

FL - 101 TRANSMITTER

INSTALLATION OF RF PROCESSOR

The following installation procedure is applicable to the FL-101 transmitters bearing serial numbers 308001 and up only.

Required Parts:

- RF Processor Unit B completed and tested 1 pce
- Tapping Screws 3 x 6 4 pcs
- Insulation Tube 3 mm dia 4 cm

MODIFICATION

Remove the top and bottom covers from the transmitter.

- (a) Locate black vinyl tube and cut a harness band as illustrated by (1) in Fig. 1 and remove the black vinyl tube from the yellow and green colored coax cable. As the coax cables are longer than necessary, cut a 50 mm piece from the end.
- (b) Prepare the ends of the coax cables as illustrated in Fig. 2. Remove a wire (2) between pin 2 of MJ-1 and soldering post. Locate white wire (3) between pin 5 of MJ-2 and soldering post and disconnect wire from the soldering post. Remove yellow wire (4) from pin 2 of MJ-2 and the soldering post. Disconnect white/yellow wire (5) from the soldering post.
- (c) Solder the yellow coax cable (6) prepared in Step (b) to MJ-1, inner conductor to pin 2 and outer braid to pin 1. Solder the green coax cable (7) to the soldering post and outer braid to ground as illustrated in Fig. 3.
- (d) Solder the white wire disconnected from the soldering post in Step (b) to pin 1 (8) of MJ-2. Connect the white/grey and two white wires (9) together using a yellow wire (4) removed in Step (b) and solder them.

Solder the white/yellow wire (5) disconnected from the soldering post in Step (b) to the other post of the soldering post where a yellow wire (10) is soldered.

- (e) Remove harness band (11) from the top of VFO unit. Cut a harness band marked *. Remove vinyl tube covering the wire harness as illustrated in Fig. 4.
- (f) Install the RF processor unit as illustrated in Fig. 5. Use the tapping screws supplied. Solder the wires as illustrated in Fig. 6.

ADJUSTMENT

The RF processor unit is carefully aligned and tested at the factory so that it can be installed without any further alignment in accordance with the description on Page 8 of the instruction manual.

The following adjustments, however, may be necessary in order to eliminate a slight tolerance of the ALC circuit transistors.

- (a) Tune the FL-101 up on the 20 meter band and set mode switch to USB position. Apply a 1 kHz 20 mV signal to the microphone input. Set the processor switch to "ON" position and LEVEL control to a fully clockwise position. Adjust MIC GAIN control until IC reaches 200 mA.
- (b) Peak T1 and T3 in the processor circuit for a maximum IC reading.
- (c) Set the processor switch to "OFF" and adjust MIC GAIN control for a 200 mA IC reading. Peak T2 for a maximum IC reading. Then, adjust MIC GAIN control until RF voltage at "IF IN" post reaches 50 mV. Adjust VR1 until RF voltage at "IF OUT" reaches 50 mV.
- (d) Disconnect audio generator from the MIC input and set the meter switch to ALC. Adjust VR2 until the meter indicates full scale in transmit without modulation.

