PHILCO TRANSISTOR - CLOCK RADIO MODEL TC-47

PANEL (CHASSIS) REMOVAL

- Remove the following—Tuning and volume control knobs, batteries, two tri-mount fasteners at speaker end of panel, battery contact and retaining board.
- 2. Open the positive battery terminal lead from L1 tie lug on panel. Open the speaker connections.
- Remove the panel from the cabinet by first lifting up on the speaker end of the panel.

SERVICE NOTES

When signal tracing, inject signal at transistor collector and limit input to keep signal across speaker below 0.275 volts.

SCHEMATIC NOTES

CAUTION—Due to 2nd I-F transistor variations, the value of resistor R8 must be selected, within limits for optimum performance. When transistor T-1504 (or T-1542) is defective and must be replaced, resistor R8 must also be changed unless the original provides the proper resistor operating characteristics.

The value of R8 is selected to allow the 2nd I-F transistor collector to draw 2 milliamps and will be between 18,000 to 33,000 ohms. This is checked by measuring the voltage across R10, the 560-ohm collector return resistor. This voltage should be 1.12 volts, with a 10% tolerance (\pm .12 volt).

All resistors are $\frac{1}{2}$ watt, 10%, carbon, except R8 which is 5%. Coil resistances read with coil in circuit. Voice coil impedance = 14 ohms. Voltages measured to ground with a 20,000 ohms/volt meter under no signal conditions.

