



DO THE JOB RIGHT.®

Item #21327

27" BEAD ROLLER

INSTRUCTIONS



The **EASTWOOD ELITE 27" BEAD ROLLER** is a professional metal fabrication tool which excels in producing strengthening ribs in panels used in creating replacement floor pans, firewalls, trunk floors, inner fenders, etc. as well as creating decorative custom designs in door panels, dashes and much more with the included dies. Also create channels and flanges with the available optional dies. The gear-driven design delivers maximum forming power while requiring minimal handle force for the greatest accuracy. A generous 27" throat depth provides the ability to reach the center of a 54" panel.

CONTENTS

- (1) 27" Throat Bead Roller Frame
- (1) Crank Handle
- (4) Crank Arm
- (1) Set of Offset Dies
- (1) M10 x 1.75 Adjustable Handle Bolt, Roller Tensioning Screw
- (1) M12 x 1.5 Adjustable Handle Bolt, Lock Screw

SPECIFICATIONS

Maximum material working thickness: **Steel** = 18 Gauge **Aluminum** = 16 Gauge

Maximum panel width (working from center): 54"

SAFETY INFORMATION

The following explanations are displayed in this manual, on the labeling, and on 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

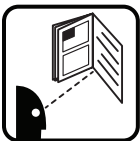
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ 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 INSTRUCTIONS

- Thoroughly read and understand this manual before using.
- Save for future reference.



⚠ WARNING PINCH AND CRUSH HAZARD!

- The Eastwood Elite 27" Bead Roller consists of heavy metal components which can present a hand/finger pinch hazard and cause potentially serious injuries, if dropped. Avoid pinching hands while handling. The use of safety shoes is strongly recommended. Keep fingers and hands away from moving parts when operating.



⚠ WARNING CUT HAZARD!

- Handling sharp metal can cause serious cuts. Wear thick, well-fitting work gloves to prevent cuts from handling sharp metal.



⚠ WARNING EYE INJURY HAZARD!

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



⚠ WARNING

- Before beginning ANY work with this tool, it is absolutely necessary that it be installed in a vice properly secured to a sturdy, workbench anchored to the floor or wall.
- Strenuous physical force may need to be applied to the Eastwood Elite 27" Bead Roller during use. Failure to ensure proper footing can quickly result in a fall which could inflict serious personal injury or property damage. Always work in a clean, uncluttered environment. Be sure there is sufficient working room around the tool to allow for safe handling of various sizes of metal.

