Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's date code in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference. 25h

CENTRAL™ MACHINERY

12 TON SHOP PRESS



70604

Visit our website at: https://www.harborfreight.com
Email our technical support at: productsupport@harborfreight.com

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

Table of Contents

Important Safety Information 2
Specifications 4
Assembly 4
Operation 8
Maintenance 9
Parts List and Assembly Diagram 10
Warranty 12

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.
⚠ DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE CAUTION	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. The operator must understand that common sense and caution are factors, which cannot be built into this product, but must be supplied by the operator.

Work area

Keep the work area clean and well lit. Cluttered benches and dark areas increase the risks of electric shock, fire, and injury to persons.

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 heavy-duty work gloves during use. Non-skid safety shoes and a hard hat must be used for the applicable conditions.
5. **Always wear eye protection.** Wear ANSI-approved safety goggles, heavy-duty work gloves, and steel-toe work boots during set up and/or 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. **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. There is a risk of bursting if the tool is damaged.
3. **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.

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 ANSI-approved 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. 12 Ton Limit. Do not operate the hydraulic jack beyond rated capacity.
13. Inspect before every use; do not use if parts are loose or damaged.
14. Jack 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 jack, 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 bottle jack 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 Harbor Freight Tools 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	12 Tons (24,000 pounds)
Oil Type	Hydraulic Oil

Setup - Before Use:

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.

⚠WARNING

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

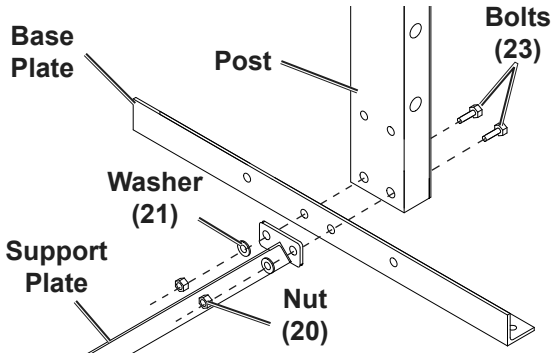
Components of this Shop Press are heavy. You will need a helper to safely assemble this product.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

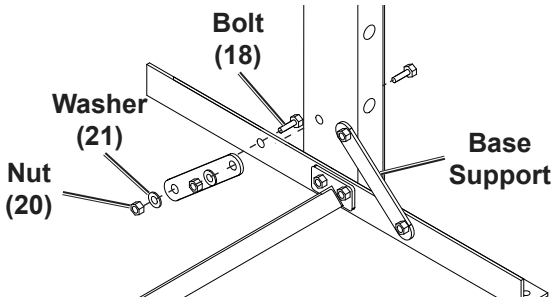
Assembly

Assemble and mount on a flat, level surface capable of supporting weight of Press, accessories and workpieces. Hand tighten all connections.

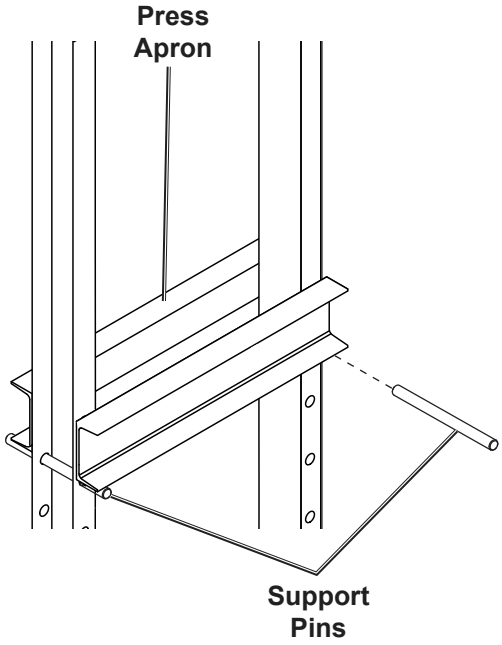
1. Using Parts List and Assembly Diagram near the end of manual, identify all parts.
2. With assistance, attach one Base Plate to one Post using one Support Plate. Secure using Bolt (23), Washer (21) and Nut (20). Repeat on other side.



