

## BASIC GUIDES TO PERFECT SOLDERING

Here are some basic guides which, if observed, will assure good electrical connections at all soldered joints:

1. The metal surface must be absolutely clean.
2. Metals to be solder-joined must be heated to a point (approximately 450° F) above the melting point of the solder (about 415° F). If either metal or solder is not hot enough, the result will be a strengthless "cold joint" that will be dull and granulated in appearance.
3. The surfaces to be joined must be sufficiently heated so that the flux does its cleaning thoroughly, then "boils off."
4. Tiny points of solder sticking up indicate too little heat (metal and solder were not sufficiently heated to permit the solder to flow freely when the tip was removed).
5. Keep the work as level as possible, because hot solder flows like water.
6. Once the tip has been removed, the joint should be allowed to cool undisturbed until the solder has completely hardened. Don't test by "jiggling."