CLEAR STOF CLEAR STOF BOOTSTRAP		L0681	16,10	22026,030037,044,049,053053N00000N00001026 05106,110117B101/191#071029C029056B026/B001/0991 22029,036040,047054,061068,072/061039	,001/001 ,0010	117I0? 011040			1 2 3
			FORT	TRAN COMPILER SORT ONE PHASE PHASE 04			P	AGE	1
SEQ PG LI	N LABEL	OP	OPEF	RANDS	SFX CT	LOCN	INSTRUCTION TY	PE	CARD
101			FORT	TRAN COMPILER SORT ONE PHASE PHASE 04					
102 103	*	CTL	6611						
103		ONE	HASE.	DETERMINE WHETHER THERE IS SUFFICIENT ROOM					
105				STATEMENT BY THREE CHARACTERS.					
106				ELOW THE GROUP MARK BELOW THE LAST (BOTTOM					
107	* ADDF	RESS) I	N COF	RE.					
108	*								
109	X1	EQU	89			0089			
110	X2	EQU	94			0094			
111	X3	EQU	99			0099			
112 113		יי דאז יוי	מת מוני	ESIDENT AREA					
114	* 2101	E IN I	.ne Ke	LOIDENI AREA					
115	PHASTI	EOII	110	PHASE ID, FOR SNAPSHOT DUMPS		0110			
116				CORE DUMP SNAPSHOT		0333			
117	I.OADNS	EOII	700	I.OAD NEXT OVERIAY		0700			
118	CLEARI	EQU	707	CS AT START OF OVERLAY LOADER		0707			
119	CDOVLY	Z EQU	769	1 IF RUNNING FROM CARDS, N IF FROM TAPE		0769			
120	TPREAL	EQU	780	TAPE READ INSTRUCTION IN OVERLAY LOADER		0780			
121	LOADXX	(EQU	793	EXIT FROM OVERLAY LOADER		0793			
122		EQU	833	BOTTOM OF CORE TO CLEAR IN OVERLAY LOADER		0833			
123	* + man		DDDDG	ACRO OF MUE DIDOM OMAMBURNE OF FACUL MUDE					
124 125				SSES OF THE FIRST STATEMENT OF EACH TYPE, ZONE OF STATEMENT TYPE) + 3*(NUMERIC PART OF					
126				. FILLED IN NEXT PHASE, O.V.					
127	*	LIPILINI	CODE,	. IIIBBD IN NEXI INAGE, Q.V.					
128		ORG	838				0838		
129	LOADDI	EQU	*&1	LOAD ADDRESS		0838			
130 84	10	DCW	#3	BLANK	3	0840			4
131 84	13		#3	1 READ TAPE	3	0843			4
	16		#3			0846			4
	19			3 WRITE TAPE		0849			4
	52 55	DCW DCW	#3			0852 0855			4
	58	DCW		5 READ INPUT TAPE 6 WRITE OUTPUT TAPE		0855			4
137 86		DCW	#3			0861			5
138 86		DCW	#3			0864			5
	57	DCW	#3			0867			5
140 87	0	DCW	#3	0	3	0870			5
141 87		DCW		/ END		0873			5
142 87		DCW		S STOP		0876			5
143 87		DCW		T COMPUTED GOTO		0879			5
144 88		DCW		U PUNCH		0882			6
145 88 146 88		DCW DCW	#3	W IF (SENSE SWITCH)		0885 0888			6 6
147 89		DCW	#3			0891			6
11, 03	-	DOM	11 J	••	J	0071			O

