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CLEAR STORAGE 1 ,008015,022026,030037,044,049,053053N000000N00001026 1
CLEAR STORAGE 2 L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0? 2
BOOTSTRAP ,008015,022029,036040,047054,061068,072/061039 ,0010011040 3
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FORTRAN COMPILER -- RESORT 3 PHASE -- PHASE 49 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101				JOB	FORTRAN COMPILER -- RESORT 3 PHASE -- PHASE 49						
102				CTL	6611						
103				*							
104				*	THE SOURCE PROGRAM IS RESORTED BACK TO ITS ORIGINAL ORDER.						
105				*	THE STATEMENT NUMBER TABLE IS FILLED WITH THE CURRENT LOCATION						
106				*	OF EACH STATEMENT.						
107				*							
108				*	ON ENTRY X3 IS AT THE BOTTOM ENTRY IN THE SORT TABLE AND						
109				*	X2 IS ONE ABOVE THE COLON THAT MARKS THE TOP OF THE SORT TABLE.						
110				*							
111			X1	EQU	89			0089			
112			X2	EQU	94			0094			
113			X3	EQU	99			0099			
114				*							
115				*	STUFF IN THE RESIDENT AREA						
116				*							
117			PHASID	EQU	110	PHASE ID, FOR SNAPSHOT DUMPS		0110			
118			SEQTAB	EQU	148	BOTTOM OF SEQUENCE NUMBER TABLE - 2		0148			
119			SNAPSH	EQU	333	CORE DUMP SNAPSHOT		0333			
120			TOPCOR	EQU	688	TOP CORE ADDRESS FROM PARAM CARD		0688			
121			LOADNX	EQU	700	LOAD NEXT OVERLAY		0700			
122			CLEARL	EQU	707	CS AT START OF OVERLAY LOADER		0707			
123				*							
124				*	STUFF FROM THE PREVIOUS PHASE						
125				*							
126			TOPA	EQU	841	TABBOT PLUS 3 X NUMBER OF STATEMENTS		0841			
127			SX1	EQU	844	SX3A IN PREVIOUS PHASE		0844			
128			NEXT	EQU	850	NEXT SORT TABLE ENTRY TO PROCESS		0850			
129			SX3A	EQU	853	SX2 IN PREVIOUS PHASE		0853			
130			SX3	EQU	856			0856			
131			W3	EQU	859			0859			
132			TOPC	EQU	862	TABBOT PLUS 3 X NUMBER OF STATEMENTS PLUS 1		0862			
133			SEQNO	EQU	865	SEQUENCE NUMBER OF STATEMENT BEING PROCESSED		0865			
134			TOPC5	EQU	870	TOPC AS FIVE DIGITS		0870			
135			TIMES6	EQU	875	DOCNT TIMES 6		0875			
136			W5	EQU	880			0880			
137			FLAG	EQU	884			0884			
138			ADR5B	EQU	891			0891			
139			ADR5	EQU	896			0896			
140			CONV35	EQU	969	CONVERT ADDRESS IN ADR5 TO DIGITS IN ADR5B		0969			
141			FINDGM	EQU	1052	FIND NEXT HIGHER GM		1052			
142			TOOBIG	EQU	1092			1092			
143				*							
144			SORTAB	EQU	2499	SORT TABLE		2499			
145				*							
146				ORG	1175				1175		
147	1	175	BEGINN	SW	GM		4	1175	, M68		4

