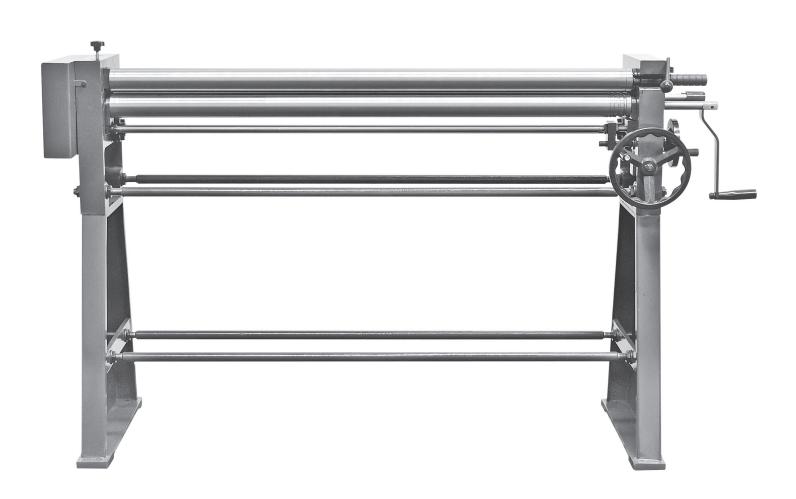


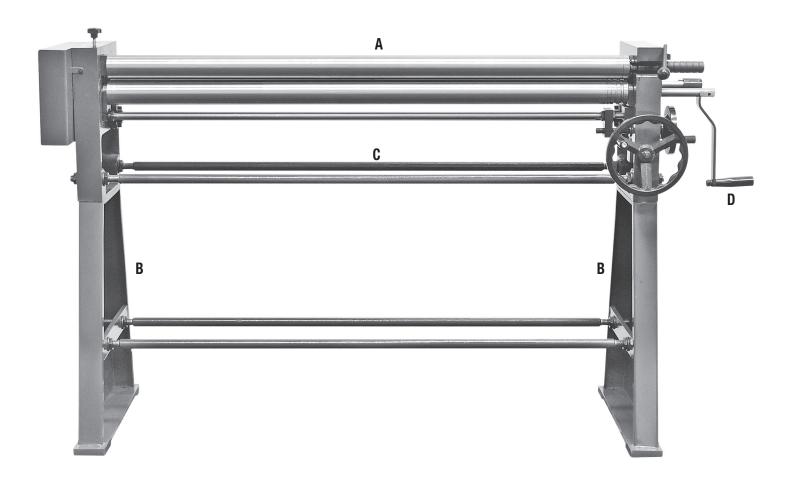
Item #59752

# HEAVY DUTY 50" SLIP ROLLER WITH BASE

**INSTRUCTIONS** 



The **EASTWOOD HEAVY DUTY 50" SLIP ROLLER WITH BASE** is designed to easily form evenly radiused rolls in sheet metal panels up to 48" wide. Capable of forming mild steel as thick as 16 gauge and solid rod material in 5/16", 1/4" & 3/32" & 1/16". A selectable 3.25:1 gear reduction feature allows precise control with reduced effort for maximum ease of use.



# **CONTENTS**

#### **COMPONENTS**

- (1) Heavy Duty 50" Slip Roller [A]
- (2) Stand Legs [B]
- (2) Tie Rods (with M20 Nuts & Washers installed) [C]
- (1) Drive Crank [D]

#### **HARDWARE**

- (4) M12 x 40mm Bolts [E]
- (4) 12mm Washers [F]
- (4) 12mm Lock Washers [G]

# **SPECIFICATIONS**

Maximum Material Width:48" [1.22m]Maximum Material Thickness:14Ga. [2mm]Available Gear Ratios:1:1 & 3.25:1Minimum Roll Diameter:2.5" [63mm]

Wire/Rod Diameter Capability: 1/16", 3/32", 1/4", 5/16"

# **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 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.



## A READ INSTRUCTIONS

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



## A WARNING HEAVYWEIGHT COMPONENTS!

- The Eastwood Heavy Duty 50" Slip Roller has a total weight of 491lbs [223kg.]. During assembly, the Eastwood Heavy Duty 50" Slip Roller MUST be lifted with the use of a mechanical lifting device capable of lifting 500lbs [227kg] such as an Engine Hoist, Overhead Crane or other suitable method only! To avoid serious injury, D0 NOT attempt to lift the Slip Roll Machine by hand or with multiple persons.
- · Use only lifting straps, chains or hooks rated for 500lbs [227kg] or greater.



