



## **ATD-5478 Tubing Flare Tool Kit Instructions**

### **Tubing Bender Instructions:**

- Bend brake lines with ONLY line bending tools, and flare brake lines ONLY with a flaring tool.
- To measure the length of line between bends it is suggested that a flexible sewing measuring tape be used, as it is more flexible than a tape measure or ruler.
- Ensure that you have the correct size line and the correct fittings. Buying too long a piece is better than buying too little. Bend and Measure WITH CARE.
- Forming your line is the whole point of the operation, so be sure to measure as precisely as possible, bend SLOWLY and CONTROLLED, and triple-check if you aren't sure.
- Measuring - For best results, don't just measure the straight portion of the line, you have to include the length that the bend takes up. Measure your existing line from apex to apex. Imagine that the line doesn't bend, rather that it continues straight until it meets the other straight piece of line. Their junction is your start point for accurate dimensions. Start with one point, and then get the other. Use the edge of a screwdriver and, with light pressure, or a sharpie to make your marks on your brake line.
- Bending - Mark all the way around the brake line completely. This will more easily facilitate the bending process. Seat the line in the 2 outer guides and squeeze the handles to SEAT (for gripping, NOT bending) the die on the line. If you look at where the line seats in the die, you can see a definite center. Put your mark (on the line) in the center of the arc that contacts the line. This will make your mark the center of the bend, giving you exact dimension carry-over.



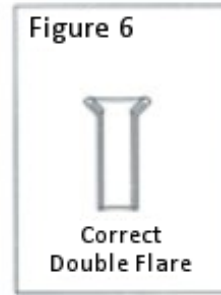
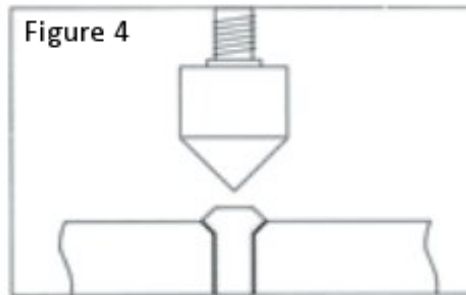
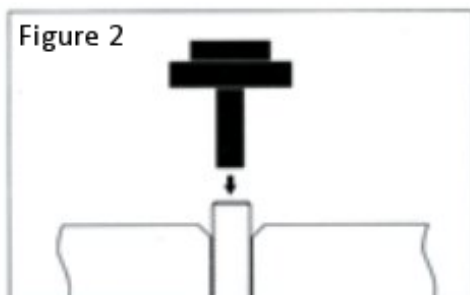
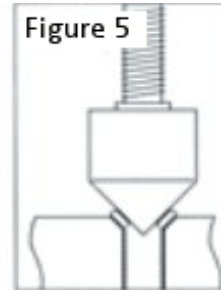
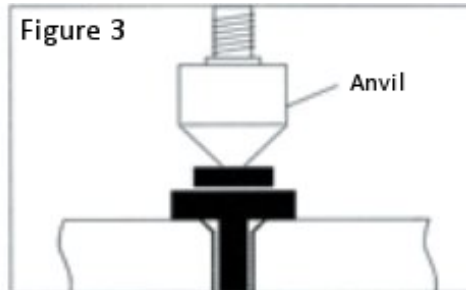
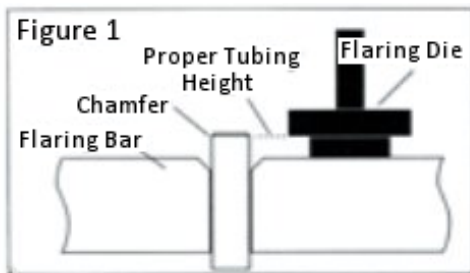
- Take your time when making your bend. A hasty bend will result in a crimped line. Squeeze the handles gently and slowly until your brake line is bent to the angle that you desire.
- It's a good idea to mock fit your brake line to the place it will fit before attaching the line, to see if you everything is a good fit, that way you can make minor bends and twists BEFORE you bolt and clamp it in place.

