

## SERVICING HINTS

### Visual Inspection

A very close visual inspection with the aid of a magnifying glass will often reveal troubles such as broken printed wires, cold solder joints, etc.

### Spray

The use of printed circuit boards is almost universal in the manufacture of portable transistor radios. One of the final steps in the manufacturing of these sets is to spray the printed boards with a clear lacquer or varnish. This coating must be penetrated when signal tracing and when voltage and resistance measurements are made.

### Soldering

When soldering or unsoldering transistors, a heat sink should be used. This is best done by using a pair of long nosed pliers on the transistor leads as they are soldered or unsoldered. The pliers will absorb the heat from the wire and prevent it from entering the transistor.

CAUTION: When soldering on a transistor radio, all grounds from chassis to test equipment or bench must be removed. The reason for this is because the soldering iron may have a slight amount of AC leakage from the heating element to the soldering tip. If the set or chassis is grounded a complete electrical AC path is formed and damage will result to transistors and the components in the receiver.

## SERVICE LITERATURE

The use of reliable service information and schematics are an important factor in servicing transistorized radios. Perhaps the first thing one notices in the initial steps is the unfamiliar location of components on the printed circuit board. It is therefore recommended that service literature, or at least wiring diagrams, be obtained before attempting to service transistor radios. It will greatly aid in locating components and test points for signal tracing.