

Eastwood[®]

DO THE JOB RIGHT.[®]

Item #54442

20 TON FLOOR SHOP PRESS

INSTRUCTIONS

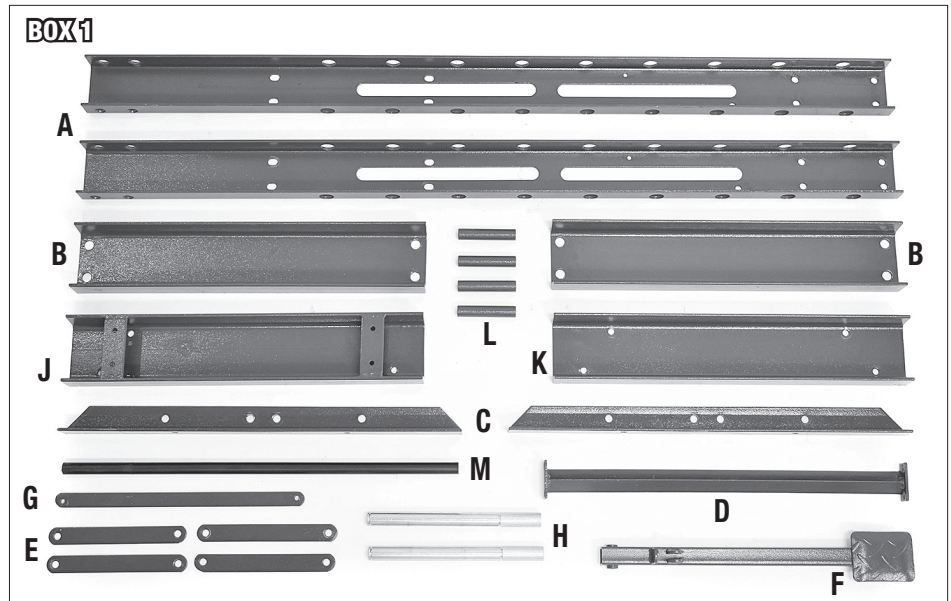


The **EASTWOOD 20 TON FLOOR SHOP PRESS** is excellent for many mechanical procedures requiring a strong linear pressing force for disassembly or assembly operations. A generous 7-1/4" Ram Stroke and adjustable 2.3 to 40" vertical working range can easily accommodate many ball joint, u-joint, bearing, bushing and gear pressing projects. The convenient Foot Pedal feature provides a choice of hands-free, foot actuated operation or the standard, hand operation pump function.

CONTENTS

BOX 1

- (2) Main Frame Sides - [A]
- (2) Upper Frame Beams - [B]
- (2) Base Rails - [C]
- (1) Lower Cross Member - [D]
- (4) Angle Braces - [E]
- (1) Foot Pedal - [F]
- (1) Linkage Arm - [G]
- (2) Table Support Pins - [H]
- (1) Table Front Half - [J]
- (1) Table Back Half - [K]
- (2) Table Spacers - [L]
- (1) Pump Handle - [M]

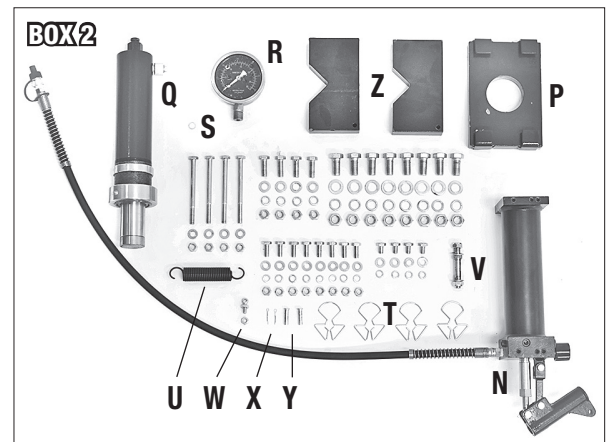


BOX 2

- (1) Hydraulic Pump Unit - [N]
- (1) Yoke Plate - [P]
- (1) Ram w/Lock Collar - [Q]
- (1) Force Gauge - [R]
- (1) Nylon Seal - [S]
- (4) Table Support Pin Clips - [T]
- (1) Foot Pedal Spring - [U]
- (1) Foot Pedal Pivot Shaft Ass'y - [V]
- (2) Spring Eyelet Ass'y - [W]
- (2) Linkage Clevis Pins - [X]
- (2) Cotter Pins - [Y]
- (2) Arbor Plates - [Z]

