

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
101			JOB		FORTRAN COMPILER -- IF COND PHASE -- PHASE 44								
102			CTL		6611								
103			*										
104			*		IN-LINE INSTRUCTIONS ARE GENERATED FOR IF (SENSE SWITCH I)								
105			*		AND IF (SENSE LIGHT I)								
106			*										
107			X1	EQU	89			0089					
108			X2	EQU	94			0094					
109			X3	EQU	99			0099					
110			*										
111			*		STUFF IN THE RESIDENT AREA								
112			*										
113			GLOBER	EQU	184 GLOBAL ERROR FLAG -- WM MEANS ERROR			0184					
114			*										
115				EXT00	SNAPSH, LOADNX, CDOVLY					MACRO			
116			SNAPSH	EQU	333			0333		GEN			
117			PHASLD	EQU	381			0381		GEN			
118			SNAPEX	EQU	564			0564		GEN			
119			LOADNX	EQU	700 CARD OVERLAY UNLESS NOP			0700		GEN			
120			CDOVLY	EQU	700 1 IF LOADING FROM CARDS, N IF FROM TAPE			0700		GEN			
121			TPREAD	EQU	704 LOAD OVERLAY FROM TAPE			0704		GEN			
122			TPERR	EQU	728			0728		GEN			
123			*										
124				EXT03	START, TOP OF PHASE 3					MACRO			
125			BEGIN3	EQU	838			0838		GEN			
126			TOP3	EQU	2600			2600		GEN			
127			*										
128			PHAS44	LDPH	IFCOND,LOADAD,BEGN44,,44					MACRO			
			*	PHAZ	LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]					GEN			
			*	XFR	PHASZ PROHIBITED IN A MACRO					GEN			
			*							GEN			
			*	LOAD	A BLOCK					GEN			
			*							GEN			
129			)6J003	EQU	110 PHASE ID			0110		GEN			
130			)6K003	EQU	700 LOAD NEXT PHASE			0700		GEN			
131			)6L003	EQU	704 TAPE READ INSTRUCTION			0704		GEN			
132			)6M003	EQU	728 TAPE ERROR HANDLER			0728		GEN			
			*							GEN			
133				ORG	201				0201				
134			PHAS44	BSS	)8J003,G		5	0201	B 257 G	GEN	1	257	
135				NOP	TO PATCH IN TRAPS FOR DEBUGGING		1	0206	N	GEN	1		
136			)0J003	EQU	*&1			0207		GEN			
137				LCA	)9J003,)6J003		7	0207	L 278 110	GEN	1	278	110
138				BCE	)1J003,)6K003,1 Q: LOADING FROM CARDS?		8	0214	B 250 700 1	GEN	1	250	700
139				BCE	)1J003,)6L003&4,0 Q: LOADING FROM AUTOCODER TAPE?		8	0222	B 250 708 0	GEN	1	250	708
140				RTW	1,LOADAD READ THE BLOCK		8	0230	L %U1 838 R	GEN	1	%U1	838
141				BER	)6M003 Q: TAPE ERROR?		5	0238	B 728 L	GEN	2	728	
142				CS	BEGN44,)9R003 ENTER THE BLOCK		7	0243	/ 838 282	GEN	2	838	282
143			)1J003	CS	)6K003,)9R003 LOAD CARDS OR AUTOCODER TAPE		7	0250	/ 700 282	GEN	2	700	282
144			)8J003	SW	)9R003		4	0257	, 282	GEN	2	282	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
145				MU	%T0,)8K003,W	8		0261	M %T0 273 W	GEN	2	%T0	273
146				H	)0J003	4		0269	. 207	GEN	2	207	
147			)8K003	EQU	*&1			0273		GEN			
