

CLEAR STORAGE 1 ,008015,022026,030037,044,049,053053N0000000N00001026 1
 CLEAR STORAGE 2 L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0? 2
 BOOTSTRAP ,008015,022029,036040,047054,061068,072/061039 ,0010011040 3

FORTRAN COMPILER -- PHASES 00-02

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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
101			JOB		FORTRAN COMPILER -- PHASES 00-02								
102			CTL		6611								
103			*										
104			*		SNAPSHOT, SYSTEM MONITOR, AND LOADER PHASE.								
105			*										
106			*		READ AND STORE THE SOURCE PROGRAM, IN REVERSE ORDER, STARTING								
107			*		AT THE TOP OF CORE, WITH BLANKS REMOVED EXCEPT WITHIN								
108			*		HOLLERITH FIELDS IN FORMAT STATEMENTS. EACH STATEMENT BEGINS								
109			*		WITH 000. FORMAT STATEMENTS THEN HAVE F, WHILE OTHERS HAVE R.								
110			*		THEN THE LABEL, IF ANY, FOLLOWED BY A COLON. THE END OF EACH								
111			*		STATEMENT IS MARKED BY A GROUP MARK WITH A WORD MARK. AFTER								
112			*		THE LAST CARD, A STOP STATEMENT IS INSERTED.								
113			*										
114			ORG		81				0081				
115	86		DC		@ @	6		0086				4	
116	89	X1	DCW		@000@	3		0089				4	
117		XXXXX1	EQU		X1 FOR USE IN SFX REGIONS			0089					
118	91		DC		@00@	2		0091				4	
119	94	X2	DCW		@000@	3		0094				4	
120		XXXXX2	EQU		X2 FOR USE IN SFX REGIONS			0094					
121	96		DC		@00@	2		0096				4	
122	99	X3	DCW		@000@	3		0099				4	
123		XXXXX3	EQU		X3 FOR USE IN SFX REGIONS			0099					
124	104		DC		@0 @	5		0104				4	
125	110	PHASID	DCW		@LOADER@ PHASE ID, FOR SNAPSHOT	6		0110				4	
126	111		DCW	#1	WM CLEARED IF DO STATEMENT APPEARS	1		0111				5	
127	112		DCW	#1	WM CLEARED IF DO STATEMENT APPEARS	1		0112				5	
128	113		DCW	#1	WM CLEARED IF DO STATEMENT APPEARS	1		0113				5	
129	114		DCW	#1	WM CLEARED WHEN AN I/O LIST OF DO IS PROCESSED	1		0114				5	
130	115		DCW	#1	WM CLEARED IF I/O LIST AND NOT LIMITED FORMAT	1		0115				5	
131	116	SUBSCR	DCW	#1	WM CLEARED IF SUBSCRIPT CODE NEEDED	1		0116				5	
132	117	SERIES	DCW	#1	NEED SERIES ROUTINE IF NO WM	1		0117				5	
133	118	SINCOS	DCW	#1	SAW SIN F OR COS F IF NO WM	1		0118				6	
134	119	LOGF	DCW	#1	SAW LOG F IF NO WM	1		0119				6	
135	120	EXPF	DCW	#1	SAW EXP F IF NO WM	1		0120				6	
136	121		DCW	#1	SAW ATAN F IF NO WM	1		0121				6	
137	122	SAWABS	DCW	#1	SAW ABS F IF NO WM	1		0122				6	
138	123	SAWNEG	DCW	#1	SAW NEGATION OPERATOR (UNARY MINUS) IF NO WM	1		0123				6	
139	124	XFIXF	DCW	#1	SAW XFIX F IF NO WM	1		0124				6	
140	125	FLOATF	DCW	#1	SAW FLOAT F IF NO WM	1		0125				7	
141	126		DCW	#1	SAW SQRT F IF NO WM	1		0126				7	
142	127		DCW	#1	SAW USER FUNCTION R IF NO WM	1		0127				7	
143	128		DCW	#1	SAW USER FUNCTION U IF NO WM	1		0128				7	
144	129		DCW	#1	SAW USER FUNCTION P IF NO WM	1		0129				7	
145	130		DCW	#1	SAW USER FUNCTION W IF NO WM	1		0130				7	
146	131		DCW	#1	SAW USER FUNCTION Y IF NO WM	1		0131				7	
147	132		DCW	#1	SAW USER FUNCTION Z IF NO WM	1		0132				8	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
148		133		DCW	#1 SAW USER FUNCTION J IF NO WM		1	0133				8	
149		134		DCW	#1 SAW USER FUNCTION K IF NO WM		1	0134				8	
150		135		DCW	#1 SAW USER FUNCTION L IF NO WM		1	0135				8	
151		136		DCW	#1 SAW USER FUNCTION M IF NO WM		1	0136				8	
152		137		DCW	#1 SAW USER FUNCTION D IF NO WM		1	0137				8	
153		138		DCW	#1 SAW USER FUNCTION H IF NO WM		1	0138				8	
154		139		DCW	#1 SAW XLINKF IF NO WM		1	0139				9	
155		142	NEGAR2	DCW	#3 LOOKS LIKE NEGARY -- SEE PHASE 20		3	0142				9	
156		145	TBLBOT	DCW	#3 ONE BELOW NUMBERS, FORMATS, I/O LISTS		3	0145				9	
157		148	SEQTAB	DCW	#3 BOTTOM OF SEQUENCE NUMBER TABLE - 2		3	0148				9	
158		151	DOCNT	DCW	#3 COUNT OF DO STATEMENTS		3	0151				9	
159		154	BOTFMT	DCW	#3 BOTTOM OF FORMAT STRINGS OR NUMBER TABLE - 1		3	0154				9	
160		157	NEGAR3	DCW	#3 LOOKS LIKE NEGARY -- SEE PHASE 20		3	0157				9	
161		160	ARYSIZ	DCW	#3 TOTAL ARRAY SIZE & 2		3	0160				10	
162		163	NEGARY	DCW	#3 16000 - ARYSIZ		3	0163				10	
163		180		DC	#17		17	0180				10	
164		183	NSTMTS	DCW	#3 NUMBER OF STATEMENTS, INCLUDING GENERATED STOP		3	0183				10	
