## **KENWOOD**

## SERVICE BULLETIN AMATEUR RADIO

SUBJECT			DATE
TS-940S	ERRATIC DISPLAY		01/20/89

Intermittent control or display problems that are difficult to correct with the reset procedure may be caused by a faulty ROM socket. The socket should be checked to insure that it makes good electrical contact with each pin of the ROM. If it is found to be intermittent, remove the socket and solder the ROM directly to the board. It should be noted that units between serial numbers 701XXXX to 811XXXX and from 903XXXX to 909XXXX are not likely to have this failure. In addition, units with a serial number of 909XXXX and above do not incorporate a socket.

## CAUTION

Removing the socket requires good soldering skills. The ROM is mounted on the Digital A unit and is designated as IC2. The board, being double sided, has solder connections on both component and foil sides. When the socket is removed, it is very important to insure that each pin is completely solder free. Having to pry up on the socket means that it is not completely desoldered and will cause the circuit foils to tear.

When performing any work on the Digital A board, CMOS handling techniques must be observed. Such techniques include using a grounded or isolated soldering tip, avoid touching the pins of IC chips with your fingers, and ground yourself with a wrist ground strap.

## To remove the socket:

- 1. Disconnect the power cord and antenna coax.
- 2. Remove the top and bottom covers from the transceiver.
- 3. Remove the 2 flat head screws from each side of the front panel chassis.
- 4. Loosen the round head screw on each side of the front panel chassis.
- 5. Carefully rotate the front panel forward. It will be necessary to unplug the VS-1 cable from the transceiver.
- 6. Remove the 4 screws from the speaker mount.

- 7. Carefully pull up on the mount and rotate it toward the front panel. Swing the mount toward the right side of the transceiver and allow it to rest on the Digital B unit shield.
- 8. Remove the 8 screws from the Digital A unit shield plate.
- 9. Lift the plate and rotate it to the left side of the transceiver.
- 10. While avoiding contact with the pins, remove the ROM (IC2) and set it aside on anti-static foam.
- 11. Remove the 6 screws that mount the Digital A board. Rotate the board toward the front panel to expose the bottom side of the board.
- 12. Carefully desolder the socket and remove it from the board. Do not pry up on the socket. If it does not easily pull off the board, the top foils are still soldered to the socket.
- 13. Install the ROM in the board and solder it in place.
- 14. Assemble the transceiver by reversing steps 1 11. Do not pinch the power switch cables between the front panel and the body of the transceiver.

This modification may be covered under warranty during the warranty period. Time required for this modification is 1.5 hrs or less. (C) 011189TKC