



DECUS

PROGRAM LIBRARY

DECUS NO.	8-348
TITLE	MINI BINARY PUNCH
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SOURCE LANGUAGE	MACHINE LANGUAGE

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MINI BINARY PUNCH

DECUS Program Library Write-up

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In the early stages of debugging a program, changes are often toggled in so that as many as possible can be collected before returning to assembly. The toggled in instructions can significantly slow debugging if the program enters a destructive error. Reloading all the fixes after loading the binary tape can be time consuming.

The problem can be overcome by accumulating the fixes into a binary tape which is loaded after the primary program tape. The following program is a method of obtaining the binary fix tape in little more time than it would take to fix a program blow.

7300	START, CLA CLL	
3213	DCA SAVE	/ CLEAR CS
7604	RETURN, LAS	/ LOAD FROM SW
6046	TLS	/ PUNCH
6041	TSF	/ SKIP IF FLAG
5204	JMP.-1	
1213	TAD SAVE	/ ADD OLD CS
3213	DCA SAVE	/ STORE CS
1213	TAD SAVE	/ DISPLAY CS
7402	HLT	
5202	JMP RETURN	
0	Save, 0	

STEP 1 Punch leader trailer off line.

STEP 2 Toggle above program into the beginning of any page of
computer core.

- STEP 3 Place address of "start" into SWITCH REGISTER and press
LOAD ADDRESS.
- STEP 4 Code instruction into binary manually. Set SWITCH REGISTER
5 and most significant two digits of ADDRESS into SR 6-11.
PRESS START. Set SR 5 to ZERO and SR 6-11 to low half of
ADDRESS. PRESS CONTINUE.
- STEP 5 Set most significant half of first INSTRUCTION into SR 6-11.
PRESS CONTINUE. Set low half and PRESS CONTINUE. (Two steps
are required to get an address or instruction onto tape.
SR 5 is used only to flag an address.) Continue until program
is complete.
- STEP 6 The ACCUMULATOR contains the CHECK SUM at each halt. When the
program is complete, enter the CS in the same manner as an
instruction.
- STEP 7 Punch leader trailer off line.