## Multi Sol -350 degree Multi Metal Solder

• Note for Torch users- Use a Carburizing flame. This is a flame with less oxygen or compressed air. This softens the flame and allows the work area to reach proper temperature without the risk of overheating or damaging the parent metal. Pre-heating the parent metal will help to insure better bonding.

## Here are the 10 steps to effective multi-metal soldering:

- **Step 1.** Pre-clean the parent metal or metals to be joined. Use emery cloth, wire brush, bead blasting or your preference.
- **Step 2.** Apply non-corrosive, liquid flux to the repair area. An easy method of application is to dip the end of the rod into the flux or use the easy applicator brush. The flux will cling to the rod or brush and is easily spread over the surface area.
- **Step 3.** Use a soft flame, heat gun or soldering iron to heat the parent metal adjacent to the actual repair. A direct flame on the repair area is likely to overheat the solder and flux.
- **Step 4.** Hold the torch tip four to six inches away from the parent metal. If it is necessary to apply the flame directly onto the rod and flux, then pull the torch tip back even farther from the work surface and keep the torch moving.
- **Step 5.** The flux will begin to bubble and turn light brown. Besides preparing the parent metal for the solder, these changes indicate the proper working temperature. If the flux turns black, clean up the area and <u>start over.</u>
- **Step 6.** When the flux turns brown, its time to apply the rod. Drag the rod over the surface area to be soldered until it begins to flow. Then stop applying the heat. If additional layers are needed, just continue to drag the rod over that area.
- **Step 7.** Sometimes it is advisable to heat the tip of the rod with the flame to help the solder flow easier and quicker onto the repair area. Do not heat the rod to the melting point.
- **Step 8.** Observe the deposit. The solder should bond smoothly. **Do not overheat!** The rod will melt if overheated, but the solder will just lay there and fail to bond properly.
- **Step 9.** If you have stopped the soldering process too soon and want to flow the deposit out more, add more flux and re-heat. The flux will help in the bonding process whether adding more rod or just flowing out the previous deposit.
- **Step 10.** Remove the excess flux with warm water and a wire brush after the repair has properly cooled.