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* V.D.M. PART NO. 92L1007-001H

* RELEASED 10-11-71

* 620 BINARY LOADER AND DUMP BLD II

* RELOCATING PRE-LOADER

007000		.CRG	.07000			000010
	000201	IBFR	.SET	.0201	INPUT BUFFER	000020
	000101	OBFR	.SET	.0101	OUTPUT BUFFER	000030
	000001	RDR	.SET	.1	TELETYPE LOAD	000040
	000001	PNCH	.SET	.1	TELETYPE DUMP	000050
	007000 R	PLDS	.EGU	.*	PRELIM. LOADER SETUP TRN	000060
007000	100437		.EXC	.0437	HSPT READER OFF	000070
007001	006010		.LDAI	.0223		000080
007002	000223					000090
007003	103101		.CAR	.PNCH	TTY READER OFF	000100
007004	006020		.LDBI	.037	NORMAL HS PUNCH DA	H 000110
007005	000037					
007006	001100		.JSS1	.*+5	TEST FOR RELOC. DATA	000120
007007	007013 R					
007010	005001		.TZA	.		000130
007011	001000		.JMP	.*+5	NORMAL RELOCATION	H 000140
007012	007016 R					
007013	000007		.HLT	.7		000150
007014	064305		.STB	.PUDA	HS PUNCH DA	H 000160
007015	005111		.IAR	.	SAVE USER SPECIFIED	000170
007016	054305		.STA	.RDTA	RELOC. DATA	000180
007017	006010		.LDAI	.0102600	DUMMY SENSE COMMAND	000190
007020	102600					
007021	114304		.CRA	.DVAD		000200
007022	054022		.STA	.DVIC	DEVICE ID	000210
					CHECK FOR ABL OPTION	000220
					IF ABL, OVERRIDE USER RELOC. DATA	000230
007023	010200		.LDA	.0200	FIRST WORD OF ABL	000240
007024	134020		.ERA	.DVIC		000250
007025	001010		.JAZ	.PLDF	ABL PRESENT	000260
007026	007042 R					

007027	006130		.ERAI	.036		000260
007030	000036					
007031	001010		.JAZ	.PLDF	ABL PRESENT	000270
007032	007042	R				
007033	014722		.LDA	.BOCT		000280
	007034	R	PLDE	.EQU	.*	000290
007034	144010		.SUB	.DVIC		000300
007035	001010		.JAZ	.PLD		000310
007036	007155	R				
007037	054266		.STA	.DVAD		000320
007040	001000		.JMP	.PLDG	HSPT INPUT	000330
007041	007046	R				
	007042	R	PLDF	.EQU	.*	000340
007042	010200		.LDA	.0200		000350
007043	001000		.JMP	.PLDE		000360
007044	007034	R				
			*			000370
	007045	R	DVIC	.EQU	.*	000380
007045	102600		.DATA	.0102600	TTY READER	000390
			*		ADJUST ALL I/O COMMANDS	000400
			*		IN BINARY LOAD/DUMP PROG.	000410
	007046	R	PLDG	.EQU	.*	000420
			*		TEST SS2 -- IF SET, USER WANTS	000430
			*		HSPT READER INPUT AND TTY PUNCH OUT	000440
007046	001200		.JSS2	.PLD3		000450
007047	007106	R				
007050	006010		.LDAI	.0103100	QAR INST	H 000460
007051	103100					
007052	114247		.ORA	.PUDA	PUNCH DA	H 000465
007053	054664		.STA	.OUT		000470
007054	006010		.LDAI	.0101500	SEN INST: HSPT BUF READY	H 000480
007055	101500					
007056	114243		.CRA	.PUDA	PUNCH DA	H 000490
007057	054663		.STA	.OTPT+1		000500
007060	006020		.LDBI	.PCFF+5		000510
007061	007430	R				
007062	034013		.LDX	.PLD2		000520
007063	014377		.LDA	.PRCD-1	NOP	000530
007064	056000		.STA	.0:2		000540
007065	005322		.DRR	.		000550
007066	005344		.DXR	.		000560
007067	001040		.JXZ	.**4		000570