165		184	GLOBER	DC	#1 GLOBAL ERROR FLAG -- WM MEANS ERROR		1	0184				10	
166		185	GOTXL	DCW	#1 XLINKF WAS REFERENCED IF NO WM		1	0185				10	
167		188	RELTAB	DCW	#3 RELOCATABLE FUNCTION TABLE ENTRY ADDRESSES		3	0188				10	
168		191	SUBENT	DCW	#3 ENTRY TO SUBSCRIPT ROUTINE		3	0191				10	
169		194	ARYTOP	DCW	#3 TOP OF ARRAYS IN OBJECT CODE		3	0194				10	
170		195		DC	#1		1	0195				10	
171		199		DCW	@V3M0@		4	0199				11	
172				ORG	333					0333			
173			*										
174			* SNAPSHOT ROUTINE										
175			*										
176				SFX	S								
177		333	SNAPSH	SBR	EXIT&3	S	4	0333	H 567		12	567	
178		337		SBR	SXX&6	S	4	0337	H 408		12	408	
179		341		MCW	KZ3,ADR5-2 START FIVE-DIGIT ADDRESS AT ZERO	S	7	0341	M 661 656		12	661	656
180		348		MCW	XXXXX3,SX3&6	S	7	0348	M 099 415		12	099	415
181		355		MCW	XXXXX1,SX1&6	S	7	0355	M 089 422		12	089	422
182		362		SBR	XXXXX1,1	S	7	0362	H 089 001		12	089	001
183		369		SBR	XXXXX3,202	S	7	0369	H 099 202		13	099	202
184		376		CS	332	S	4	0376	/ 332		13	332	
185		380		CS		S	1	0380	/		13		
186		381		MCW	PHASID,210	S	7	0381	M 110 210		13	110	210
187		388		BSS	SKIP,F	S	5	0388	B 621 F		13	621	
188			*										
189			* PRINT A HEADER										
190			*										
191		393		CC	1	S	2	0393	F 1		13		
192		395		MCW	XXXXX2,250	S	7	0395	M 094 250		13	094	250
193		402	SXX	SBR	216,0 RETURN ADDRESS WAS STORED IN B	S	7	0402	H 216 000		14	216	000
194		409	SX3	SBR	256,0 X3 WAS STORED IN B	S	7	0409	H 256 000		14	256	000
195		416	SX1	SBR	244,0 X1 WAS STORED IN B	S	7	0416	H 244 000		14	244	000
196		423		W		S	1	0423	2		14		
197		424		CC	K	S	2	0424	F K		14		

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198		426		ZA	KP2,W2A	S	7	0426	? 662 664		14	662	664
199		433	CLEARH	CS	332	S	4	0433	/ 332		14	332	
200		437		CS		S	1	0437	/		15		
201		438		CC	J	S	2	0438	F J		15		
202		440		MCW	ADR5,306 FIVE-DIGIT ADDRESS	S	7	0440	M 658 306		15	658	306
203		447		MCW		S	1	0447	M		15		
204		448		SBR	LOOP&6	S	4	0448	H 465		15	465	
205		452		MCW	K9,W2B-1	S	7	0452	M 665 668		15	665	668
206		459	LOOP	MCW	W2B-1,000	S	7	0459	M 668 000		15	668	000
207		466		MCW	DOTS	S	4	0466	M 651		16	651	
208		470		SBR	LOOP&6	S	4	0470	H 465		16	465	
209		474		A	KM10,W2B ADD I0 = -10	S	7	0474	A 667 669		16	667	669
210		481		BWZ	LOOP,W2B-1,2 NO ZONE IN COUNTER HIGH DIGIT?	S	8	0481	V 459 668 2		16	459	668
211		489		A	KP1,ADR5-2 BUMP HUNDREDS DIGIT OF ADDRESS	S	7	0489	A 670 656		16	670	656
212		496		W		S	1	0496	2		16		
213		497	GET	SW	0&X3 MOVE DATA AND WM TO PRINT AREA	S	4	0497	, 0?0		16	000+3	
214		501		MCW	0&X1,0&X3	S	7	0501	M 0|0 0?0		17	000+1	000+3
215		508		BW	DOWM,0&X1 SKIP CLEARING PRINT AREA WM	S	8	0508	V 520 0|0 1		17	520	000+1
216		516		CW	0&X3	S	4	0516	) 0?0		17	000+3	
217		520	DOWM	C	XXXXX1,TOPCOR DONE?	S	7	0520	C 089 688		17	089	688
218		527		BU	CONT NO	S	5	0527	B 568 /		17	568	
219		532		W		S	1	0532	2		17		
220		533		WM		S	2	0533	2)		17		
221		535	RX1	MCW	SX1&6,XXXXX1 RESTORE INDEX REGS	S	7	0535	M 422 089		18	422	089
222		542		MCW	SX3&6,XXXXX3	S	7	0542	M 415 099		18	415	099
223		549		CS	332	S	4	0549	/ 332		18	332	
224		553		CS		S	1	0553	/		18		
225		554		BSS	HALT,G	S	5	0554	B 563 G		18	563	
226		559		B	EXIT	S	4	0559	B 564		18	564	
227		563	HALT	H		S	1	0563	.		18		
228		564	EXIT	B	0-0	S	4	0564	B 000		19	000	
229		568	CONT	SBR	XXXXX1,1&X1	S	7	0568	H 089 0|1		19	089	001+1
230		575		BCE	BUMP3,XXXXX3-2,2	S	8	0575	B 632 097 2		19	632	097
231		583		SBR	XXXXX3,201	S	7	0583	H 099 201		19	099	201
232		590		W		S	1	0590	2		19		
233		591		WM		S	2	0591	2)		19		
234		593		A	KP1,W2A	S	7	0593	A 670 664		19	670	664
235		600		C	W2A,KP15	S	7	0600	C 664 672		20	664	672
236		607		BU	CLEARH	S	5	0607	B 433 /		20	433	
237		612		S	W2A	S	4	0612	S 664 /		20	664	
238		616		CCB	CLEARH,1	S	5	0616	F 433 1		20	433	
239		621	SKIP	MCW	XQTD,220	S	7	0621	M 680 220		20	680	220
240		628		W	RX1	S	4	0628	2 535		20	535	
241		632	BUMP3	A	KP1,XXXXX3	S	7	0632	A 670 099		20	670	099
242		639		B	GET	S	4	0639	B 497		21	497	
243		651	DOTS	DCW	@9.....@	S	9	0651			21		
244		653		DCW	@9-@	S	2	0653			21		
245		658	ADR5	DCW	00000 FIVE DIGIT ADDRESS	S	5	0658			21		
246		661	KZ3	DCW	000	S	3	0661			21		
