

CP-642A/B or CP-855 UTILITY PACKAGE

ENTRIES FOR MISCELLANEOUS OPERATIONS			ENTRIES FOR MAGNETIC TAPE OPERATIONS													
BASE + 4	INSPECT AND CHANGE (PUNCH/LIST)	A1=ADDRESS Q=CONTENTS A29=PUNCH/LIST; Q29=LIST	BASE + 14	POSITION/REWIND MAGNETIC TAPE	SEE PARAMETER WORD FOR Q BELOW											
BASE + 12	PUNCH/LIST MEMORY AREA	A1=B.A. Au=F.A. Q29=LIST ONLY Q0=NON ZERO	BASE + 15	READ MAGNETIC TAPE	SEE PARAMETER WORD FOR Q BELOW											
BASE + 20	MEMORY SEARCH/ LIST FINDS	A1=B.A. Au=F.A. Q=CONTENTS TO FIND. 6-STOP to CHANGE Q. 5-STOP IS FIND. A=ADDR Q=CONTENTS	BASE + 16	WRITE MAGNETIC TAPE	A1=B.A. Au=F.A. A=∅ WRITE UPAK PARAMETER WORD IN Q											
BASE + 21	MEMORY SEARCH/ PUNCH FINDS		BASE + 17	CHECKREAD MAGNETIC TAPE	CP-642A - 200 BPI ONLY A29 SET FOR HSP OUTPUTS PARAMETER WORD IN Q											
BASE + 22	STORE CONSTANT/ CLEAR MEMORY	A1=B.A. Au=F.A. Q=CONST. AQ=∅ CLEAR MEMORY	MAGNETIC TAPE PARAMETER WORD FOR Q REGISTER													
BASE + 23	MODIFY UPAK	SEE PARAMETER WORD	29	28	18	17	15	14	13	9	8	∅				
BASE + 24	HIGH SPEED PRINTER MEMORY DUMP	A1=B.A. Au=F.A.	NOT USED		TAPE TRANS.	NOT USED		BLOCK NUMBER OR PASS NUMBER								
BASE + 25	CHANNEL CHANGE (NOT UPAK)	A1=B.A. Au=F.A. Qa to CHAN; Q1 from CHAN	REWIND/ POSITION	TT 1=001 TT 2=010	DIRECTION											
BASE + 26	CP-642A I/C BOOTSTRAP	UPAK MUST BE ABOVE 166	0=REWIND 1=POSITION	TT 3=011 TT 4=100	1=REVERSE 2=FORWARD											
BASE + 27	RD-243 LOADER FOR SERVICE TEST BOOT	A1=CP-642A CHANNEL UPAK MUST BE ABOVE 174	MODIFY UPAK PARAMETER WORD FOR Q REGISTER													
ENTRIES FOR PAPER TAPE OPERATIONS			29	28	27	26*	22	21	20	19*15	14	12	11	10*6	5	4* ∅
BASE + 5	READ PAPER TAPE	A1=BASE FOR RELATIVE	HSP CHAN		RD-294 DENSITY	PRINT CHAN	PRINT CODE	PTU CHAN		M MTU	U 1=294 0=243					
BASE + 6	PUNCH BIOCTAL ZERO SUPPRESSED	A1=B.A. Au=F.A.	NOT USED		00=556 01=200 10=800 11=SAME AS LAST TIME	001=A SCII 010=FDATA 011=FLEX 100=TTY		NCT USED								
BASE + 7	PUNCH BIOCTAL NON-SUPPRESSED	A1=B.A. Au=F.A.	0=STORE RIL 1=IGNORE RIL													
BASE + 10	CHECKREAD BIOCTAL LIST	5-STOP A=ADDR. Q=TAPE WORD LIST/PUNCH FORMAT:														
BASE + 11	CHECKREAD BIOCTAL PUNCH	ADDR.-MEM. WORD-TAPE WORD														
BASE + 13	DUPLICATE PAPER TAPE	A1=B.A. Au=F.A. MEMORY AREA USED														
			*SETTING BITS 4, 10, 19 AND 26 ALLOW CHAN ∅ ASSIGNMENT.													

Abnormal Occurrence Indications

Q-REGISTER	MEANING	Q-REGISTER	MEANING
00007 00000	Checkread error.	00000 00106	Illegal HSP channel.
00700 00000	No base address.	00000 00107	Illegal printer code.
07700 00000	Buffer limits backwards.	00000 00110	Illegal channel input.
70000 00000	A input not zero.	00000 00111	Unused MODUPAK input not zero.
70700 00000*	Bad interrupt code.	00000 00112	Unused input not zero.
77000 00000	Checksum error.	00000 00113	Rewind and reverse in MT parameter.
77700 00000	Bad initial PT code.	00000 00116	RD-294 MT density with RD-243 MT.
77770 00000	Clock not running	00000 00117	Illegal RD-294 MT TT number.
77777 00000**	Input would write on UPAK.	00000 00120	Illegal RD-243 MT TT number.
00000 00101	CP-642B PT loader, UPAK above 617.	00000 00121	RD-243 loader, UPAK above 174.
00000 00102	Illegal MT channel.	00000 00122	CP-642A intercomputer, UPAK above 166.
00000 00103	Illegal PT channel.	00000 00123	CP-642A PT loader, UPAK above 277.
00000 00104	Illegal printer channel.	00000 00124	PT checkread must be absolute biocatal.

NOTES

A 4-STOP with A = 77777 77777 occurs with each particular abnormal occurrence. Upon restarting the computer all but two return immediately to original conditions. These two have an interim 4-STOP wherein AQ indicates more information. The next restart brings these two to initial conditions. At the initial disclosure all will have restored B-registers.

*Interim disclosure, A - Interrupt code, Q - Interrupt routine exit.

**Interim disclosure, A - Address or buffer limits, Q - UPAK limits.