

Repair Procedures

1. Surface Preparation

The work surface needs to be very clean. If there is any oxidation or other buildup in the repair area, it must first be cleaned by grinding or wire brushing. Any material that may contain a secondary surface coating such as phosphate, chromate, oily, or other coatings over the galvanizing may require solvent cleaning.

2. Apply heat to the work surface

In order for the solder to bond properly, you must heat the repair surface, not the solder (although it is beneficial to warm the solder slightly).

Heat the surface slowly and evenly, testing periodically by removing the heat source, and pressing the solder against the hot surface. If the solder does not melt, then remove and apply more heat and re-check until the solder melts. Once the solder melts, it is best to add a little extra heat to provide more time in which the solder will be workable. Please note that if you overheat the surface, the surrounding zinc coating may yellow and burn, increasing the size of the needed repair. A good visual clue is that when you are heating the work surface, you will see the area appear to dry. When you see this, you are just about there!

3. Apply solder

Once there is enough heat in the work surface, melt enough solder to cover the entire repair area, spreading it out as much as possible. Due to the high amount of rust inhibiting zinc in the solder, it will tend to form lumps and clumps as opposed to flowing out evenly like plumbing solders.

4. Blend solder

After melting the solder onto the repair surface, and while it is still at a workable temperature, use a small stainless steel **or brass** wire brush to brush the solder into the surface to obtain a good bond, and blend it with the surrounding coating.

Note: When Galva-Guard solder sticks in your brush bristles, simply heat directly with your torch, then brush the bristles firmly down on the work table edge (or on the product itself) to clear out the excess and restore the brush.