

Item #68365

# 12" BENCH SHEAR ASSEMBLY AND OPERATING INSTRUCTIONS



The **EASTWOOD 12" BENCH SHEAR** is a heavy duty tool for rapidly making clean cuts in mild steel, aluminum and other metals. The compound-action Handle linkage reduces cutting effort and replaceable, hardened steel blades ensure clean cuts for many years of service. Round stock, up to 3/8" diameter, is handled by a dedicated position on the blade and frame, featuring a hardened steel ferrule, for top performance and extended tool life.

## **INCLUDES**

- (1) 12" Bench Shear (Hardware installed) [A]
- (1) Handle Base [B]
- (1) Handle End (Hardware installed) [C]
- (1) Material Foot [D]

## **SPECIFICATIONS**

Blade Length: 12" (305mm)

Rated Maximum Material Cutting Thickness (Plate): 3/16" [5mm] Mild Steel

0.078" [2mm] Stainless Steel

3/16" [5mm] Aluminum

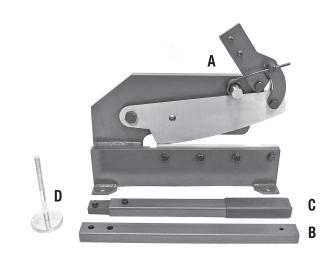
Rated Maximum Material Cutting Thickness (Round): 3/8" [10mm] Mild Steel

3/16" [5mm] Stainless Steel 3/8" [10mm] Aluminum

**Base Size (W x D):** 3.50" x 18.25" [89 x 463mm]

**Overall Assembled Dimensions (W x D x H):** 5.50" x 27.00" x 47.25" [140 x 685 x 1200mm]

Overall Assembled Weight: 57.3 lbs [26kg]



## **SAFETY INFORMATION**

The following explanations are displayed in this manual, on the labeling, and on all other information provided with this product:

## **A** DANGER

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

## **A WARNING**

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

## **A** CAUTION

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

## **A** NOTICE

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



## **▲ READ INSTRUCTIONS**

- Thoroughly read and understand these product instructions before using.
- Keep these product instructions for future reference.



## WARNING CUT AND CRUSH HAZARD!

- This tool has extremely sharp cutting blades which can quickly cause severe injury or loss of fingers! Keep fingers and hands clear of the blade while operating.
- When not in use, locking the Upper Blade in position by inserting a 1/2" bolt through the Shear Hole (FIG 1) is recommended. Accidental use could cause the Upper Blade to drop with great force resulting in severe injury or loss of fingers.



#### WARNING CUT HAZARD!

Sharp metal edges can cut. Always wear thick, well-fitting protective work gloves while operating the Shear and handling materials.



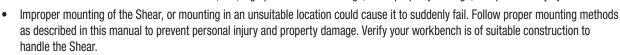
#### WARNING **EYE INJURY HAZARD!**

Metal particles can be ejected from the material when cutting. Sheet metal edges and corners are sharp and can injure eyes. Always wear ANSI approved eye protection when operating this tool.



#### **A** WARNING **INJURY HAZARD!**

- This tool must be securely bolted to a sturdy workbench capable of handling the amplified leverage without tipping. It is recommended that the workbench be anchored to the floor.
- Check for possible interference with electrical lines, air lines, other utilities, or other unseen obstructions before mounting. Failure to avoid utilities could result in electrical shock, fire, high pressure air discharge, other property damage, and personal injury.





#### **A** WARNING FALL HAZARD!

- Strenuous physical force may need to be applied to the Shear during use. Always be sure-footed and well balanced when operating to prevent personal injury and property damage. Wear appropriate, closed toe footwear to increase grip.
- Be sure there is sufficient working room around the tool for safe handling of various sizes of metal. Always work in a clean, uncluttered environment to reduce injury risk.



#### **INJURY HAZARD!** A CAUTION

- Do not exceed rated material capacity. Exceeding the material capacity could result in damage to the tool.
- The Shear is heavy and unstable before mounting, and could cause personal injury by falling. Take care when handling the Shear prior to mounting.
- The Shear was specifically designed to be operated by only one person. Never have one person operate the Handle while another handles the workpiece, or serious injury could occur.
- Frequently inspect blades. If cracks or chips develop, discontinue tool use immediately and replace damaged blades.
- When storing the Bench Shear disconnect the Handle and keep away from children to reduce risk of accidental injury.

## **A** NOTICE

- To prevent corrosion and promote smooth operation, it is recommended to oil the raw metal surfaces of the blades and castings as necessary.
- This tool is only intended for use with flat sheet, plate metal and round stock. Use with pipe, wire or other shapes is not recommended and the tool may not perform well in these scenarios.
- Keep the workpiece flat on the Lower Blade when cutting. Letting the workpiece tip will require more shearing effort and increases risk of damage to the Blades.

## **MOUNTING**

- Locking the Upper Blade in position by inserting a 1/2" bolt through the Shear Hole is recommended (FIG 1).
- Identify the Shear mounting location and check for anything on the underside of the table that may impede mounting or pose a hazard.