148			)9J003	DCW	@IFCOND@ PHASE ID	6		0278		GEN	3		
149				DCW	#1	1		0279		GEN	3		
150				DC	@44@ PHASE NUMBER	2		0281		GEN	3		
151			)9R003	DCW	@}@	1		0282		GEN	3		
152				XFR	PHAS44				B 201		4	201	
153			*										
154				ORG	BEGIN3				0838				
155			LOADAD	EQU	*&1 LOAD ADDRESS			0838					
156	838		BEGN44	BCE	DONE,0&X1,	8		0838	B 870 0|0		5	870	000+1
157	846			MCW	0&X1,SEQNO	7		0846	M 0|0 U26		5	000+1	1426
158	853			MCW	CODE	1		0853	M		5		
159	854			BCE	IFCOND,CODE,W IF (SENSE SWITCH I)	8		0854	B 874 U23 W		5	874	1423
160	862			BCE	IFCOND,CODE,K IF (SENSE LIGHT I)	8		0862	B 874 U23 K		5	874	1423
161	870		DONE	B	LOADNX	4		0870	B 700		5	700	
162	893		IFCOND	MCW	KLESS,2&X1	7		0874	M U43 0|2		6	1443	002+1
163	900			SBR	TSTLES&6,2&X1	7		0881	H /84 0|2		6	1184	002+1
164	907			LCA	0&X1,0&X3 SEQNO, CODE, GMWM	7		0888	L 0|0 0?0		6	000+1	000+3
165	914			SAR	X1	4		0895	Q 089		6	089	
166	918			C	0&X3	4		0899	C 0?0		6	000+3	
167	922			SAR	X3	4		0903	Q 099		6	099	
168	926			LCA	1&X3,2&X3 REPLACE STATEMENT CODE WITH GMWM	7		0907	L 0?1 0?2		7	001+3	002+3
169	933			SBR	X3	4		0914	H 099		7	099	
170	937			MCW	0&X1,ON	7		0918	M 0|0 U17		7	000+1	1417
171	944			MCW		1		0925	M		7		
172	945			SAR	X1	4		0926	Q 089		7	089	
173	949			MZ	X2ZONE,ON-1	7		0930	Y U44 U16		7	1444	1416
174	956			MZ	X2ZONE,OFF-1	7		0937	Y U44 U13		7	1444	1413
175	963			BWZ	*&5,SEQNO,2	8		0944	V 956 U26 2		8	956	1426
176	971			B	*&9	4		0952	B 964		8	964	
177	975			BWZ	*&15,SEQNO-2,2	8		0956	V 978 U24 2		8	978	1424
178	983			MCW	SEQNO,X2	7		0964	M U26 094		8	1426	094
179	990			MCW	0&X2,SEQNO	7		0971	M 0!0 U26		8	000+2	1426
180	997			B	MORE	4		0978	B |01		8	1001	
181			*										
182	1 001		BOTTOM	C	0&X1	4		0982	C 0|0		9	000+1	
183	1 005			SAR	X1	4		0986	Q 089		9	089	
184	1 009			SBR	X3,4&X3	7		0990	H 099 0?4		9	099	004+3
185	1 016			B	BEGN44	4		0997	B 838		9	838	
186			*										
187	1 020		MORE	MN	0&X1	4		1001	D 0|0		9	000+1	
188	1 024			SAR	X1	4		1005	Q 089		9	089	
189	1 028			BCE	SLITE,CODE,K	8		1009	B S35 U23 K		9	1235	1423
190			*										
191			*		* IF (SENSE SWITCH I) ON, OFF								
192			*										
193	1 036			MCW	0&X1,CH	7		1017	M 0|0 U45		10	000+1	1445
194	1 043			MCW	CH,*&8	7		1024	M U45 |38		10	1445	1038

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
195	1	050		BCE	OKSW,K0T06,0	8		1031	B |83 U52 0		10	1083	1452
196	1	058		B		1		1039	B		10		
197	1	059		B		1		1040	B		10		
198	1	060		B		1		1041	B		10		
199	1	061		B		1		1042	B		10		
200	1	062		B		1		1043	B		11		
201	1	063		B		1		1044	B		11		
