



# Technical Bulletin

JOHNSON MANUFACTURING COMPANY  
Princeton, Iowa 52768-0096

## JOHNSON'S #911 GALVANIZE REPAIR ALLOY

### DESCRIPTION:

Johnson Manufacturing Company offers a high quality, zinc-based, lead-free alloy for the touch-up of defective spots and/or the repair of damaged areas on hot dipped galvanized surfaces. This alloy was developed by ILZRO, (International Lead Zinc Research Organization) under Project ZMN-377, Improved Touch-up Methods for General Galvanized Products. The American Galvanizers Association also helped fund this project.

Johnson's #911 is alloyed to exacting specifications, analyzed for purity, then vacuum cast into billet form to eliminate dirt, oxidation, segregation and air entrapment. Next, it is extruded into 1/4" dia. rods, cut to length and packaged for shipment. A tribute to both its alloy characteristics as well as the way it is produced (vacuum cast, analyzed, then extruded) Johnson's #911 Galvanize Repair Alloy has a very fine, uniform microstructure offering excellent workability, along with high resistance to corrosion and abrasion. Its color and appearance closely resembles that of a fresh galvanized surface.

### PHYSICAL DATA:

Alloy	49% Tin, 50% Zinc, 1% Copper
Working Temperature	390 to 650 degrees F
Form	.250" Diameter Rod x 14" Long
Packaging	50 Pound Cartons

### USAGE:

Johnson's #911 Galvanize Repair Alloy melts very quickly on a freshly tinned, heated surface, or when it is rubbed on steel the abrasive characteristics of its zinc content offer extra cleaning power to promote fast tinning, with very little alloy dripping off the workpiece. The copper content in this unique alloy adds to its spreadability, leaving an even coating on the surface.

1. Shot blast and/or wire brush the surface to be repaired, then apply a thin coat of flux or Johnson's Tin-Ezy with Pure Tin, an aggressive tinning compound that removes grease, oil, grime, and rust to tin the toughest of spots.
2. Heat surface with a propane or gas/air torch. Newly galvanized work can be repaired directly out of the kettle, without heating.
3. While heating, rub #911 on the steel surface as soon as possible. Lay down a thin layer to coat the entire repair area first, then go back and build-up the alloy to a desired thickness.
4. Use a pyrex glass rod in a file handle or other suitable heat resistant paddle to smooth out alloy while molten.
5. Allow the repair alloy to solidify, smoothing as necessary.
6. Remove excess flux and residues with a wet cloth or paper towel while surface is still warm.



TO ORDER CALL (800) 747-0030, FOR SUPPORT CALL (563) 289-5123, TO FAX (563) 289-3825, EMAIL TO [johnsonmfg@aol.com](mailto:johnsonmfg@aol.com)