007070	007073	R					
007071	001000		.JMP	.*-5			000580
007072	007064	R					
007073	006020		.LDBI	.DUMP+10			000590
007074	007446	R					
007075	006030		.LDBI	.6			000600
007076	000006						
	007076	R	.PLD2	.EQU	.*-1		000610
007077	056000		.STA	.0.2			000620
007100	005322		.DBR	.			000630
007101	005344		.DXR	.			000640
007102	001040		.JXZ	.*+4			000650
007103	007106	R					
007104	001000		.JMP	.*-5			000660
007105	007077	R					
	007106	R	.PLD3	.EQU	.*		000670
007106	014354		.LDA	.PRCD-1		NOP	000680
007107	006020		.LDBI	.END+6			000690
007110	007615	R					
007111	006030		.LDXI	.3			000700
007112	000003						
007113	056000		.STA	.0.2			000710
007114	005322		.DBR	.			000720
007115	005344		.DXR	.			000730
007116	001040		.JXZ	.*+4			000740
007117	007122	R					
007120	001000		.JMP	.*-5			000750
007121	007113	R					
007122	014200		.LDA	.PICP			000760
007123	124202		.ADD	.DVAD			000770
007124	056000		.STA	.0.2			000780
007125	006020		.LDBI	.LOAD+4			000790
007126	007634	R					
007127	006030		.LDXI	.2			000800
007130	000002						
007131	014331		.LDA	.PRCD-1		NOP	000810
007132	056000		.STA	.0.2			000820
007133	005322		.DBR	.			000830
007134	005344		.DXR	.			000840
007135	001040		.JXZ	.*+4			000850
007136	007141	R					
007137	001000		.JMP	.*-5			000860

007140	007132	R						
007141	014161		.LDA	.PICP				000870
007142	006110		.CRAI	.0100				000880
007143	000100							
007144	124161		.ADD	.DVAD				000890
007145	056000		.STA	.0.2				000910
007146	124563		.ADD	.IN+1				000920
007147	054564		.STA	.INPT+1				000930
007150	124561		.ADD	.IN+1				000940
007151	054567		.STA	.IN				000950
007152	014153		.LDA	.DVAD				000952
007153	005111		.IAR	.				000954
007154	054151.		.STA	.DVAD				000956
								000960
								000970
								000980
								000985
								000990
								001000
								001010
								001020
								001030
								001040
								001050
								001060
								001070
								001080
								001085
								001090
								001100
								001110
								001120
								001130
								001140
								001150
								001160
								001170

INITIALIZE CONSTANTS

*
*

007155 R

PLD

.EGU

.*

DISABLE PARITY (IF ANY)

C

.EXC .0545

INITIALIZE A REG

.TZA

.STA .0

INITIALIZE LOC 0

PLDA

.ADD .LDA0

4K

.TAX

USE VALUE AS STORE POINTER

.STA .0.1

STORE LOC

LDAC

.LDA .0

FETCH LOC 0

.ERA .0.1

COMPARE LOC 0 TO INDEXED STORE

.JAZ .PLDB

END OF MEMORY

.JMP .PLDA

TRY 4K HIGHER

PLDB

.STX .SMEM

SAVE FOR OTHER USERS

.EXC .0445

ENABLE PARITY (IF ANY)

