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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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SPLIT LONG TAPE RECORDS AND RECOMBINE THEM PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101				JOB	SPLIT LONG TAPE RECORDS AND RECOMBINE THEM						
102				CTL	6611						
103				*							
104				*	SPLIT LONG TAPE RECORDS INTO SHORT ONES.						
105				*	WRITE A RECORD BEFORE EACH SHORT ONE TO FACILITATE RECOMBINING						
106				*							
107				*	COL 1. 0 - DO NOT WRITE PREVIOUS RECORD						
108				*	1 - WRITE PREVIOUS RECORD						
109				*	2 - WRITE PREVIOUS RECORD AND ENDFILE						
110				*	COL 2-4. ADDRESS TO READ NEXT RECORD						
111				*	COL 5-7. ADDRESS OF GMWM IF COLL. IS 1 OR 2.						
112				*	COL 8-80 NOT USED						
113				*							
114				*	HALTS (A- AND B-ADDRESSES):						
115				*							
116				*	111 RECOMBINER FINISHED NORMALLY, PUSH START FOR ANOTHER FILE						
117				*	222 MORE THAN TEN READ ERRORS, PUSH START TO RETRY						
118				*	333 MORE THAN TEN WRITE ERRORS, PUSH START TO SKIP AND RETRY						
119				*	666 READ ERROR FOR BOOT RECORD OF RECOMBINER						
120				*	777 SPLITTER FINISHED NORMALLY, PUSH START FOR ANOTHER FILE						
121				*							
122				*	SENSE SWITCHES						
123				*	B SKIP NOISE TEST						
124				*							
125			SIZE	EQU	1000			MAXIMUM SIZE OF SPLIT BLOCKS	1000		
126			*								
127			X1	EQU	89				0089		
128			X2	EQU	94				0094		
129			X3	EQU	99				0099		
130			*								
131				ORG	81				0081		
132			GM	DC	@} @	1	0081			GMARK	4
133			*								
134			IN	EQU	6			TAPE WITH LONG RECORDS TO BE READ	0006		
135			INOUT	EQU	1			TAPE WITH SHORT RECORDS	0001		
136			OUT	EQU	3			TAPE ON WHICH TO WRITE LONG RECORDS	0003		
137			KIN	DC	6	1	0082				4
138			KINOUT	DC	1	1	0083				4
139			KOUT	DC	3	1	0084				4
140			*								
141			*		READ THE INDICATOR RECORD						
142			*								
143				ORG	100				0100		
144			RECOMB	SW	GM	4	0100	, 081			5
145				B	CLEAR	4	0104	B 405			5
146				MN	KINOUT,RDTP&3	7	0108	D 083 249			5
147				MN	KOUT,WRTP&3	7	0115	D 084 339			5

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
148			RDIND	SBR	X2,1	7		0122	H 094 001		5
149				B	TPRD	4		0129	B 217		5
150				BCE	NXREAD,1,0	8		0133	B 202 001 0		6
151				MCW	7,X1	7		0141	M 007 089		6
152				LCA	GM,0&X1	7		0148	L 081 0 0		6
153				SBR	WRTP&6,BUF	7		0155	H 342 900		6
154				B	TPWR	4		0162	B 325		6
155				CW	0&X1	4		0166	) 0 0		6
156				BCE	NXREAD,1,1	8		0170	B 202 001 1		7
157				WTM	OUT	5		0178	U %U3 M		7
158				WTM	OUT	5		0183	U %U3 M		7
159				BSP	OUT	5		0188	U %U3 B		7
160				NOP	111	4		0193	N 111		7
161				H		1		0197	.		7
162				B	RDIND	4		0198	B 122		7
163				*							
164				* READ	THE DATA RECORD						
165				*							
166				NXREAD	MCW 4,X2	7		0202	M 004 094		8
167				B	TPRD	4		0209	B 217		8
168				B	RDIND	4		0213	B 122		8
169				*							
170				* TAPE READ	ROUTINE						
171				*							
172				TPRD	SBR TPRX&3	4		0217	H 288		8
173				MZ	CLEARL,AZTEST&7	7		0221	Y 420 284		8
174				MCW	AZTEST&7,12&X2	7		0228	M 284 0J2		8
175				RDTPZ	SBR ERCT,0	7		0235	H 403 000		9
176				SW	EOFIN	4		0242	, 404		9
177				RDTP	RTW IN,0&X2	8		0246	L %U6 0!0 R		9
178				SBR	X3	4		0254	H 099		9
179				BER	RDERR	5		0258	B 289 L		9
180				BEF	TPRX	5		0263	B 285 K		9
181				CW	EOFIN	4		0268	) 404		9
182				BSS	TPRX,B	5		0272	B 285 B		10
183				AZTEST	BCE RDTP,12&X2,	8		0277	B 246 0J2		10
184				TPRX	B 0-0	4		0285	B 000		10
185				RDERR	A *-6,ERCT	7		0289	A 289 403		10
186				MN	RDTP&3,*&4	7		0296	D 249 306		10
187				BSP	0-0	5		0303	U %U0 B		10
188				BCE	RDTP,ERCT-1,0	8		0308	B 246 402 0		11
189				NOP	222	4		0316	N 222		11
190				H		1		0320	.		11
191				B	RDTPZ	4		0321	B 235		11
192				*							
193				* TAPE WRITE	ROUTINE						
194				*							
195				TPWR	SBR TPWRX&3	4		0325	H 356		11
196				WRTPZ	SBR ERCT,0	7		0329	H 403 000		11
197				WRTP	WTW OUT,0-0	8		0336	L %U3 000 W		11

