

This coil will be L5 — insert the leads into the pcb so that the wire at the end nearest the tap is near RV4. Solder this lead to the top foil, the other end going to the left hole near C20. A short length of wire can now be used to connect the tap to the hole just to the lower right of the coil (shown dotted on diagram). Carefully space out the turns afterwards so that they are evenly distributed around the portion of the core not resting against the pcb.

3. Repeat the above operation with L4 — the only difference is that the tap is not connected to the pcb as it connects direct to the TX/RX switch later.

4. T1. This transformer is wound on a ferrite toroid (grey in colour and 13mm in diameter). Take two lengths of wire 15cm long and strip one end of each as before. Twist the two stripped ends together and solder. Now hold the junction on top the core and wind on six turns in a clockwise direction as before. Turn the core round and carry on with the other half for a further six turns.

Crop to 10mm and strip off 8mm

of insulation. Insert the coil into the pcb, solder into place, then connect the tap to the hole just to the left of the coil using a short piece of wire. Again, spread out the turns as evenly as possible.

This completes the assembly of the main pcb. Before continuing, check that all solder joints have been made on both sides of the pcb, and that all semiconductors have been inserted the correct way round.

Alignment

The various components external to the pcb now need wiring in before checking the board and aligning it. Firstly connect up the Tx/Rx switch as shown in Fig. 3, using insulated wire, keeping the leads for points D, E and the tap (F) to about 5cm in length, and the remaining leads to about 8cm. Then connect up the DSB/CW switch. The audio gain control should now be wired up as per Fig. 3, using screened leads for each connection. A suitable speaker should be wired in, again using

screened lead for its connection.

The VFO capacitor has a number of leads, some of which need removing. On one edge there are three leads — crop off these close to the body. On the other edge are five leads. Looking at the capacitor from the rear with the leads at the bottom, remove the two on the left, leaving one long lead and two shorter ones. Solder the long lead to the upper foil of the pcb adjacent to C2, then connect the other two leads together and then to point P, using a short piece of stiff wire. Set the capacitor to mid travel.

A suitable means of monitoring the output power — either a proper power meter or an SWR bridge — should then be inserted in series with the antenna lead, using 50 ohm coaxial cable, terminating in a suitable dummy load (50 ohm) or resonant antenna (the dummy load is preferable for tuning up). Finally, without switching on, connect up a +12v power supply (12-15v is suitable) with a meter in series with the positive lead for monitoring the current consumption.

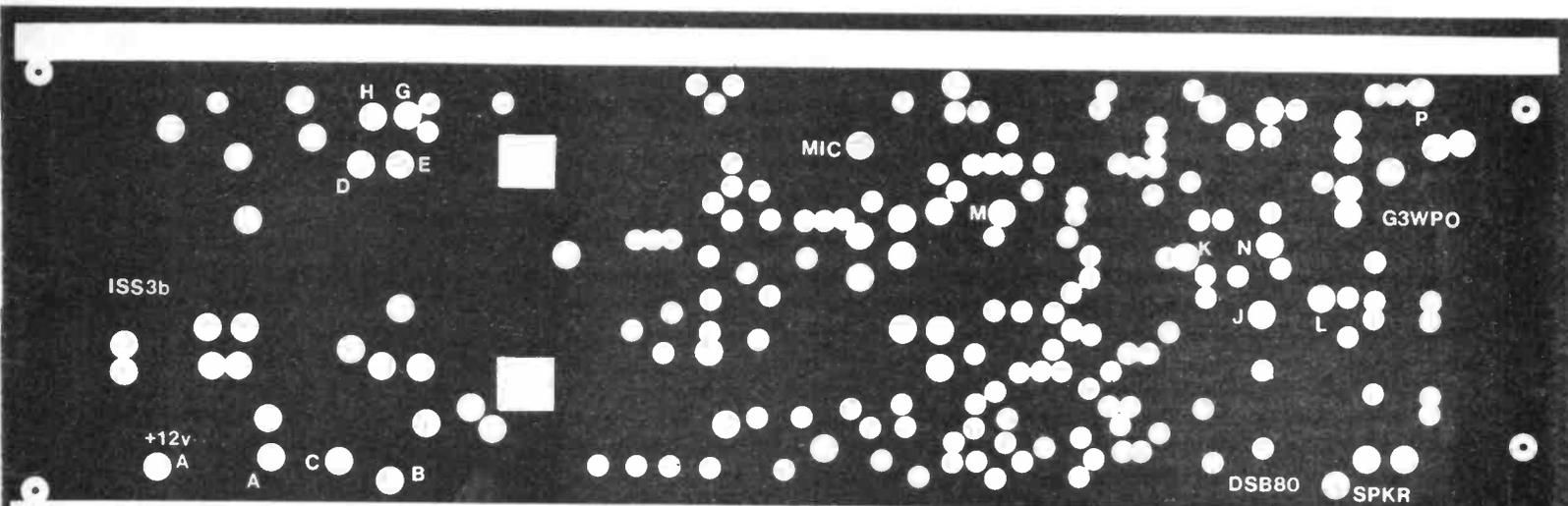


Fig. 2.

