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IDENTIFICATION

Upper Binary Loader (One Card), MU UBL1

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PURPOSE

To load absolute binary program cards and execute transfer cards produced by either UA SAP or MURASS (the MURA assembler).

RESTRICTIONS

Index register 4 must be zero, and machine must not be in the trapping mode when control is transferred to this loader.

USAGE

Self Loading: Back loader with absolute cards to be loaded and a transfer card. Press LOAD CARDS button.

Space Required: First 2 words and last 24 words of memory, irrespective of which memory size used.

Error Stop: A check sum failure results in a halt HTR (77754)₈. Loading may be continued by pressing START button.

CODING INFORMATION

This loader will load standard SHARE UA SAP-produced absolute binary cards but in addition will load MURASS-produced absolute binary cards which differ from SHARE cards in having identifying 9L6-9L9 punches. This loader will load absolute cards having any set of identifying punches in 9L1-9L12.

The check sum is never ignored.

If the loader is left in the memory it can be called into play for the reading of more cards by transferring to location (77754)₈.

On encountering either a UA SAP or MURASS transfer card (they are the same) a halt transfer will be executed to the transfer address. If 9L2 be punched on such a transfer card, a transfer without stopping will be made to the transfer address.

(NOTE: Except for the above extra features, the program is similar to and derived from GL BUL1.)

REM	UBL1 MURA	UPPER BINARY LOADER (ONE CARD)	MU	UBL1
CPY	32747,4	COPY LOOP FOR SELF LOADING	UBL1	0001
TXI	32747,4,1	X	UBL1	0002
TXH	32748,4,21	(READ THE FOLLOWING FROM BOTTOM UP)	UBL1	0003
HTR	32748	IF NOT 0, HALT, PROCEED ON START	UBL1	0004
TZE	32748	IF 0, PROCEED TO NEXT CARD	UBL1	0005
SUB	32746	X	UBL1	0006
CLA	32745	X	UBL1	0007
BLW	32745	FORM (CARD SUM) - (CHECK SUM)	UBL1	0008
TIX	32759,4,1	REPEAT UNTIL CARD COPIED	UBL1	0009
ACL	0,4	ADD IT TO LOGICAL SUM	UBL1	0010
CPY	0,4	COPY WORD FROM CARD	UBL1	0011
CAL	32745	PREPARE FOR LOGICAL SUM	UBL1	0012
CPY	32746	COPY 9R (= CHECK SUM)	UBL1	0013
STA	32760	AND AS ACL ADDRESS	UBL1	0014
STA	32759	PLANT (WC+LA) AS CPY ADDRESS	UBL1	0015
ADD	32745	ADD WC + LOADING ADDRESS (=LA)	UBL1	0016
PAK	0,4	IF NOT 0, SET IR4=WC	UBL1	0017
TZE	32745	IF 0, TRANSFER CARD, EXECUTE IT	UBL1	0018
ANA	32747	EXTRACT WORD COUNT	UBL1	0019
LLS	17	WORD COUNT (=WC) IN AC ADDRESS	UBL1	0020
CPY	32745	COPY 9L	UBL1	0021
RCD		(START HERE-READ UP) SELECT READER	UBL1	0022
HTR	31	MASK FOR WORD COUNT	UBL1	0023
HTR	0	BLANK	UBL1	0024
END	0		UBL1	0025