## A WARNING CRUSH HAZARD!

 Keep hands, feet and other body parts away from under the Slip Roll Machine during assembly. Keep children, pets and unauthorized persons away from the work area during assembly.

# **A WARNING** PINCH AND CRUSH HAZARD!



The Eastwood Heavy Duty 50" Slip Roller consists of moving metal components which can present a hand/finger pinch hazard. Avoid
pinching hands while handling and keep fingers and hands away from moving parts when operating.

## A WARNING CUT HAZARD!

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



## A WARNING EYE INJURY HAZARD!

Metal particles can be ejected from the metal surface when forming. 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!

- Before beginning ANY work with this tool, it is absolutely necessary that it be securely bolted to a floor which is level and in good condition.
- Strenuous physical force may need to be applied to the Eastwood Heavy Duty 50" Slip 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.



## **A** CAUTION

• The Eastwood Heavy Duty 50" Slip Roller was specifically designed to be operated by one person only. Never have one person operate the Handcrank while another handles the workpiece or serious injury could occur.

## **A** CAUTION

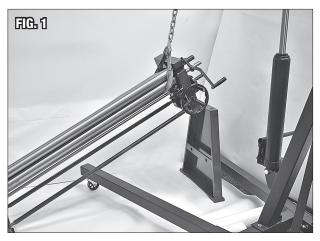
 Excessive resistance while operating could indicate a defect with the workpiece material or broken or damaged Eastwood Heavy Duty 50" Slip Roller components. To avoid injury, stop work immediately and inspect workpiece material for nicks, dents, welds, excessive scale or remaining coatings. Clean or repair as necessary or discard and begin with a new piece. Also inspect Eastwood Heavy Duty 50" Slip Roller components for looseness or damage.

# **ASSEMBLY**

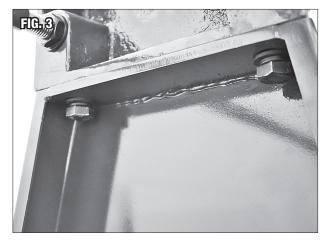
# **A** WARNING

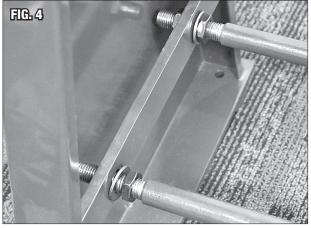
The following procedure will require performing two actions at the same time. For Safety purposes, it is strongly advised to obtain the assistance of a helper while performing these following steps.

- Using a capable lifting strap, securely wrap it around the far end of the Rollers of the Slip Roll Machine [A] and using a hoist, lift it approx. 30" [0.75m]. While doing so, allow the opposite Cast Side Frame to rest on the floor (FIG 1).
- Place the upper end of a Stand Leg [B] with the cross braced side inward under the Cast Side Frame and align the bolt holes with the threaded holes in the casting (FIG 2).
- From the underside of the Stand Leg, place two of the M12 x 40mm bolts [E] with Flat Washers and Lock Washers [F] & [G] into the holes and tighten them securely (FIG 3).
- Take the two Tie Rods [C] and remove only the outer M20 Nuts & Washers and set them aside.
- Insert the threaded ends of the Tie Rods [C] into the holes in the cross braces of the Stand Legs and add the previously removed M20 Nuts & Washers (FIG 4).
   Hand tighten all nuts at this point.





