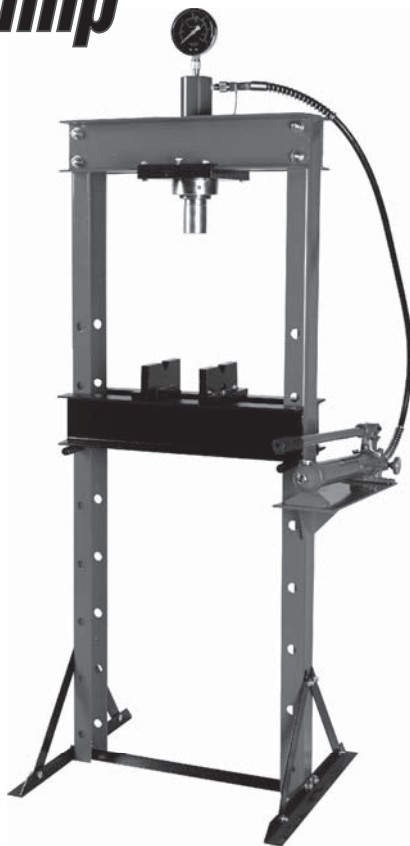


OWNER'S MANUAL & SAFETY INSTRUCTIONS

Save This Manual Keep this manual for the safety warnings and precautions, operating, assembly, inspection, maintenance and cleaning procedures. Keep this manual in a safe and dry place for future reference.

Heavy Duty Shop Press 10 & 12 & 20 Ton Hand Pump



⚠ WARNING

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

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WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

WARNING

Read all safety warnings and instructions. *Failure to heed these markings may result in personal injury and/or property damage.*

Save all warnings and instructions for future reference.

The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Work area

1. **Keep the work area clean and well lighted.** Cluttered benches and dark areas increase the risk of injury to persons.
2. **Keep bystanders and children away while operating the tool.** Distractions can result in loss of control of the tool.

Personal safety

1. **Stay alert. Watch what you are doing and use common sense when operating the tool. Do not use the tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating the tool increases the risk of injury to persons.
2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair increases the risk of injury to persons as a result of being caught in moving parts.
3. **Do not overreach.** Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
4. **Use safety equipment.** Wear safety goggles and heavy-duty work gloves during use.

Tool use and care

1. **Do not force the tool.** Use the correct tool for the application. The correct tool will do the job better and safer at the rate for which the tool is designed.
2. **Store the tool when it is idle out of reach of children and other untrained persons.** A tool is dangerous in the hands of untrained users.
3. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that affects the tool's operation.** If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
4. **Use only accessories that are identified by the manufacturer for the specific tool model.** Use of an accessory not intended for use with the specific tool model, increases the risk of injury to persons.
5. **Avoid off-center loads.** If the Pump seems unusually hard to operate, immediately stop. Adjust the Ram to eliminate or diminish an off-center load.
6. **Protect the Hose.** Do not drop heavy objects on the Hose. Avoid kinks in the Hose. Maintain proper clearance to avoid damage to the Hose and Couplers.
7. **Inspect repair before using vehicle.** Repairs to structural or frame members must be inspected by a qualified technician to ensure that the structure is still strong enough to safely fulfill its function.

Service

1. ***Tool service must be performed only by qualified repair personnel.***
2. ***When servicing a tool, use only identical replacement parts. Use only authorized parts.***
3. ***Use only the lubricants supplied with the tool or specified by the manufacturer.***