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
198				SBR	ENDWR			4 0344	H 400		12
199				BER	WTERR			5 0348	B 357 L		12
200			TPWRX	B	0-0			4 0353	B 000		12
201			WTERR	A	*-6,ERCT			7 0357	A 357 403		12
202				MN	WRTP&3,*&4			7 0364	D 339 374		12
203				BSP	0-0			5 0371	U %U0 B		12
204				BCE	WRTP,ERCT-1,0			8 0376	B 336 402 0		13
205				SKP	0			5 0384	U %U0 E		13
206				NOP	333			4 0389	N 333		13
207				H				1 0393	.		13
208				B	WRTPZ			4 0394	B 329		13
209			ENDWR	DCW	#3			3 0400			13
210			ERCT	DCW	#3			3 0403			13
211			EOFIN	DC	#1			1 0404	WORD MARK IF EOF ON INPUT		13
212				*							
213				*	CLEAR CORE DOWN TO BUF						
214				*							
215			CLEAR	SBR	CLEARX&3			4 0405	H 439		14
216				SW	BUF			4 0409	, 900		14
217				SBR	CLEARL&3,0			7 0413	H 423 000		14
218			CLEARL	CS	0-0			4 0420	/ 000		14
219				SBR	CLEARL&3			4 0424	H 423		14
220				BW	CLEARL,BUF			8 0428	V 420 900 1		14
221			CLEARX	BIN	0-0,			5 0436	B 000		14
222				*							
223				DCW	@}@\			1 0441		GMARK	15

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
224			JOB		SPLIT LONG RECORDS INTO SHORT ONES						
225			*								
226			*		ERROR CHECK AND LINK ROUTINE FOR STARTING RECOMBINER.						
227			*		LOADS AT 1-27.						
228			*								
229				BER	13 Q. ERROR	5		0442	B 013 L		16
230				CS	RECOMB,80 NO, CLEAR 0-80 AND BRANCH	7		0447	/ 100 080		16
231				BSP	1	5		0454	U %U1 B		16
232				NOP	666	4		0459	N 666		16
233				H		1		0463	.		16
234				BIN	18,	5		0464	B 018		16
235			ENDLD	EQU	*			0468			
236			*								
237			*		WRITE THE RECOMBINER						
238			*								
239			START	MZ	CLEARL,AZTEST&7 SET A-ZONE TO TEST FOR NOISE RECORD	7		0469	Y 420 284		16
240				LCA	ENDLD,27	7		0476	L 468 027		17
241				CHAIN	5					MACRO	
242				LCA		1		0483	L	GEN	17
243				LCA		1		0484	L	GEN	17
244				LCA		1		0485	L	GEN	17
245				LCA		1		0486	L	GEN	17
246				LCA		1		0487	L	GEN	17
247				MN	KIN,RDTP&3 SET TO READ FROM IN	7		0488	D 082 249		17
248				SBR	X2,BUF SET TO READ INTO BUF	7		0495	H 094 900		18
249				MN	KINOUT,WRTP&3 SET TO WRITE ON INOUT	7		0502	D 083 339		18
250				SBR	WRTP&6,1 SET THE WRITE ADDRESS	7		0509	H 342 001		18
251				B	TPWR WRITE THE RECOMBINER	4		0516	B 325		18
252				CS	80	4		0520	/ 080		18
253				SW	2,5	7		0524	, 002 005		18
254				SW	GM NOW SET A WM AT THE GM AT 81	4		0531	, 081		19
255			ANOTHR	LCA	@0@,1	7		0535	L 833 001		19
256			*								
257			*		READ A RECORD						
258			*								
259			RDLP	B	CLEAR CLEAR TOP OF CORE DOWN TO BUF	4		0542	B 405		19
260				B	TPRD READ A RECPRD	4		0546	B 217		19
261				BW	ENDIN,EOFIN Q. EOF	8		0550	V 775 404 1		19
262				SBR	4,BUF SET BUF ADDRESS IN INDICATOR RECORD	7		0558	H 004 900		19
263				SBR	WRTP&6,1 SET WRITE ADDRESS TO 1	7		0565	H 342 001		20
264				B	TPWR WRITE THE INDICATOR RECORD	4		0572	B 325		20
265				SW	15999&X3 PUT A WM UNDER THE GM FROM THE READ	4		0576	, III		20
266				SBR	7,15999&X3 SET ADDRESS OF GMWM IN INDICATOR	7		0580	H 007 III		20
267			*								
268			*		WRITE IT 1K AT A TIME						
269			*								
270				SBR	X1,BUF START WRITING AT BUF	7		0587	H 089 900		20
271			WRLP	MCW	SIZE&X1,SVCH SAVE CHARACTER WHERE GMWM WILL BE	7		0594	M   0 825		20
272				SW	SVWM ASSUME IT HAS A WM	4		0601	, 826		21
273				BW	*&5,SIZE&X1 Q. DOES IT HAVE A WM	8		0605	V 617   0 1		21