247		662	KP2	DCW	&2	S	1	0662			21		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
248	664	W2A	DCW	#2		S	2	0664			21		
249	665	K9	DCW	9		S	1	0665			22		
250	667	KM10	DCW	@I0@		S	2	0667			22		
251	669	W2B	DCW	#2		S	2	0669			22		
252	670	KP1	DCW	&1		S	1	0670			22		
253	672	KP15	DCW	&15		S	2	0672			22		
254	680	XQTD	DCW	@EXECUTED@		S	8	0680			22		
255			SFX		END OF SNAPSHOT ROUTINE								
256			*										
257			*		* STORAGE FOR PARAMETER CARD								
258			*										
259			DA		1X19			0681	0699		22		
260	685	PWORD		5	THE WORD PARAM			0685		SBFLD			
261	688	TOPCOR		8	TOP CORE ADDRESS FROM PARAM CARD			0688		SBFLD			
262	690	IMOD		10	INTEGER MODULUS -- NUMBER OF DIGITS			0690		SBFLD			
263	692	MANTIS		12	FLOATING POINT MANTISSA DIGITS			0692		SBFLD			
264	693	CONDNS		13	P FOR CONDENSED DECK			0693		SBFLD			
265	694	SNAPSW		14	S FOR SNAPSHOT			0694		SBFLD			
266	695	CL410		15	T IF RUN ON 1410 IN 1401 COMPATIBILITY MODE			0695		SBFLD			
267	696	FMTSW		16	X FOR NO FORMAT, L FOR LIMITED FORMAT			0696		SBFLD			
268			*		BLANK FOR ORDINARY, A FOR A CONVERSION								
269	699	PARAM		19	PARAMETER CARD IS STORED HERE			0699		SBFLD			
270			*										
271			*		* LOAD NEXT OVERLAY								
272			*										
273			SFX		L								
274	700	LOADNX	MCW		CLRBOT-2,K999-2 SET CLEAR END HIGH DIGIT	L	7	0700	M 831 828		23	831	828
275	707	CLEARL	CS		0-0	L	4	0707	/ 000		23	000	
276	711		SBR		CLEARL&3	L	4	0711	H 710		23	710	
277	715		C		CLEARL&3,K999	L	7	0715	C 710 830		23	710	830
278	722		BU		CLEARL	L	5	0722	B 707 /		23	707	
279	727		SW		CLRWM&4	L	4	0727	, 758		23	758	
280	731		MCW		CLEARL&3,CLRWM&6	L	7	0731	M 710 760		23	710	760
281	738		CW		CLRWM&4	L	4	0738	) 758		24	758	
282	742	CLRL	C		CLRWM&6,CLRBOT	L	7	0742	C 760 833		24	760	833
283	749		BE		CDOVLY LOAD THE OVERLAY	L	5	0749	B 769 S		24	769	
284	754	CLRWM	LCA		BLANK,0 CLEAR WITH BLANK AND WORD MARK	L	7	0754	L 834 000		24	834	000
285	761		SBR		CLRWM&6	L	4	0761	H 760		24	760	
286	765		B		CLRL	L	4	0765	B 742		24	742	
287	769		R		40 CARD OVERLAY UNLESS NOP	L	4	0769	I 040		24	040	
288	773	RDAGIN	MCW		EINIT,ECOUNT INITIALIZE ERROR COUNT	L	7	0773	M 835 837		25	835	837
289	780	TPREAD	RTW		1,BEGIN1 LOAD OVERLAY FROM TAPE	L	8	0780	L %U1 838 R		25	%U1	838
290	788		BER		TPERR ERROR?	L	5	0788	B 797 L		25	797	
291	793		B		BEGIN1 NO, RUN THE OVERLAY	L	4	0793	B 838		25	838	
292	797	TPERR	BSP		1	L	5	0797	U %U1 B		25	%U1	
293	802		S		ONE,ECOUNT	L	7	0802	S 836 837		25	836	837
294	809		BWZ		TPREAD,ECOUNT,B STILL POSITIVE?	L	8	0809	V 780 837 B		26	780	837
295	817		H		3333,3333 TOO MANY TAPE ERRORS	L	7	0817	. C33 C33		26	3333	3333
296	824		B		RDAGIN READ AGAIN	L	4	0824	B 773		26	773	
297	830	K999	DSA		999	L	3	0830	999		26	999	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
298		833	CLRBOT	DCW	#3 ADDRESS TO CLEAR DOWN TO	L	3	0833			26		
299		834	BLANK	DCW	#1	L	1	0834			26		
300		835	EINIT	DCW	&9 INITIAL ERROR COUNT	L	1	0835			26		
301		836	ONE	DCW	&1	L	1	0836			27		
302		837	ECOUNT	DCW	#1	L	1	0837			27		
303				SFX	END OF LOAD NEXT OVERLAY ROUTINE								
304			*										
305			*		START HERE								
306			*										
307	838		BEGIN1	BCE	CARD,1, BEING LOADED FROM CARDS?		8	0838	B 853 001		27	853	001
308	846			MCW	NOPI,CDOVLY TURN OFF CARD OVERLAY		7	0846	M 871 769		27	871	769
309			CARD	SBR	CLRBOT,BEGIN1		7	0853	H 833 838		27	833	838
310				SBR	CLEARL&3,GMWM1		7	0860	H 710 900		27	710	900
311				B	LOADNX		4	0867	B 700		27	700	
312			NOPI	NOP			1	0871	N		28		
313				ORG	*&X00				0900				
314			GMWM1	DCW	@}@		1	0900		GMARK	29		
315				EX	BEGIN1				B 838		30	838	
316			*										
317			*		READ AND CHECK PARAMETER CARD								
318			*										
319				ORG	BEGIN1				0838				
320	853		BEGIN2	CS	80		4	0838	/ 080		33	080	
321	857			SW	1,GM		7	0842	, 001 N14		33	001	2514
322	864			SW	81,84		7	0849	, 081 084		33	081	084
323	871			CS	332		4	0856	/ 332		33	332	
324	875			CS			1	0860	/		33		
325	876			R	READ PARAMETER CARD		1	0861	1		33		
326	877			LCA	19,PARAM SAVE IT		7	0862	L 019 699		33	019	699
327	884			C	PARAM-14,KPARAM IS IT A PARAMETER CARD?		7	0869	C 685 N39		34	685	2539