Specific Safety Rules

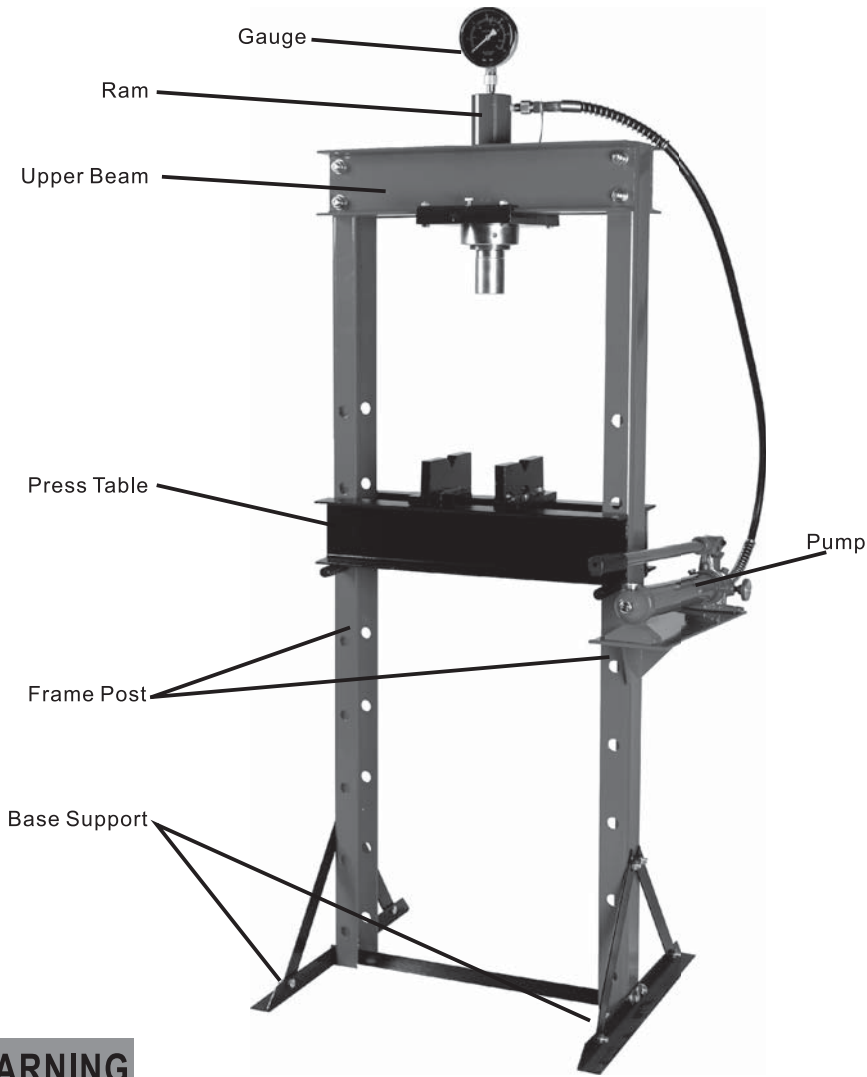
1. Keep hands away from Arbor Plates and Press Pin during use.
2. Do not move workpiece while compressed.
3. Release load before service or maintenance.
4. Bolt to floor before use.
5. Keep area under Arbor Plates clear. If Arbor Plates rest on obstruction (i.e. bolt, debris, etc.), it creates an uneven press, causing excess stress and possible breakage.
6. Avoid off-center loads. Do not operate if workpiece tilts or binds during compression.
7. STOP and release compression if you suspect imminent structural failure. If safe, inspect thoroughly and reposition before proceeding.
8. Do not compress springs or other elastic objects. They could disengage hazardously.
9. Wear safety goggles, heavy-duty work gloves, and steel-toe work boots during set up and/or use.
10. Keep bystanders out of work area.
11. Do not stand directly in front of the press when loaded. Do not leave the press unattended when loaded.
12. Do not operate the hydraulic ram beyond rated capacity.
13. Inspect before every use; do not use if parts are loose or damaged.
14. Ram service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
15. When servicing a Ram, use only identical replacement parts – refer to attached, product-specific parts list and diagram. Follow instructions in the "User - Maintenance Instructions" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
16. Only use with accessories rated to handle the forces exerted by this tool during operation. Other accessories not designed for the forces generated may break and forcefully launch pieces.
17. Use only with Ram included with this Press.
18. Industrial applications must follow OSHA requirements.
19. This product is not a toy. Keep it out of reach of children.
20. Maintain labels and nameplates on the Shop Press. These carry important safety information. If unreadable or missing, contact service center for a replacement.
21. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



SAVE THESE INSTRUCTIONS

Specifications

Maximum Capacity	10 Ton	12 Ton	20 Ton
Ram Stroke	135 mm	135 mm	145 mm



WARNING

1. Do not **overextend** the Ram. (Do not **over** the Warning Line on the Piston of Ram.)
2. Do not **overload** the capacity.
3. Do not attempt to **operate** pump unless the Breather Valve both on pump and gauge are open.