HARDWARE: BOX 2

- (2) M10 x 1.50 x 130 mm Shoulder Bolts (Table Assembly)
- (4) M10 x 1.50 x 15 mm Bolts (Pump Attachment)
- (8) M10 x 1.50 x 25 mm Bolts (Angle Braces)
- (12) M10 x 1.50 Nuts
- (16) M10 Washers
- (12) M10 Lock Washers
- (4) M12 x 1.75 x 35 mm Bolts (Base Rails/Cross Member to Main Frame)
- (6) M12 x 1.75 Nuts
- (6) M12 Washers
- (4) M12 Lock Washers
- (8) M16 x 2.00 x 35 mm Bolts (Upper Frame Beams)
- (8) M16 Nuts
- (8) M16 Washers
- (8) M16 Lock Washers



SPECIFICATIONS

Hydraulic Pump Capacity: 20 Tons (40,000 lbs.), [18,144 kg] maximum

Hydraulic Ram Stroke: 7.25" [185 mm]

Vertical Working Range: 2.3 to 40" [58 - 1016mm]

Arbor Depth: 4" [101 mm]

Arbor Width: 21.25". [540 mm]

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

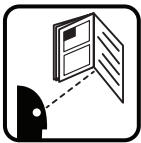
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION 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 HAZARD!

- This tool has hydraulically actuated components that generate greatly amplified crushing and bending forces which can quickly cause severe injury! Keep fingers and hands away from moving parts when operating.



WARNING INJURY HAZARD!

- While in use, objects under pressure in the Eastwood 20 Ton Floor Shop Press can suddenly slip out of position, releasing a great deal of stored energy and force, causing serious injury or death and property damage. Work from the Pump side of the Frame at all times. Do not allow others near the tool while in operation.

CAUTION INJURY HAZARD!

- The Eastwood 20 Ton Floor Shop Press was specifically designed to be operated by one person only. Never have one person operate the lever while one handles the Ram or Spreader, or serious injury could occur.
- Injury or property damage could occur from being struck by ejected workpiece fragments. Before beginning work, be sure the surrounding work area is clear of persons or objects to avoid injury or property damage.
- Excessive resistance while operating could indicate excessive side loads or component binding. To avoid injury and or severe tool damage, stop work immediately and inspect tool components and extensions for any deflection or bending.
- The Eastwood 20 Ton Floor Shop Press consists of heavy metal components which can cause serious injuries if allowed to drop. Avoid pinching hands while handling parts during assembly.
- Obtaining the assistance of a helper during assembly is recommended.

NOTICE

- The Eastwood 20 Ton Floor Shop Press is intended for use as a linear pushing and compression tool. **DO NOT** use as a jack, lifting, or support device.

