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### Identification

BOS patch command-PATCH  
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### Purpose

PATCH is a BOS command program which provides the programmer with a simple method of examining and modifying the contents of machine registers, core locations, and drum positions.

### Usage

To call in the PATCH program from BOS command level, type:

PATCH

The patcher will be brought into core and started. Whenever the patcher is started, it will wait for request lines from the operator's console. The following requests are recognized (see below for an explanation of what addresses are legal for addr):

1. addr the contents of addr will be typed
2. SET addr cont addr will have its contents set to cont
3. DBR loc -bits- the dbr which the patcher uses will be set to loc. If bits is supplied it will set the bound and paging bits.
4. (empty line) the patcher will look for commands from the card reader. If none are found it will return to the console.
5. TTY the patcher will look for commands from the console
6. DRUM sect loc the contents of location loc within drum sector sect will be typed
7. DRUM SET sect loc cont the contents of location loc within sector sect will be set to cont
8. BRK addr the contents of location addr will be set to the instruction DRL 0

9. FLT seg ↑ offset            a directed fault 5 will be set in the PTW for the location selected.
10. QUIT                        control returns to BOS
11. GO                         a chain of QUIT, CONTIN

For requests 1 and 2, addr may be

- a) an absolute address
- b) a segment address in the form "segno ↑ loc"
- c) a register designator

All parameters should be separated by spaces. The up-arrow in a segmented address is a separate parameter. Numbers are all octal and may be 12 digits long. If the patcher dislikes some argument or does not recognize a command, it will type a question mark. Whenever the patcher makes a change, it types a comment giving absolute address, old contents, and new contents; this is important for the BRK and FLT requests, since each time the patcher is entered it is a fresh copy, and so breakpoints cannot be restored.

The legal register designators are:

A	X0	X4	AP	LP
Q	X1	X5	AB	LB
E	X2	X6	BP	SP
TR	X3	X7	BB	SB
PBR	ILC	DSBR		

Note that "PBR" and "ILC" represent the BOS returns location, and that "DSBR" is the value of the DBR in the BOS machine conditions which will be used for restore, not the DBR value simulated by the patcher as it examines core.