Assembly Instructions



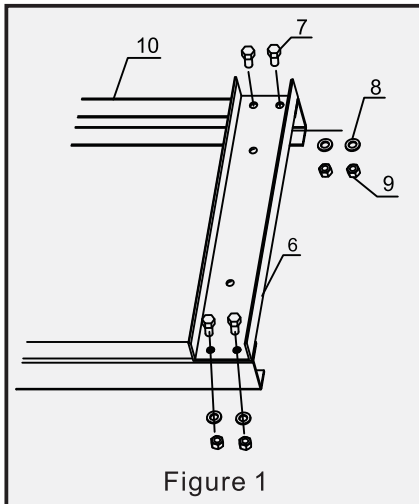
Read the **ENTIRE** IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use of this product.

Inspect tool before use, looking for damaged, loose, and missing parts. If any problems are found, do not use tool until repaired.

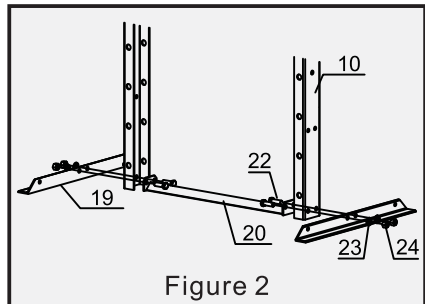
Components of this Shop Press are heavy. You will need a helper to safely assemble this product.

Using the Components photo (Page 5) and the Parts List and Assembly Diagram near the end of the manual, lay out and identify all pieces before assembly.

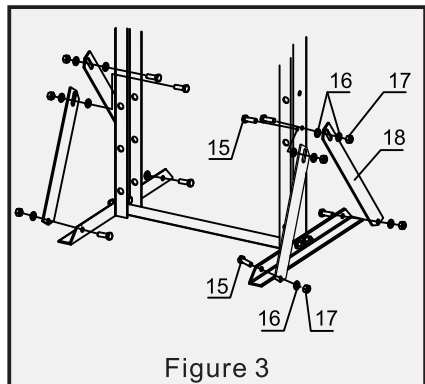
1. Put on safety glasses and heavy leather boots.
2. Put the Frame Posts (10) on the stable, flat and level surface. Align the holes on the Upper Beam (6) with the holes in the top of the Frame Posts (10) and secure in place with the Bolts (7), Washers (8) and Nuts (9). See Figure 1.



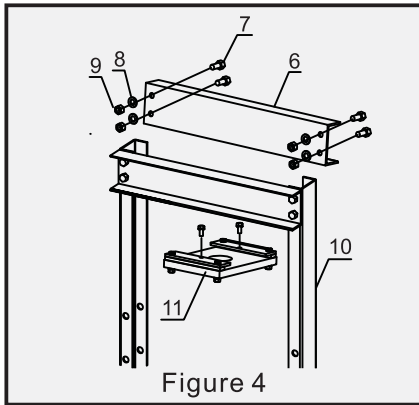
3. Put the Frame Posts (10) in the upright position. Slide each Base Support (19) under the Frame Posts (10), and place the Bottom Frame Support (20) between them. Line up the bolt holes and insert the Bolts (22) through the Frame Posts, Base Sections, and Bottom Frame Support, then secure in place with the Washers (23) and Nuts (24). See Figure 2.