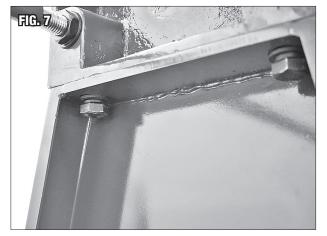


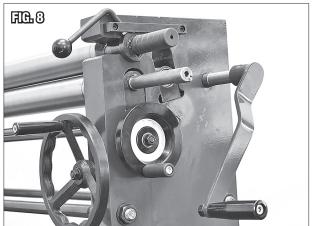


- Very carefully release the weight of the partial assembly by resting a Stand Leg
  on the floor and allowing the opposite end of the Slip Roll Machine to rest on the
  floor (FIG 5).
- Again, using a capable lifting strap, securely wrap it around the far end of the Rollers of the Slip Roll Machine [A] and using a hoist, lift it approx. 30" [0.75m] (FIG 6).
- Allow the threaded ends of the Tie Rods to pass through the holes of the Stand Leg and add the previously removed M20 Nuts & Washers. Partially draw in the Nuts but do not tighten them, allowing for alignment of the Stand Leg attachment Bolts.
- From the underside of the Stand Leg, place the remaining two of the M12 x 40mm bolts [E] with flat washers and lock washers [F] & [G] into the holes and tighten them securely (FIG 7).
- Go back to the Tie Rod Nuts, adjust them into position against both sides of the cross brace and tighten them securely.
- Add the Drive Crank **[D]** to the rearmost Keyed Shaft protruding from the right side of the Eastwood Heavy Duty 50" Slip Roller Machine side casting by aligning the keyway of the hub with the key of the shaft **(FIG 8)**.
- The Eastwood Heavy Duty 50" Slip Roller is now ready for use.









# **SET UP**

## **A** WARNING

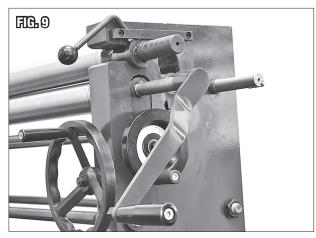
It is absolutely necessary to mount the Eastwood Heavy Duty 50" Slip Roller to the floor prior to use with 3/8" hardware to ensure that the unit will not tip over when in use.

- Note that there are two Keyed Shafts protruding from the right side of the Eastwood Heavy Duty 50" Slip Roller Machine side casting.
- The rearmost shaft drives the rollers at a 3.25:1 gear reduction while the forward shaft drives at a direct 1:1 ratio.

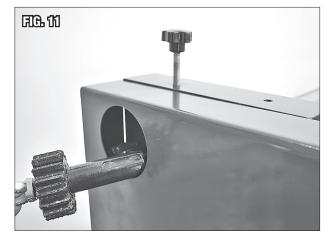
## **A** NOTICE

It is recommended to select the rearmost 3.25:1 gear reduced shaft as it provides much less effort to turn and offers much greater control of the rolling process particularly when rolling thicker gauge material, wider panels and tighter radii.

- To select the direct 1:1 ratio, remove the Drive Crank and place it on the forward shaft (FIG 9).
- The Rear 3.25:1 Driveshaft may be disengaged from drive. To do so:
  - Loosen the Threaded Knob located on the top of the Left Side Casting (FIG 10).
  - Pull the Eyelet from the hole at the side of the Left Side Casting (**FIG 11**). A gear and shaft are attached and will be withdrawn from the hole.
  - The Rear 3.25:1 Driveshaft is now disengaged from drive.
- To re-engage the Rear 3.25:1 Driveshaft:
  - Insert the gear and shaft attached to the Eyelet into the hole. Note that the keyway cut into the shaft must face upwards to allow the end of the threaded knob shaft to align with it (FIG 12).
  - Turn the Drive Crank several degrees in either direction until the gear teeth mesh.
  - Draw down the Threaded Knob.
  - The Rear 3.25:1 Driveshaft is now engaged for drive.









# **OPERATION**

There are Three Rollers in the Eastwood Heavy Duty 50" Slip Roller; The Upper Roller, Lower Roller and a Rear Roller.

The 8" Front-Mounted Handwheel controls the Rear Roller to adjust the Radius that is to be formed in the panel while the smaller, Side-Mounted, 5" Handwheel adjusts the spacing of the Upper and Lower Rollers to accommodate the thickness of the metal being rolled.

The Upper Roller may be released at the right side and swung out to release a fabricated cylinder.

The Eastwood Heavy Duty 50" Slip Roller is a professional metal working tool that will greatly expands metal working capabilities.

Before making an actual piece for a project, work with some scrap pieces of the

same size and thickness to practice on and to dial in the desired radius.

It is not possible to preset the Slip Roll to a pre-determined radius, so it requires some trial and error to achieve a desired radius.

