# KENWOOD

### **ASB-982**

## **Service Bulletin**

**Amateur Radio** 

Division

**Subject:** TS-950S/SD TX IMAGE ON 18.115MHZ**Date:** 02/06/91

Some TS-950SD owners have reported a transmit image at 18.115MHz that causes the receiving station to hear distortion on the carrier. If the operating frequency is shifted 3KHz above or below 18.115MHz, the image disappears. This modification will lower the image level from -30dB (worse case) to better than -40dB by installing a trap on the 455KHz I.F.

#### REQUIRED PARTS:

4pf TRIMMER CAPACITOR	C05-0308-05
40pf TRIMMER CAPACITOR	C05-0309-05
2.2uH COIL	L40-2292-14

#### MODIFICATION:

- 1. Disconnect the power cord and antenna.
- 2. Remove the top and bottom covers (18 screws).
- 3. Locate the I.F. board on the bottom of the transceiver. This is the back right board of the 4 boards on the bottom of the transceiver. Figure 1
- 4. Locate L36 by connector CN17 on the I.F. board. Figure 2
- 5. Install and solder into place a 4pF trimmer capacitor across L36. Figure 3
- 6. Install a 2.2uH coil and 40pF trimmer capacitor in series from the output of L36 to ground. The can of L31 can be used for ground. Figure 3

#### ALIGNMENT:

1. Connect the TS-950S/SD to a power meter and 50 ohm load.

2. If you are working on the TS-950S Digital, connect the DSP cables on the bottom cover to the back panel.

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This modification is covered under the 1 year warranty. Time required for this modification is 1 hr. or less. (C) 020691EWP

- In the CW mode, adjust the front panel power control for 150W while the ALC level is just at the starting point on the meter. This will create the highest image level condition.
- 4. Using a monitor receiver with narrow filters installed and AGC set to off, tune the receiver to the image frequency.
- 5. Alternately adjust the two trimmer capacitors until the image cannot be heard. This procedure may need to be repeated several times.
- 6. Push the wire harness around the I.F. board toward the chassis of the transceiver.
- 7. Assemble the transceiver.

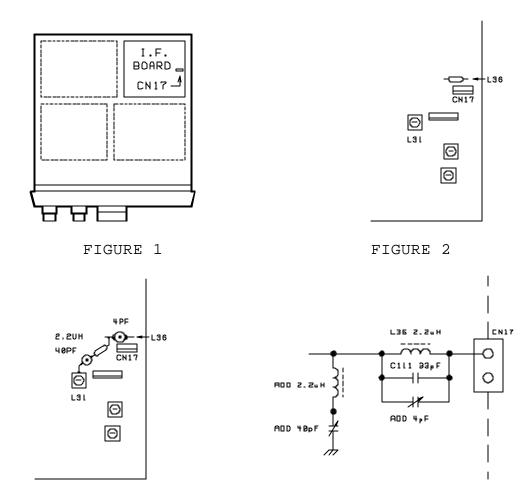


FIGURE 3 SCHEMATIC

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