



SERVICE BULLETIN

from: TRIO-KENWOOD COMMUNICATIONS, INC.

TR-8400

#843

SUBJECT: TR-8400 Sub-audible Encoder Installation

DATE 02/18/81

When installing a sub-audible encoder in a first-lot radio, change the Tone switch power source from the 8C (common) to the 9T (transmit) line. This will prevent the encoder from distorting the receiver when the Tone switch is ON.

Procedure

1. Remove the bottom cover (2 long screws, rear, 3 short screws, front) and unplug the speaker.
2. Cut the GRAY lead to the Tone switch wiper one inch from the switch. Tape-insulate the long lead to the harness.
3. Connect the switch wiper to the Mic connector, pin 5. (See Fig. 1)
4. Install the encoder, connect the speaker, and replace the bottom cover.

For complaints of distorted sub-audible tone in a first-lot unit, replacing components and readjusting the PLL will reduce or eliminate distortion.

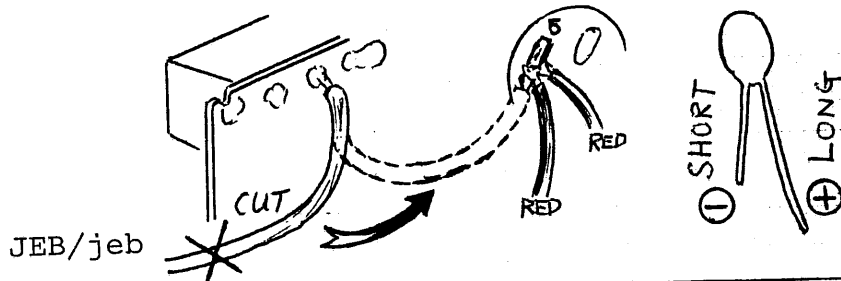
Procedure

1. Remove the top cover (4 screws).
2. Remove the rubber conductive shield.
3. Remove the aluminum cover from the PLL unit X50-1670-xx (17 screws).
4. Unplug connectors J2-J6.
5. Remove 11 screws and 2 threaded studs securing the PLL printed circuit board. Shift the board to the rear, then swing up and to the right.
6. Use Wikit or a desoldering tool to remove and replace:

Component	was	replace with	(vicinity of Q7)
R30	12k Ω	18k Ω	$\frac{1}{4}$ W
R31	820 Ω	390 Ω	$\frac{1}{4}$ W
C47	6.8 μ F	15 μ F Tantalum	(observe polarity)
C48	6.8 μ F	15 μ F	"

Note: Don't create solder-bridges or lift the foil.

7. Reverse steps 5, 4, 3 to partially reassemble.
8. Perform the PLL adjustment listed in the Service Manual, Page 24, item 2.
9. Reverse steps 2 & 1 for final assembly.



PLL unit (X50-1670-51, 61)

