## THINGS TO KNOW ABOUT SOLDERING

Basically there are two types of soldering. One is low temperature soldering, usually electronic parts to printed circuit boards or soldering wires to connectors. The other type is called silver solder. It is done at a much higher temperature and is mechanically much stronger and would be used typically to put metal parts together.

## LOW TEMPATURE SOLDERING

Low temperature solder works in the 400 to 500 degree range and works well with a soldering iron or a soldering gun. The solder is typically 70/30 or 60/40 (tin to lead content). Joint strength is around 8000 PSI.

There is something called 6% silver solder which is low temperature and around 10000 PSI.

Usually the solder has a rosin core which is about all the is needed to solder parts to a printed circuit board or soldering wires together. When soldering wires to connectors it is helpful to use additional soldering past to help the solder flow into the joint. The past is for low temperature soldering only, not for silver soldering.

Typical low temperature past is Rubyfluid. *bing.com/images* 



RubyFluid Water Soluble Soldering Flux 57g / 2oz

## HI TEMPATURE SILVER SOLDERING

Hi temperature silver solder is typically 56% to 75% silver with copper and zinc filling the reminder of the metal. The working temperature range is much higher (1100 degrees to 1500 degrees) and is done with a torch of some type. The joint strength is much higher, in the range of 40000 PSI to 70000 PSI.

Silver soldering is usually used for higher strength joints in metal parts. It is important that the parts are cleaned well and that you use a high temperature flex. All oxidation and paint must be removed. The parts should "bright", some 600 sand paper works.

Careful not to use low temperature solder past ad it will burn away before the high temperature silver solder melts into the joint and therefore the silver solder will not flow.

Typical high temperature past is Stay-Silv.

Amazon's Choice



<u>Harris SSWF1/4 Stay Silv Brazing Flux, 1/4 lb. Jar, White</u>