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
148	1	179		B	* & 8	4		1179	B / 90		4
149	1	183	LOOP	SBR	X3, 0-0	7		1183	H 099 000		4
150	1	190		SBR	NEXT	4		1190	H 850		4
151	1	194	MIDDLE	BCE	EMPTY, 0&X3,	8		1194	B Z30 0?0		4
152	1	202		SBR	LOOP&6, 3&X3	7		1202	H / 89 0?3		4
153	1	209		MN	0&X3	4		1209	D 0?0		4
154	1	213		SAR	* & 7	4		1213	Q S23		5
155	1	217		BWZ	INDIR, 0-0, S	8		1217	V Y26 000 S		5
156	1	225		MCW	0&X3, X1	7		1225	M 0?0 089		5
157	1	232	INDIRB	SBR	TOPC, 0&X3	7		1232	H 862 0?0		5
158	1	239	INNER	MCW	X1, SX1A	7		1239	M 089 M47		5
159	1	246		MCW	X1, X3	7		1246	M 089 099		6
160	1	253		B	FINDDGM GET ADDRESS & 1 OF GM ABOVE STATEMENT	4		1253	B 52		6
161	1	257		MCW	X3, ADR5	7		1257	M 099 896		6
162	1	264		B	CONV35	4		1264	B 969		6
163	1	268		MCW	ADR5B, W5 ADDRESS & 1 OF GM ABOVE STATEMENT	7		1268	M 891 880		6
164	1	275		A	K1, W5	7		1275	A M48 880		6
165	1	282		MCW	SX1A, ADR5 ADDRESS OF STATEMENT	7		1282	M M47 896		7
166	1	289		B	CONV35	4		1289	B 969		7
167	1	293		MCW	ADR5B, W5B	7		1293	M 891 M42		7
168	1	300		S	W5B, W5 LENGTH OF STATEMENT	7		1300	S M42 880		7
169	1	307		MCW	X2, ADR5	7		1307	M 094 896		7
170	1	314		B	CONV35	4		1314	B 969		7
171	1	318		MCW	ADR5B, TOPC5 TOP OF TABLE & 2	7		1318	M 891 870		8
172	1	325		B	TEST	4		1325	B Y90		8
173	1	329		BL	MOVED1	5		1329	B Z71 T		8
174	1	334	NEWSTM	MCW	SX1A, X1	7		1334	M M47 089		8
175	1	341		BCE	* & 12, F1, 1	8		1341	B T60 M43 1		8
176	1	349		A	K1, 208	7		1349	A M48 208		8
177	1	356		B	REPORT	4		1356	B V27		9
178			*								
179	1	360		MCW	K0, F1	7		1360	M M49 M43		9
180	1	367		MCW	X3, SX3B&6	7		1367	M 099 V26		9
181	1	374		MCW	3&X1, X3	7		1374	M 0 3 099		9
182	1	381		MCW	0&X3, X3	7		1381	M 0?0 099		9
183	1	388		SBR	3&X1, 4&X3	7		1388	H 0 3 0?4		9
184	1	395		MA	W3, 3&X1	7		1395	# 859 0 3		10
185	1	402		MCW	X1, SX1B	7		1402	M 089 M52		10
186	1	409	DEZONE	MZ	* - 4, 9&X3	7		1409	Y U11 0?9		10
187	1	416		MZ	* - 4, 12&X3	7		1416	Y U18 0A2		10
188	1	423		MZ	* - 4, 15&X3	7		1423	Y U25 0A5		10
189	1	430		MZ	* - 4, 18&X3	7		1430	Y U32 0A8		11
190	1	437		BCE	DEZONX, 22&X3,	8		1437	B U84 0B2		11
191	1	445		MCW	22&X3, X1	7		1445	M 0B2 089		11
192	1	452		MCW	0&X1, 22&X3	7		1452	M 0 0 0B2		11
193	1	459		MA	K004, 22&X3	7		1459	# M55 0B2		11
194	1	466		MA	W3, 22&X3	7		1466	# 859 0B2		12
195	1	473		MCW	0&X1, X3	7		1473	M 0 0 099		12
196	1	480		B	DEZONE	4		1480	B U09		12
197	1	484	DEZONX	SBR	22&X3, 4&X2	7		1484	H 0B2 0!4		12

