

RI-0014 04-27-01 DATE

IM-5006

**PRODUCT** 

**TUNER SCAN SENSITIVITY** 

**SUBJECT** 

**PURPOSE**: Some very early production units lacked sensitivity and did not stop on stations when placed in the Scan mode. This modification will correct this condition.

**TOOLS REQUIRED:** Phillips screw driver, small jeweler's straight blade screw driver, needle nose pliers, wire cutters, soldering iron (small tip), solder, voltmeter.

COMPONENTS REQUIRED: 5.6k ohm 1/4 watt resistor.

## PROCEDURE: FM TUNER MODIFICATION

- Disconnect main power from system by turning off main breaker or disconnect low voltage AC supply wires from transformers.
- 2. Locate IC18 on Main PC Board (Figure 1). Bend C136 and C152 out of the way to allow access to Pins 9 and 14 of IC18.
- 3. Apply a small amount of solder to the tip of the soldering iron. Then, touch the tip to Pin 9 of IC18. Allow the solder to flow from the iron's tip onto Pin 9. Repeat for Pin 14 (Figure 2).
- 4. Bend and cut the leads on the 5.6k ohm resistor as illustrated in Figure 3.
- 5. Using needle nose pliers, hold the resistor's lead next to Pin 9 of IC18, and reflow the solder on Pin 9. Make sure no solder bridges or shorts have been formed to any other pins. Repeat for Pin 14. Finished modification should look like Figure 4.

## **PROCEDURE: FM SCAN ALIGNMENT**

- 1. After resistor has been added to IC18, it may be necessary to adjust the FM Scan sensitivity.
- 2. Locate D13 on Main PC Board and connect positive (+) input of voltmeter to the anode of D13 and the negative (-) input to the heat sink (Figure 1).
- 3. Using the < > keys, tune in a strong FM station.
- 4. Once a station has been found, adjust Quadrature Transformer T5 (Figure 1) until the voltage on the meter goes to a high state (approximately 2.7V).
- 5. It voltage does not go to a high state during adjustment of T5, slightly turn FM Scan TrImpot VR3 clockwise. Then, try tuning T5 again. Repeat if necessary.
- 6. After a high state has been achieved on the anode of D13, press the Scan and then the > keys. Radio should start scanning upward in frequency and stop only at strong stations.

**Note:** If radio is stopping on noise or very weak stations, VR3 may be over adjusted. Turn VR3 counter-clockwise until radio stops only at strong stations.

