The **EASTWOOD BEAD ROLLER** is excellent for producing strengthening ribs in panels used in creating replacement floor pans, firewalls, trunk floors, inner fenders, etc. and also for creating decorative custom designs in door panels, dashes and much more with the range of included beaded Rollers. Also create channels, flanges and a multitude of profiles with the offset tipping dies. The gear-driven design delivers maximum forming power while requiring minimal handle force for the greatest accuracy. A generous 19” throat depth provides the ability to work the center of a 38” panel.

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1. 19” Throat Bead Roller Frame (A)
2. (1) 19” Throat Bead Roller Frame (A)
3. (1) Crank Handle (B)
4. (1) Roller Tensioning Lever (C)
5. (1) Set of Offset/Tipping Dies (D), pre-installed
6. (3) Complete Sets of Roller Dies:
   - 1/4” Bead Forming Dies (E)
   - 3/8” Bead Forming Dies (F)
   - 1/2” Bead Forming Dies (G)
7. (6) Die Set-Screws (H)

**SPECIFICATIONS**

- **Maximum material working thickness:** Steel = 18 Gauge, Aluminum = 16 Gauge
- **Maximum panel width** (working from center): 38”
- 22mm (7/8”) shafts compatible with most optional accessory dies
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 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 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 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 Bead Roller components for looseness or damage.
SET UP

- Clamp the lower edge of the Bead Roller Frame in a minimum 4” (6” & larger strongly recommended) vise with the Eastwood logo facing you and gears to the right (FIG 1) and 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.

ASSEMBLY

- 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 10mm wrench (not included) (FIG 2).
- Thread the Roller Tensioning Lever (C) into the block at the upper left corner of the Bead Roller Frame (A).
- Install Die Set Screws into Dies (E), (F) & (G).
  **NOTE:** Dies (D) come with set screws pre-installed.

LAYOUT & PLANNING

- Using a suitable marker, draw the pattern or shape you want to form with beads right on the panel. We recommend using a T-square and straightedge or long ruler for straight lines. For curves, use a circle or radius template (FIG 3).
- 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 Roller Tensioner Lever (C) by turning the Lever at the upper left in a Counter-Clockwise direction as viewed from the top (FIG 4).
• Loosen the Upper Shaft Lock Bolts using an 18mm wrench (not included) (FIG 4). Note that the through hole in the upper frame 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 5).
• 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 6).
• Draw down the Roller Tensioner Lever 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 Upper Shaft Lock Bolts using an 18mm wrench (not included).

CREATING STRAIGHT BEADS
NOTE: For the greatest ease in handling workpiece panels and achieving optimal accuracy in forming beads, it is strongly advised to have a helper turn the handle as you work.
Also, use on various metals and gauges will produce a different result with the same dies and will require various degrees of effort. Always perform a practice run with a piece of scrap material of the same type and gauge before forming the actual workpiece.
• 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 Roller Tensioner, then loosen the Upper Shaft Lock Bolts using an 18mm wrench (not included) 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 a helper cranking the handle, and the operator 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 to keep the guideline aligned with the Upper Die as you go (FIG 7).
• 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 completed.
• By using combinations of curves and straight lines, there is almost no limit to the designs than can be created with the Eastwood Bead Roller.
CHANGING DIES

DIE REMOVAL
- Loosen the Roller Tensioner Lever located at the top of the Bead Roller Frame.
- Loosen the Upper Shaft Lock Bolts using an 18mm wrench (not included).
- Raise the Left side of the Upper Roller Shaft and Bearing Block to separate the Bead Roller Dies then tighten the Upper Shaft Lock Bolts sufficiently to hold the Upper Die in place.
- Loosen the Die set screws with a 4mm hex key (not included) (FIG 8).
- Using a 16mm wrench (not included), loosen and remove the Retaining Bolts and Washers from the threaded shaft ends (FIG 8).
- Pull the Roller Dies from the shafts.

DIE INSTALLATION
- With the Upper Shaft held in the up position, slide the 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 using a 4mm hex key (not included).
- Re-install the Retaining Bolts and with Washers and tighten with a 16mm wrench (not included).
- Re-adjust the Roller Tensioner and tighten the Upper Shaft Lock Bolts using an 18mm wrench (not included) (FIG 9).

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. Add motor oil to the Roller Tensioning threads.
- Lubricate Bearing Blocks periodically at the Zerk Fittings with a grease gun containing a medium bodied chassis grease.
- Add grease to the drive gears.
ADDITIONAL ITEMS

#20552 The available Adjustable Guide Fence guides along the edge of a metal panel and allows you to make straight line beads perfectly straight and parallel

#20267 Metal Fab Bead Roller Die Set

#51088 Shrinker/Stretcher Set

#13475 Eastwood Electric Metal Shears

#11797 Throatless Shear

#14042 Versa Bend Sheet Metal Brake

#20254 Eastwood 24" Slip Roll