328	891			BU	NOPARM NO, ANNOUNCE ERROR		5	0876	B L09 /		34	2309	
329	896			SW	73 SET WORD MARKS FOR		4	0881	, 073		34	073	
330	900			SW	6,7 FORTRAN MARGINS		7	0885	, 006 007		34	006	007
331	907			SW	TOPCOR-2		4	0892	, 686		34	686	
332	911			MCW	80,PWORD		7	0896	M 080 685		34	080	685
333			*										
334			*		DETERMINE THIS MACHINE'S CORE SIZE, COMPARE IT TO								
335			*		SIZE ON PARAMETER CARD								
336			*										
337	918			CS	0-0		4	0903	/ 000		34	000	
338	922			SBR	CORSIZ		4	0907	H N42		35	2542	
339	926			MCW	TOPCOR,TOCONV		7	0911	M 688 N45		35	688	2545
340	933			B	ADCONV COVERT TOPCOR TO FIVE DIGITS		4	0918	B Y61		35	1861	
341	937			MCW	CONVTD,TOP5		7	0922	M N50 O38		35	2550	2638
342	944			MCW	CORSIZ,TOCONV		7	0929	M N42 N45		35	2542	2545
343	951			B	ADCONV CONVERT CORSIZ TO FIVE DIGITS		4	0936	B Y61		35	1861	
344	955			MCW	CONVTD,COR5		7	0940	M N50 O33		36	2550	2633
345	962			A	KP1, TOP5 TOP ADDR + 1 = SIZE		7	0947	A N51 O38		36	2551	2638
346	969			A	KP1,COR5 COR ADDR + 1 = SIZE		7	0954	A N51 O33		36	2551	2633
347	976			CS	332		4	0961	/ 332		36	332	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
398	1	174	RDLOOP	BW	MOVECD,FLAG	8		1159	V /96 Q13 1		42	1196	2813
399	1	182		BCE	DONE,1,:	8		1167	B !55 001 :		43	2055	001
400			*										
401			*		NO SYSTEM AFTER END CARD								
402			*										
403	1	190	NOSYS	CC	1	2		1175	F 1		43		
404	1	192		CS	332	4		1177	/ 332		43	332	
405	1	196		CS		1		1181	/		43		
406	1	197		MCW	MSG1,270	7		1182	M P72 270		43	2772	270
407	1	204		W		1		1189	2		43		
408	1	205		CC	1	2		1190	F 1		43		
409	1	207	HALT1	H	HALT1	4		1192	. /92		44	1192	
410			*										
411			*		MOVE CARD TO SAVE AREA								
412			*										
413	1	211	MOVECD	MCW	72,CARD72 MOVE CARD TO SAVE AREA	7		1196	M 072 M85		44	072	2485
414	1	218		MCW		1		1203	M		44		
415	1	219		MCW		1		1204	M		44		
416	1	220		BCE	DONE,CARD1,:	8		1205	B !55 M14 :		44	2055	2414
417	1	228	C12T	BIN	PRTHDG, UNCONDITIONAL AT FIRST, BECOMES BCV	5		1213	B K52		44	2252	
418	1	233	AFTHDG	CS	300	4		1218	/ 300		44	300	
419	1	237		CS		1		1222	/		45		
420	1	238		MCW	72,283 MOVE CARD TO PRINT AREA	7		1223	M 072 283		45	072	283
421	1	245		MCW	6,215	7		1230	M 006 215		45	006	215
422	1	252		BCE	LSTCMT,CARD1,C PRINT NOW IF COMMENT	8		1237	B L43 M14 C		45	2343	2414
423	1	260	CRD1SW	B	NOTCNT BECOMES NOP AFTER FIRST CARD	4		1245	B V31		45	1531	
424	1	264		BCE	NOTCNT,CARD6,0	8		1249	B V31 M19 0		45	1531	2419
425	1	272		BCE	NOTCNT,CARD6,	8		1257	B V31 M19		46	1531	2419
426			*										
427			*		CONTINUATION CARD								
428			*										
429	1	280		A	KP1,CNTCNT BUMP CONTINUATION COUNT	7		1265	A N51 Q09		46	2551	2809
430	1	287		BCE	CNTOK,CNTCNT-1,0 NINE OR FEWER?	8		1272	B S87 Q08 0		46	1287	2808
431	1	295		MCW	CNTMSG,300 PUT ERROR MSG IN PRINT AREA	7		1280	M P87 300		46	2787	300
432	1	302	CNTOK	W	LIST THE CARD	1		1287	2		46		
433	1	303		MCW	CARD7A,SVCHAR&3 SET SAVE CHAR ADDR TO COL 7	7		1288	M M91 S98		46	2491	1298
434			*										
435			*		PROCESS THE CARD (NOTCNT COMES BACK HERE)								
436			*										
437	1	310	SVCHAR	MCW	0-0,CHAR SAVE A CHARACTER	7		1295	M 000 Q16		47	000	2816
438	1	317		SW	SVCHAR&1	4		1302	, S96		47	1296	
439	1	321		A	K1,SVCHAR&3 BUMP ADDR OF CHAR TO SAVE	7		1306	A M95 S98		47	2495	1298
440	1	328		CW	SVCHAR&1	4		1313	) S96		47	1296	
441	1	332	CRD2SW	NOP	BLNKOK BRANCH IF COPYING EVERYTHING	4		1317	N Z58		47	1958	
442	1	336		BCE	SVCHAR,CHAR, SKIP BLANKS	8		1321	B S95 Q16		47	1295	2816
443	1	344		MCW	CHAR,*&8	7		1329	M Q16 T43		48	2816	1343
444	1	351		BCE	INTRST,INTCHR,0	8		1336	B W85 L73 0		48	1685	2373
445			CHAIN	5						MACRO			
446			BCE			1		1344	B	GEN	48		
447			BCE			1		1345	B	GEN	48		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
448				BCE			1	1346	B	GEN	48		
449				BCE			1	1347	B	GEN	48		
450				BCE			1	1348	B	GEN	48		
451	1	364	MVCHAR	MCW	CHAR,0		7	1349	M Q16 000		49	2816	000
452	1	371		SBR	MVCHAR&6		4	1356	H T55		49	1355	
453	1	375	BUMPNS	A	KP1,NCHAR	BUMP CHARACTER COUNTER	7	1360	A N51 P92		49	2551	2792
454	1	382		C	MVCHAR&6,BOTCOR	CORE FULL OF SOURCE CODE?	7	1367	C T55 P95		49	1355	2795
455	1	389		BE	BIGSRC		5	1374	B K18 S		49	2218	
