

Service Bulletin

KENWOOD ELECTRONICS, INC.  NATIONAL SERVICE DEPT.

DATE: August 15, 1977

Bulletin SB 2023

TO: ALL KENWOOD AUTHORIZED SERVICE CENTERS

SUBJECT: REPLACEMENT OF OUTPUT TRANSISTORS IN THE KR9400

The following procedure should be observed when servicing a KR9400 with blown output transistors:

- 1) Replace the power transistors 2SB539 and 2SD287.
- 2) On the main amp board X07-1390-10, remove the jumper wire J2 which connects the collector of Qe3 to ground pins 5 and 6. In its place install a 15K ohm, $\frac{1}{4}$ W resistor.
- 3) Install a 0.47uf, 100V Mylar capacitor in parallel with capacitor Ce4 (47uf, 100V).
- 4) Replace the 1pf capacitor Ce8 with a 3pf capacitor. Alternatively, a 2pf capacitor can be added in parallel to the 1pf Ce8.
- 5) Sever the connection between pin 3 and Re7 on the main amp board by cutting the printed foil pattern between pin 3 and Re7. Make the cut as close to Re7 as possible.
- 6) Short pin 3 to pin 2 via a jumper wire.

The above service should be performed on both KR9400 main amp boards. Refer to figure 1 for further details.

Once the main amp boards have been serviced, proceed as follows:

- 1) Check all eight output transistors and all eight 0.47 ohm resistors on the heat sink.
- 2) Check power supply.

If the above items are in proper working condition, install the main amp boards.

Once the boards are installed adjust the bias conditions. Refer to the service manual and figure 2 below. Note that bias adjustments made when the receiver is cold will differ from the adjustment made after warm-up. Therefore, to avoid over currents, allow about 10 minutes warm-up prior to adjustment.

