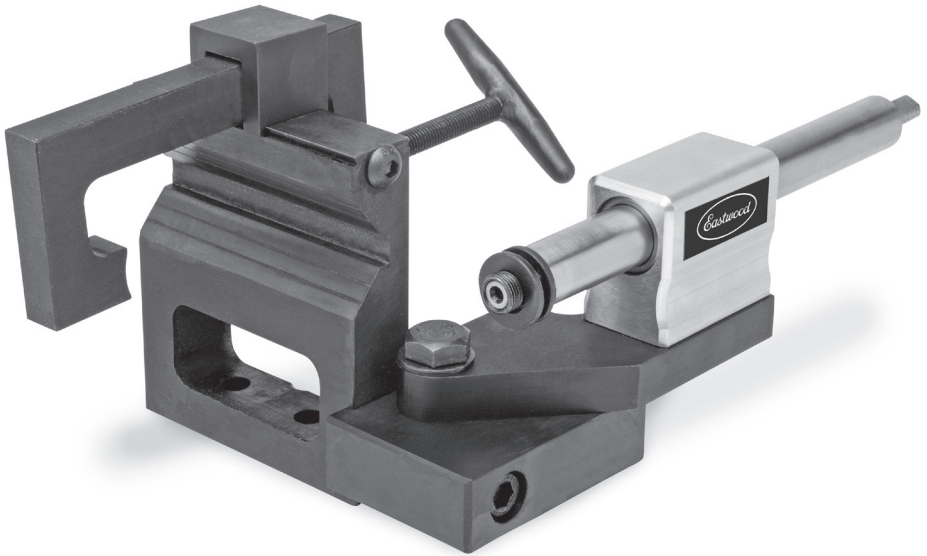


*Eastwood*

DO THE JOB RIGHT.

Part #20447

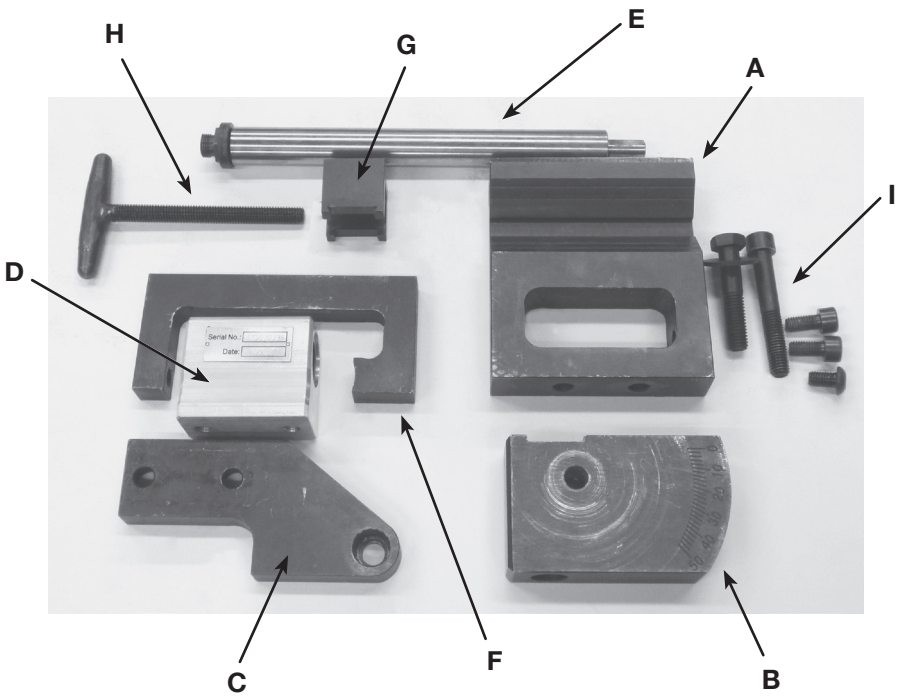
# EASTWOOD PROFESSIONAL TUBING NOTCHER INSTRUCTIONS



Your Eastwood Professional Tubing Notcher is designed with the professional fabricator in mind to create precision “fishmouth” notches within a wide range of angles from 90° to 150° in tubing up to 3" diameter using a hand drill with a 1/2" or larger chuck. Equipped with roller bearings and a 25 mm steel shaft, this notcher should provide years of reliable service.

## WHAT YOU GET:

- A. Frame
- B. Base
- C. Swivel Plate
- D. Bearing Block with Bearings Pre-installed
- E. 25mm Shaft with 1/2" to 5/8" Arbor adaptor
- F. Tubing Clamp
- G. Tube Clamp Slider
- H. “T” handle
- I. Hardware



# SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:

## **DANGER**

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

## **WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## **CAUTION**

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

## **NOTICE**

NOTICE is used to address practices not related to personal injury.