				FORTRAN COMPILER SORT ONE PHASE PHASE 04				PAGE	2
SEQ	PG LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
148	894		DCW	#3 Y	3	0894			6
149	897		DCW	#3 Z REWIND	3				6
150	900		DCW	#3 !	3	0900			6
151	903		DCW	#3 J SENSE LIGHT	3	0903			7
152	906		DCW	#3 K IF (SENSE LIGHT)	3	0906			7
153	909		DCW	#3 L READ	3				7
154	912		DCW	#3 M	3	0912			7
155	915		DCW	#3 N ENDFILE		0915			7
156	918		DCW	#3 0	3	0918			7
157	921		DCW	#3 P PRINT	3	0921			7
158	924		DCW	#3 Q	3	0924			8
159	927		DCW	#3 R ARITHMETIC	3	0927			8
160	930		DCW	#3 ?	3	0930			8
161	933		DCW	#3 A PAUSE	3	0933			8
162	936		DCW	#3 B BACKSPACE	3	0936			8
163	939		DCW	#3 C CONTINUE	3	0939			8
164	942		DCW	#3 D DO	3	0942			8
165	945		DCW	#3 E IF	3	0945			9
166	948		DCW	#3 F FORMAT	3				9
167	951		DCW	#3 G GOTO	3				9
168	954		DCW	#3 H	3				9
169	957		DCW	#3 I DIMENSION	3	0957			9
170			ORG	1006			1006		
171	1 009	ZONES *	DCW	@2SKB@	4	1009			10
172 173				INSTEAD OF 838					
174		^ SIAK	I HEKE	INSIEAD OF 838					
175	1 010	BEGINN	1 00	2599	1	1010	/ N99		10
176	1 010	DEGINN	CHAIN		-4	1010	/ IN 9 9	MACRO	1.0
177	1 014		CS		1	1014	/	GEN	10
178			CS			1015	,	GEN	10
179			CS		1	1016	,	GEN	10
180			CS		1	1017	,	GEN	10
181			CS		1	1018	,	GEN	10
182			CS		1	1019	,	GEN	11
183			CS		1	1020	/	GEN	11
184			CS		1	1021	/	GEN	11
185	1 022		MCW	83,X3 ADDRESS OF END OF LAST STATEMENT	7	1022	M 083 099		11
186	1 029		MCM	2&X3	4	1029	P 0?2		11
187	1 033		MCW		1	1033	M		11
188	1 034		SBR	X3 ADDRESS OF BEGINNING OF LAST STATEMENT	4	1034	н 099		11
189		*							
190		* MULT	IPLY S	TATEMENT NUMBER OF LAST STATEMENT BY 3					
191		*							
192	1 038		MCW	0&X3,SEQ			M 0?0 T52		12
	1 045		ZA	SEQ,SEQ5	7		? T52 T57		12
	1 052		A	SEQ5	4		A T57		12
195	1 056		A	SEQ,SEQ5	7	1056	A T52 T57		12
196	1 063		S	KP2,SEQ5 3 * # STMTS - 2	7	1063	S T58 T57		12
19/	1 070		MCW	SEQ5, WORK5	7	TO 10	M T57 T63		12

				FORTRAN COMPILER SORT ONE PHASE PHASE 04			PAGI	Ξ 3
SEQ	PG LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
198	1 077		MCW	K16K,SEQ5	7	1077	M T68 T57	13
199 200	1 084	*	S	WORK5,SEQ5 16000 - (3 * # STMTS - 2)	7	1084	S T63 T57	13
201			ERT TO	ADDRESS				
203	1 091		BAV	LOOP CLEAR OVERFLOW	5	1091	B 96 Z	13
204	1 096	LOOP	A	KP96,SEQ5-3	7	1096	A T70 T54	13
205	1 103		BAV	LOOP	5	1103	B 96 Z	13
206	1 108		MN	SEQ5-3,*&4	7	1108	D T54 /18	13
207	1 115		MZ	ZONES-0,SEQ5-2	7	1115	Y 09 T55	14
208		*						
209			MCW	83,X1	7	1122	М 083 089	14
210			MCW	X1,NOP&3	7	1129	M 089 /53	14
211			MCW	SEQ5,X2	7	1136	M T57 094	14
212			MZ	KM1,NOP&2 SET TAG FOR X2	7	1143	Y T71 /52	14
	1 150	NOP	NOP	0 X1 + X2	4	1150	N 000	14
	1 154		SAR	X2	4	1154	Q 094	15
215	1 158 1 162		S	W2A W2B	4	1158 1162	S T73 S T75	15 15
217			S MZ	X2,W2A-1	7	1162	Y 094 T72	15
217			MZ	X2-2,W2B-1	7		Y 092 T74	15
	1 180	LOOP2	BWZ	LOOP2X,W2B-1,2	8	1180	V /99 T74 2	15
220		1001 2	A	K10V,W2B	7	1188	A T77 T75	16
221			В	LOOP2	4	1195	B /80	16
	1 199	LOOP2X		LOOP3X,W2A-1,2	8	1199	V S18 T72 2	16
223			A	K04V,W2A	7	1207	A T79 T73	16
224			В	LOOP2X	4	1214	В /99	16
225	1 218	LOOP3X	A	W2B-1,W2A	7	1218	A T74 T73	16
226	1 225		MCW	X2,SEQ5	7	1225	M 094 T57	17
227	1 232		MCW	W2A	4	1232	M T73	17
228	1 236		ZA	SEQ5	4	1236	? T57	17
229	1 240		MZ	*-4,SEQ5 CLEAR ZONE IN TENS DIGIT	7	1240	Y S42 T57	17
	1 247		C	SEQ5,K2900	7	1247	C T57 T84	17
	1 254		BL	OK	5	1254	B S93 T	17
232		*						
233		* INSU	F.F.T.C.T.E.	NT ROOM TO EXPAND EVERY STATEMENT BY THREE CHARACTE	ERS			
234	1 259	^	CS	222	4	1259	/ 222	17
235			CS	332	4	1263	/ 332	18
	1 264		CC	1	2	1264	F 1	18
238	1 266		MCW	MSG2,270	7	1266	M U20 270	18
239			W	11502/270	1	1273	2	18
240			CC	1	2	1274	F 1	18
241			BCE	HALT, CDOVLY, 1	8	1276	B S89 769 1	18
242			RWD	1	5	1284	U %U1 R	18
	1 289	HALT	Н	HALT	4	1289	. S89	19
244		*						
245		* SOUR	CE COD	E WILL FIT AFTER EXPANDING EVERY STATEMENT BY				
246		* THRE	E CHAR	ACTERS				
247		*						

