IDENTIFICATION

Product Code:	MAINDEC-12-D9CA-D
Product Name:	PDP-12 Operating Procedure
Date Created:	December 1, 1969
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1. ABSTRACT

Due to console switch and control differences between Family-of-Eight and PDP-12 computers, the following generalized instructions are given to insure proper loading and starting of punched paper tape programs supplied by DEC for the PDP-12.

2. REQUIREMENTS

2.1 Equipment

- a) Any PDP-12 computer with necessary options for each particular program.
- b) An ASR-33 teletype or equivalent.

2.2 Preliminary Programs

- a) RIM Formatted tapes require only that the rim loader be in core and operating.
- b) BINARY Formatted tapes require that the binary loader be in core and operating.

3. LOADING PROCEDURES

3.1 Rim Loader

The Rim Loader is a minimum-logic program designed to load basic processor and memory diagnostics. It is toggled in from the console in the following manner:

- a) Set the MODE switch to 8 MODE.
- b) Set the IF switches to the desired memory bank (usually $\emptyset \emptyset \emptyset$).
- c) Depress I/O preset.
- d) Place the address of the first instruction in the left switches (7756).
- e) Place the first instruction in the right switches (6 \emptyset 32).
- f) Depress FILL; this loads the instruction at the specified address, and also places that address in the MA register.
- g) Depress FILL STEP; this reloads the instruction at the specified address, and increments the MA.
- h) Place the second, and succeeding, instructions in the right switches, depressing fill step after each instruction.
- i) When completed, the MA should equal 7776.

	RIM LOADER (LOW SPEED)	
ADDR	CONT	
7756	6ø32	
7757	6Ø31	
776Ø	5357	
7761	6Ø36	
7762	71Ø6	
7763	7øø6	
7764	751Ø	
7765	535 7	
7766	7øø6	
7767	6Ø31	
777Ø	5367	
7771	6Ø34	
7772	742Ø	
7773	3776	
7774	3376	
7775	5356	

3.2 Binary Loader

The Binary Loader is a rim-formatted program designed to increase loading speed by 50% over the rim loader. It is loaded using the rim loader in the following manner.

- a) Set the MODE switch to 8 mode.
- b) Set the IF switches to the desired memory bank in which the rim loader resides (usually $\emptyset \emptyset \emptyset$).
- c) Depress I/O preset.
- d) Set the teletype reader switch to free.
- e) Open the teletype reader and insert the program tape such that the directional arrows are visible and pointing in the direction of tape travel with the leader punches over the sensing fingers.
- f) Close the reader and set the reader switch to start.
- g) Get the teletype front panel switch to on line.
- h) Set the left switches to 7756.
- i) Insure that the computer is set to 8 mode.
- j) Depress start LS.
- k) The program tape will read in; when the data transfer is completed, as indicated by the trailer code passing over the reader, momentarily depress stop.
- 1) The Binary Loader is now in core.

3.3 Rim-Formatted Paper Tapes

The procedure is identical to loading the Binary Loader, section 3.2.