ASSEMBLY

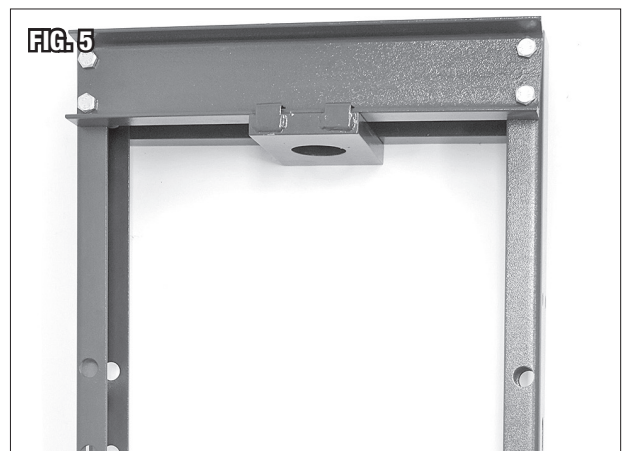
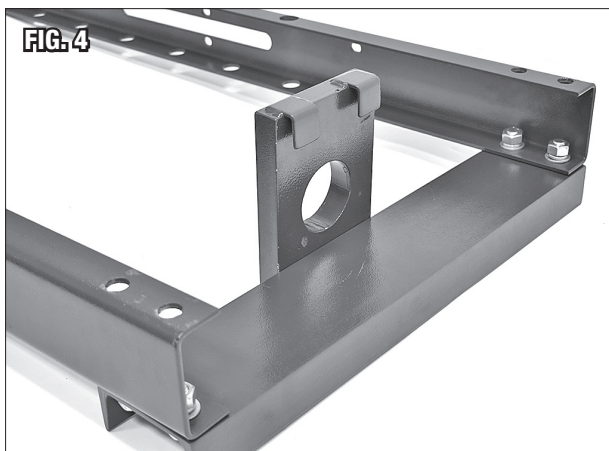
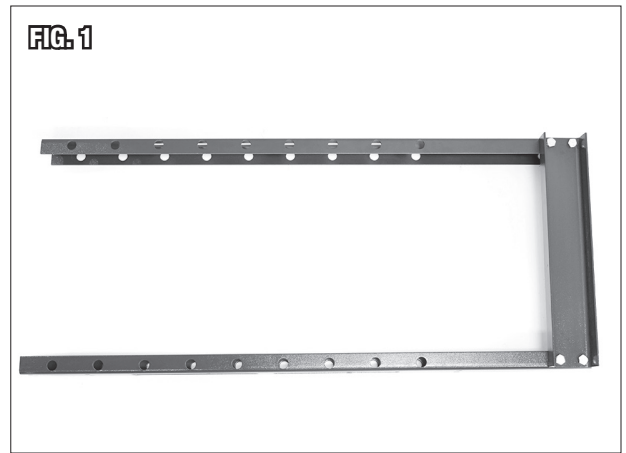
- Attach one of the Upper Frame Beams [B] to the Main Frame Sides [A] with 4 sets of M16 x 2.00 x 35 mm Bolts, Nuts and Washers (FIG 1).
NOTE: Do Not fully tighten hardware until all pieces are assembled to allow for alignment.
- Join the Main Frame Sides [A], the Base Rails [C] and the flanges of the Lower Cross Member [D] together with (4) sets of M12 x 1.75 x 35 mm Bolts, Nuts and Lock Washers (FIG 2).
- Add the four Angle Braces [E] between the Main Frame Sides [A] and the Base Rails [C] with (8) sets of M10 x 1.50 x 25 mm Bolts, Nuts, Washers and Lock Washers (FIG 3).
- For safety, allow the partial assembly to remain on its side.

⚠ CAUTION INJURY HAZARD!