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
248	1	761	ENDST2	MCW	NOP, SWITCH	7		1761	M 58 X09		20
249	1	768		C	NEXT, TOPA	7		1768	C 850 841		20
250	1	775		BU	CONTIN	5		1775	B Y14 /		20
251			*								
252	1	780	DONE	LCA	COLON, 0&X2	7		1780	L M57 0!0		20
253	1	787		SBR	X3	4		1787	H 099		21
254	1	791		BSS	SNAPSH, C	5		1791	B 333 C		21
255	1	796		SBR	CLEARL&3, GMWM	7		1796	H 710 M69		21
256	1	803		LCA	RESORT, PHASID	7		1803	L M66 110		21
257	1	810		B	LOADNX	4		1810	B 700		21
258			*								
259	1	814	CONTIN	BCE	INDIR2, FLAG, 1	8		1814	B Y58 884 1		21
260	1	822		B	LOOP	4		1822	B /83		21
261			*								
262			*		SORT TABLE ENTRY IS THE ADDRESS OF ANOTHER ONE						
263			*								
264	1	826	INDIR	MCW	0&X3, X3	7		1826	M 0?0 099		22
265	1	833		MCW	0&X3, X1	7		1833	M 0?0 089		22
266	1	840		SBR	NEWX3&3, 3&X3	7		1840	H Y68 0?3		22
267	1	847		MCW	K1, FLAG	7		1847	M M48 884		22
268	1	854		B	INDIRB	4		1854	B S32		22
269			*								
270	1	858	INDIR2	MCW	K0, FLAG	7		1858	M M49 884		22
271	1	865	NEWX3	MCW	0-0, X1	7		1865	M 000 089		23
272	1	872		MCW	NEWX3&3, TOPC	7		1872	M Y68 862		23
273	1	879		MCW	K1, F1	7		1879	M M48 M43		23
274	1	886		B	INNER	4		1886	B S39		23
275			*								
276	1	890	TEST	SBR	TESTX&3	4		1890	H Z29		23
277	1	894		MCW	SX3, ADR5	7		1894	M 856 896		23
278	1	901		B	CONV35 CONVERT ADR5 TO ADR5B	4		1901	B 969		24
279	1	905		MCW	ADR5B, TIMES6	7		1905	M 891 875		24
280	1	912		S	TOPC5, TIMES6	7		1912	S 870 875		24
281	1	919		C	W5, TIMES6	7		1919	C 880 875		24
282	1	926	TESTX	B	0-0	4		1926	B 000		24
283			*								
284			*		EMPTY CELL IN SORT TABLE						
285			*								
286	1	930	EMPTY	A	K1, 208	7		1930	A M48 208		24
287	1	937		C	NEXT, TOPA	7		1937	C 850 841		25
288	1	944		BE	DONE	5		1944	B X80 S		25
289	1	949		SBR	X3, 3&X3	7		1949	H 099 0?3		25
290	1	956		SBR	NEXT	4		1956	H 850		25
291	1	960		B	MIDDLE	4		1960	B /94		25
292			*								
293	1	964	MOVED	SBR	SX3, 2&X3	7		1964	H 856 0?2		25
294	1	971	MOVED1	MCW	SX3, X3	7		1971	M 856 099		26
295	1	978		SBR	X3, 2&X3	7		1978	H 099 0?2		26
296	1	985		B	FINDGM	4		1985	B 52		26
297	1	989		BCE	MOVED, 0&X3, : COLON MEANS STATEMENT ALREADY MOVED	8		1989	B Z64 0?0 :		26

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
298	1	997		B	TEST	4	1997	B	Y90		26
299	2	001		BL	*&5	5	2001	B	!10 T		26
300	2	006		B	NEWSTM	4	2006	B	T34		26
301			*								
302	2	010		SBR	SX2A&6,0&X2	7	2010	H	M19 0!0		27
