

Faulty heater switch. Intermittent operation of the heater supply is usually due to high resistance contacts on the heater switch. This switch is a double pole type, one pole for switching the sidetone oscillator on and off, the other pole switching the heater supply. A quick cure here is to clean the switch and swop the wires over as the slightly faulty contacts will usually handle the sidetone oscillator, and the original sidetone contacts will be as good as new.

Plugging phones in does not cut out speaker. This is usually caused by the use of the wrong type of jack plug. Stereo jack plugs or 'Post Office' types with small tips are not suitable, round tipped mono plugs being the order of the day. If this does not cure the trouble note that quite a few *FT101's* seem to have escaped with the phone jack socket wrongly wired, so if the internal speaker still does not cut out, consult **Fig. 4** and rewire if necessary.

Plenty of PA current but poor PA dip and RF output low. The causes of this effect can be many and have included a faulty 600V feed choke, faulty pi-tank coupling capacitor, or a blob of solder on the PA coil.

Oscillation or distortion as mike gain advanced at some frequencies on the 160m band. The trouble here is that the RF choke on the patch input socket is resonant. This can either be disconnected entirely if the socket is not used, or the choke can be replaced by one with a ferrite core. This fault seems to mainly occur on *FT101B's*, and probably later units are already fitted with a different choke.

Workshop manual. A very good operating and maintenance manual is supplied with the *FT101*. These notes — whilst it is hoped they will be of general interest presume that this is available. Owners wishing to delve further into their rigs might like to know that a full workshop manual is also available via Yaesu dealers.

Safety. The on/off switch is a single pole type and does not isolate the *FT101* from the mains supply. You must therefore remove the mains plug from the wall socket before attempting service work. The *FT101* contains large capacitors and high voltages. Some points such as the top caps of the power amplifier valves remain live at 700V for some

considerable time after the set has been switched off. Never touch any point in the PA cage without first shorting the top caps of the PA valves to chassis (leave the rig to stand for 1 minute after disconnecting mains supply before doing this, or use a resistor of a few hundred ohms to avoid an excessive discharge current.)

Fuses. The fuse should be a 3 amp quick blow type for use on 220/240 volt supplies.

Swopping the pilot lamps. Several owners have damaged their FT101 by causing a short circuit when replacing the pilot lamps. These are run from the rectified DC supply, and a short circuit will burn out the rectifiers in the power supply. Do not try and swop them when the rig is switched on, or fit them wrongly so that the wire shorts to the chassis. Equipment which has been imported by the approved importer is normally stamped on the rear "234V". Many unofficial imports, and some Sommerkamp equipment is set on 220V and should be rewired as per the instructions in the manual. Operation at UK mains voltages on the 220 volt setting will considerably reduce the life of components in the FT101.

Valves. The FT101 is designed to function with Japanese valves and NEC or Toshiba are recommended by Yaesu. Some other brands will give poor results, refuse to neutralise, or even oscillate in the receive mode and cause damage.