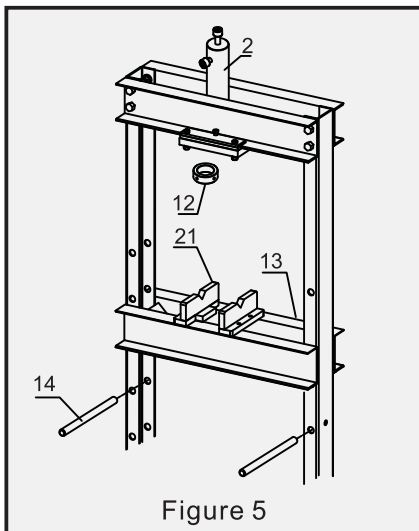
4. Attach the Base Side Supports (18) to the Frame Posts and Base Support using the Bolts (15), Washers (16), and Nuts (17). See Figure 3.



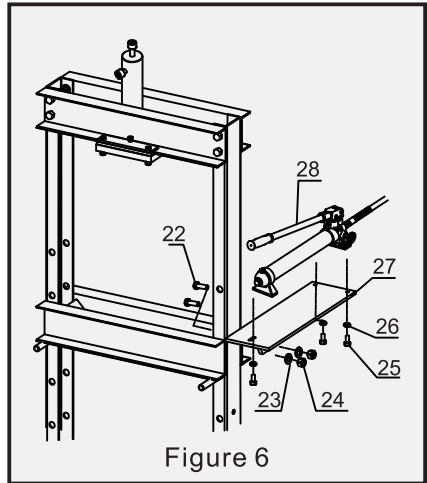
5. Align the holes on the Upper Beam (6) with the holes in the top of the Frame Posts (10) and secure in place with the Bolts (7), Washers (8) and Nuts (9). Attach Ram Base Plate (11). See Figure 4.



6. Attach the Ram (2) using Ram Big Nut (12). Slide the Support Pins (14) into the holes in the Frame Posts. Angle the Press Table (13) so the rails of the Press Table straddle the Frame Posts, then lower into place down the Frame Posts so the Press Table rests on the Support Pins. Then Put the Arbor Plates (21) on the Press Table. See Figure 5.

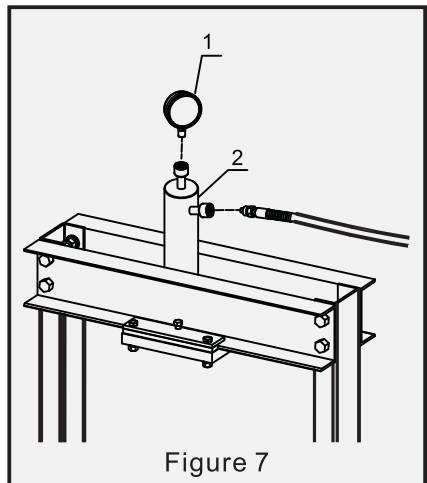


7. Attach the Pump Base Plate (27) using Bolts (22), Washers (23) and Nuts (24). Then attach the Pump (28) using Bolts (25) and Washers (26). See Figure 6.



8. Attach the Gauge (1) and Hose to the Ram. See Figure 7.

Note: For set-up, position the Support Pins at least several holes down from the top holes in the Frame Posts so you have room to place the Press Table (13). You can re-adjust the placement of the Press Table after assembly.



Operating Instructions



Read the **ENTIRE** IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Bleeding the Pump

IMPORTANT! Before first use, check for proper hydraulic oil level in the Pump. Then thoroughly test the Ram and Pump for proper operation prior to its actual use. If the Pump operation feels spongy, or the Ram lowers while the Release Valve is closed, there may be air in the Pump. Bleed the Pump as follows:

1. Remove the Oil Fill Screw . The Seal Ring should come off with it.
2. The fluid level should be near the bottom of the opening. If required, add high grade hydraulic fluid.
3. Make sure the Seal Ring is still in place around the Oil Fill Screw and thread the Fill Screw into the Pump securely. Do not use thread seal tape.
4. Follow the steps in page 12 (air in the pump).