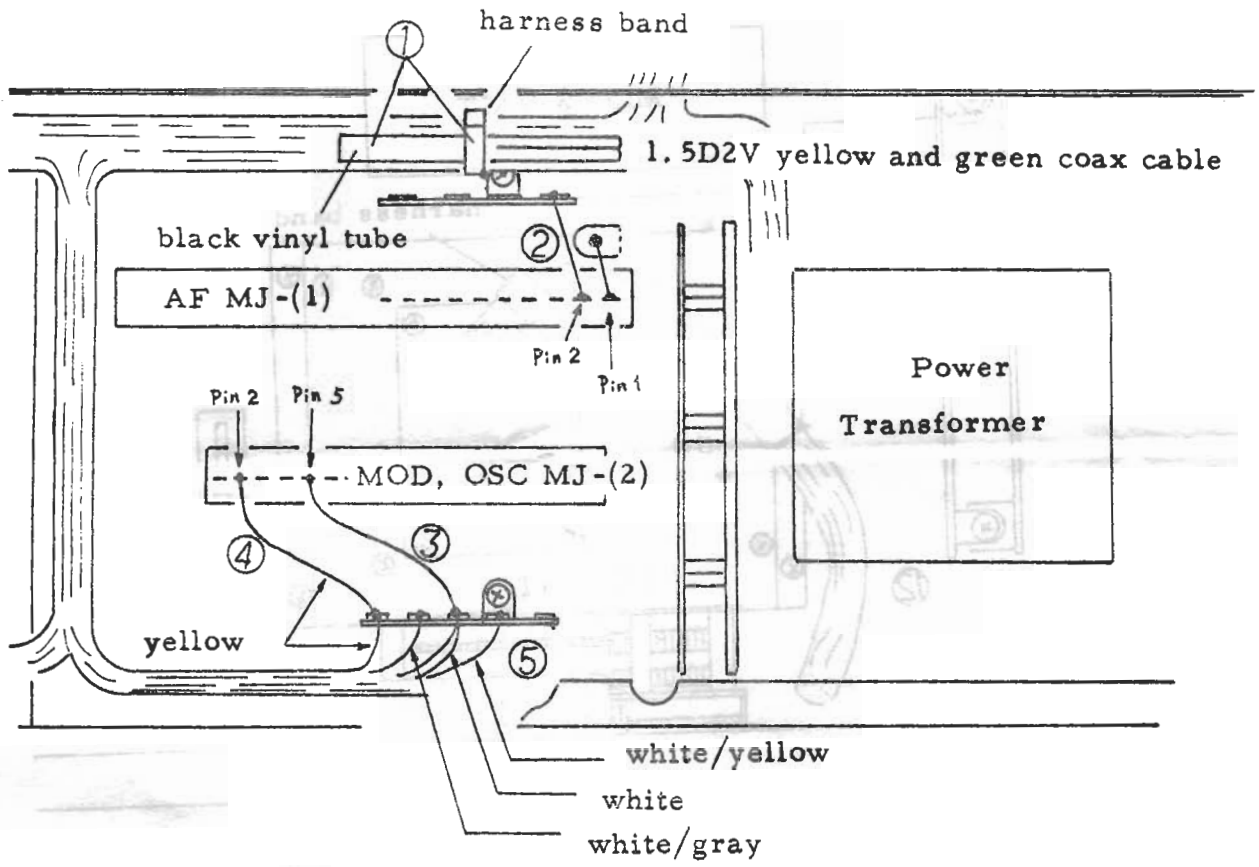


Fig. 1

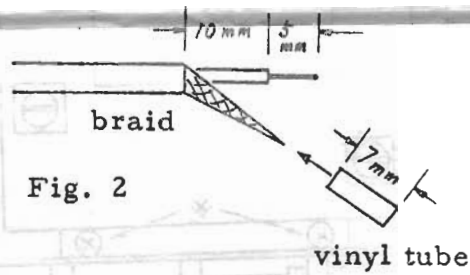


Fig. 2

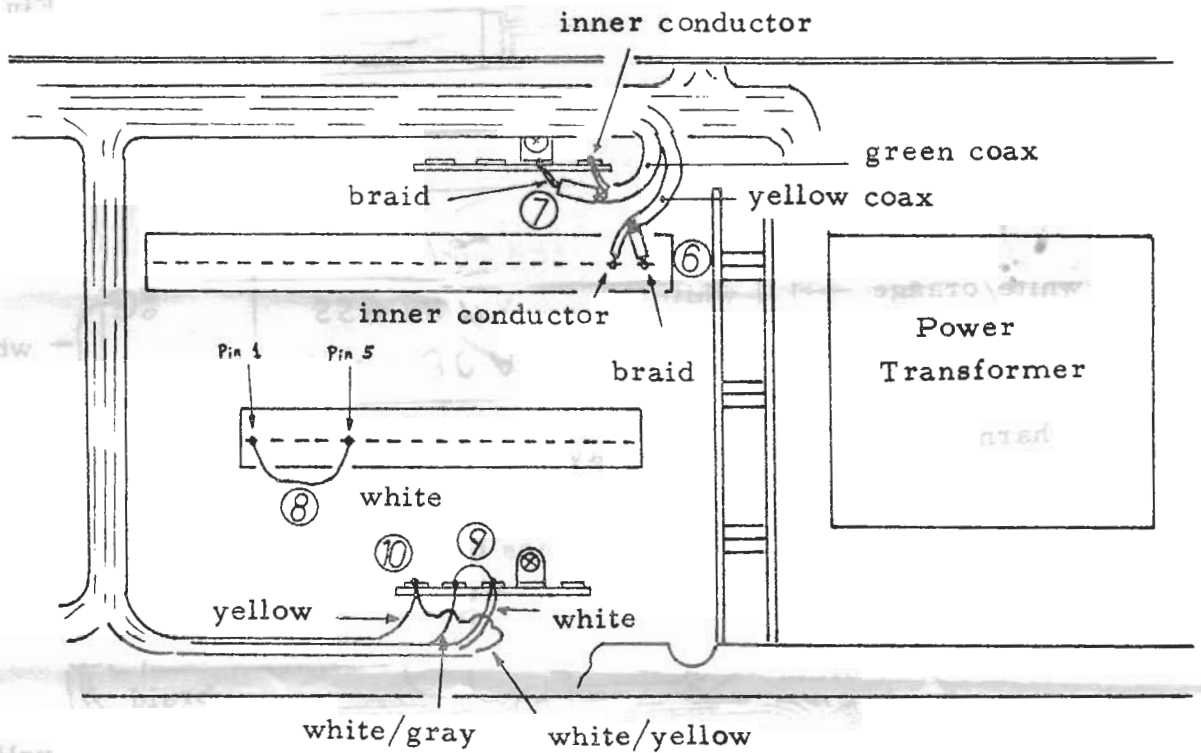


Fig. 3

