

diagram and analyzed to determine the source of trouble. Finally, the Transistor should be removed if it is suspected.

Removing a soldered-in transistor from a printed board is a delicate job and should not be done unless it is almost certain that it is defective. Transistors as a rule don't go bad and should not be immediately suspected.

If the Transistor has to be removed, extreme care should be taken in removing it. Too much heat from the soldering iron may damage it, therefore long nose pliers should be used as a heat sink to conduct the heat from the lead wires. After it is out, it may be checked in the Transistor Test Circuit of this Tester.

Before installing the new or old transistor back into the circuit, the printed board should be cleaned and prepared for the entry of the transistor leads. The reason for these precautions is to insure good solder connections with a minimum amount of heat.

TRANSISTOR BASE CONNECTIONS

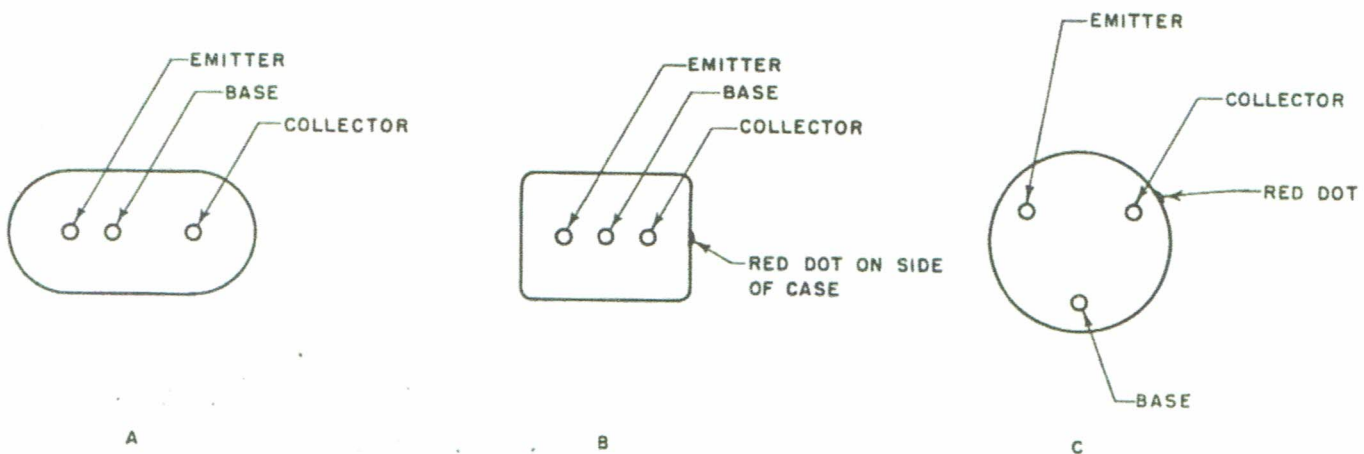


Fig. 2. Bottom view of 3 common types of Transistors

Figure 2 illustrates 3 of the most popular transistor types currently employed in portable radios. The most common type pictured in Figure 2 A, has its base and emitter leads closely spaced at one end of the transistor body while the collector is positioned at the other end. Bearing in mind that the center lead is always the base element, the technician should have little trouble in distinguishing between leads on this type of transistor. Connections for units shown in Figure 2 B and C are determined in a like manner.

SHORT CUTS IN SIGNAL TRACING

After the technician becomes thoroughly familiar with the transistor Radio