C

.LDA .RDTA

CHECK FOR USER RELOC% DATA

.JAZ .PLDJ

NONE PRESENT

.LRLA .12

DESIRED 4K MODULE

.STA .SMEM

UPPER MEM% BOUND

PLDJ

.LDA .SMEM

.SUBI .22

.TAB

TOP OF RELOC AREA

.SUBI .0153

.STA .SLOD

LOADER ENTRY

007207	006140		.SUBI	.0177	ADJ FOR RELOC BASE ADDR	CC1180
007210	000177					
007211	054564		.STA	.TEMP		CC1190
007212	005311		.IAR	.		CC1200
007213	054537		.STA	.SLCD-1		CC1210
007214	006030		.LXI	.07747	TOP OF BLD II IN 4K	CC1220
007215	007747					
007216	006010		.LDAI	.0221		CC1230
007217	000221					
007220	005322		.DBR	.		CC1240
007221	056000		.STA	.0.2	XON (0221)	CC1250
007222	005111		.IAR	.		CC1260
007223	005322		.DBR	.		CC1270
007224	056000		.STA	.0.2	TAPE (0222)	CC1280
007225	005111		.IAR	.		CC1290
007226	005322		.DBR	.		CC1300
007227	056000		.STA	.0.2	XOFF (0223)	CC1310
						CC1320
					RELOCATE BLD CONSTANTS	CC1330
						CC1340
	007230	R	PLDL	.EGU	.*	CC1350
007230	006010		.LDAI	.0747	SET WORD COUNT FOR DUMP ROUTINE	CC1360
007231	000747					
007232	056030		.STA	.24.2	BOOTSTRAP DUMP WORD COUNT	CC1360
007233	054070		.STA	.RDIA	SET TO NON ZERO SO NOT TO HALT DURING	CC1365
007234	005344		.DXR	.	UPPER ADDR OF CARD LOADER IN 4K	CC1370
007235	005323		.DECR	.023	TEST IF ALL WORDS	CC1380
007236	144514		.SUB	.SLCD-1	ARE RELOCATED	CC1390
007237	007400		.ROF	.		CC1400
007240	001010		.JAZ	.PLDN	RELOCATION COMPLETE	CC1410
007241	007256	R				
007242	015000		.LDA	.0.1	FETCH NXT WORD FOR RELOC	CC1420
007243	004350		.LSRA	.8		CC1430
007244	001010		.JAZ	.PLDM	RELOCATION NEEDED	CC1440
007245	007251	R				
007246	015000		.LDA	.0.1	NO ADJ NEEDED	CC1450
007247	001000		.JMP	.PLDM+2		CC1460
007250	007253	R				
	007251	R	PLDM	.EGU	.*	CC1470
007251	015000		.LDA	.0.1	GET WORD	CC1480
007252	124523		.ADD	.TEMP	ADD RELOC. BASE	CC1490
007253	056000		.STA	.0.2	RELOCATE IT	CC1500
007254	001000		.JMP	.PLDL+4		CC1510

007255	007234	R							
	007256	R	PLDN	.EGU	**				CC1520
007256	005111			.IAR	.		SET LOAD/DUMP HALTS NON-ZERO	D	CC1522
007257	056200			.STA	.0200,2		STORE HALT AT LOADER ENTR.	D	CC1530
007260	056004			.STA	.4,2		AND START OF DUMP PRG4	E	CC1540
			*				ACCOUNT FOR ANY INDIRECT ADDRESSES		CC1550
			*				AFTER RELOCATION IS FINISHED		CC1560
			*				DONT ADJ JMP* MORE THAN ONCE		CC1570
007261	016171			.LDA	.0171,2				CC1580
007262	006150			.ANAI	.077400				CC1590
007263	077400								
007264	001010			.JAZ	***4				CC1600
007265	007270	R							
007266	001000			.JMP	.PLDP				CC1610
007267	007310	R							
007270	014505			.LDA	.TEMP				CC1620
007271	126171			.ADD	.0171,2		JMP* PLDR		CC1630
007272	056171			.STA	.0171,2		AT END OF PUNCH LEAD/TRAIL RTN(PLD1+3)		CC1640
007273	014502			.LDA	.TEMP				CC1650
007274	126331			.ADD	.0331,2		JMP* LWRD		CC1660
007275	056331			.STA	.0331,2				CC1670
007276	006010			.LDAI	.040				CC1680
007277	000040								
007300	056353			.STA	.0353,2				CC1690
007301	004241			.LRLA	.1				CC1700
007302	056176			.STA	.0176,2		K100		CC1710
007303	004241			.LRLA	.1				CC1720
007304	056175			.STA	.0175,2		K200		CC1730
007305	006010			.LDAI	.0224				CC1740
007306	000224								
007307	056177			.STA	.0177,2				CC1750
	007310	R	PLDP	.EGU	**				CC1760
007310	005007			.ZERO	.7				CC1770
007311	001400			.JSS3	***4		TEST FOR LOAD AND GO OPTION		CC1780
007312	007315	R							
007313	001000			.JMP*	.SLCD		DONE- GO TO LOADER		CC1790
007314	107754	R							
007315	014436			.LDA	.SLCD		INCREMENT LOADER ENTRY ADDR		CC1800
007316	005111			.IAR	.		TO IGNOR HALT AT ENTRY		CC1810
007317	054434			.STA	.SLCD		AND SET A REG NON ZERO		CC1820
007320	001000			.JMP*	.SLCD		TO GO INTO EXECUTION		CC1830
007321	107754	R							

