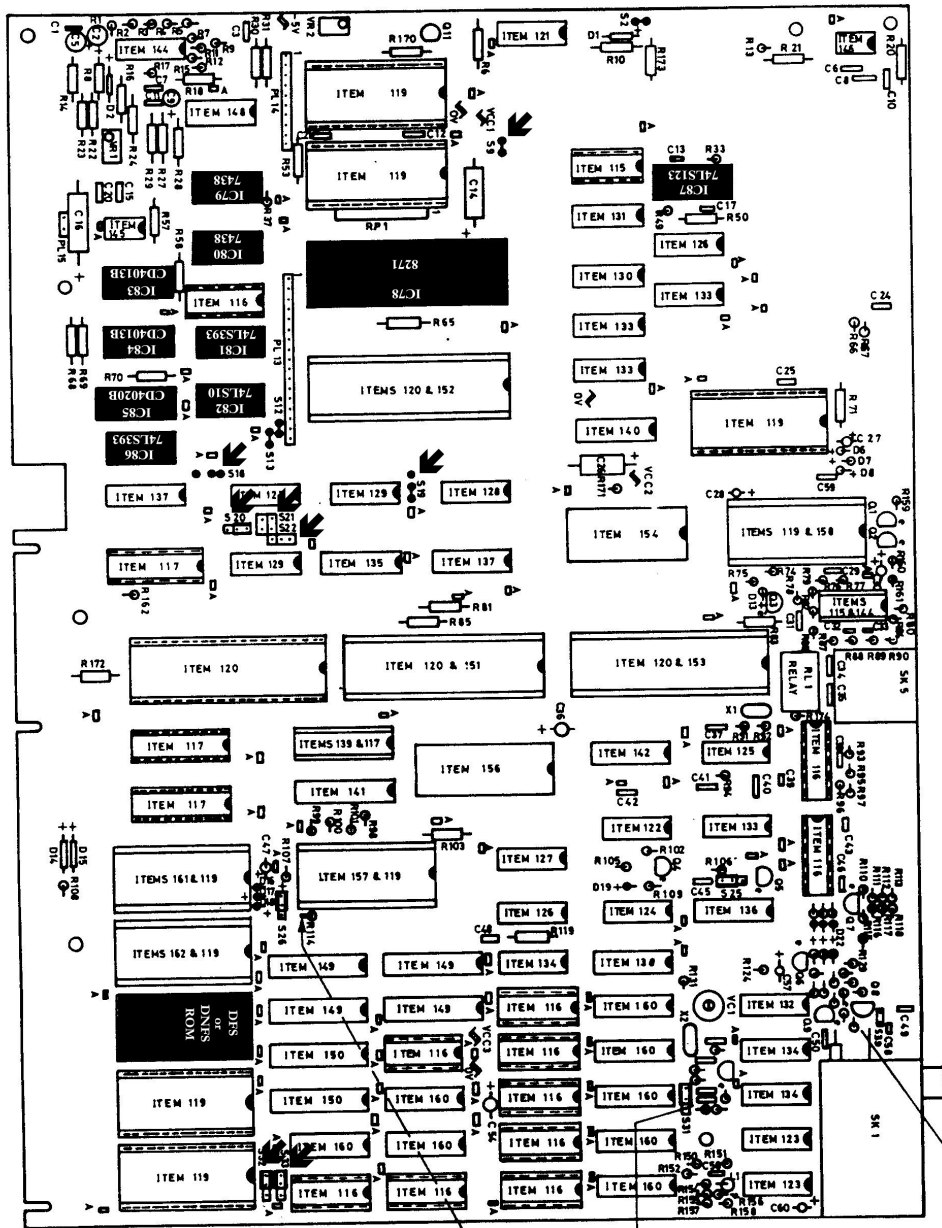




## BBC Model B 8271 Disc Upgrade Kit Fitting Instructions



### Component Location inside the BBC Microcomputer

The diagram above shows the location of the ICs inside the BBC microcomputer. These are shaded black and give the IC socket number and component name for each.

The various PCB links which must be changed are marked with an arrow.

### Important Note

The BeebMaster 8271 Disc Interface Upgrade Kit contains all the microchips listed in the fitting instructions required to add the 8271 disc interface to a BBC Model B.

The integrated circuits in the BeebMaster Disc Upgrade Kit are electrostatic sensitive. Please observe the appropriate precautions for handling such devices when fitting this upgrade.

If you are in any doubt as to the fitting of the Disc Upgrade Kit to the BBC microcomputer, please contact BeebMaster for advice. DO NOT risk damage to your BBC or this upgrade kit if you are unsure how to proceed!

www.BeebMaster.co.uk/BeebShop  
Enquiries@BeebMaster.co.uk

## Fitting the BeebMaster 8271 Disc Upgrade to a BBC Model B Microcomputer

1. Switch off the computer and unplug it from the mains. Switch off and disconnect any peripherals connected to the computer.
2. Remove the computer's lid by unscrewing the four screws marked "FIX" - two at the rear of the computer and two underneath.
3. Remove the two (or three in some cases) fixing bolts holding the keyboard in position.
4. Unplug the keyboard connector and speaker connector from the main PCB and remove the keyboard. If the Speech serial interface is fitted to the keyboard, unplug the serial connector from the main PCB.
5. Fit the integrated circuits listed below into the sockets provided on the main circuit board, ensuring that they are inserted the correct way round, ie. with the half-moon notch facing towards the back of the computer.

The location of the IC sockets on the PCB is shown on the diagram on the back page. The location of the ICs in the BeebMaster Disc Upgrade Kit Box is shown in the diagram opposite.

The IC pins may need to be bent inwards slightly to fit them in the sockets. To do this, lay one row of pins on a flat surface and gently exert pressure on the IC until the pins are in the correct position, remembering to observe electrostatic precautions when doing so.

1 x 8271	IC78
2 x 7438	ICs 79,80
1 x 74LS10	IC82
2 x 74LS393	ICs 81,86
2 x CD4013B	ICs 83,84
1 x CD4020B	IC85
1 x 74LS123	IC87 (Not required if Econet already fitted)
1 x DNFS ROM	

6. **On issue 1 or 2 circuit boards only**, connect the two pads of link position S8 with a wire link.

7. If the computer is fitted with OS ROM version 0.1 then it must be replaced with MOS 1.20. Please contact BeebMaster if your computer does not contain Acorn OS 1.20 (as reported by \*FX 0).
8. If the existing power supply does not incorporate an auxiliary power output socket it must be exchanged for a suitable unit (eg. ASTEC type).
9. **On issue 1, 2 or 3 circuit boards only**, cut the leg of IC27 pin 9 as close to the PCB as possible and the track connected to it on the component side of the circuit board between IC27 and IC89, then reconnect the cut IC leg to the East pad of link S9 with a short length of insulated wire.
10. **On issue 4 boards onwards**, cut the link at position S9.
11. Set the following link positions using MOLEX jumpers:—

S18-North	S22-North
S19-East	S32-West
S20-North	S33-West
S21-2 x East/West	

The location of these links is shown on the diagram marked overleaf with an arrow.

### Component Location inside the BeebMaster Disc Upgrade Kit Box