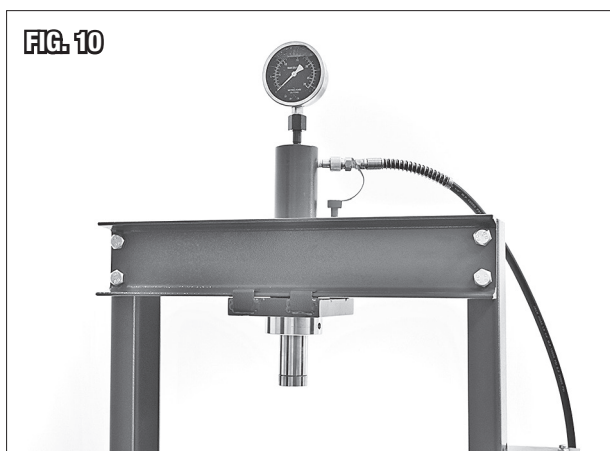
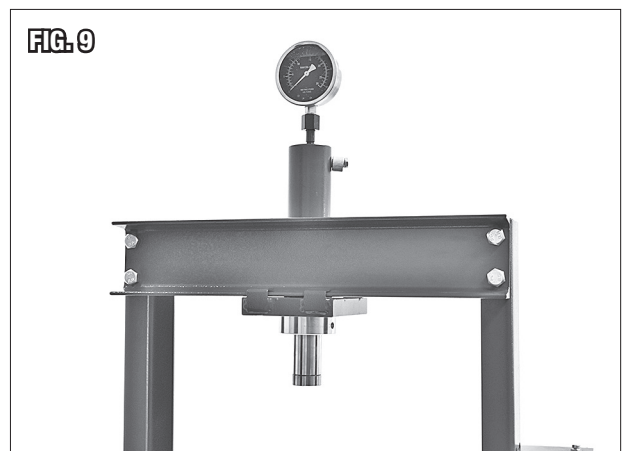
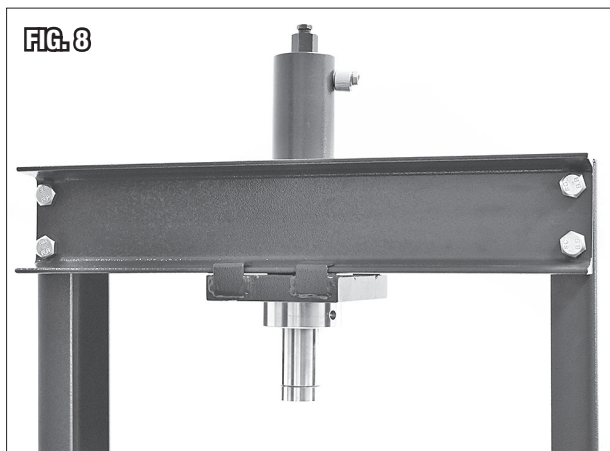
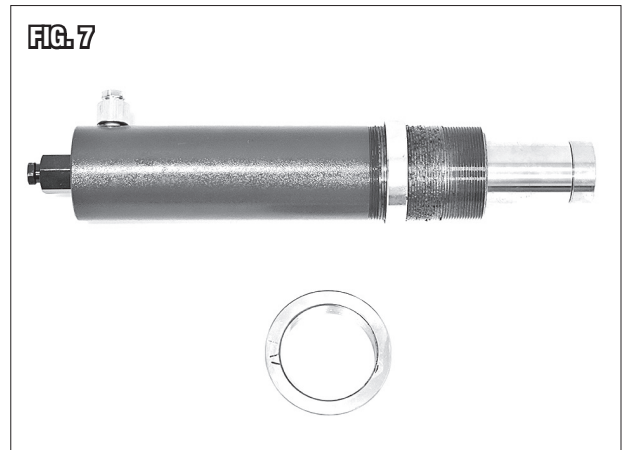
The Eastwood 20 Ton Floor Shop Press consists of heavy metal components which can cause potentially serious injuries if allowed to drop.

Obtaining the assistance of a helper during the following assembly steps is required.

- Hook the fingers on one side of the Yoke Plate [P] over the lower “C” channel edge of the previously attached Frame Beam [B] (FIG 4).
- Next, with the assistance of a helper, slip the lower “C” channel edge of the 2nd Frame Beam [B] under the opposite fingers of the Yoke Plate [P] and attach the Beam with (4) sets of M16 x 2.00 x 35 mm Bolts, Nuts and Washers (FIG 5).
- Securely tighten all hardware at this point.