General Operating Instructions

1. Use the Support Pins (14) to adjust the height of the Press Table (13).

Note: The Press Table should be in the highest position possible with the workpiece as close as possible to the ram.

2. Place the item to press on the Arbor Plates (21). Turn the Arbor Plates to support the stationary part of the workpiece.

WARNING! Make sure there is no obstruction (such as a stray bolt or debris) under the Arbor Plates. Such items create an uneven surface which can cause the Arbor Plates to break under pressure.

WARNING! When pressing two items together, the items must be lined up vertically. If not, one item may forcefully eject itself sideways from the unit.

3. Open the Release Valve, ram will get down quickly. When pressing two items together, make sure that they are in vertical alignment. Continue to operate the Pump Handle to press the work piece.
4. After the task is completed, be careful when releasing Pump pressure. For safety, remove the Pump Handle, then slowly turn the Release Valve on the Pump, allowing the ram come back.

WARNING! During the release process the ram may rise quickly. Stay clear.

User-Maintenance Instructions



Procedures not specifically explained in this manual must be performed only by a qualified technician.

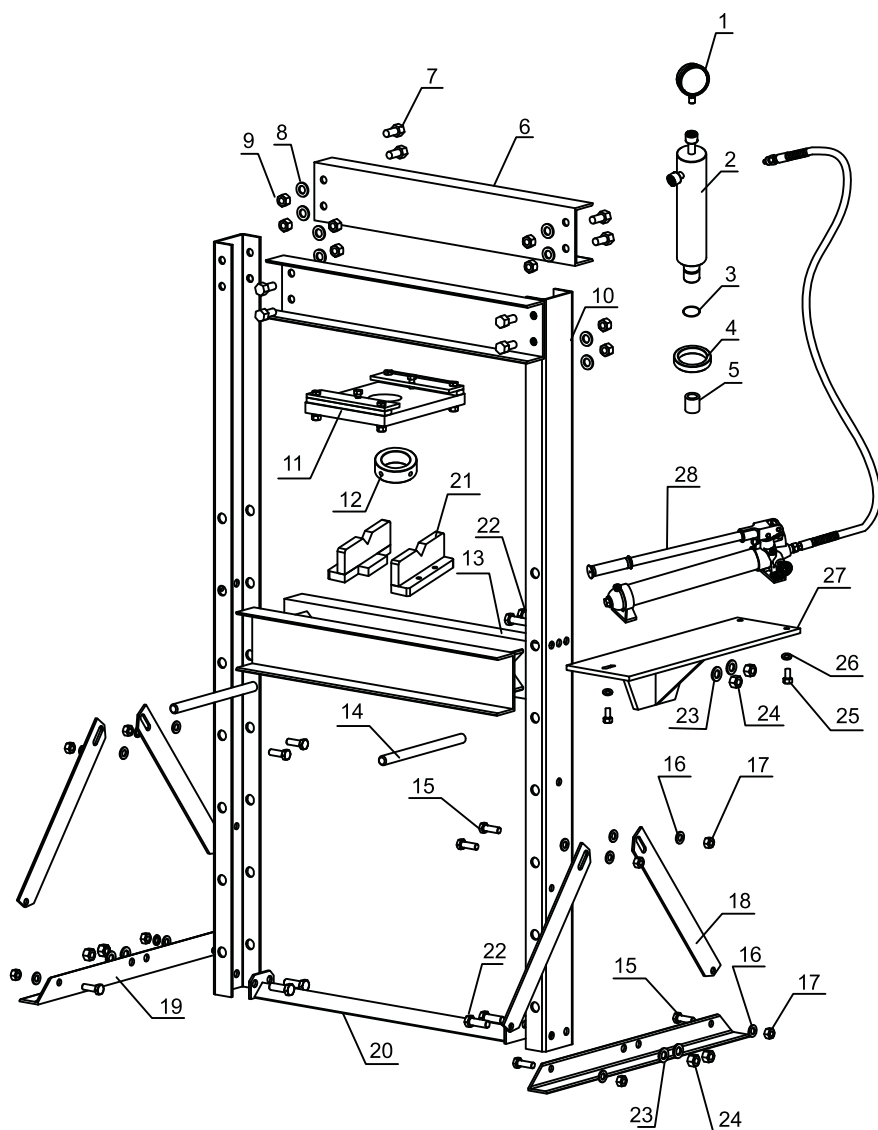
WARNING

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

1. Before each use, inspect the general condition of the Shop Press, Ram and Pump. Check for broken, cracked, or bent parts, loose or missing parts, and any condition that may affect the proper operation of the product. If a problem occurs, have the problem corrected before further use.
- Do not use damaged equipment.**
2. Before each use, thoroughly test the Ram (2) and Pump (28) for proper operation prior to its actual use. If the Pump appears not to be working properly, follow Bleeding the hydraulic Fluid instructions.
3. Change the hydraulic oil at least once every year. To change the hydraulic oil:
 - a. With the Ram fully lowered, remove the Pump from the Pump Base Plate (27).
 - b. Remove the Oil Filler Screw.
 - c. Tip the Pump to allow the old hydraulic oil to drain out of the unit completely, and dispose of the old hydraulic oil in accordance with local regulations.
 - d. Completely fill the unit with a high quality hydraulic oil (not included) until the oil just begins to run out of the Oil Fill Hole.
