

SERVICE BULLETIN AMATEUR RADIO

SUBJECT TH-215/415 TX SIGNAL-TO-NOISE RATIO IMPROVEMENTS	DATE 10/28/88
---	------------------

The TH-215/415 transmit signal-to-noise ratio is typically 30 dB. This ratio is more than sufficient for routine operations. For those users who would like to obtain additional performance, the following modification will provide an improvement of 5 to 8 dB.

REQUIRED PARTS:

47 OHM 1/10 WATT CHIP RESISTOR	RK73FB2A470J
220 OHM 1/10 WATT CARBON RESISTOR	RD14BB2B221J
22uF 6.3V ELECTROLYTIC CAPACITOR	CE04CW0J220M
1uF 50V ELECTROLYTIC CAPACITOR	C90-1248-05

1. Disconnect the battery and antenna.
2. Remove the 7 screws from the back panel of the transceiver (Figure 1).
3. Lift the front panel from the transceiver and lay it to the right side.
4. Disconnect the 2 flex cables and remove the 3 screws from the IF unit (Figure 2).
5. Pull the top panel off and then remove the IF unit.
6. Remove the 8 screws from the RF unit and unplug connector CN2 (Figure 3). Remove the RF unit from the back cover.
7. Locate R50 (TH-215) or R60 (TH-415) on the foil side of the RF unit (Figure 4). Replace the resistor with a 47 ohm chip resistor.
8. On the component side of the IF unit, add a 1uF capacitor as shown in figure 5.
9. Also on the component side, cut one foil, add a 220 ohm resistor, and add a 22uF capacitor as shown in figure 6.
10. Assemble the transceiver by reversing steps 1 - 6.

This is an optional change that may not be covered under warranty. Time required for this modification is 1.0 hrs or less. (C) 84588TKC

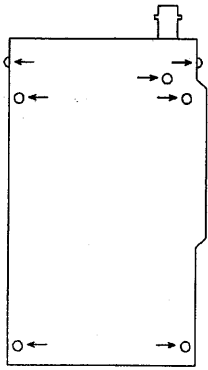


FIGURE 1

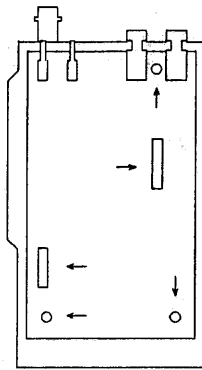


FIGURE 2

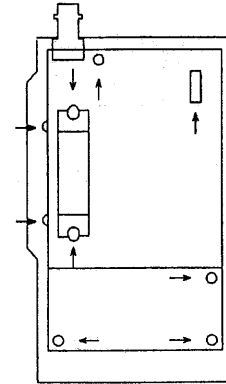
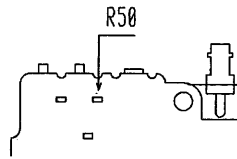
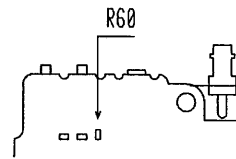


FIGURE 3



TH-215



TH-415

FIGURE 4

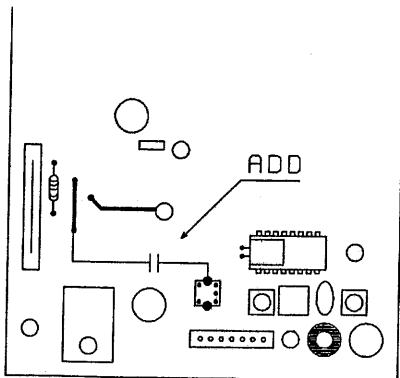


FIGURE 5

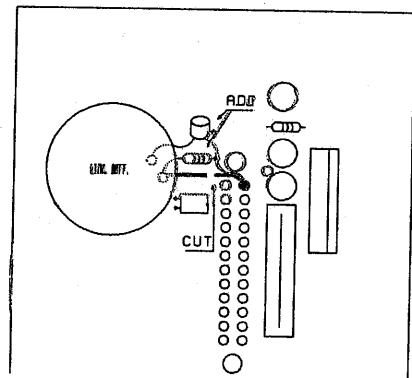


FIGURE 6