#### **CREATING CURVES IN PANELS**

To begin:

- Rotate the Front, 8" Radius Adjustment Handwheel [I] Counter-Clockwise to raise
  the Rear Roller and reduce the formed radius. Rotating the 8" Handwheel Clockwise lowers the Lower Roller and increases the size of the formed roll (FIG 13).
- Place the piece of sheet metal to be rolled between the Top and Bottom front rollers and gradually rotate the Side-Mounted, 5" Thickness Adjustment Handwheel
   [II] Clockwise until the Lower Roller is raised up to exert pressure on the piece of sheet metal between the rollers.
- Rotate the Hand Crank [ III ] (Clockwise as viewed from the right side) to begin
  feeding the metal into the rollers until the piece is directly above the Rear Roller
  (FIG 14).
- Once again, adjust the 8" Radius Adjustment Handwheel [1] to set the radius of the piece. The more this roller is raised, the smaller the radius of the part will be.
- Rotate the Hand Crank [ III ] (Clockwise as viewed from the right side) to form the
  piece. Continue rotating the Hand Crank until the entire piece exits the rollers.
   NOTE: If a tighter radius is desired, the piece may be re-run through the rollers
  with the Rear Roller raised as needed.

#### **CREATING CYLINDERS**

The Eastwood Heavy Duty 50" Slip Roller can not only create bends but can also be used to form cylinders. To find the length of material required to create the Cylinder, determine the diameter of the cylinder needed and calculate the circumference by using the following formula:

## Circumference = 3.14 X Diameter + 3/8" for leading edge.

**NOTE:** Approx. 3/8" of material will be exposed as a straight bend at the beginning of the cylinder and will need to be trimmed off after cylinder completion.

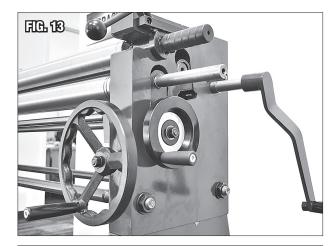
Place the leading edge of the piece of sheet metal to be formed into the Tangential Slot cut into the length of the Upper Roller (**FIG 15**).

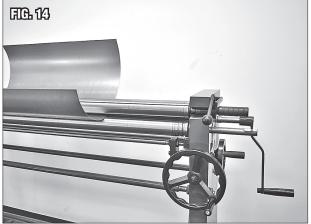
- Rotate the Side-Mounted, 5" Thickness Adjustment Handwheel [ II ] Clockwise
  until the Lower Roller is raised up to exert pressure on the piece of sheet metal
  between the rollers.
- Rotate the Hand Crank [ III ] (Counter-Clockwise as viewed from the right side) to begin feeding the metal into the rollers until the piece begins to contact the Rear Roller.
- Rotate the Front, 8" Radius Adjustment Handwheel [1] Counter-Clockwise to raise the Rear Roller and reduce the formed radius.

**NOTE:** The more the Rear Roller is raised, the smaller the radius of the cylinder will be.

#### **A** NOTICE

It is better to make the initial forming too large of a diameter rather than too small as a diameter that is formed too large can be reformed to a smaller diameter. If the diameter is made too small initially, it cannot be reformed and must be scrapped.

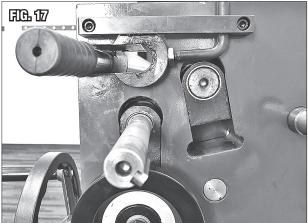


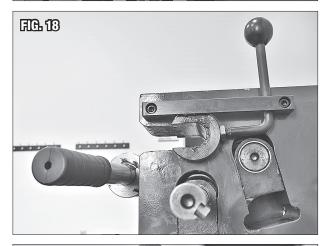


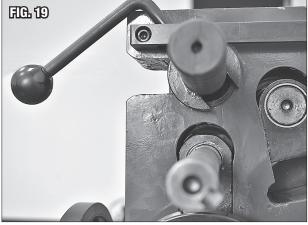


- Continue to rotate the Hand Crank [ III ] (Counter-Clockwise until the entire Cylinder has been formed (FIG 16).
- Once the cylinder has been formed, it will need to be removed from the Slotted Upper Roller by the following method:
  - Rotate the Front, 8" Radius Adjustment Handwheel [1] Clockwise to lower the Rear Roller.
  - Rotate the Side-Mounted, 5" Thickness Adjustment Handwheel [ II ]
    Counter-Clockwise until the Lower Roller is lowered to release pressure on the piece of sheet metal between the rollers.
  - Move the Top Roller Release Lever [ IV ] upward and backward within the Guide Frame to a vertical position (FIG 17).
  - Grip the Rubber Handgrip on right-side, Upper Roller Shaft and pull it outward allowing the entire Roller to pivot outward on it's left side mounting (FIG 18).
  - Pull the formed Cylinder off the end of the Upper Roller.
  - Replace the Upper Roller back into the base and move the Top Roller Release Lever [ IV ] forward and down, locking it in place (FIG 19).









