ATD-5478
Master Flaring and Tubing Tool Set
Owner's Manual

FEATURES:

- Includes cutting, bending and flaring tools designed for use on steel brake, transmission & fuel lines and copper, aluminum & brass tubing
- Makes SAE 45˚ double & single flares in 3/16", 1/4", 5/16", 3/8" and 1/2" tubes
- Makes ISO bubble flares in 4.75mm, 6mm, 8mm and 10mm tubes found on many European, Asian and some domestic vehicles
- Roller-style tubing bender makes tight bends without collapsing the tube
- Mini tubing cutter for 1/8" to 5/8" diameter tubes allows use in tight areas

SET INCLUDES:

- Universal Flaring Tool Yoke
- SAE Flaring Tool Bar Assembly
- (5) SAE Flaring Tool Adapters: 3/16", 1/4", 5/16", 3/8", 1/2"
- Metric Flaring Tool Bar Assembly
- (4) ISO Bubble Flaring Tool Adapters: 4.75mm, 6mm, 8mm, 10mm
- Tubing Bender with (2) Adapter Wheels
- Mini Tubing Cutter
- Adapter Wrench

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.

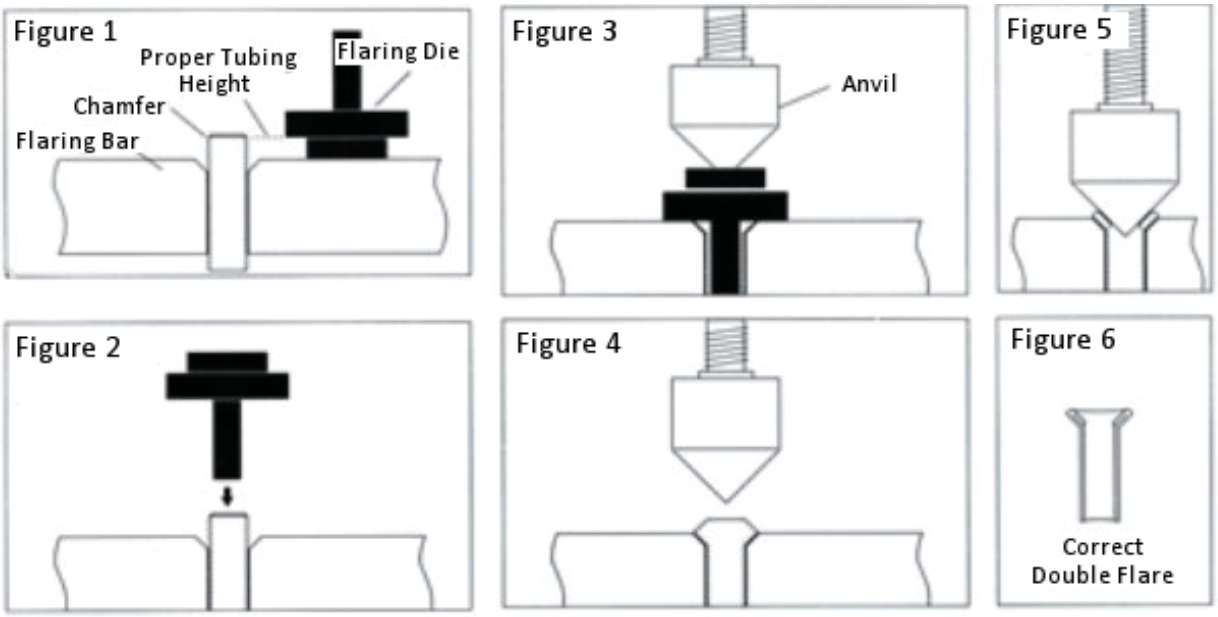
- Take your time when making your bend. A hasty bend will result in a crimped line. Squeeze the handles gently and slowly until your brake line is bent to the angle that you desire.
- It's a good idea to mock fit your brake line to the place it will fit before attaching the line, to see if you everything 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 yolk 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 yolk assembly. The bubble flare is complete.