007322	000037	PUDA	.DATA	.037	STORAGE FOR HS PUNCH	H	CC1835
007323	100401	PIOP	.SEL	.0401	HSPT READER OFF		CC1840
		*			FILL OUT SPACE WITH		CC1850
		*			NON-ZERO WORDS		CC1860
	007326	R DVAD	.EQU	.*+2			CC1915
007324	000001	RDTA	.DATA	.1.1.1.1.1.1.1.1.1.1			CC1920
007325	000001						
007326	000001						
007327	000001						
007330	000001						
007331	000001						
007332	000001						
007333	000001						
007334	000001						
007335	000001						
007336	000001		.DATA	.1.1.1.1.1.1.1.1.1.1			CC1930
007337	000001						
007340	000001						
007341	000001						
007342	000001						
007343	000001						
007344	000001						
007345	000001						
007346	000001						
007347	000001						
007350	000001		.DATA	.1.1.1.1.1.1.1.1.1.1			CC1940
007351	000001						
007352	000001						
007353	000001						
007354	000001						
007355	000001						
007356	000001						
007357	000001						
007360	000001						
007361	000001						
007362	000001		.DATA	.1.1.1.1.1.1.1.1.1.1			CC1950
007363	000001						
007364	000001						
007365	000001						
007366	000001						
007367	000001						
007370	000001						

007371 000001
 007372 000001
 007373 000001
 007374 000001
 007375 000001
 007376 000001
 007377 000001