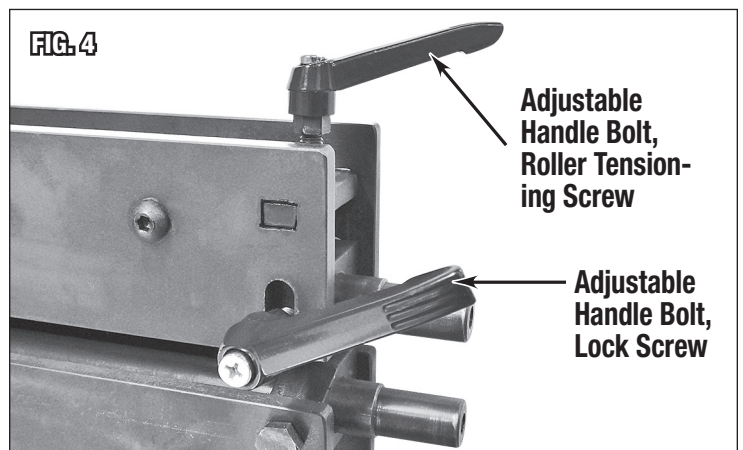
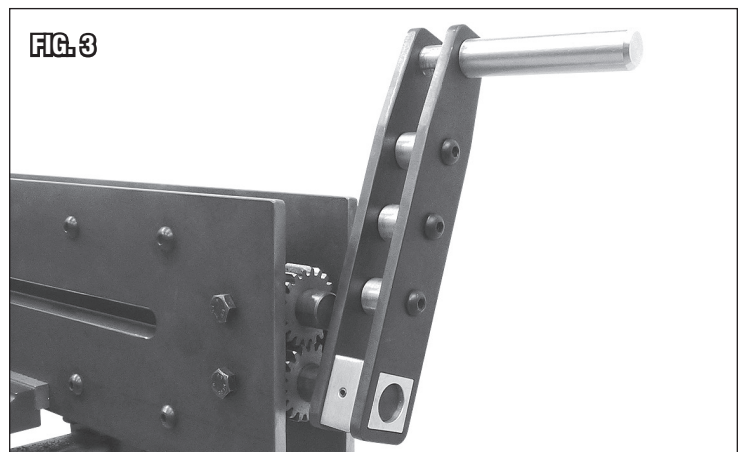
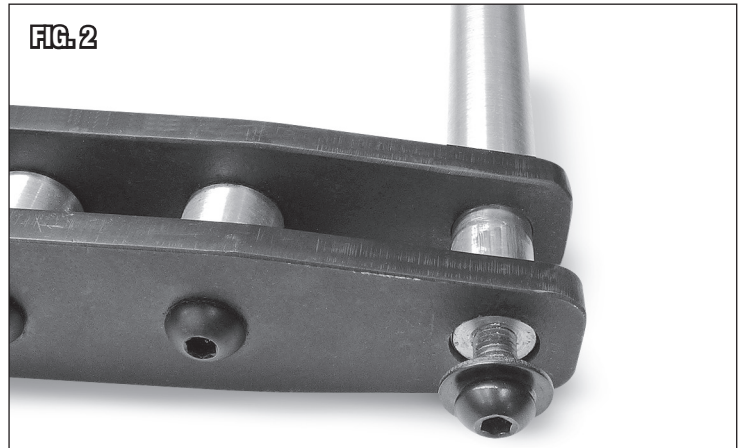
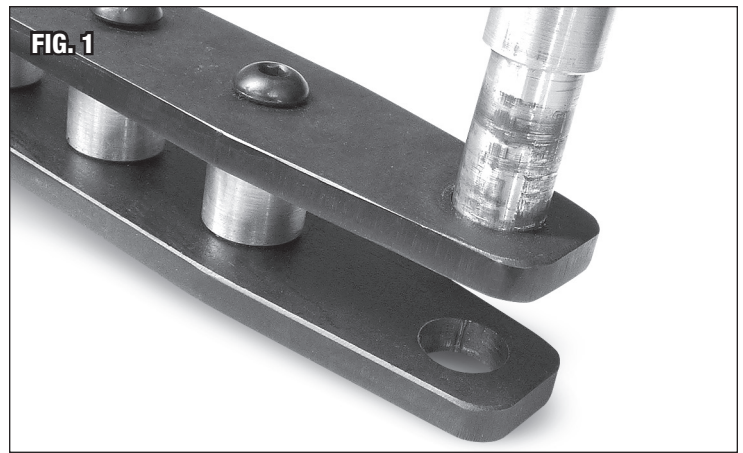


⚠ NOTICE

- Excessive resistance while operating could indicate a defect with the workpiece material or broken or damaged Eastwood Elite 27" Bead Roller components. To avoid injury, stop work immediately and inspect workpiece material for nicks, dents, welds, excessive scale or remaining coatings. Clean or repair as necessary or discard and begin with a new piece. Also inspect Eastwood Elite 27" Bead Roller components for looseness or damage.

ASSEMBLY

- Insert the turned and threaded end of the aluminum Crank Handle into the lesser diameter through holes of the Crank Arm.
NOTE: This may be a tight fit and require a hammer (**FIG 1**).
- Place the M10 washer over, then thread the M10 x 1.5 Round Socket Head Screw into the Crank Handle and tighten it securely with a 6mm Hex Key (not included) (**FIG 2**).
- Slip the 1" [25mm] bored hole in the Crank Handle over the large 1" [25mm] drive end of the Lower Shaft, align set screw with the flat on the shaft and tighten with a 4mm Hex Key (not included) (**FIG 3**).
- Thread the M10 x 1.75 Adjustable Handle Bolt, Roller Tensioning Screw into the top of the Roller Tensioning Block (**FIG 4**).
- Insert the M12 x 1.5 Adjustable Handle Bolt, Lock Screw through the slot in the upper rear panel of the Frame (**FIG 4**), and thread into the upper Bearing Block.



SET UP

- Clamp the lower edge of the Bead Roller Frame in a minimum 4" (6" & larger strongly recommended) vise (not included) with the Adjustable Handle Bolt, Roller Tensioning Screw toward the top and the Adjustable Handle Bolt, Lock Screw to the rear (**FIG 5**). Tighten vice securely. **NOTE:** It is helpful to use a vise with a swiveling base, since you will be able to rotate it, as needed, to maintain a comfortable position while working a panel.