## Double Flare Instructions:

The flaring tools provided in this set are designed to double flare thin wall steel, aluminum and .040 wall soft copper tubing.

- End of tubing must be cut square (Use Tubing Cutter)
- Deburr inside of tubing, and chamfer outside.
- Place tubing in correct hole with proper length exposed on beveled side of flaring bar as shown in Figure 1.
- Tighten flaring bar firmly starting with nut closest to tubing. Make certain tubing will not slip.
- Fit Flaring Die into tubing (Fig. 2). This may be difficult if tubing is not properly deburred.
- Place anvil over Flaring Die and turn down until Die contacts flaring bar. (Fig. 3).
- Remove Flaring Die. End of tubing should be bell shaped (Fig. 4).
- Place anvil over bar and turn anvil down until tubing folds in on itself (Fig. 5).
- Remove tool and tubing should look like Figure 6.

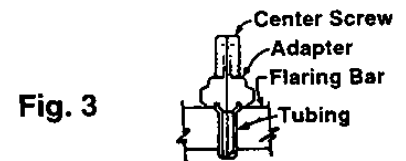
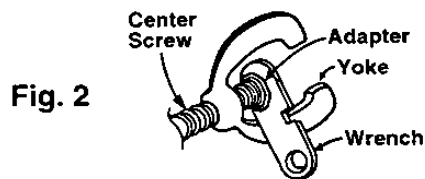
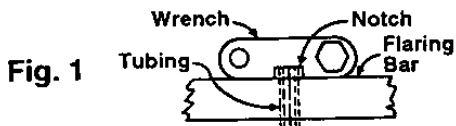
**TIP: Lubricate yoke mandrel threads and flaring die with a light oil.**



## ISO Bubble Flare Instructions:

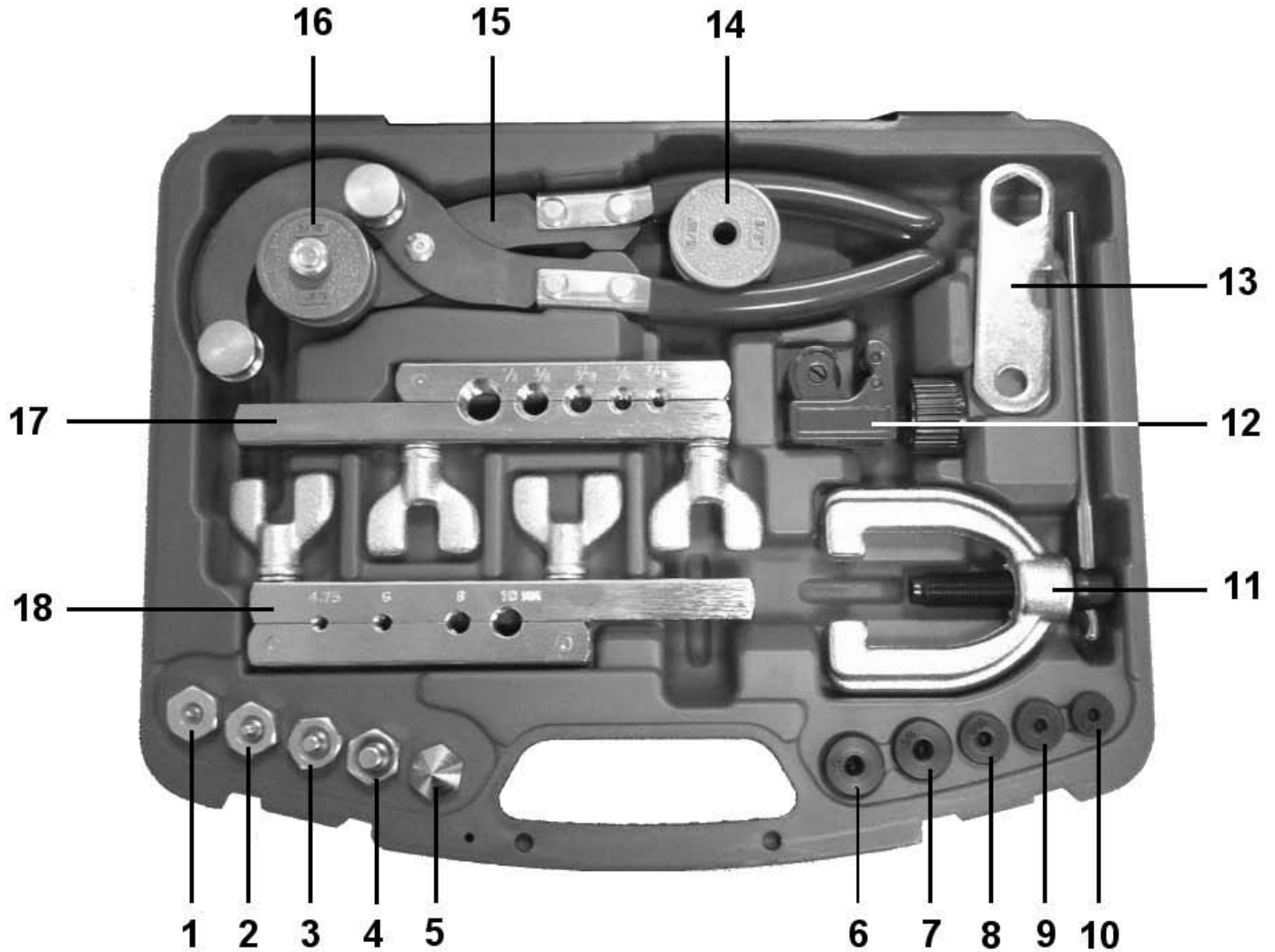
The flaring tools provided in this set are designed for metric soft steel brake lines where an “ISO” or bubble style flare is required.