.DATA .1.1.1s1

H CC1960

*
 * WORD SIZE 16 OR 18 BITS
 * CC1970
 * CC1980

007400

.ORG .07400

CC2000

* BINARY LOAD/DUMP FOR TELETYPE
 * CC2010

* CC2020

* CC2030

* CC2040

007400 R BEGN .EQU *

007400 007400 .ROF SET BOOTSTRAP FLAG
 CC2060

007401 002000 .CALL .DUMP-BEGN DUMP BOOTSTRAP
 CC2070

007402 000034
 * CC2080

* CONSOLE PROGRAM DUMP DRIVER
 * CC2090

* CC2100

007403 000007 DHLT .HLT .7 OPERATOR SETS REGISTERS
 CC2110

007404 007401 .SOF SET PROGRAM FLAG
 CC2120

007405 002000 .CALL .DUMP-BEGN DUMP PROGRAM TAPE
 CC2130

007406 000034

007407 001000 .JMP .DHLT-BEGN HALT FOR OPERATOR
 CC2140

007410 000003
 * CC2150

* BINARY DUMP ROUTINE
 * CC2160

* CC2170

007411 014343 EOR .LDA .LAST *END OF RCD
 CC2180

007412 001010 .JAZ .POFF-BEGN (BOOTSTRAP DUMP)
 CC2190

007413 000023

007414 014336 .LDA .CKSM
 CC2200

007415 002000 .CALL .PWRD-BEGN PUNCH CHECKSUM
 CC2210

007416 000136

007417 001001 .JOF .PRCD-BEGN (NOT EXEC RCD)
 CC2220

007420 000064

007421 002000 .CALL .PLDR-BEGN PUNCH TRAILER
 CC2230

007422 000162

007423 014152 POFF .LDA .TARN PUNCH OFF
 CC2240



007424	002000	.CALL	.OTPT-BEGN		CC2250	
007425	000342					
007426	005000	.NOP	.		G CC2260	
007427	002000	.CALL	.OTPT-BEGN		CC2270	
007430	000342					
007431	014322	.LDA	.FRST	RESTORE REGISTERS	CC2280	
007432	024322	.LDB	.LAST		CC2290	
007433	001000	.JMP	.*-BEGN		CC2300	
007434	000033					
007434		DUMP	.BES	.0	*ENTRY POINT	CC2310
007435	054316	.STA	.FRST	SAVE REGISTERS	CC2320	
007436	064316	.STB	.LAST		CC2330	
007437	074144	.STX	.EXEC		CC2340	
007440	005014	.TAX	.	SET LOAD ADDR	CC2350	
007441	014306	.LDA	.TAPE	PUNCH ON	CC2360	
007442	002000	.CALL	.OTPT-BEGN		CC2370	
007443	000342					
007444	005000	.NOP	.		G CC2380	
007445	002000	.CALL	.OTPT-BEGN		CC2390	
007446	000342					
007447	002000	.CALL	.PLDR-BEGN		CC2400	
007450	000162					
007451	064301	.STB	.CKSM	RESET CHECKSUM	CC2410	
007452	001001	.JCF	.PRCD-BEGN	(PROGRAM DUMP)	CC2420	
007453	000064					
007454	064300	.STB	.LAST	SET BUCT FLAG	CC2430	
007455	006030	.LDXI	.07000	START OF LOADER	CC2440	
007456	007000					
007457	024317	.LEB	.WCNT		CC2450	
007460	001000	.JMP	.PBCOT-BEGN		CC2460	
007461	000130					
007462	005000	.NOP	.		CC2470	
007463	005000	.NOP	.		CC2480	
007464	007401	PRCD	.SCF	.	*PUNCH A RCD	CC2490
007465	074310	.STX	.TEMP	CALC RCD LENGTH	CC2500	
007466	014266	.LDA	.LAST		CC2510	
007467	144306	.SUB	.TEMP		CC2520	
007470	005112	.INCR	.012		CC2530	
007471	001002	.JAP	.DRCD-BEGN	(DATA RECORD)	CC2540	
007472	000101					
007473	034110	.LDX	.EXEC	SET EXEC ADDR	CC2550	
007474	005041	.TXA	.		CC2560	

007475	001004		.JAN	.POFF-BEGN	(NO EXEC RCD)	002570	
007476	000023						
007477	007400		.RPF	.		002580	
007500	005001		.TZA	.	SET RCD LENGTH = 0	002590	
007501	144073	DRCD	.SUB	.K100		002600	
007502	001004		.JAN	..+3-BEGN	(SHORT RCD)	002610	
007503	000105						
007504	024070		.LDB	.K100	SET FOR MAX RCD	002620	
007505	005301		.DECR	.1		002630	
007506	002000		.CALL	.OTPT-BEGN	PUNCH VISUAL AID	002640	
007507	000342						
007510	002000		.CALL	.OTPT-BEGN		002650	
007511	000342						
007512	002000		.CALL	.OTPT-BEGN		002660	
007513	000342						
007514	005001		.TZA	.		002670	
007515	002000		.CALL	.OTPT-BEGN	PUNCH RCD MARK	002680	
007516	000342						
007517	005021		.TBA	.		002690	
007520	002000		.CALL	.PWRD-BEGN	PUNCH RCD LENGTH	002700	
007521	000136						
007522	005041		.TXA	.		002710	
007523	002000	PDATA	.CALL	.PWRD-BEGN	PUNCH ADDR/DATA	002720	
007524	000136						
007525	001020		.JBZ	.EOR-BEGN	(END OF RCD)	002730	
007526	000011						
007527	005322		.DBR	.	COUNT DOWN	002740	
007530	015000	PBOOT	.LDA	.0.1	GET DATA	002750	
007531	005144		.IXR	.	SET NEXT ADDR	002760	
007532	001000		.JMP	.PDATA-BEGN		002770	
007533	000123						
			*			002780	
			* CHECKSUM AND PUNCH BINARY WORD			002790	
			*			002800	
007534	024241	PWR1	.LDB	.TEMP	RESTORE B	002810	
007535	001000		.JMP	..-BEGN	RETURN	002820	
007536	000135						
	007536	R	.PWRD	.EGU	..-1	ENTRY POINT	002830
007537	064236		.STB	.TEMP	SAVE B	002840	
007540	005012		.TAB	.		002850	
007541	134211		.ERA	.CKSM	CALCULATE CHECKSUM	002860	
007542	054210		.STA	.CKSM		002870	