 - e. Reinstall the Oil Filler Screw.
 - f. Clean with a clean cloth using a detergent or mild solvent.
 - g. Replace the Pump onto the Frame Post (See step 7 under Assembly Instructions).

DIAGRAM



PARTS LIST

Part	Description	Qty
1	Gauge	1
2	Ram	1
3	Retaining Ring	1
4	Ram Small Nut	1
5	Cap Head	1
6	Upper Beam	2
7	Bolt	8
8	Washer	8
9	Nut	8
10	Frame Post	2
11	Ram Base Plate	1
12	Ram Big Nut	1
13	Press Table	1
14	Support Pin	2

Part	Description	Qty
15	Bolt	8
16	Washer	12
17	Nut	8
18	Base Side Support	4
19	Base Support	2
20	Bottom Frame Support	1
21	Arbor Plate	2
22	Bolt	6
23	Washer	6
24	Nut	6
25	Bolt	3
26	Washer	3
27	Pump Base Plate	1
28	Pump	1

TROUBLE SHOOTING



TO PREVENT SERIOUS INJURY:

Use caution when troubleshooting a malfunctioning jack.

Completely resolve all problems before use. If the solutions presented in the Troubleshooting guide do not solve the problem, have a qualified technician inspect and repair the jack before use.

After the Ram and Pump are repaired: Test it carefully without a load by raising it and lowering it full checkin for ro ero eration BEFORE RETURNING THE PUMP TO OPERATION.

Problem	Possible Cause	Solution
Ram does not operate when handle is pumped	Release valve not tightly closed	Firmly close the release valve
	Air in the pump	Please follow the steps: 1.Open the release valve by turning it counter-clockwise,pump up the handle 10-15 times 2.Close the release valve by turning it clockwise, pump up the handle 5-10 times 3.Repeat step 1 and 2 for about 3 times
	The steel ball is immersed inside for too long time	
Ram will not hold load	Release valve not tightly closed	Firmly close the release valve
	Malfunction in pump such as dirt inside valve mechanism	Please follow the steps: 1.Open the release valve by turning it counter-clockwise,pump up the handle 10-15 times 2.Close the release valve by turning it clockwise, pump up the handle 5-10 times 3.Repeat the step 1 and 2
Ram reluctant to lower when load removed	Oil reservoir overfilled	Drain oil to correct level
	Piston binding	Clean and lubricate moving parts
	Overextend the ram	Replace ram
Ram will not extend to full range of stroke	Low oil level	Add hydraulic oil to the reservoir
Ram tries to tilt to one side	Incorrect of connection or unbalance of the footing	Stop work and re-position ram and base, ensuring it is well supported and as close to perpendicular to the repair as possible