456	1	394	CRD3SW	BCE	HOLLER,CHAR,H		8	1379	B X36 Q16 H		49	1736	2816
457	1	402	CRD4SW	NOF	BRANCH,CRD3SW		7	1387	N P96 T79		50	2796	1379
458				*									
459	1	409	TEST7	C	SVCHAR&3,CARD7A	AT COLUMN 7?	7	1394	C S98 M91		50	1298	2491
460	1	416	CRD5SW	BU	SVCHAR		5	1401	B S95 /		50	1295	
461	1	421		SW	MVCHAR&4		4	1406	, T53		50	1353	
462	1	425	CRD6SW	MCW	MVCHAR&6,X2		7	1410	M T55 094		50	1355	094
463	1	432		CW	MVCHAR&4		4	1417	) T53		50	1353	
464	1	436		MCW	NOP2,CRD6SW		7	1421	M N13 U10		51	2513	1410
465	1	443		MCW	NOP2,CRD5SW		7	1428	M N13 U01		51	2513	1401
466	1	450		A	K10,COLCNT		7	1435	A N21 M88		51	2521	2488
467	1	457		BCE	COL3,COLCNT-1,5	THREE COLUMNS DONE?	8	1442	B W54 M87 5		51	1654	2487
468	1	465		SW	FLAG		4	1450	, Q13		51	2813	
469	1	469		BWZ	SVCHAR,COLCNT-1,2	MORE THAN SEVEN COLUMNS DONE?	8	1454	V S95 M87 2		52	1295	2487
470	1	477		MCW	BRNCH2,CRD5SW		7	1462	M M96 U01		52	2496	1401
471	1	484		MCW	0&X2,WORK7		7	1469	M 010 N05		52	000+2	2505
472	1	491		C	KFMT,WORK7	FORMAT% ?	7	1476	C N12 N05		52	2512	2505
473	1	498		BU	SVCHAR		5	1483	B S95 /		52	1295	
474				*									
475				*	PROCESS A	FORMAT STATEMENT							
476				*									
477	1	503		MCW	BRANCH,CRD3SW		7	1488	M P96 T79		53	2796	1379
478	1	510		MCW	0&X3,WORK6		7	1495	M 0?0 Q02		53	000+3	2802
479	1	517		MCW	KF,WORK6-3		7	1502	M Q03 P99		53	2803	2799
480	1	524		MCW	WORK6,0&X3		7	1509	M Q02 0?0		53	2802	000+3
481	1	531		B	SVCHAR		4	1516	B S95		53	1295	
482				*									
483	1	535	SLASH	MCW	KAT,CHAR	CONVERT SLASH TO AT-SIGN	7	1520	M Q04 Q16		53	2804	2816
484	1	542		B	MVCHAR		4	1527	B T49		54	1349	
485				*									
486				*	NOT A	CONTINUATION CARD							
487				*									
488	1	546	NOTCNT	MCW	NOP,CRD1SW		7	1531	M N34 S45		54	2534	1245
489	1	553		A	KP1,NSTMT		7	1538	A N51 Q07		54	2551	2807
490	1	560		MCW	NOP,CRD3SW		7	1545	M N34 T79		54	2534	1379
491	1	567		MCW	NOP,CRD4SW		7	1552	M N34 T87		54	2534	1387
492	1	574		MCW	5,211	MOVE LABEL TO PRINT AREA	7	1559	M 005 211		54	005	211
493	1	581		S	CNTCNT	CLEAR CONTINUATION COUNT	4	1566	S Q09		55	2809	
494	1	585		MCW	NOP,CRD2SW		7	1570	M N34 T17		55	2534	1317
495	1	592		MCS	NSTMT,203	MOVE STATEMENT COUNT TO PRINT AREA	7	1577	Z Q07 203		55	2807	203
496	1	599		W			1	1584	2		55		
497	1	600		SW	MVCHAR&4		4	1585	, T53		55	1353	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
498	1	604		MCW	MVCHAR&6,MVCHR2&6	7		1589	M T55 W13		55	1355	1613
499	1	611		CW	MVCHAR&4	4		1596	) T53		55	1353	
500	1	615		MCW	MOVE,CRD6SW	7		1600	M N22 U10		56	2522	1410
501	1	622	MVCHR2	LCA	GM,0	7		1607	L N14 000		56	2514	000
502	1	629		SBR	X3 SAVE ADDRESS OF FIRST CHAR STORED	4		1614	H 099		56	099	
503	1	633		SBR	MVCHAR&6	4		1618	H T55		56	1355	
504	1	637		MCW	COLON,CARD6 COLON AFTER LABEL, IF ANY	7		1622	M N19 M19		56	2519	2419
505	1	644		MCW	BRNCH2,CRD5SW	7		1629	M M96 U01		56	2496	1401
506	1	651		MCW	K20,COLCNT INITIALIZE COLUMN COUNTER	7		1636	M M98 M88		57	2498	2488
507	1	658		MCW	SAVE2A,SVCHAR&3	7		1643	M M94 S98		57	2494	1298
508	1	665		B	SVCHAR	4		1650	B S95		57	1295	
509			*										
510	1	669	COL3	C	0&X2,KEND END CARD?	7		1654	C 010 Q12		57	000+2	2812
511	1	676		BU	SVCHAR	5		1661	B S95 /		57	1295	
512	1	681		CW	FLAG	4		1666	) Q13		57	2813	
513	1	685		B	SVCHAR	4		1670	B S95		57	1295	
514			*										
515	1	689	AT	MCW	KMINUS,CHAR CONVERT AT SIGN TO MINUS	7		1674	M Q14 Q16		58	2814	2816
516	1	696		B	MVCHAR	4		1681	B T49		58	1349	
517			*										
518			*		SAW AN INTERESTING CHARACTER								
519			*										
520	1	700	INTRST	BCE	TESTLC,CHAR, TEST FOR A ZONE	8		1685	B L58 Q16		58	2358	2816
521	1	708		BCE	TESTLC,CHAR, | RECORD MARK	8		1693	B L58 Q16 |		58	2358	2816
522	1	716		BCE	SLASH,CHAR, /	8		1701	B V20 Q16 /		58	1520	2816
523	1	724		BCE	AT,CHAR,@	8		1709	B W74 Q16 @		59	1674	2816
524	1	732		MCW	KSTAR,300	7		1717	M Q15 300		59	2815	300
525	1	739		MCW	PROCD	4		1724	M N33		59	2533	
526	1	743		MCW	CHAR	4		1728	M Q16		59	2816	
527	1	747		B	MVCHAR	4		1732	B T49		59	1349	
528			*										
529			*		CHARACTER IS H, PROBABLY HOLLERITH								
530			*										
531	1	751	HOLLER	MCW	MVCHAR&6,X1	7		1736	M T55 089		59	1355	089