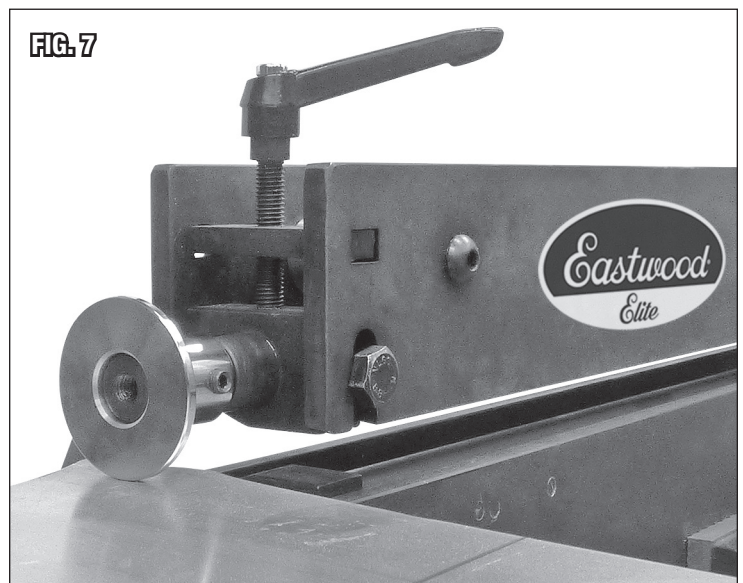
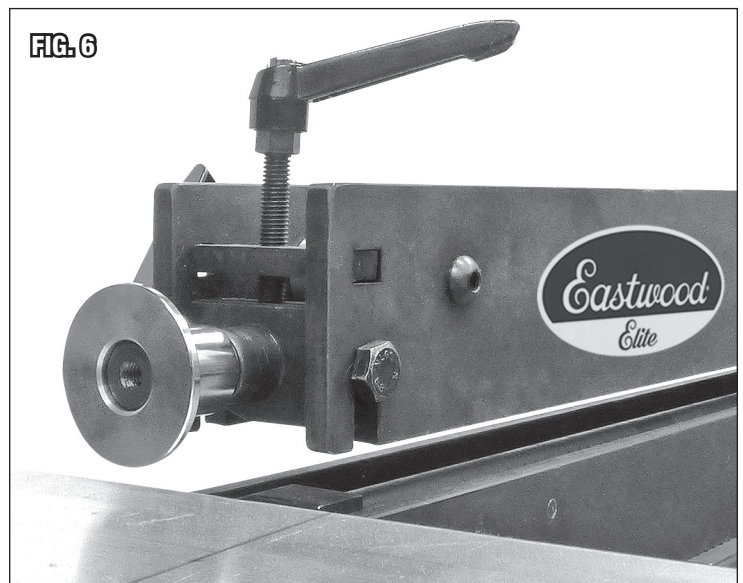
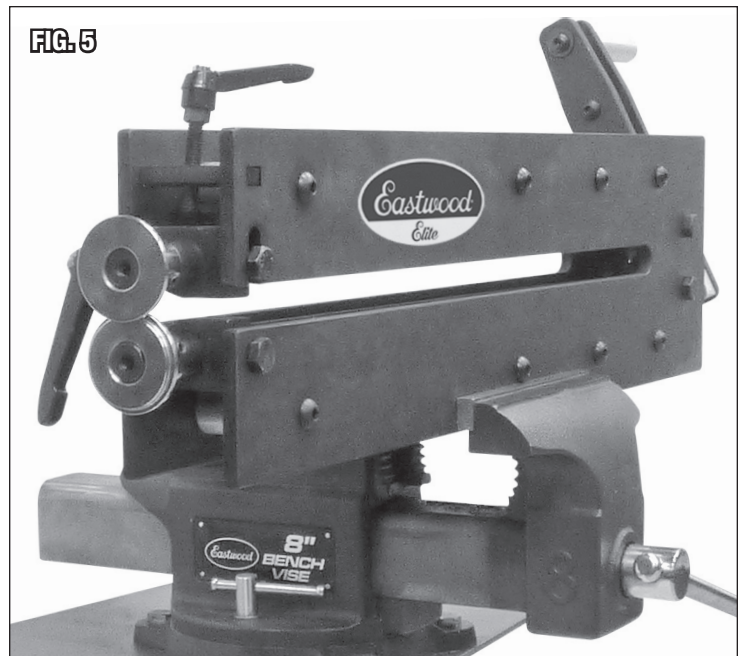
LAYOUT & PLANNING

- Using a suitable marker, draw the pattern or shape you want to form on the panel. We recommend using a T-square and straight-edge or long ruler for straight lines. For curves, use a circle or radius template.
- Work carefully and lay out your design lines as neatly as possible.
- When forming beads, be sure to work from the inside of the piece toward the outside. The bead roller shrinks metal and if you work from the outside toward the center, the bead you previously formed will be distorted and the entire piece may warp.
- Plan out how you will need to turn and move the panel while creating the pattern to avoid having to start and stop in the middle of a line.
- A little time taken at this stage will make the rest of the job go that much more easily and help avoid mistakes.