303	2	017	TSTTOP	C	X3, TOPCOR	7	2017	C	099 688		27
304	2	024		BE	ATTOP	5	2024	B	!44 S		27
305	2	029		SBR	X1, 3&X3	7	2029	H	089 0?3		27
306	2	036		BCE	NEXTAB, 0&X1, } GM	8	2036	B	!57 0 0 } GMARK		27
307	2	044	ATTOP	B	TEST	4	2044	B	Y90		27
308	2	048		BL	TOOBIG	5	2048	B	92 T		28
309	2	053		B	SX2A	4	2053	B	M13		28
310	2	057	NEXTAB	SBR	X3, 4&X3	7	2057	H	099 0?4		28
311	2	064	NEXTB1	B	FINDGM	4	2064	B	52		28
312	2	068		C	0&X3, COLON	7	2068	C	0?0 M57		28
313	2	075		BU	TSTTOP	5	2075	B	!17 /		28
314	2	080		SBR	NEXTX1&6, 0&X3	7	2080	H	J46 0?0		28
315	2	087		SBR	SX3A, 2&X3	7	2087	H	853 0?2		29
316	2	094		SBR	X3, 3&X3	7	2094	H	099 0?3		29
317	2	101	LOOP2	LCA	0&X1, 0&X3	7	2101	L	0 0 0?0		29
318	2	108		SAR	X1	4	2108	Q	089		29
319	2	112		C	0&X3	4	2112	C	0?0		29
320	2	116		SAR	X3	4	2116	Q	099		29
321	2	120		BCE	*&5, 0&X1, } GM	8	2120	B	J32 0 0 } GMARK		30
322	2	128		B	LOOP2	4	2128	B	J01		30
323	2	132		MN	0&X1	4	2132	D	0 0		30
324	2	136		SAR	SX1	4	2136	Q	844		30
325	2	140	NEXTX1	SBR	X1, 0-0	7	2140	H	089 000		30
326	2	147		BWZ	*&5, 1&X1, S	8	2147	V	J59 0 1 S		30
327	2	155		B	*&8	4	2155	B	J66		30
328	2	159		MCW	K1, F2	7	2159	M	M48 M44		31
329	2	166		BWZ	*&5, 0&X1, 2	8	2166	V	J78 0 0 2		31
330	2	174		B	*&9	4	2174	B	J86		31
331	2	178		BWZ	*&19, 2&X1, 2	8	2178	V	K04 0 2 2		31
332	2	186		MCW	2&X1, X1	7	2186	M	0 2 089		31
333	2	193		MCW	0&X1, X2	7	2193	M	0 0 094		32
334	2	200		B	*&8	4	2200	B	K11		32
335	2	204		MCW	2&X1, X2	7	2204	M	0 2 094		32
336	2	211		SBR	SEQNO, 0&X2	7	2211	H	865 0!0		32
337	2	218		SBR	*&14	4	2218	H	K35		32
338	2	222		MZ	X2ZONE, *&6	7	2222	Y	M67 K34		32
339	2	229		SBR	X2, 0-0	7	2229	H	094 000		33
340	2	236		MCW	SEQNO, *&14	7	2236	M	865 K56		33
341	2	243		MZ	X2ZONE, *&6	7	2243	Y	M67 K55		33
342	2	250		SBR	X2, 0-0	7	2250	H	094 000		33
343	2	257		BWZ	*&12, SORTAB-1&X2, S	8	2257	V	K76 MR8 S		33
344	2	265		SBR	SORTAB&X2, 1&X3	7	2265	H	MR9 0?1		34
345	2	272		B	SKIP2	4	2272	B	L16		34
346	2	276		MCW	SORTAB&X2, X1	7	2276	M	MR9 089		34
347	2	283		BCE	*&12, F2, 1	8	2283	B	L02 M44 1		34

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
348	2	291		SBR	3&X1,1&X3	7		2291	H 0 3 0?1		34
349	2	298		B	*&15	4		2298	B L16		34
350	2	302		SBR	0&X1,1&X3	7		2302	H 0 0 0?1		35
351	2	309		MCW	K0,F2	7		2309	M M49 M44		35
352	2	316	SKIP2	C	SX1,SX3	7		2316	C 844 856		35
353	2	323		BE	LOOP2X	5		2323	B L56 S		35
354	2	328		MCW	SX1,X1	7		2328	M 844 089		35
355	2	335		MN	0&X3	4		2335	D 0?0		35