532	1	758		MCW	NOP,CRD3SW	7		1743	M N34 T79		60	2534	1379
533	1	765		MCW	NOP,CRD4SW	7		1750	M N34 T87		60	2534	1387
534	1	772		MCW	BRANCH,CRD2SW	7		1757	M P96 T17		60	2796	1317
535	1	779		MCW	4&X1,HCOUNT REMEMBER, SOURCE IS STORED BACKWARD	7		1764	M 0|4 Q19		60	004+1	2819
536	1	786		BCE	AT2,HCOUNT-1,@	8		1771	B X87 Q18 @		60	1787	2818
537	1	794		BWZ	NZHM1,HCOUNT-1,2	8		1779	V Y02 Q18 2		61	1802	2818
538	1	802	AT2	MCW	HCOUNT-2,HCOUNT ONE DIGIT OF HOLLERITH COIUNT	7		1787	M Q17 Q19		61	2817	2819
539	1	809		MCW	KZ2	4		1794	M Q21		61	2821	
540	1	813		B	TEST7	4		1798	B T94		61	1394	
541			*										
542			*		NO ZONE AT HCOUNT-1								
543			*										
544	1	817	NZHM1	BCE	AT3,HCOUNT,@	8		1802	B Y18 Q19 @		61	1818	2819
545	1	825		BWZ	NZH,HCOUNT,2	8		1810	V Y36 Q19 2		61	1836	2819
546	1	833	AT3	MCW	HCOUNT-2,HCOUNT	7		1818	M Q17 Q19		62	2817	2819
547	1	840		MCW	KZ1,HCOUNT-2	7		1825	M Q22 Q17		62	2822	2817

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
598	2	070	DONE	MCW	MVCHAR&6,X1		7	2055	M T55 089		68	1355	089
599	2	077		LCA	GM,0&X1		7	2062	L N14 0|0		68	2514	000+1
600	2	084		SBR	X1		4	2069	H 089		68	089	
601	2	088		CC	1		2	2073	F 1		69		
602	2	090		CS	332		4	2075	/ 332		69	332	
603	2	094		CS			1	2079	/		69		
604	2	095		MCS	NCHAR,205		7	2080	Z P92 205		69	2792	205
605	2	102		MCW	MSGCHR,222		7	2087	M Q52 222		69	2852	222
606	2	109		W			1	2094	2		69		
607	2	110		CC	J		2	2095	F J		69		
608	2	112		MCW	NSTMT,NSTMTS		7	2097	M Q07 183		70	2807	183
609	2	119		LCA	STOP,0&X1		7	2104	L Q63 0|0		70	2863	000+1
610	2	126		SBR	X1		4	2111	H 089		70	089	
611	2	130		SW	2&X1		4	2115	, 0|2		70	002+1	
612	2	134		A	KP1,NSTMTS		7	2119	A N51 183		70	2551	183
613	2	141		BCE	NOTBIG,3000,		8	2126	B J38 ?00		70	2138	3000
614	2	149		B	BIGSRC		4	2134	B K18		71	2218	
615	2	153	NOTBIG	SBR	CLEARL&3,2999		7	2138	H 710 R99		71	710	2999
616	2	160		SBR	CLRBOT,BEGIN2 CHANGE ADDRESS TO CLEAR DOWN TO		7	2145	H 833 838		71	833	838
617	2	167		BSS	SNAPSH,C		5	2152	B 333 C		71	333	
618	2	172		LCA	SCANR1,PHASID SCANNER		7	2157	L Q70 110		71	2870	110
619	2	179		CS	80 GET		4	2164	/ 080		71	080	
620	2	183		SW	1,40 READY		7	2168	, 001 040		72	001	040
621	2	190		SW	47,54 FOR		7	2175	, 047 054		72	047	054
622	2	197		SW	61,68 CARD		7	2182	, 061 068		72	061	068
623	2	204		SW	72 OVERLAY		4	2189	, 072		72	072	
624	2	208		BCE	LOADNX,CDOVLY,N RUNNING FROM TAPE?		8	2193	B 700 769 N		72	700	769
625	2	216		R			1	2201	1		72		
626	2	217		C	7,SCANR2		7	2202	C 007 Q77		73	007	2877
627	2	224		BE	LOADNX		5	2209	B 700 S		73	700	
628	2	229		B	NOSYS		4	2214	B /75		73	1175	
629				*									
630				*	SOURCE PROGRAM TOO BIG								
631				*									
632	2	233	BIGSRC	CS	332		4	2218	/ 332		73	332	
633	2	237		CS			1	2222	/		73		
634	2	238		CC	1		2	2223	F 1		73		
635	2	240		MCW	MSG2,270		7	2225	M R13 270		73	2913	270
636	2	247		W			1	2232	2		74		
637	2	248		CC	1		2	2233	F 1		74		
638	2	250		BCE	HALT2,CDOVLY,1 RUNNING FROM CARDS?		8	2235	B K48 769 1		74	2248	769
639	2	258		RWD	1 NO, REWIND THE TAPE		5	2243	U %U1 R		74	%U1	
640	2	263	HALT2	H	HALT2		4	2248	. K48		74	2248	
641				*									
642				*	PRINT LISTING PAGE HEADING								
643				*									
644	2	267	PRTHDG	CC	1		2	2252	F 1		74		
645	2	269		MCW	KAT,C12T&4 CHANGE TO BCV		7	2254	M Q04 S17		74	2804	1217
646	2	276		CS	299		4	2261	/ 299		75	299	
647	2	280		A	K1,PAGNUM		7	2265	A M95 R16		75	2495	2916

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
648	2	287		MCS	PAGNUM,299		7	2272	Z R16 299		75	2916	299
649	2	294		MCW	KPAGE,295		7	2279	M R24 295		75	2924	295
650	2	301		MCW	80		4	2286	M 080		75	080	
651	2	305		W			1	2290	2		75		
652	2	306		CS	299		4	2291	/ 299		75	299	
653	2	310		MCW	PAGHDG,234		7	2295	M M08 234		76	2408	234
654	2	317		W			1	2302	2		76		
655	2	318		CC	J		2	2303	F J		76		
656	2	320		B	AFTHDG		4	2305	B S18		76	1218	
657				*									
658				*	NO PARAMETER CARD								
659				*									
660	2	324		NOPARM	CC 1		2	2309	F 1		76		
661	2	326		CS	332		4	2311	/ 332		76	332	
662	2	330		CS			1	2315	/		76		
663	2	331		MCW	MSG3,270		7	2316	M R53 270		77	2953	270
664	2	338		W			1	2323	2		77		