OPERATION

GETTING STARTED

- Loosen the Adjustable Handle Bolt, Roller Tensioning Screw located at the top of the Bead Roller Frame by pushing in against spring resistance to engage hex and turning (**FIG 4**).
- Loosen the Adjustable Handle Bolt, Lock Screw and retract it several turns (**FIG 4**). Note that the through hole is slotted. At this point, the Left side of the Upper Roller Shaft and Bearing Block should be free to be raised up sufficiently to separate the Bead Roller Dies enough to slide the workpiece metal between them (**FIG 6**).
- Center the Upper Die over the previously drawn pattern line then slide the Upper Roller Shaft and Bearing Block down in place against the metal workpiece panel (**FIG 7**).
- Draw down the Adjustable Handle Bolt, Roller Tensioning Screw finger tight, check alignment with your drawn line then tighten several additional turns. **NOTE:** Do Not Over Tighten as this may tear the metal workpiece, jam the Roller Dies or deform the Frame.
- Tighten Adjustable Handle Bolt, Lock Screw.



CREATING STRAIGHT BEADS

IMPORTANT NOTE: For the greatest ease in handling workpiece panels and achieving optimal accuracy in forming beads, it is strongly advised to have a helper turning the handle as you work. **Visit eastwood.com to view our how-to videos.**

- Have the helper crank slowly as you move the metal along following your marked guideline.
- Keep the marked guideline aligned with the center of the Upper Die as you go. When you reach the end of the guideline, you may re-roll the bead by having your helper turn the crank in the opposite direction. This produces a more sharply defined bead.
- When done, loosen and retract the Adjustable Handle Bolt, Roller Tensioning Screw, then loosen the Adjustable Handle Bolt, Lock Screw and raise the Upper Die.
- Pull the workpiece panel from between the dies and admire your work.

FORMING CURVES

- The trick to forming curves with the bead roller is careful coordination between your helper cranking the handle, and you moving the metal workpiece slowly through the dies while turning it through the curve all at the same time.
- It is critical to producing a good job that you keep the guideline aligned with the center of the Upper Die as you go. If your design forms an oval, start the bead in the center of a straight or larger radiused section.
- Do no attempt to start right at a corner or a joint of two lines, since it will be extremely difficult to line up the bead perfectly when you finish.
- By using combinations of curves and straight lines, there is almost no limit to the designs you can create with the Eastwood Elite 27" Bead Roller.

CHANGING DIES

DIE REMOVAL

- Loosen the Adjustable Handle Bolt, Roller Tensioning Screw located at the top of the Bead Roller Frame.
- Loosen the Adjustable Handle Bolt, Lock Screw and retract it several turns.
- Raise the left side of the Upper Roller Shaft and Bearing Block to separate the Bead Roller Dies then tighten the Adjustable Handle Bolt, Lock Screw to hold the Upper Die in place.
- Loosen the 4mm Die set screws with a 4mm hex key (not included).
- Pull the Mandrel Dies from the shafts.

MANDREL DIE INSTALLATION

- With the Upper Shaft held in the up position, slide the Mandrel Dies onto the shaft ends. Be sure to align the set screws with the flats of the shafts.
- Use care to align the machined grooves or offsets of the Dies before tightening set screws.
- Re-adjust the Adjustable Handle Bolt, Roller Tensioning Screw and tighten the Adjustable Handle Bolt, Lock Screw.

STORAGE

- Remove Handle.
- Apply a thin film of light oil or rust-preventive to all bare steel areas.
- Store in a clean, dust-free, dry, dampness free area preferably covered with plastic sheeting.

MAINTENANCE

NOTE: Maintenance should be performed before each use.

- Clean dirt and debris from Roller Dies.
- Check tightness of all hardware.
- Check operation for binding. Lubricate Bearing Blocks periodically with medium bodied chassis grease.
- Add grease to the drive gears.

ADDITIONAL ITEMS

- #21328 Adjustable Guide Fence
- #20622B Bead Roller Stand
- #51088 Shrinker/Stretch Set
- #13475 Eastwood Electric Metal Shears
- #11797 Throatless Shear
- #14042 Versa Bend Sheet Metal Brake
- #20254 Eastwood 24" Slip Roll
- #20267 Eastwood Bead Roller Metal Fabrication Forming Dies
- #28160 Eastwood Louver Dies

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

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: techelp@eastwood.com
PDF version of this manual is available online >> eastwood.com/21327manual

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