

TERSE DEBUGGING PACKAGE

STEP            STEP NNNN

PREPARE TO DEBUG VERB NAMED NNNN. THE VERB ABOUT TO BE EXECUTED WILL BE PRINTED.

S

EXECUTE ONE INSTRUCTION ( ONE PASS THROUGH THE INNER INTERPRETER ).

Q

EXECUTE THE ENTIRETY OF THE VERB ABOUT TO BE EXECUTED.  
Note: Q places the breakpoint pointer at the adr 2 + the interpreter pointer. Verbs that use the 2nd word as data or as a jump address ( IF ELSE CASE LIT ) will not work. No actual change in the memory location is made ( PROM programs can be debugged this way ), but note that the program is actually being stepped an instruction at a time when in Q or breakpoint mode.

PSD

LIST THE CONTENTS OF THE entire PARAMETER STACK.

RSD

LIST THE CONTENTS OF THE entire RETURN STACK.

BRK

n BRK

SET A BREAKPOINT AT THE SPECIFIED ADDRESS.  
Example: ' TESTPROG 1+ BRK  
Set a breakpoint at the first instruction of TESTPROG ( note skipping the header byte ).

CLRBRK

Clear breakpoint.

VERB

n VERB

Display the name of the verb whose code start adr is n. Very handy !

UNCOM

n UNCOM

Uncompile ( list ) the verb compiled at adr n.

'

' NNNN --- n

Return the begin of code adr of verb NNNN. ( Part of system verbs )

PS --- n

Returns the value of the parameter stack pointer ( same as SP@ ).

RS --- n

Returns the value of the return stack pointer.

\*\*\* FLAGS AND COUNTERS \*\*\*

BM VARIABLE. BREAK MODE.

0 - STOP EXECUTION ON ENCOUNTERING BREAKPOINT.

1 - PRINT STATUS ON ENCOUNTERING BREAKPOINT AND CONTINUE EXECUTION.

DFG VARIABLE. DISPLAY MODE FLAG.

0 - NO DISPLAY AFTER INSTRUCTION EXECUTED.

1 - DISPLAY ONLY INSTRUCTION TO BE EXECUTED.

2 - Display parameter stack, verb about to be executed, and top of return stack ( I ). ( 2 is default value )

DISPLAY FORMAT:

[ ... stktopvalue ] VERB= NNNN [ I= n ]

SCT Variable. Step count. Normally set to 0.

Set to the number of instructions to be executed before control returns to user.

\$BC Variable. Current interpreter pointer used by debugger.

BPNT Variable. Adr where breakpoint is set.

\$BRK Variable. If 1, breakpoint is set. Execution mode is breakpoint mode. A STEP or S will proceed until the BPNT @ is reached.