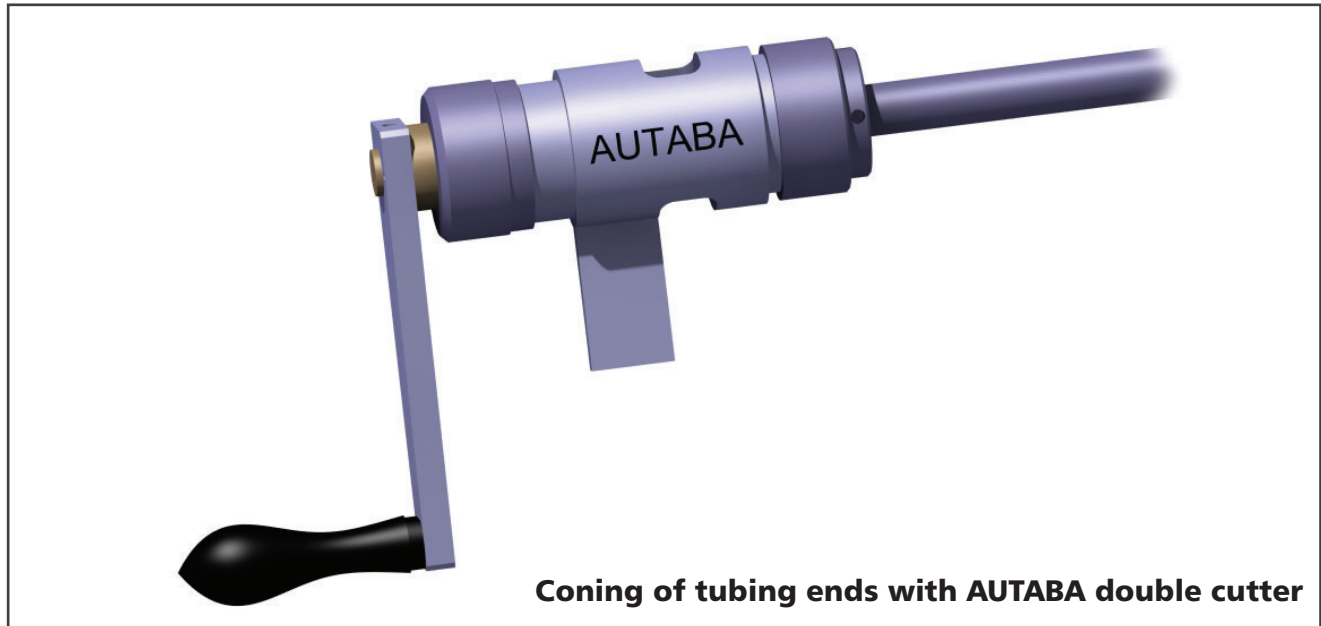
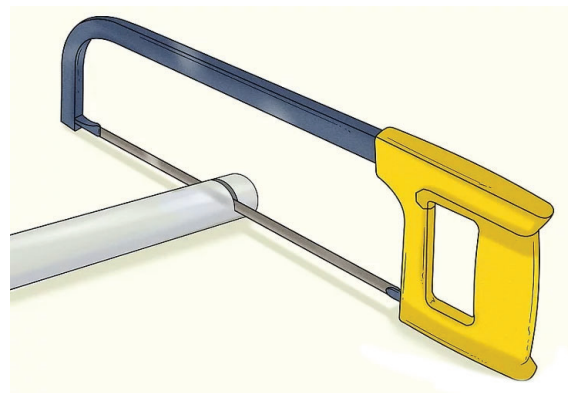


Manual Kit Procedure



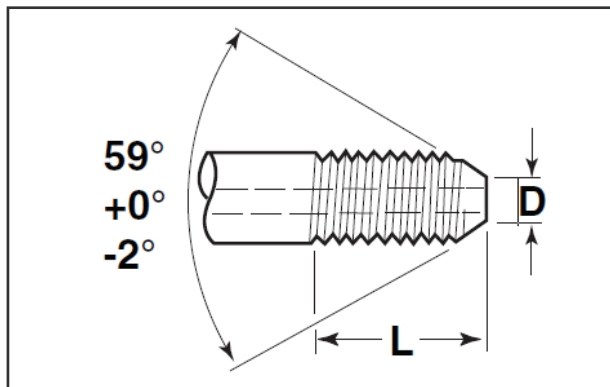
1. Cut tubing to length and square off the end using hacksaw with at least 32 teeth per inch or abrasive cut-off wheel. Allow extra length for proper engagement into the connection as listed in design table. Additional 1/16" should be added to each end to compensate for coning/end facing.
Note: When cutting tubing with abrasive cut off wheel, tubing should not be over heated effecting material properties.



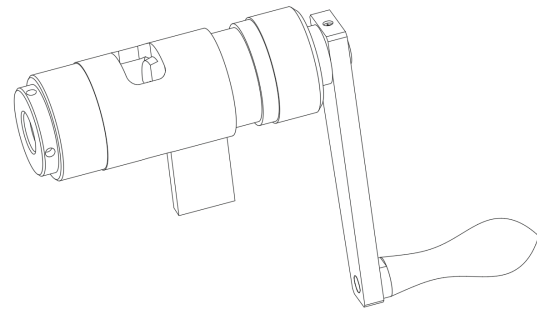
2. Install the collet and collet nut into the bottom of the coning tool housing. Remove the cutter support feed nut from the coning tool housing and install the cutters. This can be done by backing out the four set screws in the cutter support.
Note: When installing new blades, be sure the blades are flat against the holder.
3. Place the coning tool housing (or optional support arm), without the feed nut/cutter support assembly, in a vise. The vise should be equipped with soft jaws, and the housing should be placed in the vise to allow lubricant to flow to the cutters and cone.

4. Slide the tubing through the collet until the end of the tube appears in the coning tool housing window . Line the end of the tube with the edge of the window as marked above and tighten the collet nut firmly in place using the collet nut wrench.

5. Install the feed nut/cutter support assembly into the coning tool housing. Rotate the feed nut clockwise until the top of the cutters just contact the top of the tube. Do not rotate the feed nut any further at this point.



Tool Kits Package



6. Apply cutting oil through the lubricant opening in the end of the cutter holder or directly through the housing window (Fig. 3). A medium weight high sulphur content cutting fluid is recommended. Use the cutting oil freely during the coning operation.

7a. The distance the feed nut travels from it's start position can be used to gauge the amount of travel to properly cone the tube. The amount of travel is shown in Table , and is labeled "Cone Length".

7b. Another method to determine proper cone length is to count the number of turns of the feed nut. The number of turns required is listed in Table under the heading "Number of Turns". This includes enough advancement of the feed nut to face-off the tube and square the edge that forms the seal surface.

The feed nut is supplied with a position indicator (drilled hole) to help determine the number of turns.

8. Rotate the handle in a clockwise direction while simultaneously slowly turning the feed nut in a clockwise direction. Rotate the feed nut slowly and evenly to smoothly cone the tube. Loosen collet nut, remove tubing and visually inspect the cone. Use deburring tool to remove any burr on inside edge of tube after coning.