

Instructions for Double Flaring Tool Kit

This tool offers an exceedingly quick and convenient method of making double flares on thin-wall steel tubing. This tool can be used with seamless, butt-welded or lap-seam-welded steel tubing having not over .035" wall thickness. This tool can also be used for single or double flaring soft copper, aluminum, magnesium or other soft, thin-wall tubing.

1. Loosen the (2) wing nuts on the flaring bar. This permits separation of the (2) halves of the flaring bar.
2. Before inserting tubing into the flaring bar, be sure the end of the tubing to be flared has been cut off squarely and any burrs removed from the inside edge. Tubing should also be chamfered on the outside edge. This chamfering is very important as it influences the results obtained in the first forming operation. Chamfering can be done very easily with an ordinary file.
3. Insert the tubing in to the hole of the proper size, with the end of the tubing protruding above the top of the flaring bar by a distance equal to the width of the shoulder on the adapter of corresponding size. (See Figure 1) With steel tubing that is harder than average, it may be necessary to slightly reduce the distance that the tube protrudes from the flaring bar. Experience gained from using this tool will indicate when this is necessary. (A set of (5) adapters, one each for 3/16", 1/4", 5/16", 3/8" and 1/2" O.D. tubing, is a part of the tool.)
4. Tighten the wing nuts. Tighten the wing nut nearest to the tube first, and then tighten the other wing nut. The wings on the nuts are of a special shape that permits using the rod of the yoke as a lever in tightening. Nuts must be securely tightened so there is no chance of the tube slipping.
5. Place yoke over bar of tool. Now place adapter of proper size on the protruding end of tubing, with stem of adapter inserted into tubing. It is advisable to put a little oil on the lower face and stem of adapter.
6. Move yoke into position so that flaring cone centers directly over the adapter. Screw cone down until cone and adapter engage. At this point make sure that the adapter is centered in the tubing, and then continue screwing cone down until shoulder of adapter rests on flaring bar. This performs a beelling operation on the tubing as shown in Figure 2.
7. Back off flaring cone slightly and remove adapter. Screw cone down again tightly, this time directly onto the tubing. This folds the tubing back on itself, as shown in Figure 3, forming an accurate 45° double flare.
8. Occasionally oil yoke screw and oil swivel cone through the hole in the side.