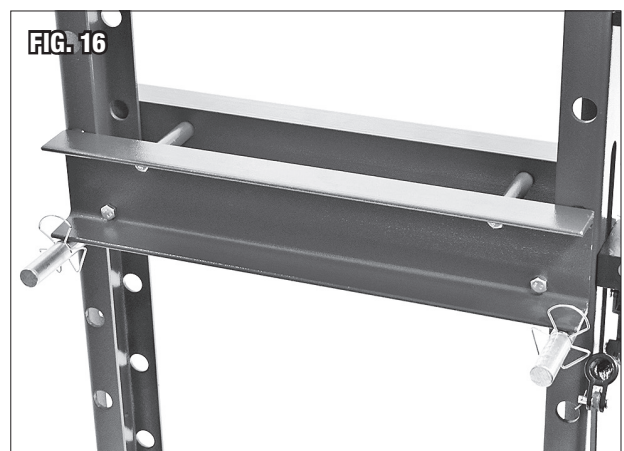
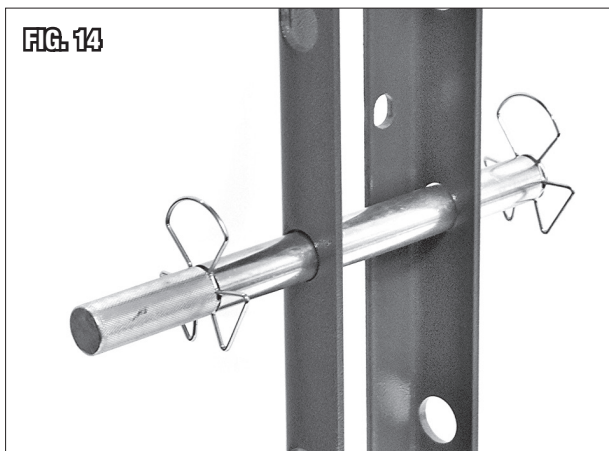
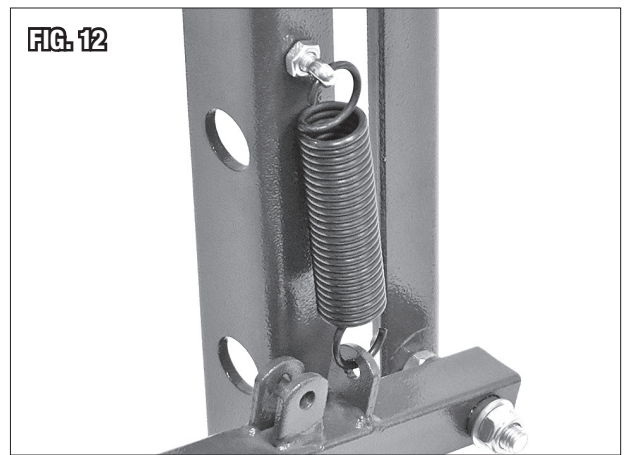
- Stand the Assembled Frame upright and carefully mount the Hydraulic Pump Unit **[N]** onto the outside face of the right Main Frame Side **[A]** with four M10 x 1.50 x 15 mm Bolts, Washers and Lock washers **(FIG 6)**.
- Unthread and remove the pre-installed Lock Collar from the Ram **[N]** and place it aside for later re-installation **(FIG 7)**.
- Insert the Ram **[Q]** with the hose connection end facing upward, through the center hole of the Yoke Plate **[P]**. Thread the previously removed Lock Collar onto the threads of the Ram **[N]** **(FIG 8)**.
- Slip the Nylon Seal **[S]** over the threaded fitting of the Force Gauge **[R]** then install it with the Gauge facing forward **(FIG 9)**.
- Remove the protective plastic cap from the female fitting on the side of the Ram **[N]** and thread the male, Hydraulic Pump hose fitting into it **(FIG 10)**.
- Remove the Outer Locknuts and one washer from the Foot Pedal Pivot Shaft Ass'y **[V]** and set them aside.
- Remove the outer nut and washer from the Spring Eyelet Assembly **[W]** and set them aside.
- Insert the longer threaded end of the Foot Pedal Pivot Shaft **[V]** (with the inner nut and washer in place) into the corresponding hole in the face of the right Main Frame Side **[A]** **(FIG 11)**.
- Using the previously removed Locknut and Washer, secure the Pivot Shaft tightly in place **(FIG 11)**.



- With the Pedal facing upward, slide the sleeved end of the Foot Pedal [F] over the Pivot Shaft and secure with the previously removed Locknut and Washer (FIG 1). **NOTE:** Do Not overtighten and cause binding.
- Insert the threaded end of the Spring Eyelet [W] into the corresponding hole in the face of the right Main Frame Side [A] and secure with the previously removed nut and washer (FIG 12).
- Hook the ends of the Foot Pedal Spring [U] into the Spring Eyelet and the tab on the upper edge of the Foot Pedal arm [F] (FIG 12).
- Set one end of the Linkage Arm [G] into the Clevis of the Hydraulic Pump Ass'y Arm, slip a Linkage Clevis Pin [X] through the holes and secure with a Cotter Pin [Y] (FIG 13).
- Place the opposite end of the Linkage Arm [G] into the clevis tabs of the Foot Pedal [F], slip a Linkage Clevis Pin [X] through the holes and secure with a Cotter Pin [Y] (FIG 13).
- Insert the (2) Table Support Pins [H] through the selected pair of 9 available height setting holes in the Main Frame side members [A] and secure by snapping the Table Support Pin Clips [T] into the annular grooves (FIG 14).
- Assemble the Table from the Table Front and Back halves [J] & [K] and (2) Table Spacers [L] with (4) sets of M10 x 1.50 x 130 Shoulder Bolts, nuts, washers and locknuts (FIG 15).
- Feeding it from above at an angle, install the assembled Table [J], [K] & [L] between the Frame side members and resting on the Table Support Pins [H] (FIG 16).