Fig. 1

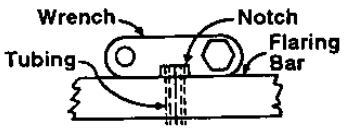


Fig. 2

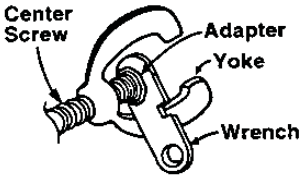
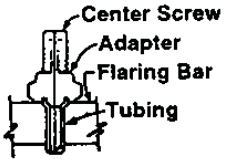
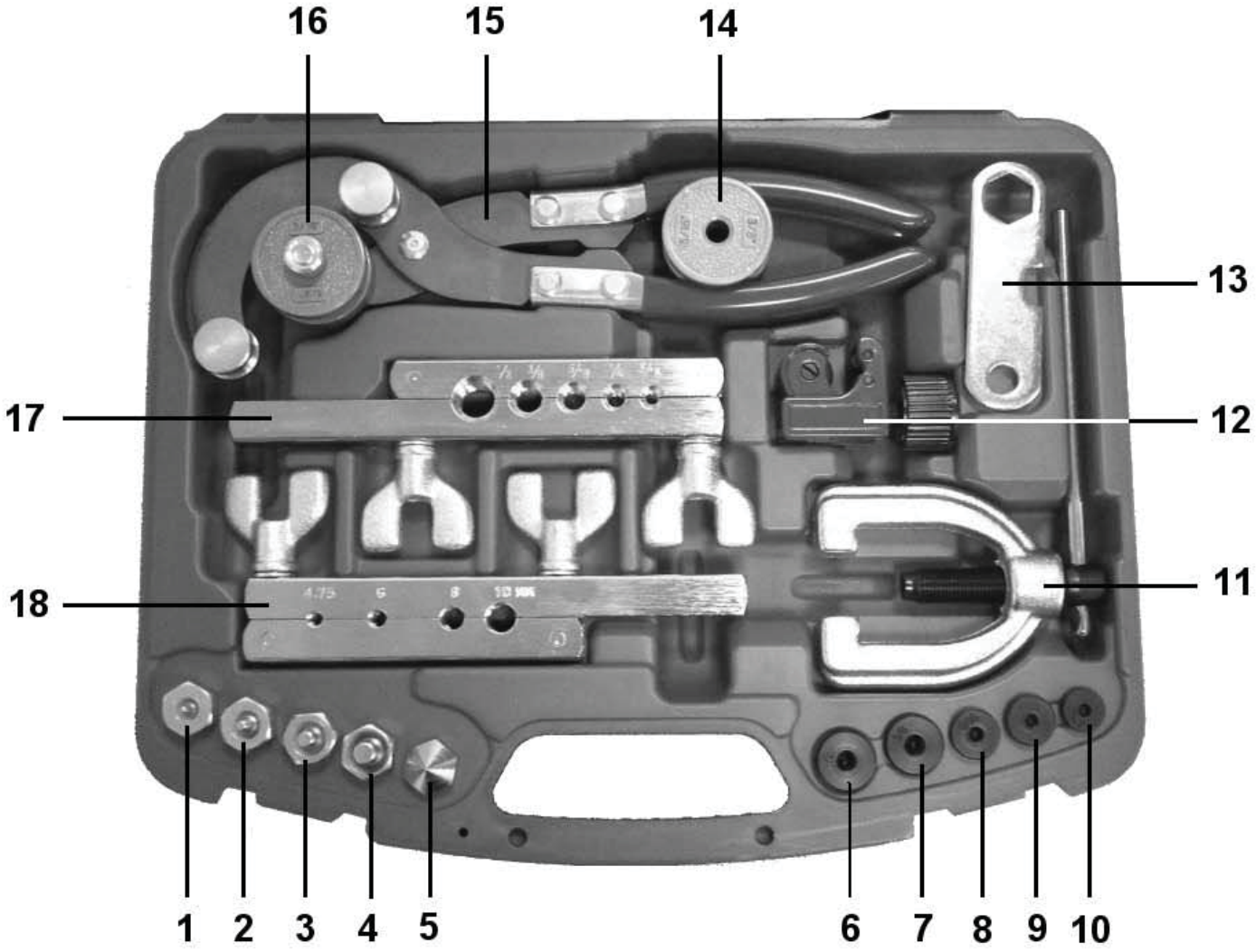


Fig. 3



REPLACEMENT PARTS

Not all components of this product are replacement items, but are illustrated as a convenient reference for position in the assembly sequence. When ordering parts, give model number, part number and description. Call your distributor for current pricing:



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

WARRANTY

1 YEAR LIMITED WARRANTY

THIS WARRANTY AND CONFIRMED RECEIPT(S) SHOULD BE *RETAINED BY THE CUSTOMER* AT ALL TIMES

PURCHASED FROM: _____

DATE PURCHASED: _____

INVOICE/RECEIPT NUMBER: _____

Your ATD-5478 is warranted for a period of 12 months from the original purchase date.

For a period of one (1) year from your purchase date, ATD Tools, Inc. will repair or replace (at its option) without charge, your ATD product if it was purchased new and the product has failed due to a defect in material or workmanship which you experienced during normal use of the product. This limited warranty is your exclusive remedy.

To access the benefits of this warranty, contact your supplier, or point of sale directly. You may be advised to return the product under warranty, freight prepaid, to your supplier for warranty determination.

If this ATD product is altered, abused, misused, modified, or undergoes service by an unauthorized technician, your warranty will be void. We are not responsible for damage to ornamental designs you place on this ATD product and such ornamentation should not cover any warnings or instructions or they may void the warranty. This warranty does not cover scratches, superficial dents, and other abrasions to the paint finish that occur under normal use. It also does not cover normal wear items such as but not limited to brushes, batteries, drill bits, drill chucks, pads or blades.

Subject to the law in your state:
(1) Your sole and exclusive remedy is repair or replacement of the defective product as described above.
(2) ATD is not liable for any incidental damages, including but not limited to, lost profits and unforeseeable consequences.
(3) The repair and replacement of this product under the express limited warranty described above is your exclusive remedy and is provided in lieu of all other warranties, express or implied. All other warranties, including implied warranties and warranties of merchantability or fitness for a particular purpose are disclaimed and, if disclaimer is prohibited, these warranties are limited to one year from your date of purchase of this product.

Some states' laws do not allow limited durations on certain implied warranties and some states' laws do not allow limitations on incidental or consequential damages. You should consult the law in your state to determine how your rights may vary.

[Affix receipt or invoice here for safe keeping]