

## **Galva-Guard™ Repair Procedure**

### 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 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.

## **Galva-Guard™ Hole Filling Procedure**

Using Galva-Guard™ to fill those unsightly drain and vent holes in your galvanized products is quick and easy. It takes a little finesse, but here are the basics:

Tools needed: Torch using medium to low flame, wire brush (wood handle w/stainless or brass bristles is preferred), and Galva-Guard™ solder.

The goal is to get some heat into both your product, and the Galva-Guard. Start by:

- 1) Pre-heat the steel surface around the hole to be filled. You do not need to get the steel quite as hot as you would for a traditional Galva-Guard repair.
- 2) Insert the end of a piece of warmed Galva-Guard into the hole you are filling. Use your torch to get the Galva-Guard to stick at the far end where it contacts the hole edge.
- 3) With your torch, heat the solder just past the other side of the hole so that a piece larger than the hole will separate from the rest of the solder.
- 4) It is important now to hold the torch tip up high from the work surface to avoid overheating the area. With the torch held high, waive it around the work area to get the steel heated more, and to further soften the Galva-Guard.
- 5) When you see the Galva-Guard soften, use the back side of your wire brush as a spatula to press the Galva-Guard into the hole. You can then use a combination of heat, the brush bristles, and the back side of the brush to join, blend, and smooth the solder until you are pleased with the results.

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.