356	2	339		MN		1		2339	D		35
357	2	340		MN		1		2340	D		36
358	2	341		SAR	NEXTX1&6	4		2341	Q J46		36
359	2	345		SBR	X1,1&X1	7		2345	H 089 0 1		36
360	2	352		B	LOOP2	4		2352	B J01		36
361	2	356	LOOP2X	LCA	GM,0&X3	7		2356	L M68 0?0		36
362	2	363		SBR	SX3	4		2363	H 856		36
363	2	367		C	SEQTAB,SX3A	7		2367	C 148 853		36
364	2	374		BE	ATBOT	5		2374	B M04 S		37
365	2	379		MCW	SX3A,X3	7		2379	M 853 099		37
366	2	386		SBR	X1,1&X3	7		2386	H 089 0?1		37
367	2	393		SBR	X3,2&X3	7		2393	H 099 0?2		37
368	2	400		B	NEXTB1	4		2400	B !64		37
369				*							
370				*	AT BOTTOM OF SORT TABLE						
371				*							
372	2	404	ATBOT	B	TEST	4		2404	B Y90		37
373	2	408		BL	TOOBIG	5		2408	B 92 T		37
374	2	413	SX2A	SBR	X2,0-0	7		2413	H 094 000		38
375	2	420		MCW	TOPC,X3	7		2420	M 862 099		38
376	2	427		MCW	0&X3,SX1A	7		2427	M 0?0 M47		38
377	2	434		B	NEWSTM	4		2434	B T34		38
378				*							
379				*	DATA						
380				*							
381	2	442	W5B	DCW	00000	5		2442			38
382	2	443	F1	DCW	0	1		2443			38
383	2	444	F2	DCW	0	1		2444			38
384	2	447	SX1A	DCW	#3	3		2447			39
385	2	448	K1	DCW	1	1		2448			39
386	2	449	K0	DCW	0	1		2449			39
387	2	452	SX1B	DCW	#3	3		2452			39
388	2	455	K004	DSA	4	3		2455	004		39
389	2	456	BRANCH	B		1		2456	B		39
390	2	457	COLON	DCW	@:@	1		2457			39
391	2	458	NOP	NOP		1		2458	N		40
392	2	466	RESORT	DCW	@RESORT 4@	8		2466			40
393	2	467	X2ZONE	DCW	@R@	1		2467			40
394	2	468	GM	DC	@}@	1		2468		GMARK	40
395	2	469	GMWM	DCW	@}@	1		2469		GMARK	40
396				EX	BEGINN				B /75		41
397				END					/ 000 080		

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ADR5	896	ADR5B	891	ATBOT	2404	ATTOP	2044	BEGINN	1175	BRANCH	2456	CLEARL	707
COLON	2457	CONTIN	1814	CONV35	969	DEZONE	1409	DEZONX	1484	DONE	1780	EMPTY	1930
ENDST2	1761	ENDSTM	1654	F1	2443	F2	2444	FINDGM	1052	FLAG	884	GM	2468
GMWM	2469	INDIR	1826	INDIR2	1858	INDIRB	1232	INNER	1239	K0	2449	K004	2455
K1	2448	LINK1	1688	LINK2	1695	LOADNX	700	LOOP	1183	LOOP2	2101	LOOP2X	2356
MARK	1702	MIDDLE	1194	MORE	1615	MOVED	1964	MOVED1	1971	NEWSTM	1334	NEWX1	1635
NEWX3	1865	NEXT	850	NEXTAB	2057	NEXTB1	2064	NEXTX1	2140	NOP	2458	PHASID	110
REPORT	1527	RESORT	2466	SEQNO	865	SEQTAB	148	SETWMS	1730	SKIP2	2316	SNAPSH	333
SORTAB	2499	SWITCH	1709	SX1	844	SX1A	2447	SX1B	2452	SX2A	2413	SX3	856
SX3A	853	SX3B	1520	TEST	1890	TESTX	1926	TIMES6	875	TOOBIG	1092	TOPA	841
TOPC	862	TOPC5	870	TOPCOR	688	TSTTOP	2017	W3	859	W5	880	W5B	2442
X1	89	X2	94	X2ZONE	2467	X3	99						