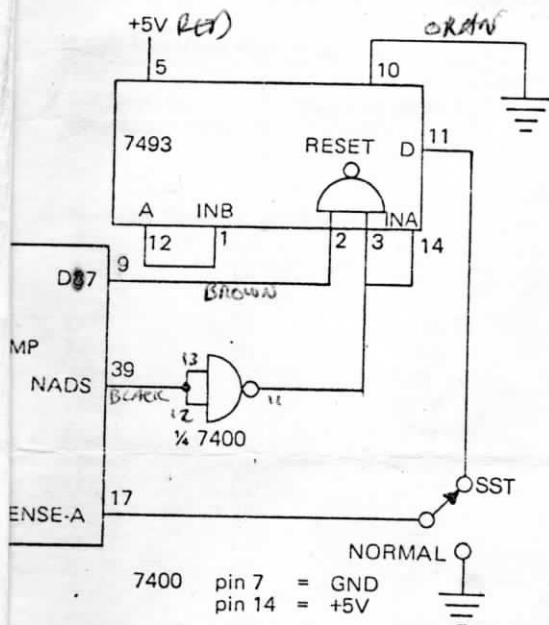
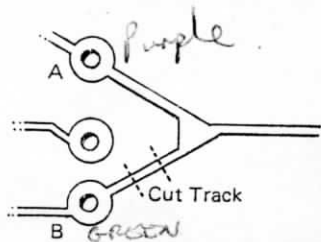


instruction and address. Repeatedly pressing 'GO' will step through the program. In between steps the contents of the user's registers, stored in RAM at 00F9 - 00FF, can be examined or altered using the monitor in the usual way. The switch may be returned to 'NORMAL' at any time; the next time 'GO' is pressed, the program will be executed in the normal way.

The single-step facility will appear to step over XPPC 3 instructions when encountered (X'3F) since they reverse the effect of the interrupt used for single-stepping. The single-step program will also behave strangely when used to step over HALT instructions (X'00), since the HALT flag is used by the single-step program.



1. Circuitry needed to implement single-step.



Underside of board between IC8 & IC3.

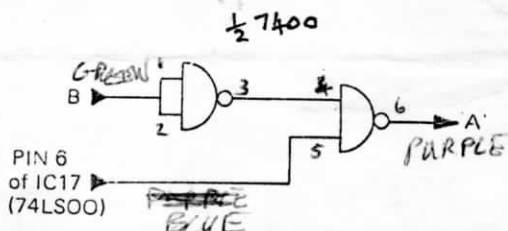


Fig. 2. Modification needed on boards Issue II or earlier.

### Offset Calculation

The offset-calculation program is located at 0093 in the revised monitor, and it saves you the trouble of calculating jump operands.

Suppose we had the following program . . . .

0FC9          C400          LCOP          LDI 0

⋮  
⋮  
⋮  
⋮  
⋮

0FD4          9CXX          JNZ LOOP

Where XX is to be determined. We use the offset program as follows:

1. Put the jump instruction address in (0FF9, 0FFA), in this case 0FD4.
2. Put the destination address in (0FFB, 0FFC), in this case 0FC9.
3. Enter the address 0093 and press 'GO'.
4. The program will insert the correct value of XX into your program, in this case F3.