



Soldering of Wire to Bender **Recommended Process**

Equipment required:

1. Temperature controlled soldering iron.
2. PbSn or Pb Free solder 0.020 diameter rosin core.
3. Flux- Kester 1544 or equivalent.
4. AWG28 - AWG32, stranded, tinned.

Soldering Procedure:

1. Pre heat soldering iron to 300° C max (572° F).
2. Strip wire approximately 5/32" and tin the lead with the solder.
3. Apply a small pool of liquid flux near the outer edge of the ceramic surface. Add small dot of solder with soldering iron for maximum 0.5 seconds (few seconds for the metal surface).
4. Lay the tinned wire on the solder dot and position the wire for desired orientation.
5. Apply soldering iron to the wire and solder connection for no more than 0.5 seconds (few seconds for metal surface) and reflow the solder onto the wire to complete the solder joint. Do not add additional solder unless the wire strands are not adequately covered with a film of solder.
6. Repeat this procedure for all other connections including the metal substrate of the bender. Try to keep all connections close together and observe the same lead lay.
7. Clean the flux off all connections with standard alcohol.
8. Visually examine each joint. The solder connection should be smooth and bright with no cracks or crazing
9. Discard the bender if the joint on the ceramic fails by lifting off the silver coating of the bender. DO NOT solder to another spot on the ceramic surface - the performance and life of the bender will be degraded. The metal connection can be resoldered as required.