

Should You Solder Over an Old Silver Soldered Connection?

By Richard R Vensel

Soldering over silver solder (or trying) is possible, but will it make the best connection? The answer is “It can be done”, but the real question is “Should it be done? It is very easy to make a bad short lived connection (a fusible link) in this situation. It only takes a few minutes to solder in a set of brushes the correct way and make a good, long lasting connection, so let’s do it correctly.

WE RECOMMEND SILVER SOLDERING ALL STARTER BRUSHES!

We are aware that not everyone does this, but if you want to make a connection that will last and not come back, it must be silver soldered. This is the best and safest way to do it.

One of the first considerations is the different melting points of solder. 60-40 and 40-60 solders melt at approximately 360 degrees Fahrenheit. 97-3 Lead-Free is just as easy to solder with and melts at 460 degrees Fahrenheit. It also has less resistance and higher tensile strength. Silver Solder melts at approximately 1300 degrees Fahrenheit and has the maximum lowest resistance and highest tensile strength. What this means is if you are soldering over a silver soldered connection your chances of a bad connection are as high as it can get. So, the lower the resistance and the higher the melting point, the better the connection. You can see from the specifications above that there is as much as 940 degree difference between the different solders.

Try this for even a better way to make a good connection that will last.

Grind off the silver solder and solder directly to the copper, after tinning both surfaces in the solder joint, hold both surfaces together and reheat. You will end up with a great solder joint every time.

Another consideration is how to hold the two pieces together without making a direct short. Use our high temperature sleeving C854-399-S4 and our Locking pliers V104-hemostats, or your locking pliers and the sleeving. Do not crimp too tightly, as the solder melts the joint will be thinner.