

2.3.11 Assembly of the Resonator

The resonator RES1 is close to the PIC (IC14), just below the green LED. This is the blue component with three legs, marked 4.00. It can be fitted either way around. Solder it and cut the legs.

2.3.12 Assembly of the buzzer

The buzzer is located left of the displays (BUZ1). The longest pin is the (+) which should go into the top hole. If you fit it the wrong way around, it won't produce any sound. Solder it and cut the legs.

2.3.13 Assembly of the transistors

There are 7 transistors in the kit. Six of them are marked 2N7000 and the remaining one is marked BC557. Please check these numbers carefully; although they look almost identical, they should not be swapped! First, insert the only BC557 into the position marked as T5 in the top right corner of the board (**not T7!**). Solder it, and cut the legs. Please check the PCB carefully for short circuits. The legs of the transistors are very close together and a short circuit is easily made. Note that the transistors have a flat side, which should line up with the symbol printed on the PCB.

Next, mount the six 2N7000 transistors. 4 of them, T1, T2, T3 and T4 are located just below the displays.

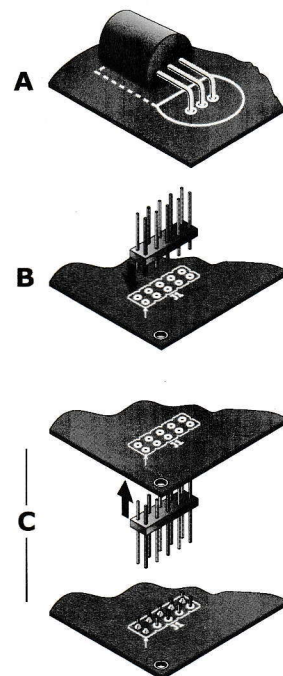
You may want to bend the pins of these transistors to allow them to lay 'flat' on the surface of the PCB. This area is marked with a dotted line (drawing **A**). T6 should go left of the MODE switch (SW1) and may also be 'flattened'. When mounting the transistors this way, be sure to bend the pins prior to mounting the component. Never bend it once it is soldered!

Finally, T7 is located at the top right of the PCB, close to the serial port connection. Do not bend the legs of this transistor.

2.3.14 Assembly of the Header

Mount and solder the header (J1) at the bottom right of the PCB (Steckerbrett area). The short legs should go into the holes in the PCB (drawing **B**). The longer legs should point upwards; these will be used to fit the jumpers.

*NOTE: if you don't want the jumpers to be changed from the front of the PCB (i.e. if you want to fit them permanently) you may decide to mount the header from the rear of the PCB. Refer to drawing **C**.*

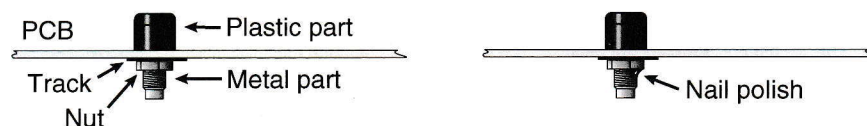


2.3.15 Assembly of the MultiFuse

The MultiFuse goes to the right of the Buzzer at the top left of the PCB (FUSE1). Solder it and cut the legs. The MultiFuse is a self-restoring fuse which doesn't have to be replaced in case of a short circuit.

2.3.16 Assembly of the Sockets

Locate the 26 sockets in the plastic bag containing the mechanical materials. These 26 sockets all go onto the Steckerbrett part of the PCB in the holes marked DSC1 to DSC26. They should go into the large holes. Mount them one by one. Remove the nut from the socket. Ensure that the plastic tube is correctly fixed to the metal part of the socket. If this is not the case, fix it first. Insert the socket in the large hole from the front of the PCB and fit the nut again at the back.



The nut will 'touch' the metal ring on the PCB, which is exactly what we want. Use the pliers, or even better: a **nut driver**, to fix the nut, but don't fit it too tight as the plastic may break! You may want to secure the nut by applying a drop of nail polish on the junction between the nut and the metal part of the socket.