# Instructions for using

the

# Brazing Dimpler™

An exclusive product of

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This tool is for use on fittings that will be **brazed**. It is <u>not</u> to be used on fittings that will be soldered!!!!!



Using fingers or an Allen wrench, back the set screw out so that it is flush with the upper jaw surface



With the tool closed, adjust the leg bolt until the tool ends are in line with each other (both parallel to the white line).



With the tool still closed, insert the fitting to be modified into the jaws and adjust the set screw so that it makes contact with the fitting surface.



Rotate the set screw clockwise one turn or a little more



Rotate the nut until it makes contact with the wrench surface, then tighten with a wrench.



Slide the fitting into the Tool and squeeze the handle. Release the handle and remove the fitting



Check to be sure there is a protrusion on the inside of the fitting. The protrusion only needs to be 0.003 inches or so. That is enough of a bump that it is obvious when you look at it or feel it.

It is not necessary to make the impression as deep as the ridge on the fitting since the clearance between the tube and the fitting is quite small. If the height of the protrusion is not adequate, adjust the set screw slightly (approximately 1/8 turn). Since the set screw is 1/4-20, each full turn will increase the height of the protrusion 0.050 inches.

When using Brazing Dimpler, one dimple will stop the tube; however, to maintain squareness of the fitting with the tube, three (3) dimples approximately 120° apart are recommended.



The impression should be located a minimum of 2 times the thickness of the tube or the fitting, whichever is thinner, from the open end of the fitting. For example, for 0.065 wall tube, the minimum distance should be 0.13 inches, or just a little over 1/8 inches (or 3 mm if you are into metric). If a Brazing Procedure Specification (BPS) is being followed, use the minimum depth of insertion specified on the BPS as the minimum set-back distance.

For larger fittings, the simplest thing to do is to insert the fitting until it bumps against the tool, placing the dimple approximately 3/8 inches back from the end of the fitting. This is sufficient depth to have 2t overlap for all sizes of type L and M copper tube and for type K up to 6 inch size (0.192 inch wall) while maintaining the benefit of limited overlap.

# <u>Caution</u>

#### DO NOT EVEN THINK OF USING THIS TOOL FOR FITTINGS THAT WILL BE SOLDERED.

- Don't be confused by what is called "silver solder." Solder melts at around 400°F and braze metal melts above 1200°F regardless of what it's called.
- Braze metal is about 8 times stronger than solder that's why it's OK to shorten up solder-joint fittings when brazing a joint.