## **BENDING RODS OR WIRE**

To begin:

- Lower the rear Roller completely by rotating the 8" Handwheel [1] Clockwise.
- Rotate the Side-Mounted, 5" Handwheel [ II ] Counter-Clockwise until the Lower Roller is lowered.
- Place the rod or wire to be rolled into the appropriate width grooves of the Top and Rear Rollers.
- Rotate the Side-Mounted, 5" Handwheel [ II ] Clockwise until the Lower Roller is raised up to exert pressure on the piece of Rod or Wire between the rollers.
- Rotate the Front, 8" Radius Adjustment Handwheel [1] Counter-Clockwise to raise the Rear Roller and decrease the formed radius.
- Turn the Hand Crank to feed the Rod or Wire through the Rollers as need to form the bend (FIG 20).



# **ADJUSTMENTS**

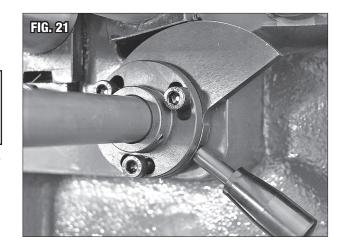
## PARALLELING THE UPPER AND REAR ROLLERS

## **A** NOTICE

The parallelism between the Upper and Rear Rollers has been finely set at the factory at assembly and should never require adjustment.

Should damage to the unit affecting the gap between the Rollers ever occur, they can be adjusted as follows:

- Rotate the Front, 8" Radius Adjustment Handwheel [1] Fully Clockwise until it stops. This is the bottom of the Rear Roller Travel range.
- Place a level in the center of the Upper Roller and shim the feet of the machine if necessary to achieve perfect level.
- Once perfect level of the Upper Roller is achieved, move the level to the Rear Roller.
- Loosen the three Flange to Cam Socket Head screws on the Left side of the Rear Roller mounting flange. Note that the three mounting holes in the Flange are Slotted (FIG 21).
- Grasp the short Handle on the left side Cam (FIG 21) and rotate the Cam up or down very slightly while observing the level. Once perfect level is achieved, do not move the Lever or Cam and tighten all three Socket Head screws.
- Recheck the level of the Lower Roller.

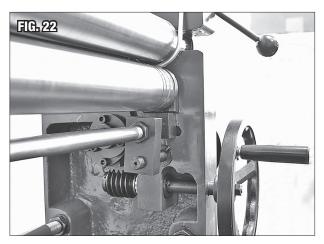


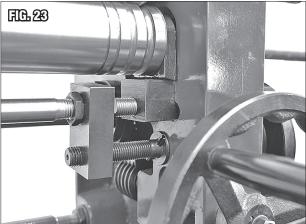
# **MAINTENANCE**

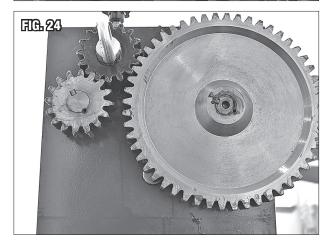
# **A** NOTICE

The design of the Eastwood Heavy Duty 50" Slip Roller features moving wedges, cams and gears bearing great loads when in use. These components rely on having adequate amounts of lubrication. The lack of proper lubrication will cause greatly increased operator effort and rapid wear of components.

- Use a generous amount of a good quality, heavy bodied chassis grease on all moving parts.
- Pay particular attention to all sliding and rotating components (FIGS 22 & 23).
- The sheet metal Gear Cover may be removed from the left Side Frame to expose the Drive Gears for lubrication (FIG 24).







# **ADDITIONAL ITEMS**

#32044 Eastwood Metal Bead Roller

#20622 Eastwood Motorized Bead Roller and Stand #51088 Eastwood Shrinker/Stretcher Combo Set

#13475 Eastwood Electric Metal Shears #11797 Eastwood Throatless Shear

#14042 Eastwood Versa Bend Sheet Metal Brake