IF USING HAND CONTROL PUMP HANDLE

- Slide the Pump Handle [M] into the Pumping Lever of the Pump [N].
- The Arbor Plates [Z] are placed as needed on top of the Table Assembly [J], [K] & [L] to support the workpiece.



SET-UP AND OPERATION

INSTALLATION LOCATION

⚠ NOTICE

The Eastwood 20 Ton Floor Shop Press is designed to be used in a Vertical position only with the Main Frame securely placed on a clean, level and stable surface. DO NOT attempt to use in a horizontal or any other position.

The Eastwood 20 Ton Floor Shop Press MUST be installed on a solid and level surface for proper operation and safety.

OPERATION

⚠ WARNING INJURY HAZARD!

While in use, objects under pressure in the Eastwood 20 Ton Shop Press can suddenly slip out of position, releasing a great deal of stored up energy and force causing serious injury or death and property damage. Work from the Pump side of the Frame at all times. Do not allow others near the tool while in operation.

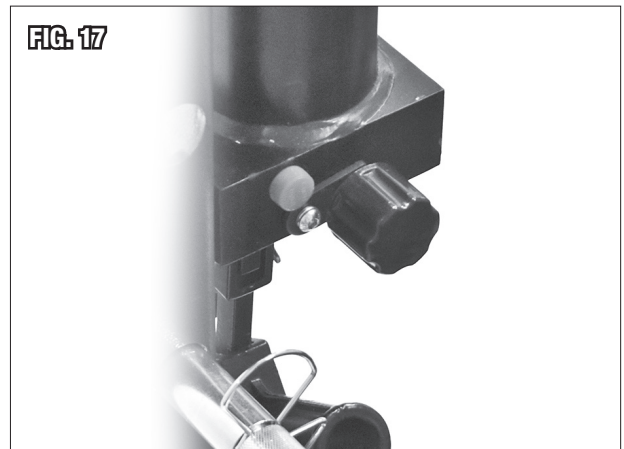
⚠ CAUTION INJURY HAZARD!

Use caution and do not allow side loading of the Ram piston if attempting offset loads.

⚠ NOTICE

Before beginning use, carefully plan out the positioning of the Table, Ram and Arbor Plates and analyze the expected movement of the workpiece to minimize the danger of sudden movement or slippage.

- The Ram [Q] and Yoke Plate [P] assembly can be moved off center if necessary, to apply an offset force is possible but not recommended due to the unequal stresses that can be transmitted through the frame. To do so; slide it into position as needed.
- Check that the Release Valve (Knob located at the Lower side of the Hydraulic Pump) (FIG 17) is closed. (Rotate in a Clockwise direction).
- Begin slowly operating Pump Handle while constantly observing the workpiece for expected movement and any signs of sudden slippage.
- When planned work is completed, carefully and slowly rotate the Release Valve (Rotate in a Counter-Clockwise direction) to release pressure.



MAINTENANCE

CHECK/ADD HYDRAULIC FLUID TO PUMP

- Check that the Release Valve (**FIG 17**), (**NOTE:** Knob located at the Lower Front side of the Hydraulic Pump) is closed. (Rotate in a Clockwise direction)
- Remove Oil Fill Screw at top of Pump. **NOTE:** Do Not lose Seal Ring.
- The fluid level should be visible at the bottom of the threads. If required, add a high-quality hydraulic fluid.
- Check that the Seal Ring is in place on the Fill Screw/Breather and thread the Fill Screw into the Pump securely.

STORAGE

- Keep in a clean, dry area free of corrosive moisture with Ram in the retracted position. Covering with thick plastic is recommended.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Ram Stops Before Full Work Stroke is Completed	Low fluid level in Reservoir	Retract Ram fully and check fluid level. Add a high quality, hydraulic oil as needed.
	Offset forces causing binding of components	Retract Ram and check thoroughly for any offset forces acting on components.
	Pushing Capability of the Ram has been exceeded	Retract Ram and discontinue use.

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

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: tech@eastwood.com

PDF version of this manual is available at eastwood.com

The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA 800.343.9353 eastwood.com

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