- Read and understand all instructions before using this machine. Save this instruction manual for future reference.
- Keep out of reach of untrained persons and children.



## **WARNING HEALTH HAZARDS**

- Exposure to the loud noise of cutting can cause hearing loss. Wear hearing protection when using this tool.
- Dust created by sawing can contain hazardous materials. Wear a NIOSH approved respirator when sawing treated lumber, masonry products, or items painted with lead-based paints.





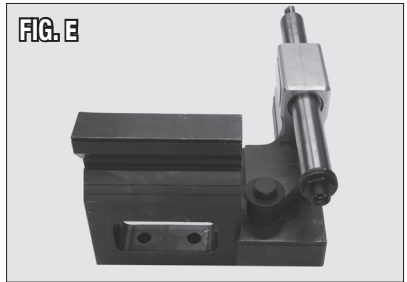
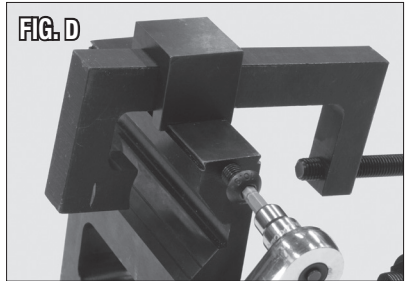
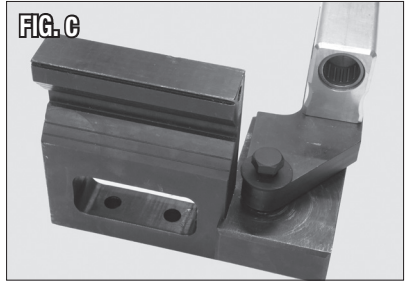
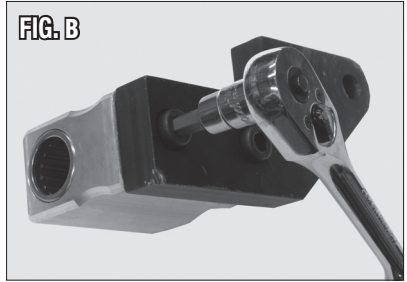
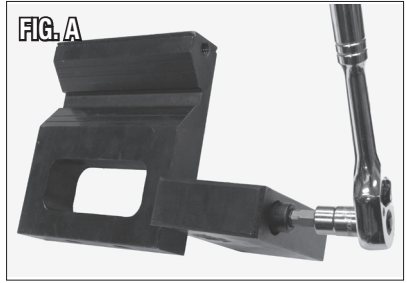
## **WARNING INJURY HAZARDS!**

- This tool emits sharp shards when cutting that can cause eye injury. Always wear ANSI-approved goggles when using this tool.
- The hole saws used with this tool can cause serious cut wounds. Keep hands and body away from cutting area and blade when cutting.
- The cut edges of tubing are sharp and can cause severe cuts to hands and body. Wear heavy duty work gloves and keep cut tubing edges away from body to prevent injury.
- Unplug drill before adjusting or changing saw blades to prevent accidental starting and injury.
- Do not force the tool to cut. If tool does not cut acceptably install a new blade.
- Secure the tubing notcher in a bench vise or bolt to workbench before use. Do not hold the tool or tubing against your body or in your hands as this could lead to injury.
- Use only hole saws specifically designed for use on threaded arbors.

# SET UP

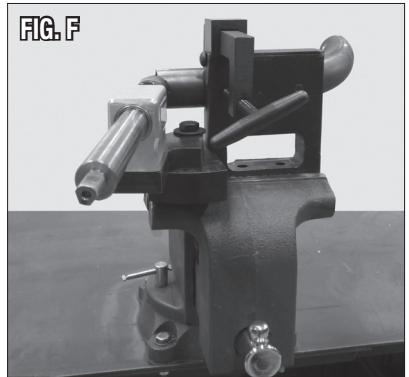
1. Beginning with the bare Frame, install the Base onto the side of the Frame using the provided M12X 1.75 X 80 Bolt. Ensure that the Base has the degree scale facing up **(FIG. A)**.
2. Attach the Bearing Block to the Swivel Plate using two provided M10X1.5X20 Bolts. Ensure that the bolts heads are flush or below the bottom surface of the swivel plate so that it will rotate freely on the slider base **(FIG. B)**
3. Install the Swivel Plate onto the Base using the Provided M12X1.75X60 Bolt and Flat washer. **(FIG. C)**
4. Slide the tube clamp into the tube clamp slider. Install the tube clamp slider onto the notcher from the bearing block side. Install the last stop bolt into the side of the frame. Install the T-handle into the rear of the Tube clamp and install retaining bolt. **(FIG. D)**
5. Note that the threaded end of the Arbor Shaft has  $\frac{1}{2}$ " threads and a  $\frac{5}{8}$ " threaded adapter loosely attached. This is to accommodate smaller sized hole saws with  $\frac{1}{2}$ " Dia. mounting holes or larger (up to 3") hole saws with  $\frac{5}{8}$ " Dia. mounting holes. For smaller hole saw use, the adapter must be removed from the Arbor Shaft however if the  $\frac{5}{8}$ " adapter is to be used, be sure that it is securely tightened. **(FIG. E)**