665	2	339		CC	1		2	2324	F 1		77		
666	2	341		BCE	HALT3,CDOVLY,1 RUNNING FROM CARDS?		8	2326	B L39 769 1		77	2339	769
667	2	349		RWD	1 NO, REWIND THE TAPE		5	2334	U %U1 R		77	%U1	
668	2	354	HALT3	H	HALT3		4	2339	. L39		77	2339	
669				*									
670				*	LIST COMMENT CARD								
671				*									
672	2	358	LSTCMT	MCW	FINAL,203		7	2343	M R56 203		77	2956	203
673	2	365		MCW	5,211		7	2350	M 005 211		78	005	211
674	2	372		W			1	2357	2		78		
675	2	373	TESTLC	BLC	DONE		5	2358	B 155 A		78	2055	
676	2	378		R			1	2363	1		78		
677	2	379		B	RDLOOP		4	2364	B /59		78	1159	
678				*									
679	2	388	INTCHR	DCW	@\$/| @ INTERESTING CHARACTERS		6	2373			78		
680	2	423	PAGHDG	DCW	@ SEQ STMT FORTRAN STATEMENT@		35	2408			79		
681				*									
682				*	CARD SAVE AREA								
683				*									
684				DA	1X78			2409	2486		79		
685			SAVE2		2			2410		SBFLD			
686			CARD1		6			2414		SBFLD			
687			CARD6		11			2419		SBFLD			
688			CARD7		12			2420		SBFLD			
689			CARD72		77			2485		SBFLD			
690			AZONE		78			2486		SBFLD			
691				*									
692				*	CONSTANTS AND WORK AREAS								
693				*									
694	2	503	COLCNT	DCW	#2		2	2488			80		
695	2	506	CARD7A	DSA	CARD7 ADDRESS OF COLUMN 7 IN SAVE AREA		3	2491	M20		80	2420	
696	2	509	SAVE2A	DSA	SAVE2		3	2494	M10		80	2410	
697	2	510	K1	DCW	1		1	2495			80		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
698	2	511	BRNCH2	DC	@B@		1	2496					80
699	2	513	K20	DC	20		2	2498					80
700	2	520	WORK7	DCW	#7		7	2505					80
701	2	527	KFMT	DCW	:@TAMROF@ 'FORMAT%' SPELLED BACKWARD		7	2512					80
702	2	528	NOP2	DC	@N@		1	2513					80
703	2	529	GM	DC	@}@		1	2514		GMARK			80
704	2	533	PREFIX	DCW	@000R@ DEFAULT STATEMENT PREFIX -- ARITHMETIC		4	2518					80
705	2	534	COLON	DCW	@:@		1	2519					81
706	2	536	K10	DCW	10		2	2521					81
707	2	537	MOVE	DC	@M@		1	2522					81
708	2	548	PROCD	DCW	@ PROCESSED @		11	2533					81
709	2	549	NOP	NOP			1	2534		N			81
710	2	554	KPARAM	DCW	@PARAM@		5	2539					81
711	2	557	CORSIZ	DCW	#3 ACTUAL MACHINE SIZE (TOP ADDR)		3	2542					81
712	2	560	TOCONV	DCW	#3 ADDRESS TO BE CONVERTED TO FIVE DIGITS		3	2545					81
713	2	565	CONVTD	DCW	#5 ADDRESS CONVERTED TO FIVE DIGITS		5	2550					82
714	2	566	KP1	DCW	&1		1	2551					82
715	2	594	STMSG	DCW	@START OF FORTRAN COMPILATION@		28	2579					82
716	2	620	SPSIZE	DCW	@MACHINE SIZE SPECIFIED IS @		26	2605					83
717	2	643	ACTSIZ	DCW	@ACTUAL MACHINE SIZE IS @		23	2628					84
718	2	648	COR5	DCW	#5 CORSIZ AS FIVE DIGITS		5	2633					84
719	2	653	TOP5	DCW	#5 TOPCOR AS FIVE DIGITS		5	2638					84
720	2	658	K3900	DCW	03900		5	2643					84
721	2	676	SIZERR	DCW	@MACHINE SIZE ERROR@		18	2661					85
722	2	722	SGTM	DCW	@SPECIFIED IS GREATER THAN ACTUAL MACHINE SIZE.@		46	2707					87
723	2	743	SGTM2	DCW	@ERROR - MACHINE SIZE @		21	2728					87
724	2	746	DOWNT0	DSA	2999 DCW @R99@		3	2731	R99			2999	87
725	2	787	MSG1	DCW	@MESSAGE 1-SYSTEM DOES NOT FOLLOW END CARD@		41	2772					89
726	2	802	CNTMSG	DCW	@CONTINUE CD ERR@		15	2787					89
727	2	807	NCHAR	DCW	#5 NUMBER OF CHARACTERS		5	2792					89
728	2	810	BOTCOR	DSA	3000 BOTTOM OF SPACE TO STORE PROGRAM		3	2795	?00			3000	89
729	2	811	BRANCH	DCW	@B@		1	2796					89
730	2	817	WORK6	DCW	#6		6	2802					90
731	2	818	KF	DCW	@F@		1	2803					90
732	2	819	KAT	DCW	@@@		1	2804					90
733	2	822	NSTMT	DCW	#3 NUMBER OF STATEMENTS		3	2807					90
734	2	824	CNTCNT	DCW	#2 COUNT OF CONTINUATION CARDS		2	2809					90
735	2	827	KEND	DCW	@DNE@ END SPELLED BACKWARD		3	2812					90
736	2	828	FLAG	DCW	#1 WORD MARK IS A FLAG		1	2813					90
737	2	829	KMINUS	DCW	@-@		1	2814					91
738	2	830	KSTAR	DCW	@*@		1	2815					91
739	2	831	CHAR	DCW	#1 CHARACTER FROM INPUT		1	2816					91
740	2	834	HCOUNT	DCW	#3 HOLLERITH COUNT		3	2819					91
741	2	836	KZ2	DCW	00 TWO ZEROS		2	2821					91
742	2	837	KZ1	DCW	0		1	2822					91
743	2	838	WORKH1	DCW	#1 WORK SPACE FOR HOLLERITH COUNT		1	2823					91
744	2	840	CNVW2A	DCW	#2 WORK SPACE FOR ADDRESS CONVERSION		2	2825					92
745	2	842	CNVW2B	DCW	#2 WORK SPACE FOR ADDRESS CONVERSION		2	2827					92
746	2	844	CNVKA0	DCW	@A0@ CONSTANT FOR ADDRESS CONVERSION		2	2829					92
747	2	846	CNVKQ4	DCW	@?4@ CONSTANT FOR ADDRESS CONVERSION		2	2831					92