202	1	064		CS	332	4		1045	/ 332		11	332	
203	1	068		CS		1		1049	/		11		
204	1	069		SW	GLOBER	4		1050	, 184		11	184	
205	1	073		MN	SEQNO,246	7		1054	D U26 246		11	1426	246
206	1	080		MN		1		1061	D		11		
207	1	081		MN		1		1062	D		12		
208	1	082		MCW	ERR37	4		1063	M U95		12	1495	
209	1	086		W		1		1067	2		12		
210	1	087		BCV	*&5	5		1068	B |77 @		12	1077	
211	1	092		B	*&3	4		1073	B |79		12	1079	
212	1	096		CC	1	2		1077	F 1		12		
213	1	098		B	BOTTOM	4		1079	B 982		12	982	
214				*									
215				*	* SENSE SWITCH NUMBER IS OK								
216				*									
217	1	102	OKSW	A	KP1,CH	7		1083	A U96 U45		13	1496	1445
218	1	109		MN	CH,BIN	7		1090	D U45 U22		13	1445	1422
219	1	116		MCW	ON,BIN-1	7		1097	M U17 U21		13	1417	1421
220	1	123		MCW	OFF,X2	7		1104	M U14 094		13	1414	094
221	1	130		MCW	0&X2,X2	7		1111	M 0!0 094		13	000+2	094
222	1	137		S	KP10,X2&1	7		1118	S U98 095		14	1498	095
223	1	144		C	SEQNO,X2	7		1125	C U26 094		14	1426	094
224	1	151		BE	SAME	5		1132	B S20 S		14	1220	
225	1	156		MCW	OFF,BRANCH	7		1137	M U14 U30		14	1414	1430
226	1	163		LCA	BRANCH,0&X3	7		1144	L U30 0?0		14	1430	000+3
227	1	170		LCA	BIN	4		1151	L U22		14	1422	
228	1	174		SBR	X3	4		1155	H 099		15	099	
229	1	178	ALMOST	C	0&X1	4		1159	C 0|0		15	000+1	
230	1	182		SAR	X1	4		1163	Q 089		15	089	
231	1	186		LCA	1&X1,0&X3	7		1167	L 0|1 0?0		15	001+1	000+3
232	1	193		SBR	X3	4		1174	H 099		15	099	
233	1	197	TSTLES	BCE	BEGN44,0,< NOT TOO BIG IF LESS-THAN NOT CLOBBERED	8		1178	B 838 000 <		15	838	000
234	1	205		CS	332	4		1186	/ 332		15	332	
235	1	209		CS		1		1190	/		16		
236	1	210		CC	1	2		1191	F 1		16		
237	1	212		MCW	ERROR2,270	7		1193	M V34 270		16	1534	270
238	1	219		W		1		1200	2		16		
239	1	220		CC	1	2		1201	F 1		16		
240	1	222		BCE	HALT,CDOVLY,1	8		1203	B S16 700 1		16	1216	700
241	1	230		RWD	1	5		1211	U %U1 R		16	%U1	
242	1	235	HALT	H	HALT	4		1216	. S16		17	1216	
243				*									
244	1	239	SAME	LCA	BIN,0&X3	7		1220	L U22 0?0		17	1422	000+3

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
245	1	246		SBR	X3	4		1227	H 099		17	099	
246	1	250		B	ALMOST	4		1231	B /59		17	1159	
247			*										
248	1	254	SLITE	MCW	0&X1,CH	7		1235	M 0|0 U45		17	000+1	1445
249	1	261		MCW	CH,SLITET&7	7		1242	M U45 S56		17	1445	1256
250	1	268	SLITET	BCE	OKLITE,K1234,0	8		1249	B S98 V38 0		18	1298	1538
251	1	276		B		1		1257	B		18		
252	1	277		B		1		1258	B		18		
253	1	278		B		1		1259	B		18		
254	1	279		CS	332	4		1260	/ 332		18	332	
255	1	283		CS		1		1264	/		18		
256	1	284		SW	GLOBER	4		1265	, 184		18	184	
257	1	288		MN	SEQNO,245	7		1269	D U26 245		19	1426	245