**⚠ WARNING** Only specifically designed threaded metal saws are to be used with this unit. Severe personal injury can occur with improper saw use!



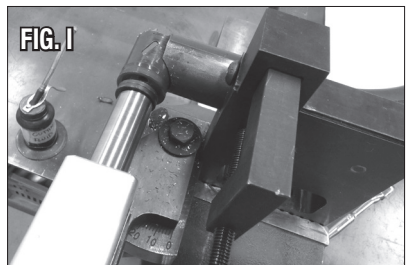
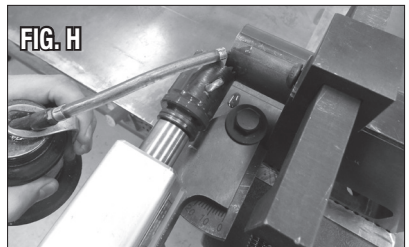
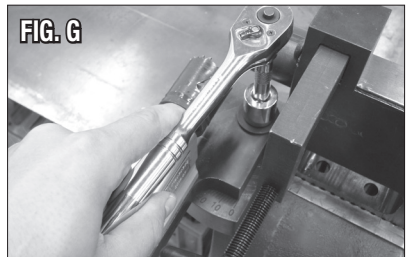
6. Be sure the base of the Eastwood Tubing Notcher is securely mounted to a stable work surface or clamped tightly in a solidly mounted vice of substantial size. **(FIG. F)**

**⚠ WARNING** Severe personal injury can occur if the unit is not securely mounted!



## CUTTING/NOTCHING TUBING WITH THE EASTWOOD TUBING NOTCHER:

1. Determine the angle of the notch or “fishmouth” to be cut in the tubing, loosen the lock bolt slightly and adjust the Arbor Carrier to the desired angle using the gauge and tighten the lock bolt securely. **(FIG. G)**
2. Place the tubing into the “V” notch and tighten down the Tubing Clamp with the “T” handle.  
**Note:** Always make your “fishmouth” at the end of a pre-cut section of tubing, never in the middle of a longer piece. Keep the cut line from going beyond the centerline of the hole saw. **(FIG. H)**
3. For less heat buildup, longer saw life, and minimal vibration, slower saw speed is better. Some high strength steels, however, cut better at slightly higher speeds. A variable speed drill is useful for controlling the saw speed. Be sure to use plenty of cutting oil on the metal saw teeth and feed the saw slowly. **(FIG. I)**
4. It is strongly recommended that several practice cuts be made on scrap tubing to increase familiarity with the tool and its set-up before working on a valuable project.



## HELPFUL TIPS:

- This tool is designed to accurately form an angled “fishmouth” notch in a piece of metal tubing. Softer metals such as aluminum and copper tubing can be cut with minimal effort while carbon and stainless steel will require greater effort to achieve the same results. Thicker walled tubing will also require more effort than thinner walled material.
- Keep the saw teeth lubricated with cutting oil and keep the feed speed slow. Make sure the Arbor Shaft is kept clean of metal chips and dirt and is always well lubricated.
- Be aware that finished “fishmouth” cuts have **extremely sharp** edges, handle them carefully. The rough sawn edges will need to be ground or filed with the final desired shape and properly prepared for welding.
- When finished, clean the tool of metal chips and excess oil. Handle the chips with extreme care.
- When notching at a high angle the hole saw may bottom on the tubing itself. To finish the notch, remove waste material from the hole saw’s path.

## ADDITIONAL ITEMS

#28003	Hole Saw Kit
#12012	MIG 175
#12746	TIG 200 AC/DC
#20279	MIG 250
#12485	Tubing Bender
#30115	8" Bench Vise

---

**If you have any questions about the use of this product, please contact**

The Eastwood Technical Assistance Service Department: 800.544.5118 >> email: [techelp@eastwood.com](mailto:techelp@eastwood.com)

PDF version of this manual is available online >> [eastwood.com/20447manual](http://eastwood.com/20447manual)

The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA

US and Canada: 800.345.1178 outside US: 610.718.8335

Fax: 610.323.6268 [eastwood.com](http://eastwood.com)