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
274				CW	SVWM			4 0613	) 826		21
275				LCA	GM,SIZE&X1			7 0617	L 081   0		21
276				SBR	WRTP&6,0&X1			7 0624	H 342 0 0		21
277				B	TPWR			4 0631	B 325		21
278				C	X3,ENDWR			7 0635	C 099 400		22
279				BU	NOTEND			5 0642	B 720 /		22
280				SBR	SX1,0&X1			7 0647	H 829 0 0		22
281				SBR	SX3,0&X3			7 0654	H 832 0?0		22
282				MN	@00@,SX3			7 0661	D 835 832		22
283				MN				1 0668	D		22
284				MN	@00@,SX1			7 0669	D 835 829		23
285				MN				1 0676	D		23
286				C	SX1,SX3			7 0677	C 829 832		23
287				BU	LONG			5 0684	B 709 /		23
288				BSP	INOUT			5 0689	U %U1 B		23
289				CW	15999&X3			4 0694	) III		23
290				LCA	GM,100&X1			7 0698	L 081 1 0		23
291				B	TPWR			4 0705	B 325		24
292		LONG		LCA	@1@,1			7 0709	L 836 001		24
293				B	RDLP			4 0716	B 542		24
294		NOTEND		LCA	@0@,1			7 0720	L 833 001		24
295				SBR	4,SIZE&X1			7 0727	H 004   0		24
296				SBR	WRTP&6,1			7 0734	H 342 001		24
297				B	TPWR			4 0741	B 325		25
298				LCA	SVCH,SIZE&X1			7 0745	L 825   0		25
299				BW	*&5,SVWM			8 0752	V 764 826 1		25
300				CW	SIZE&X1			4 0760	)   0		25
301				SBR	X1,SIZE&X1			7 0764	H 089   0		25
302				B	WRLP			4 0771	B 594		25
303				*							
304		ENDIN		LCA	@2@,1			7 0775	L 837 001		26
305				SBR	WRTP&6,1			7 0782	H 342 001		26
306				B	TPWR			4 0789	B 325		26
307				WTM	INOUT			5 0793	U %U1 M		26
308				WTM	INOUT			5 0798	U %U1 M		26
309				BSP	INOUT			5 0803	U %U1 B		26
310				BSP	INOUT			5 0808	U %U1 B		26
311				NOP	777			4 0813	N 777		27
312				H				1 0817	.		27
313				B	ANOTHR			4 0818	B 535		27
314				*							
315		ENDRD		DCW	#3			3 0824			27
316		SVCH		DCW	#1			1 0825			27
317		SVWM		DCW	#1			1 0826			27
318		SX1		DCW	#3			3 0829			27
319		SX3		DCW	#3			3 0832			28
320				LTORG	*				0833		
				DCW	@0@			1 0833		LIT	28
				DCW	@00@			2 0835		LIT	28
				DCW	@1@			1 0836		LIT	28

SPLIT LONG RECORDS INTO SHORT ONES

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
321				DCW	@2@	1		0837		LIT	28
322				ORG	*&X00				0900		
322			BUF	DC	#1	1		0900			29
323				END	START				/ 469 080		