258	1	295		MN		1		1276	D		19		
259	1	296		MN		1		1277	D		19		
260	1	297		MCW	ERR36	4		1278	M V80		19	1580	
261	1	301		W		1		1282	2		19		
262	1	302		BCV	*&5	5		1283	B S92 @		19	1292	
263	1	307		B	*&3	4		1288	B S94		19	1294	
264	1	311		CC	1	2		1292	F 1		20		
265	1	313		B	BOTTOM	4		1294	B 982		20	982	
266			*										
267	1	317	OKLITE	MCW	K080,W3	7		1298	M V83 V86		20	1583	1586
268	1	324		A	CH,W3	7		1305	A U45 V86		20	1445	1586
269	1	331		MCW	W3,BW-1	7		1312	M V86 U37		20	1586	1437
270	1	338		MCW	OFF	4		1319	M U14		20	1414	
271	1	342		MCW	W3,SW	7		1323	M V86 U42		20	1586	1442
272	1	349		MCW	ON,X2	7		1330	M U17 094		21	1417	094
273	1	356		MCW	0&X2,X2	7		1337	M 0!0 094		21	000+2	094
274	1	363		S	KP10,X2&1	7		1344	S U98 095		21	1498	095
275	1	370		C	SEQNO,X2	7		1351	C U26 094		21	1426	094
276	1	377		BE	SAME2	5		1358	B T93 S		21	1393	
277	1	382		MCW	ON,BRANCH	7		1363	M U17 U30		22	1417	1430
278	1	389		LCA	BRANCH,0&X3	7		1370	L U30 0?0		22	1430	000+3
279	1	396		LCA	SW	4		1377	L U42		22	1442	
280	1	400		LCA	BW	4		1381	L U38		22	1438	
281	1	404		SBR	X3	4		1385	H 099		22	099	
282	1	408		B	ALMOST	4		1389	B /59		22	1159	
283	1	412	SAME2	LCA	SW,0&X3	7		1393	L U42 0?0		22	1442	000+3
284	1	419		LCA	BW	4		1400	L U38		23	1438	
285	1	423		SBR	X3	4		1404	H 099		23	099	
286	1	427		B	ALMOST	4		1408	B /59		23	1159	
287			*										
288			* DATA										
289			*										
290	1	433		OFF	DCW #3	3		1414			23		
291	1	436		ON	DCW #3	3		1417			23		
292	1	441		BIN	DCW @B &@	5		1422			23		
293	1	442		CODE	DCW #1	1		1423			23		
294	1	445		SEQNO	DCW #3	3		1426			24		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
295	1	449	BRANCH	DCW	@B @	4		1430			24		
296	1	457	BW	DCW	@V 1@	8		1438			24		
297	1	461	SW	DCW	@, @	4		1442			24		
298	1	470	KLESS	DCW	@<@	1		1443			24		
299	1	471	X2ZONE	DCW	@K@	1		1444			24		
300	1	472	CH	DCW	#1	1		1445			24		
301	1	479	K0T06	DCW	@0123456@	7		1452			25		
302	1	522	ERR37	DCW	@ERROR 37 - ILLEGAL SENSE SWITCH, STATEMENT @	43		1495			27		
303	1	523	KP1	DCW	&1	1		1496			27		
304	1	525	KP10	DCW	&10	2		1498			27		
305	1	561	ERROR2	DCW	@MESSAGE 2 - OBJECT PROGRAM TOO LARGE@	36		1534			28		
306	1	565	K1234	DCW	1234	4		1538			29		
307	1	607	ERR36	DCW	@ERROR 36 - ILLEGAL SENSE LIGHT, STATEMENT @	42		1580			31		
308	1	610	K080	DSA	80	3		1583	080		31	080	
309	1	613	W3	DCW	#3	3		1586			31		
310	1	614	GMWM	DCW	@}@	1		1587		GMARK	31		
311			XFR		BEGN44				B 838		32	838	
312			CLRME	CLRA	LOADAD, GMWM, C					MACRO			
			*	CLRA	CLRBOT, CLRTOP [, SS, HERE, GWMAD]					GEN			