007543	005021		.TSA	.			CC2880
007544	005302		.DECR	.2			CC2890
007545	004022		.ASLB	.18	B = MAX NEGATIVE NUMBER		CC2900
007546	004554		.LLSR	.12	SHIFT IN FIRST SIX BITS		CC2910
007547	134202	PWR2	.ERA	.K40	ENDOCE		CC2920
007550	124201		.ADD	.K40			CC2930
007551	002000		.CALL	.OTPT-BEGN	OUTPUT SIX BITS		CC2940
007552	000342						
007553	005001		.TZA	.			CC2950
007554	004446		.LLRL	.6	SHIFT IN NEXT SIX BITS		CC2960
007555	001020		.JBZ	.PWR1-BEGN	ALL FINISHED		CC2970
007556	000134						
007557	001000		.JMP	.PWR2-BEGN			CC2980
007560	000147						
007561	005000		.NCP	.			CC2990
			*				CC3000
			* PUNCH LEADER/TRAILER NULLS				CC3010
			*				CC3020
007562	000007	PLDR	.DATA	.7	ENTR POINT. DATA FOR LOADING PURPOSES ONLY		CC3030
007563	024011		.LDB	.K100	SET FOR 6+ INCHES		CC3040
007564	014007		.LDA	.K200	ASCII NULL		CC3050
007565	002000	PLD1	.CALL	.OTPT-BEGN	PUNCH		CC3060
007566	000342						
007567	001020		.JBZ*	.PLDR-BEGN			CC3070
007570	100162						
007571	005322		.DSR	.	COUNT		CC3080
007572	001000		.JMP	.PLD1-BEGN			CC3090
007573	000165						
007574	177777	K200	.DATA	.-1	ASCII NULL		CC3100
007575	177777	K100	.DATA	.-1	MAX RCD LNTH		CC3110
007576	177777	TAPN	.DATA	.-1	PUNCH OFF		CC3120

		*					CC3140
		* CCNSCLE PROGRAM LOAD DRIVER					CC3150
		*					CC3160
007577	000007	LHLT	.HLT	.7		OPERATOR SETS MODE	CC3170
007600	002000		.CALL	.LOAD-BEGN		LOAD PROGRAM TAPE	CC3180
007601	000230	7630					
007602	001000		.JMP	.*-3-BEGN		HAUT FOR OPERATOR	CC3190
007603	000177	7777					
		*					CC3200
		* BINARY LOAD ROUTINE					CC3210
		*					CC3220
007604	177777	EXEC	.DATA	.-1		EXECUTION ADDR	CC4140
007605	005002	TZB	.TZB	.			CC3230
007606	074002	STX	.DATA	.074002		.STX .LOAD	CC3240
007607	014143	END	.LDA	.CKSM			CC3250
007610	001011		.JIF	.011	.LRCD-BEGN	(GOOD LOAD RCD)	CC3260
007611	000235						
007612	014134		.LDA	.XOFF		READER OFF	CC3270
007613	002000		.CALL	.OTPT-BEGN			CC3280
007614	000342						
007615	014135		.LDA	.CKSM			CC3290
007616	005302		.DECR	.2			CC3300
007617	003010		.XAZ	.TZB-BEGN			CC3310
007620	000205						
007621	014133		.LDA	.MODE			CC3320
007622	001010		.JAZ	.*44-BEGN			CC3330
007623	000226						
007624	003022		.XIF	.022	.STX-BEGN	SET RETURN IF GOOD EXEC RCD	CC3340
007625	000206						
007626	034125		.LDX	.FRST		SET LAST ADDR READ	CC3350
007627	001000		.JMP	.*-BEGN			CC3360
007630	000227						
007630		LOAD	.BES	.0		*ENTRY POINT	CC3370
007631	054123		.STA	.MODE		SAVE LOAD MODE	CC3380
007632	014116	100537	.LDA	.XON		READER ON	CC3390
007633	002000	5000	.CALL	.OTPT-BEGN			CC3400
007634	000342	5000					
	007635	R LRCD	.EQU	.*			CC3410
007635	007400	ROF	.ROF	.			CC3420
007636	001001		.JOF	.*+11-BEGN			CC3430
007637	000251	7651					
007640	002000		.CALL	.INPT-BEGN		FIND RCD MARK	CC3440