phase-4.3.asc	Mon Jul 14 23:50:05 2008	4						
	FORTRAN COMPILER SORT ONE PHASE PHASE 04			PA	ЗE			
SEQ PG LIN LABEL OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYP	E C			
248 1 293 OK MCW	X2,83 REPLACE ADDRESS OF BOTTOM OF CODE	7	1293	M 094 083				
249 1 300 MCM	0&X1	4	1300	P 0 0				
250 1 304 SAR	X1 ADDRESS BELOW LAST STATEMENT	4	1304	Q 089				
251 1 308 BSS	SNAPSH,C	5	1308	В 333 С				
050 1 010 050		-	1010					

SEQ PG LIN	LABEL OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
248 1 293	OK MCW	X2,83 REPLACE ADDRESS OF BOTTOM OF CODE	7	1293	M 094 083	19
249 1 300	MCM	0 & X 1	4	1300	P 0 0	19
250 1 304	SAR	X1 ADDRESS BELOW LAST STATEMENT	4	1304	Q 089	19
251 1 308	BSS		5		В 333 С	19
252 1 313	SBR	TPREAD&6,1022 CHANGE LOAD ADDRESS FOR NEXT PHASE	7	1313	H 786 22	19
253 1 320	SBR	CLRBOT	4	1320	н 833	19
254 1 324	SBR	LOADXX&3,1022 CHANGE ENTRY ADDRESS FOR NEXT PHASE	7	1324	H 796 22	20
255 1 331	SBR	OT DADI 62 CODMO61	7	1331	H 710 U27	20
256 1 338	LCA	SORT2,PHASID	7		L U26 110	20
257 1 345	В	CLEARL&3,SOR12&1 SORT2,PHASID LOADNX LOAD NEXT OVERLAY	4	1345	В 700	20
258	*					
259		'S AND WORK AREAS				
260	*					
261 1 349	DCW		1	1349		20
262 1 352	SEQ DCW	#3 SEQUENCE NUMBER OF LAST STATEMENT	3	1352		20
263 1 357	SEQ5 DCW	#5 STMT NUMBER TIMES 3	5	1357		20
264 1 358	KP2 DCW		1	1000		21
265 1 363	WORK5 DCW	#5	5	1363		21
266 1 368	K16K DCW		5	1368		21
267 1 370	KP96 DCW			1370		21
268 1 371	KM1 DCW			1371		21
269 1 373 270 1 375	W2A DCW			1373 1375		21
270 1 375	W2B DCW K10V DCW			1375		21 22
272 1 379	K10V DCW		2	1377		22
272 1 379	K04V DCW K2900 DCW		∠ 5	1379		22
274 1 420	MSG2 DCW			1420		23
275 1 426	SORT2 DCW		6	1426		2.4
276 1 427	GMWM DCW		1		GMAF	
277	ORG		1	142/	0201	.IX 24
278 203	DSA		3	0203		25
279	EX	BEGINN	J	0203	B 10	26
280	END				/ 000 080	20
200	LIND				, 000 000	

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			FORTRAN	COMPILE	R SORT	ONE PHA	SE PHA	SE 04				PAGE	5
SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
BEGINN	1010	CDOVLY	769	CLEARL	707	CLRBOT	833	GMWM	1427	HALT	1289	K04V	1379
K10V	1377	K16K	1368	K2900	1384	KM1	1371	KP2	1358	KP96	1370	LOADDD	838
LOADNX	700	LOADXX	793	LOOP	1096	LOOP2	1180	LOOP2X	1199	LOOP3X	1218	MSG2	1420
NOP	1150	OK	1293	PHASID	110	SEQ	1352	SEQ5	1357	SNAPSH	333	SORT2	1426
TPREAD	780	W2A	1373	W2B	1375	WORK5	1363	X1	89	X2	94	X3	99

ZONES 1009