			*							GEN			
			*	CLEAR CORE	AFTER A PHASE USING THE CLRTOP ADDRESS					GEN			
			*							GEN			
313			ORG		201				0201				
			*							GEN			
			*	CLEAR DOWN	TO CLRBOT & X00 THE EASY WAY					GEN			
			*							GEN			
314			CLRME	EQU	*&1			0201		GEN			
315			BSS		SNAPSH, C	5		0201	B 333 C	GEN	33	333	
316			)0J004	CS	GMWM CLEAR FROM CLRTOP	4		0206	/ V87	GEN	33	1587	
317			SBR	)0J004&3		4		0210	H 209	GEN	33	209	
318			SBR	)0L004&6		4		0214	H 255	GEN	33	255	
319			C	)0J004&3,)0M004	DOWN TO CLRBOT & X00?	7		0218	C 209 266	GEN	33	209	266
320			BU	)0J004		5		0225	B 206 /	GEN	33	206	
			*							GEN			
			*	NOW CLEAR	DOWN TO CLRBOT THE HARD WAY					GEN			
			*							GEN			
321			)0K004	C	)0L004&6,)0N004	7		0230	C 255 269	GEN	33	255	269
322			BU	)0L004		5		0237	B 249 /	GEN	34	249	
323			CS	LOADNX,)0Q004	LOAD THE NEXT BLOCK AT 1	7		0242	/ 700 276	GEN	34	700	276
324			)0L004	LCA	)0P004, 0-0 CLEAR WITH BLANK AND WORD MARK	7		0249	L 270 000	GEN	34	270	000
325			SBR	)0L004&6		4		0256	H 255	GEN	34	255	
326			B	)0K004		4		0260	B 230	GEN	34	230	
327			)0M004	DSA	)0R004 CLRBOT & X00 - 1	3		0266	899	GEN	34	899	
328			)0N004	DSA	LOADAD CLRBOT	3		0269	838	GEN	34	838	
329			)0P004	DCW	#1	1		0270		GEN	35		
330			DC	@CLRA @	IDENTIFY IN A DECK, TAPE, OR DUMP	5		0275		GEN	35		
331			)0Q004	DCW	@}@	1		0276		GEN	35		
332			ORG	LOADAD&X00					0900				
333			)0R004	EQU	* CLRBOT & X00 - 1			0899		GEN			
334			XFR	CLRME					B 201		36	201	

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J003	0207: 0	)0J004	0206: 0	)0K004	0230: 0	)0L004	0249: 0	)0M004	0266: 0	)0N004	0269: 0
)0P004	0270: 0	)0Q004	0276: 0	)0R004	0899: 0	)1J003	0250: 0	)6J003	0110: 0	)6K003	0700: 0
)6L003	0704: 0	)6M003	0728: 0	)8J003	0257: 0	)8K003	0273: 0	)9J003	0278: 0	)9R003	0282: 0
ALMOST	1159: 0	BEGIN3	0838: 0	BEGN44	0838: 0	BIN	1422: 0	BOTTOM	0982: 0	BRANCH	1430: 0
BW	1438: 0	CDOVLY	0700: 0	CH	1445: 0	CLRME	0201: 0	CODE	1423: 0	DONE	0870: 0
ERR36	1580: 0	ERR37	1495: 0	ERROR2	1534: 0	GLOBER	0184: 0	GMWM	1587: 0	HALT	1216: 0
IFCOND	0874: 0	K080	1583: 0	KOTO6	1452: 0	K1234	1538: 0	KLESS	1443: 0	KP1	1496: 0
KP10	1498: 0	LOADAD	0838: 0	LOADNX	0700: 0	MORE	1001: 0	OFF	1414: 0	OKLITE	1298: 0
OKSW	1083: 0	ON	1417: 0	PHAS44	0201: 0	PHASLD	0381: 0	SAME	1220: 0	SAME2	1393: 0
SEQNO	1426: 0	SLITE	1235: 0	SLITET	1249: 0	SNAPEX	0564: 0	SNAPSH	0333: 0	SW	1442: 0
TOP3	2600: 0	TPERR	0728: 0	TPREAD	0704: 0	TSTLES	1178: 0	W3	1586: 0	X1	0089: 0
X2	0094: 0	X2ZONE	1444: 0	X3	0099: 0						

UNREFERENCED SYMBOLS

PHASLD SNAPEX TOP3 TPERR TPREAD