007641	000333	7733					
007642	005111		.IAR	.			003450
007643	004350		.LSRA	.8			003460
007644	001010		.JAZ	.LRCD+1-BEGN		A ≠ 0 still at record mark	003470
007645	000236	7636				A = 0	
007646	007401		.SCF	.			003480
007647	001000		.JMP	.LRCD+3-BEGN			003490
007650	000240	7640					
007651	007401		.SCF	.			003500
007652	054100		.STA	.CKSM	RESET CHECKSUM		003510
007653	002000		.CALL	.LWRD-BEGN	GET RCD LENGTH		003520
007654	000302	7702					
007655	064064		.STB	.RCDL	IF 0		003530
007656	003020		.XBZ	.ROF-BEGN	SET EXEC FLAG		003540
007657	000236	7635					
007660	002000		.CALL	.LWRD-BEGN	GET ADDR		003550
007661	000302	7702					
007662	005024		.TBX	.			003560
007663	064070		.STB	.FRST	SAVE ADDR		003570
007664	002000	LDATA	.CALL	.LWRD-BEGN	GET DATA OR CHECKSUM		003580
007665	000302	7702					
007666	014053		.LDA	.RCDL			003590
007667	001010		.JAZ	.END-BEGN	(END OF RCD)		003600
007670	000207	7607					
007671	005311		.DAR	.			003630
007672	054047		.STA	.RCDL	COUNT WORDS READ		003620
007673	014061		.LDA	.MODE			003630
007674	001004		.JAN	.+3-BEGN			003640
007675	000277	7677					
007676	065000		.STB	.0.1			003650
007677	005144		.IXR	.	SET NEXT ADDR		003660
007700	001000		.JMP	.LDATA-BEGN			003670
007701	000264	7664					

*
 * READ AND CHECKSUM BINARY WORD EXIT WD IN B reg
 *

007702	000007	LWRD	.DATA	.7	ENTR POINT. DATA FOR LEADING PURPOSES ONLY		003700
007703	005103		.INCR	.3	clear A & B		003720
007704	005111		.IAR	.			003730
007705	054070	LWR1	.STA	.TEMP	SET LOOP COUNTER		003740
007706	002000		.CALL	.INPT-BEGN	GET SIX BITS		003750
007707	000333	7737					

007710	144041		.SUB	.K40	REMOVE CODE	CC3760
007711	134040		.ERA	.K40		CC3770
007712	004005		.ASLB	.5		CC3780
007713	004041		.LRLB	.1		CC3790
007714	005032		.MERG	.032	ASSEMBLE DATA WORD	CC3800
007715	004346		.LSRA	.6		CC3810
007716	005311		.DAR	.		CC3820
007717	001002		.JAP	.END+3-BEGN	ERROR	CC3830
007720	000212	17612				
007721	124054		.ADD	.TEMP		CC3840
007722	001002		.JAP	.LWR1-BEGN		CC3850
007723	000305	17705				
007724	005021		.TBA	.		CC3860
007725	134025		.ERA	.CKSM	CALCULATE CHECKSUM	CC3870
007726	054024		.STA	.CKSM		CC3880
007727	001000		.JMP*	.LWRD-BEGN		CC3890
007730	100302	117702				
			*			CC3900
			* INPUT PAPER TAPE			CC3910
			*			CC3920
007731	102501	102537	.CIA	.RDR		CC3930
007732	001000		.JMP	.*	RETURN	CC3940
007733	007732	R 7710				
007733		INPT	.BES	.0	*ENTRY	CC3950
007734	101201	101537	.SEN	.IBFR	.IN-BEGN	CC3960
007735	000331	7731				
007736	001000		.JMP	.*-2-BEGN		CC3970
007737	000334	7734				
			*			CC3980
			* OUTPUT PAPER TAPE			CC3990
			*			CC4000
007740	103101	OUT	.CAR	.PNCH		CC4010
007741	001000		.JMP	.*-BEGN		CC4020
007742	000341					
007742		OTPT	.BES	.0	*ENTRY	CC4030
007743	101101		.SEN	.OBFR	.OUT-BEGN	CC4040
007744	000340					
007745	001000		.JMP	.*-2-BEGN		CC4050
007746	000343					
007747	177777	XOFF	.DATA	.-1	READER OFF	CC4060
007750	177777	TAPE	.DATA	.-1	PUNCH ON	CC4070
007751	177777	XON	.DATA	.-1	READER ON	CC4080