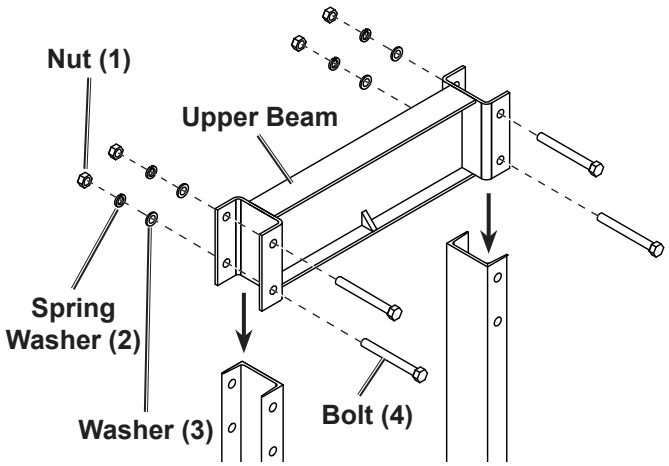
3. Attach two Base Supports between Post and Base Plate. Secure using Bolts (18), Washers (21), and Nuts (20). Repeat on other side.



4. Insert one Support Pin into upper hole in each Post.
5. Lower Press Apron over Posts.



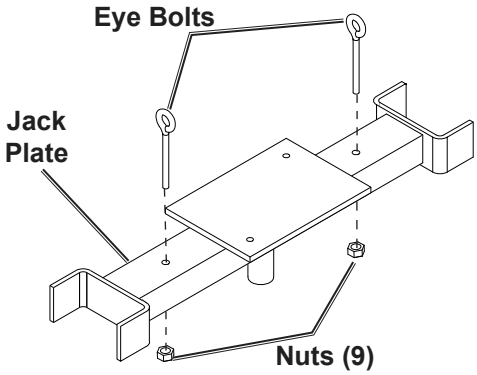
6. Attach Upper Beam, with Tabs facing down, to Posts using four Bolts (4), Washers (3), Spring Washers (2) and Nuts (1).



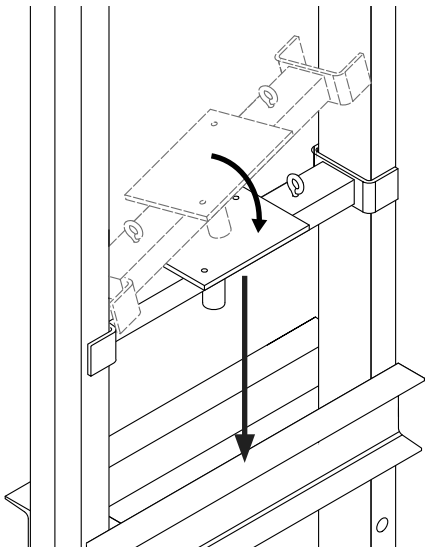
7. Check that Shop Press assembly is square, then tighten all hardware.

8. Mount the Shop Press to the Floor:
   a. With assistance, move the Shop Press to the mounting location. If needed, drill four 1/2″ diameter mounting holes in the Base Supports and use as a template to mark the spots where four 1/2″ diameter holes will be drilled in the concrete or wood floor. Check for any hidden wiring or cables and adjust the location for the holes as needed. Then, temporarily set the Shop Press aside.
   b. For concrete floors use a masonry drill bit to drill the four 1/2″ diameter holes (about 3″–4″ deep) into the concrete. Make sure to blow out the concrete dust from the drilled holes. Insert lag screw anchors (sold separately) into the holes.
   c. Move the Shop Press back to the location where it is to be mounted, and align the four 1/2″ diameter mounting holes in the Base Supports with the four pre-drilled 1/2″ holes in the concrete or wood. Use four minimum 3″ long, 1/2″ diameter concrete anchor bolts or lag bolts (sold separately) to secure the Shop Press to the concrete or wood floor.

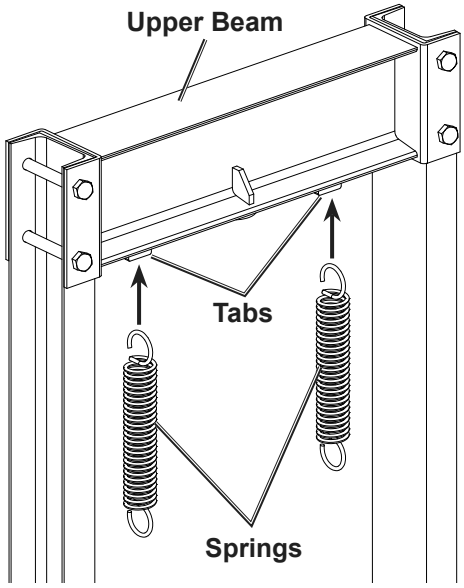
9. Insert two Eye Bolts through Jack Plate, secure with two Nuts (14).