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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
748	2	849	PZE	DCW	&000 PLUS ZERO		3	2834				92	
749	2	850	MOVE2	MCW			1	2835	M			92	
750	2	851	COMMA	DCW	,@		1	2836				92	
751	2	867	MSGCHR	DCW	@INPUT CHARACTERS@		16	2852				93	
752	2	878	STOP	DCW	@ }POTS:R000@ STOP SPELLED BACKWARD, ETC.		11	2863				93	
753	2	885	SCANR1	DCW	@SCANNER@		7	2870				93	
754	2	892	SCANR2	DCW	@SCANNER@		7	2877				94	
755	2	928	MSG2	DCW	@MESSAGE 2 - OBJECT PROGRAM TOO LARGE@		36	2913				95	
756	2	931	PAGNUM	DCW	#3		3	2916				95	
757	2	939	KPAGE	DCW	@ PAGE @		8	2924				96	
758	2	968	MSG3	DCW	@MESSAGE 3 - NO PARAMETER CARD@		29	2953				96	
759	2	971	FINAL	DCW	#3		3	2956				97	
760				ORG	2999				2999				
761	2	999	GMWM	DCW	@}@		1	2999		GMARK		98	
762				EX	BEGIN2				B 838			99	838
763				END					/ 838 080				838

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ACTSIZ	2628: 0	ADCONV	1861: 0	ADR5 S	0658: 0	AFTHDG	1218: 0	ARYSIZ	0160: 0	ARYTOP	0194: 0
AT	1674: 0	AT2	1787: 0	AT3	1818: 0	AZONE	2486: 0	BEGIN1	0838: 0	BEGIN2	0838: 0
BIGNUF	1081: 0	BIGSRC	2218: 0	BLANKL	0834: 0	BLNKOK	1958: 0	BOTCOR	2795: 0	BOTFMT	0154: 0
BRANCH	2796: 0	BRNCH2	2496: 0	BUMP3S	0632: 0	BUMPNS	1360: 0	C12T	1213: 0	C1410	0695: 0
CARD	0853: 0	CARD1	2414: 0	CARD6	2419: 0	CARD7	2420: 0	CARD72	2485: 0	CARD7A	2491: 0
CDOVLY	0769: 0	CHAR	2816: 0	CLEAR	1088: 0	CLEARH	0433: 0	CLEARL	0707: 0	CLRBOT	0833: 0
CLRL L	0742: 0	CLRWML	0754: 0	CNTCNT	2809: 0	CNTMSG	2787: 0	CNTOK	1287: 0	CNVKA0	2829: 0
CNVKQ4	2831: 0	CNVW2A	2825: 0	CNVW2B	2827: 0	COL3	1654: 0	COLCNT	2488: 0	COLON	2519: 0
COMMA	2836: 0	CONDNS	0693: 0	CONT S	0568: 0	CONVTD	2550: 0	COR5	2633: 0	CORSIZ	2542: 0
CRD1SW	1245: 0	CRD2SW	1317: 0	CRD3SW	1379: 0	CRD4SW	1387: 0	CRD5SW	1401: 0	CRD6SW	1410: 0
DOCNT	0151: 0	DONE	2055: 0	DOTS S	0651: 0	DOWM S	0520: 0	DOWNT0	2731: 0	ECOUNT	0837: 0
EINITL	0835: 0	EXIT C	1954: 0	EXIT S	0564: 0	EXPF	0120: 0	FINAL	2956: 0	FLAG	2813: 0
FLOATF	0125: 0	FMTSW	0696: 0	GET S	0497: 0	GLOBER	0184: 0	GM	2514: 0	GMWM	2999: 0
GMWM1	0900: 0	GOTXL	0185: 0	HALT S	0563: 0	HALT1	1192: 0	HALT2	2248: 0	HALT3	2339: 0
HCCOUNT	2819: 0	HOLLER	1736: 0	IMOD	0690: 0	INTCHR	2373: 0	INTRST	1685: 0	K1	2495: 0
K10	2521: 0	K20	2498: 0	K3900	2643: 0	K9 S	0665: 0	K999 L	0830: 0	KAT	2804: 0
KEND	2812: 0	KF	2803: 0	KFMT	2512: 0	KM10 S	0667: 0	KMINUS	2814: 0	KP1	2551: 0
KP1 S	0670: 0	KP15 S	0672: 0	KP2 S	0662: 0	KPAGE	2924: 0	KPARAM	2539: 0	KSTAR	2815: 0
KZ1	2822: 0	KZ2	2821: 0	KZ3 S	0661: 0	LOADNX	0700: 0	LOGF	0119: 0	LOOP S	0459: 0
LOOP1C	1887: 0	LOOP2C	1906: 0	LP2X C	1925: 0	LSTCMT	2343: 0	MANTIS	0692: 0	MOVE	2522: 0
MOVE2	2835: 0	MOVECD	1196: 0	MSG1	2772: 0	MSG2	2913: 0	MSG3	2953: 0	MSGCHR	2852: 0
MVCHAR	1349: 0	MVCHR2	1607: 0	NCHAR	2792: 0	NEGAR2	0142: 0	NEGAR3	0157: 0	NEGARY	0163: 0
NOP	2534: 0	NOP1	0871: 0	NOP2	2513: 0	NOPARM	2309: 0	NOSYS	1175: 0	NOTBIG	2138: 0
NOTCNT	1531: 0	NSTMT	2807: 0	NSTMTS	0183: 0	NZH	1836: 0	NZHM1	1802: 0	ONE L	0836: 0
PAGHDG	2408: 0	PAGNUM	2916: 0	PARAM	0699: 0	PHASID	0110: 0	PREFIX	2518: 0	PROCD	2533: 0
PRTHDG	2252: 0	PSGTM	1062: 0	WORD	0685: 0	PZE	2834: 0	RDAGIN	0773: 0	RDLOOP	1159: 0
RELTAB	0188: 0	RX1 S	0535: 0	SAVE2	2410: 0	SAVE2A	2494: 0	SAWABS	0122: 0	SAWNEG	0123: 0
SCANR1	2870: 0	SCANR2	2877: 0	SEQTAB	0148: 0	SERIES	0117: 0	SGTM	2707: 0	SGTM2	2728: 0
SINCOS	0118: 0	SIZERR	2661: 0	SKIP S	0621: 0	SLASH	1520: 0	SNAPSH	0333: 0	SNAPSW	0694: 0
SPSIZE	2605: 0	STMSG	2579: 0	STOP	2863: 0	SUBENT	0191: 0	SUBSCR	0116: 0	SVCHAR	1295: 0
SX1 S	0416: 0	SX3 S	0409: 0	SXX S	0402: 0	TBLBOT	0145: 0	TEST7	1394: 0	TESTLC	2358: 0
TOCONV	2545: 0	TOP5	2638: 0	TOPCOR	0688: 0	TPERRL	0797: 0	TPREAD	0780: 0	USEACT	1074: 0
W2A S	0664: 0	W2B S	0669: 0	WORK6	2802: 0	WORK7	2505: 0	WORKH1	2823: 0	X1	0089: 0
X2	0094: 0	X3	0099: 0	XFIXF	0124: 0	XQTD S	0680: 0	XXXXX1	0089: 0	XXXXX2	0094: 0
XXXXX3	0099: 0										

UNREFERENCED SYMBOLS

ARYSIZ ARYTOP BOTFMT CONDNS DOCNT EXPF FLOATF FMTSW GLOBER GMWM GOTXL IMOD LOGF MANTIS NEGAR2 NEGAR3 NEGARY
 RELTAB SAWABS SAWNEG SEQTAB SERIES SINCOS SNAPSW SUBENT SUBSCR TBLBOT XFIXF