

Taking apart the



Dismantling the FT101

Some circuit boards and parts are easily accessible once the lid and bottom covers have been removed. When servicing in the more difficult to get at sections, it is not worth struggling and risking doing damage, as it is very easy to remove the complete cabinet. To do this, proceed as follows:

1. Completely disconnect the FT101 from the mains, aerial and all other equipment and place on bench in an inverted position.
2. Remove bottom cover and release hexagonal screws and two star-headed screws (four at the front and one at the rear) holding cabinet in place.
4. Gently slide cabinet off over rear of FT101 ensuring that the lid catches do not foul the audio board or the metallic labels identifying this board's preset controls.

Faults and modifications

Mains fuse blows. If a replacement 3 amp fuse fails do not fit a larger

Part 2

Troubleshooting and repair by Harry Leeming G3LLL

one: there is a fault. The most likely cause of mains fuse failure is a short circuit in the HT rectifiers, and these should be checked with an ohm meter. A suitable replacement is the BY127 television type HT rectifier, and it is advisable to replace all eight rectifiers in the HT bridge even if only a couple are faulty. Note that early FT101 Mk 1s used only four HT rectifiers, but for reliability these should be replaced with eight rectifiers fitted with the 470k equalising resistors as in Fig. 1.

Set works on receive, but won't transmit, or vice versa. A common cause of this is that the junior operator has had his fingers on and has left the INT/EX/CH switch in the wrong position. Many FT101s have been returned for this.

No transmit, no PA current, receive OK. Check that power amplifier valve heaters are lit. The 11-pin plug at the rear must be fitted and must have a link between pins one and two before the power amplifier stage will function.

No SSB transmit, three or more S-points down on receive, final amplifier resting current OK at 50 to 60 mA. CW and tune gives full output. This fault is occasionally caused by Q1 on the IF board having blown. You can replace this FET with almost any RF FET such as the MPF102, provided that you get the pin connections correct.

Any weird fault, particularly if intermittent. High resistance contacts on the plug-in circuit boards can cause some very odd effects. Standard service procedure is to remove the plug-in circuit boards, squirt the contacts with contact cleaner, and plug them in and out half a dozen times to clean the connections.