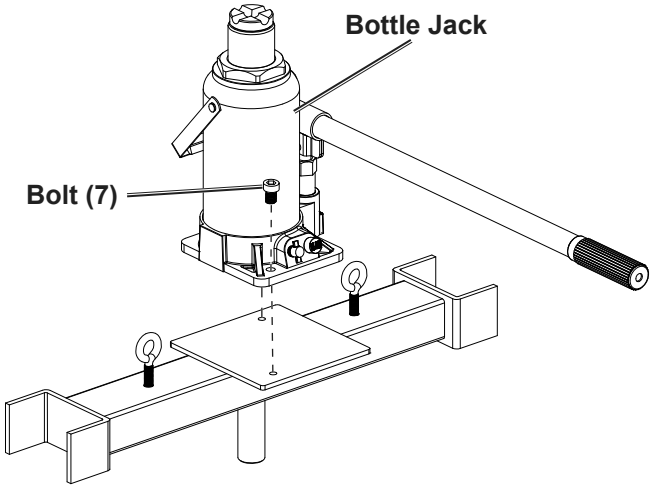
10. Slide Jack Plate over Posts, then lower onto Apron.



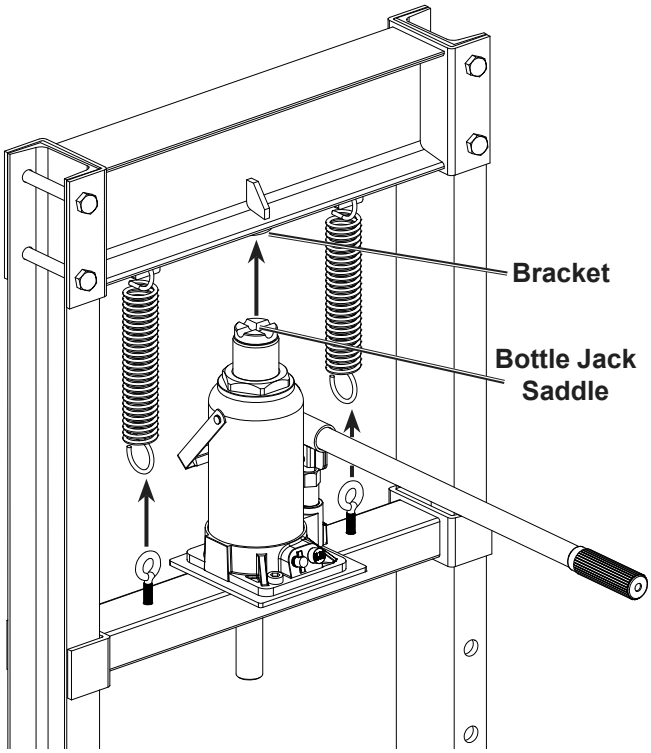
11. Hang the Springs on the Tabs.