- Carefully make a square cut on the tubing end to be flared, deburr the inside of the tubing and then chamfer the outside of the tubing.
- Insert tubing in correct hole of the flaring bar. Place the adapter wrench on the surface of the flaring bar with the notch in the wrench over the tubing end. Position the tubing so the end of the tubing is flush with the top of the notch. (See figure 1)
- Tighten wing nuts securely, starting with the wing nut closest to the tubing. Select the adapter that fits the tubing, screw the adapter into the forcing screw, and tighten the adapter with the wrench. (See figure 2)
- Place the yoke assembly over the flaring bar. Line up the center of the adapter with the center of the tubing. Tighten the forcing screw until the adapter rests on the flaring bar. (See figure 3)
- Loosen the forcing screw and remove the yoke assembly. The bubble flare is complete.





# ATD-5478



ITEM#	ORDERING PART#	PART DESCRIPTION
1	PRT5464-01	4.75mm ADAPTER
2	PRT5464-02	6mm ADAPTER
3	PRT5464-03	8mm ADAPTER
4	PRT5464-04	10mm ADAPTER
5	PRT5478-05	ANVIL
6	PRT5463-05	1/2" ADAPTER
7	PRT5463-04	3/8" ADAPTER
8	PRT5463-03	5/16" ADAPTER
9	PRT5463-02	1/4" ADAPTER

ITEM#	ORDERING PART#	PART DESCRIPTION
10	PRT5463-01	3/16" ADAPTER
11	PRT5478-11	YOKE ASSEMBLY
12	PRT5478-12	TUBING CUTTER
13	PRT5478-13	WRENCH
14	PRT5478-14	5/16" - 3/8" DIE
15	PRT5478-15	PLIERS
16	PRT5478-16	3/16" - 1/4" DIE
17	PRT5478-17	SAE FLARING BAR
18	PRT5478-18	METRIC FLARING BAR