#### A WARNING INJURY HAZARD!

Check for the presence of electrical, air, or other utility lines under the mounting surface before drilling mounting holes.

- If the workbench needs to be reinforced for additional strength, place an 18" x 18" x 2" piece of wood or 18" x 18" x 1/4" steel plate on the underside of the workbench.
- Mark and drill the holes for mounting. It is recommended to use 1/2"
   (M12) hardware through-bolted. Be sure to drill the holes perpendicular to the workbench and, if used, fully through the reinforcing wood or metal plate.
- The hardware should be long enough to extend 1" (25mm) on the underside for secure mounting. Use washers at both ends to distribute the force, and utilize a lock washer or locking nut.
- Tighten the hardware to secure the Shear. Periodically check the tightness of the bolts and retighten if necessary.

## **ASSEMBLY**

 Install the Handle End [C] to the Handle Base [B] with the preinstalled screw on the Handle End.

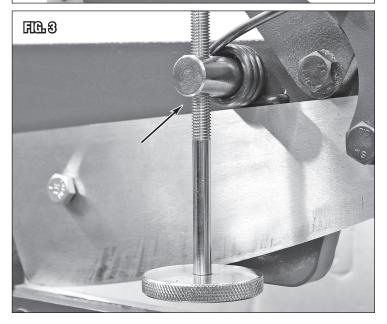
#### A WARNING CUT AND CRUSH HAZARD!

When not in use, locking the Upper Blade in position by inserting a 1/2" bolt through the Shear Hole (FIG 1) is recommended. Accidental use could cause the Upper Blade to drop with great force resulting in severe injury or loss of fingers.

- Remove the preinstalled screws from the handle mount and align
  the mounting holes of the assembled Handle over the threaded holes
  in the mount. Install the screws through the holes in the assembled
  Handle (FIG 2) and tighten securely.
- Thread the Material Foot [D] into the spring pin (FIG 3).







## **OPERATION**

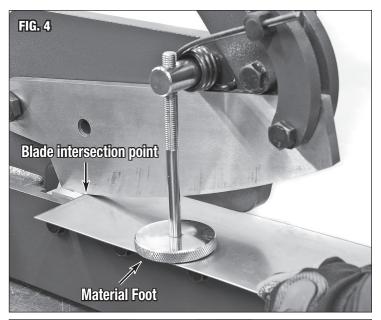
#### **SHEARING SHEET MATERIAL**

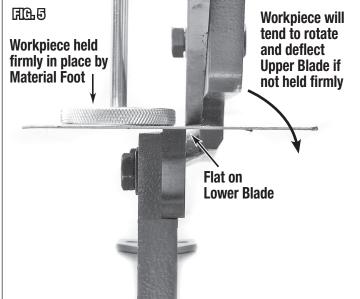
- For maximum control and cutting force, begin all cuts by raising the Handle fully and aligning the start point on your workpiece with the point at which the Blades intersect (FIG 4). Remove safety bolt from Shear Hole if installed.
- Adjust the Material Foot to help hold the workpiece flat on the Lower Blade (FIG 5). The workpiece will tend to tip and deflect the Upper Blade. This will require more shearing force and the risk of damage to the Blades increases significantly.
- Keep the workpiece stationary and flat against Lower Blade as you draw the Handle downward. After the first cut is completed and the Upper Blade has traveled fully, raise the Handle, then slide the workpiece forward, again aligning the cut line with the Blade intersection point.

**NOTE:** Be cognizant of your hand positioning while feeding the sheet to avoid the Blades.

#### SHEARING FLAT/PLATE MATERIAL

- Begin by raising the Handle fully. Remove safety bolt from Shear Hole if installed.
- When cutting shorter sections of thick material, it is best to use
  the Material Foot to hold the workpiece down so you can use both
  hands for shearing. Position as much of the workpiece under the
  Material Foot as you can (FIG 6).
- Adjust the Material Foot to help hold the workpiece flat on the Lower Blade (FIG 5). The workpiece will tend to tip and deflect the Upper Blade. This will require more shearing force and the risk of damage to the Blades increases significantly.
- Keep the metal stationary and flat against Lower Blade as you draw the Handle downward to complete the cut. After the cut is completed raise the Handle.







#### **SHEARING ROD**

- Begin by raising the Handle fully. Remove safety bolt from Shear Hole if installed. Insert the rod through the hardened steel ferrule, and out through the Shear Hole in the Upper Blade.
- Just as with sheet/plate material, hold the rod flat with the Upper Blade (FIG 7). The rod will tend to tip and deflect the Upper Blade. This will require more shearing force and the risk of damage to the Blades increases significantly.
- Keep the rod stationary and flat against Upper Blade as you draw the Handle downward to cut it. After the cut is completed raise the Handle.

# **BLADE REPLACEMENT**

## A WARNING CUT HAZARD!

This tool has extremely sharp cutting blades which can quickly cause severe injury or loss of fingers! Always wear thick, well-fitting protective work gloves while handling or using the Shear.