007752	177777	K40	.DATA	.-1		CC4090
007753	177777	CKSM	.DATA	.-1	LOAD CHECKSUM	CC4100
007754	177777	FRST	.DATA	.-1	INITIAL DUMP ADDR	CC4110
007755	177777	MODE	.DATA	.-1	LOAD MODE	CC4120
	007755 R	LAST	.EQU	.*-1	EAST DUMP ADDR	CC4130
	007742 R	RCDL	.EQU	.*-12	RECORD LENGTH	CC4150
	007753 R	\$MEM	.EQU	.*-3	UPPER MEMORY BOUNDARY	CC4160
	007754 R	SLOD	.EQU	.*-2	START OF LOADER	CC4170
	007756 R	BOOT	.EQU	.*		CC4180
007777		WCNT	.ORG	.07777	EAST WORD IN 4K	CC4190
	007776 R	TEMP	.EQU	.*-1		CC4200
	007000		.END	.07000		CC4210

LITERALS

POINTERS

SYMBOLS

1	007776	R	TEMP
1	007777	R	WCNT
1	007756	R	BOOT
1	007754	R	SLOD
1	007753	R	\$MEM
1	007742	R	RCDL
1	007755	R	LAST
1	007755	R	MODE
1	007754	R	FRST
1	007753	R	CKSM
1	007752	R	K40
1	007751	R	XON
1	007750	R	TAPE
1	007747	R	XOFF
1	007742	R	OTPT
1	007740	R	OUT
1	007733	R	INPT
1	007731	R	IN
1	007705	R	LWR1
1	007702	R	LWRD
1	007664	R	LDAT
1	007638	R	ROF

1	007635	R	LRCD
1	007630	R	LOAD
1	007607	R	END
1	007606	R	STX
1	007605	R	TZB
1	007604	R	EXEC
0	007577	R	LHLT
1	007576	R	TAPN
1	007575	R	K100
1	007574	R	K200
1	007565	R	PLD1
1	007562	R	PLDR
1	007547	R	PWR2
1	007536	R	PWRD
1	007534	R	PWR1
1	007530	R	PBOO
1	007523	R	PDAT
1	007501	R	DRCD
1	007464	R	PRCD
1	007434	R	DUMP
1	007423	R	POFF
1	007411	R	EOR
1	007403	R	DHLT
1	007400	R	BEGN
1	007324	R	RDTA
1	007326	R	DVAE
1	007323	R	PIOP
1	007322	R	PUDA
1	007310	R	PLDP
1	007256	R	PLDN
1	007251	R	PLDM
1	007230	R	PLDL
1	007200	R	PLDJ
1	007171	R	PLDB
1	007163	R	LDAG
1	007160	R	PLDA
1	007155	R	PLD
1	007106	R	PLD3
1	007076	R	PLD2
1	007046	R	PLDG
1	007045	R	DVIC
1	007042	R	PLDF

1	007034	R	PLDE
0	007000	R	PLDS
1	000001		PNCH
1	000001		RDR
1	000101		OBFR
1	000201		IBFR