

PDP-4 PROGRAM LIBRARY

(7-42-u)

NUMBER: Digital - 4 - 11 - U
NAME: RIM Puncher
AUTHOR: J. M. Graetz - DEC
DATE: September 28, 1962
SPECS: 1038 registers: 100-~~102~~²⁰²
7000-7002-7202
Tapes: P10-DEC
RIM, SA 100
RIM, SA 7000
NEEDED: RIM Loader (I-1)
PURPOSE: To punch a Readin-Mode tape from any
area of core memory.

The RIM puncher will punch a readin-mode tape with start block from any area of core. The tape format of the output consists of thirty inches or about 3 1/2 fanfold units (ffu) of leader, data blocks in readin-mode format, a start block consisting of a jump instruction and a blank dummy word to stop the tape reader, and a few inches of trailer.

Usage:

1. Read in the desired version (high or low) of RIM Puncher.
2. AC Switch zero must be down. Set the first address of the block to be punched in the AC Switches and press continue.
3. When program stops, set the final address of the block in the ACS and press continue. (If ACS₀ is up at this point, the program will refuse to proceed.) *caution.*
- 4a. If ACS₀ is down when the program stops punching, pressing continue at this point will cause the address now in the ACS to be taken as the first address of a new block of data to be punched. In this case, the procedure is repeated from step 2. *pressing continue indicates that*
- 4b. If ACS₀ is up,[^] the address in the ACS will be taken as a starting location and a start block followed by trailer will be punched.
5. If a new tape is desired after the start block has been punched, put ACS₀ down and repeat from step 2.

Error Stops:

There are no error stops in RIM Puncher. The only halts are those indicated above.

RIM PUNCHER MK IIIa 28-9-62

/ACS-0 down, first address in ACS and continue.
/On halt, last address in ACS and continue
/On halt, ACS-0 down if new block, up if start block. Address
/in ACS and continue.
/For new tapes, repeat procedure from the top.

/Two versions: low--SA 100; high--SA 7000

```
rimp,      hit
           lam -400
           jms feed           /feeds 3-1/2 ffu of tape
           las               /first address from ACS
rim2,      xor (dac
           dac bfst
           hit
           las               /last address from ACS
           spa
           jmp rim2 2        /will not proceed unless ACS-0 is down
           add (dac 1
           dac blast
pch,       lac bfst
           sad blast
           jmp psb
           jms pib           /RIM word
           lac bfst 1
           jms pib           /data word
           isz bfst
           jmp pch
psb,       lam -20
           jms feed
           hit
           las               /next address
           sma
           jmp rim2         /if new data block
           xor (200000      /if start block
           jms pib
           cla
           jms pib           /dummy word to stop tape
           lam -131
           jms feed
           jmp rimp

feed,      0
           dac hold
           pla 10
           psf
           jmp .-1
           isz hold
           jmp feed 2
           jmp feed 1
```

```
pib,      0
          dac temp
          iam -2
          dac chrc
plin,     lac temp
          rtl      rtl      rtl
          dac temp
          ral
          and (77
          add (200
          pls
          psf
          jmp .-1
          isz chrc
          jmp plin
          jmp pib 1
```

```
bfst,    0
blast,   0
chrc,    0
```

```
temp=feed
hold=pib
```

```
chrc/
```

```
start rimp
```