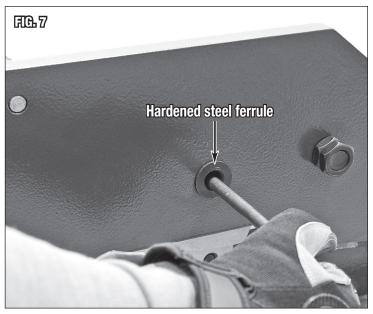
Through use the Blade edges may wear, resulting in poor shearing performance. The factory installed Lower Blade is four-edged. This means you can rotate the Lower Blade three times before replacement or resharpening is required. To rotate or replace, follow the instructions below.

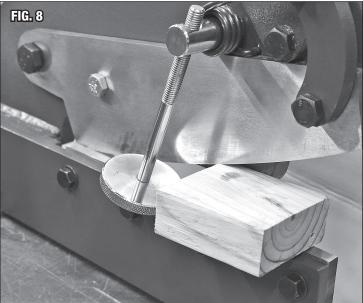
## A WARNING CUT AND CRUSH HAZARD!

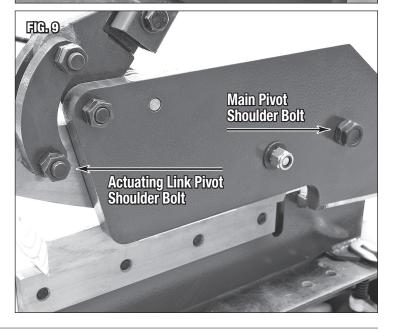
This tool has extremely sharp cutting blades which can quickly cause severe injury or loss of fingers! Keep fingers and hands clear of the blade while operating.

#### **UPPER BLADE**

- Raise Handle to open blades.
- As a safety precaution, insert a large screwdriver, bolt, or similar object into the Shear Hole to lock the Upper Blade. In addition, place a section of 2" x 4" or other suitable wood between the upper and lower blades (FIG 8).
- Loosen and remove the Actuating Link Pivot Shoulder Bolt & Nut (FIG 9).
- Loosen and remove the Main Pivot Locknut, Nut and Shoulder Bolt (FIG 9).
- At this point the Upper Blade will be free. Very carefully hold the Blade with one hand while the previously placed screwdriver is removed from the Shear Holes.
- Carefully withdraw the Upper Blade.
- Reinstall new Blade in reverse order. Over tightening of the nuts will
  cause binding. Only tighten them hand snug. The Locknuts can be
  tightened down with wrenches to lock the position.

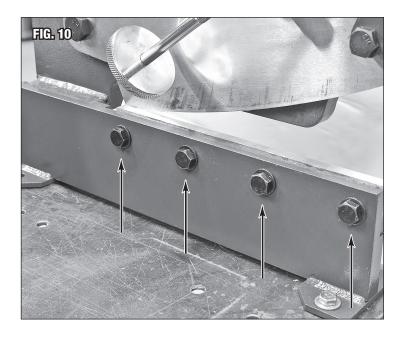






#### **LOWER BLADE**

- As a safety precaution, insert a large screwdriver, bolt, or similar object into the Shear Hole to lock the Upper Blade (FIG 1).
- Loosen and remove the four Lower Blade retaining Bolts and Washers (FIG 10) and carefully remove the Lower Blade.
- Replace with new Blade or flipped old Blade. Reinstall in reverse order and tighten the Bolts snug.



## **MAINTENANCE**

**NOTE:** Maintenance should be performed on an as-needed basis.

- Check tightness of all hardware. The bolts at pivot points should be just tight enough to prevent excessive slop in use. They do not need to be torqued.
- Check operation for binding. Lubricate pivot points periodically with a medium bodied lubricating oil.
- Inspect Blades for cracks, damage, or premature wear. Replace if damaged.
- Clean dirt and debris from the Shear.

# **STORAGE**

- As a safety precaution use a nut and bolt or pin and clip in the Shear Hole to lock the Upper Blade in the raised position (FIG 1).
- Apply a thin film of light oil or rust-preventive to all bare metal areas. Store in a clean, dust-free, dry, dampness free area, preferably covered with plastic sheeting.

# **TROUBLESHOOTING**

| PROBLEM   | CAUSE              | CORRECTION  |
|---|--------------------|---|
| Produces a<br>Rough, Jagged<br>Cut or Fails to<br>Cut | Worn Blades        | Replace or resharpen Blades. See <b>BLADE REPLACEMENT.</b>  |
|   | Material Too Thick | Refer to the specifications table for maximum material thicknesses.<br>Do not exceed maximum material thicknesses listed. |

## **ADDITIONAL ITEMS**

#### **R&D MUST-HAVE ACCESSORIES**







#### REPLACEMENT ITEMS

#68364 Replacement Blades

**OPTIONAL ITEMS** 

#20257 Sheetmetal Layout Kit 5 Piece Kit

#20259 Protractor

Visit eastwood.com for complete info and pricing.