



## Mounting Instructions for Diamond Core Bit Segments - Using a Segment Mounting Jig -



**Brazing Material**

- 1 & 2 ) Use a flux designed for silver solder, such as Harris "Stay Silv" flux with small brush for applying and don't dip into big jar, use small jar with just enough flux for the job.
- 3) Use a good contact cleaner to degrease the bit tube.
- 4) K2 marks the cutting side of the segment, and pre-cleans the mounting side that will be brazed to the tube.
- 5) Use silver solder that starts to flow at 1170°F, free flowing at 1270°. K2 supplies either 1" shims or 1/16" wire x .010 thick.
- 6) Use a good metal file or sandpaper for de-burring the tube surface and sparker for the oxy-acetylene torch.



**Degrease & file tube surface**

- 1) Make certain tubing end is clean and grease free with no burrs.



**Marking tube for even spacing**

- 1) Normal spacing is 1/2" between segments on sizes 7" and larger.
- 2) On 2" thru 6" diameter tubing spacing should be no less than 1/8" (consult segment manufacturer for special application spacing).



**Apply flux to the un-marked side of segment.**

- 1) The segment un-marked side must be clean & free from rust or oil. Polish on "wet or dry" emery paper to clean if needed.



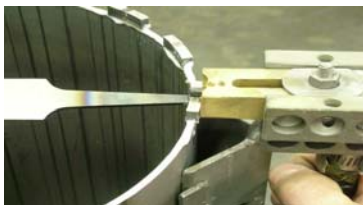
**Locate segment on center of tube**

- 1) Adjust mounting jig before fluxing so segment is centered on tube.



**Apply flux on the tube**

- 1) Flux liberally flux, designed for silver solder, in areas where segments will be mounted.
- 2) Place solder strip, then segment on center of tube, according to marks.



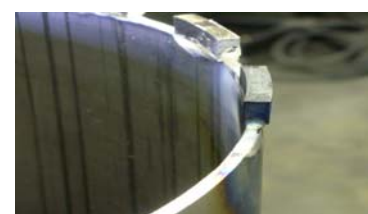
**Use mounting jig to insure proper clearance**

- 1) Use pre-set mounting jig to insure correct alignment and clearance.
- 2) Push segments against jig with screwdriver or similar instrument.



**Applying Heat**

- 1) Use acetylene torch, apply heat to inside of tubing and segment, continually moving torch to spread heat evenly. 2) Heat segment and tubing until both show cherry red at brazing line with solder flowing evenly under segment. 3) Allow to cool for a few seconds before removing jig to avoid moving segment while solder is molten. 4) After all segments are mounted, wash with hot water to remove flux. 5) Inspect solder lines, reheat as necessary. ( Solder Note: 5/8" long wire = 1"



**Completed brazed segment**