



How To Use A Soldering Iron

In more trying times than these, there was a hue and cry for a "chicken in every pot." Today, for the do-it-yourselfer, the slogan ought to be "A soldering iron for every home." This reasonably priced tool is virtually indispensable for modern people. With it, wonders can be performed: toys, electrical appliances, plugs, and even jewelry can be repaired in the home. The following recipes will teach you all you need to know about this device.

Most metals, with the exception of aluminum, white metal, and porous cast iron can be soldered. Those most easily soldered are tin, all sheet metals (except aluminum), brass, and copper. All soldering should be done on a surface where damage would be of little concern-preferably wood.

Utensils

25- or 30-watt soldering iron
with medium-small tip
Fine emery cloth
Small, fine file

Ingredients

Soldering paste or flux
(nonacid)
Cotton cloth or pad
2 small tin can lids
Piece of electrical wire

Preheating Soldering Iron

1. When soldering iron (Fig. 12A) is new, tip should be cleaned with emery cloth.
2. If iron is old, tip should be filed and reshaped.
3. Plug into outlet and heat tip until it turns bright orange or red.
4. Dip heated tip into soldering flux, and avoid inhaling fumes.
5. Touch a short length of solder coil to heated tip (Fig. 12B). The melted solder will run freely, creating a shiny, silvery surface on the tip.
6. Remove solder coil and wipe tip clean of excess with cloth or pad.

Soldering Tin Lids

1. Preheat soldering iron.
2. With emery cloth, clean off small edge of each tin lid.
3. Wipe soldering paste on cleaned surface of one lid.
4. Press heated tip onto fluxed area.
5. Touch end of solder coil to the point at which the heated

tip and tin lid meet. The solder will flow freely over the surface.

6. Remove soldering iron and solder coil.
7. Repeat process with other tin lid.
8. Turn one lid over and place on the other, so both soldered surfaces are in contact (Fig. 12C).
9. Press heated soldering tip onto overlapped surface until solder beneath melts and overflows from edges.
10. Remove soldering iron and allow lids to cool. Once cool, the lids will be solidly welded together.

Soldering Electrical Wire

1. Strip back a piece of electrical wire so stranded ends are exposed.
2. Twist ends together tightly in clockwise direction.
3. Dip twisted ends into soldering paste.
4. Touch heated soldering iron tip and solder coil to twisted ends (Fig. 12D). Avoid inhaling fumes. The flowing solder will seal wire strands.
5. Let cool.

SOLDERING IRON

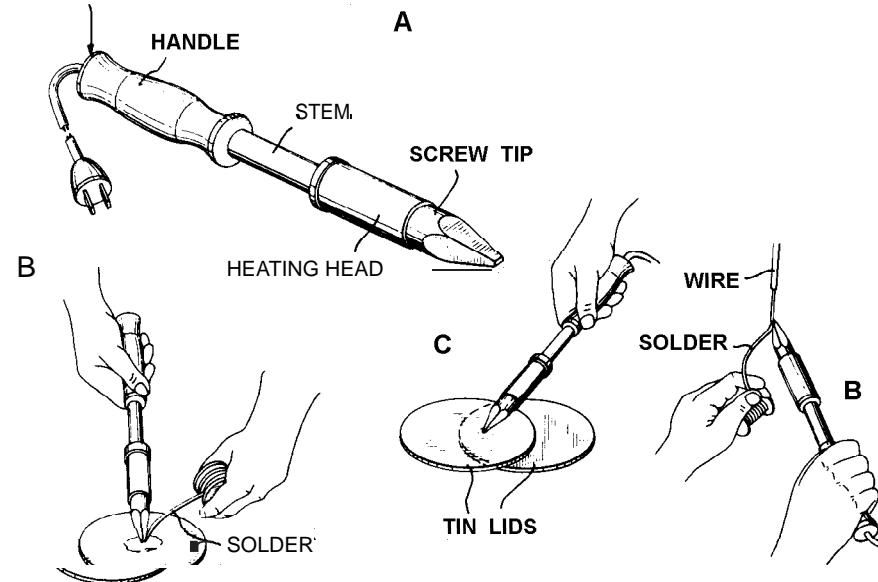


Figure 12
Soldering Iron Techniques