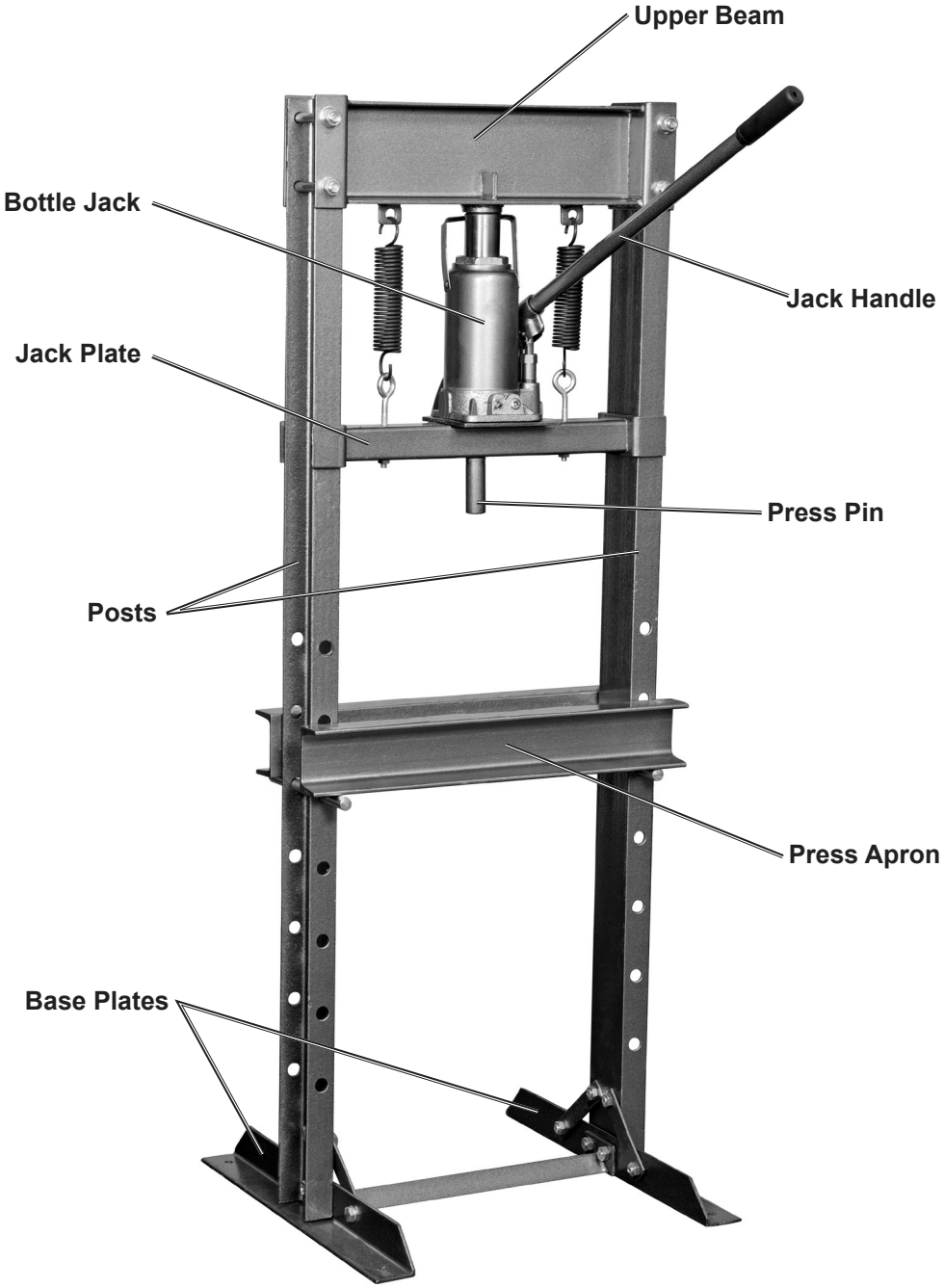
12. **IMPORTANT!** Before first use, check for proper hydraulic oil level in the Jack. Thoroughly test the Jack for proper operation prior to its actual use. If the Jack appears *not* to be working properly, it may be necessary to *bleed* its hydraulic system of excess air. **To bleed Bottle Jack:**
    a. Remove the Oil Filler Plug. Insert slot on lower portion of Jack Handle over Valve Release Screw. Turn Handle counterclockwise to open the Valve Release Screw.
    b. Insert the Handle into the Plunger/Fulcrum Assembly. Apply pressure to the Saddle, and pump the Handle quickly several times.
    c. Check the Oil Fill Hole and, if necessary, top off the Oil Fill Hole with hydraulic oil.
    d. Replace the Oil Filler Plug.
    e. Place slot on the Jack Handle over Valve Release Screw. Turn Handle clockwise to close Valve Release Screw.
    f. Test the Jack several times before putting into use. If, after purging, the Jack still does not appear to be working properly, do not use the Jack until it has been repaired by a qualified service technician.
    g. When finished, make sure Jack is fully collapsed.
13. Place the Bottle Jack on the center of the Jack Plate, align it with two mounting holes in the Jack Plate and secure with two Bolts (7).



14. With assistance, slide Jack Plate up the Posts so Bottle Jack Saddle fits in the center Bracket.
15. Hook the Springs into the Eye Bolts.



Components and Controls



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.

General Operating Instructions

1. Adjust Press Apron to highest position possible for workpiece to be as close as possible to the Press PIn.
2. Place Arbor Plate(s) on Press Apron to support the stationary part of the workpiece.

WARNING! TO PREVENT SERIOUS INJURY:
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.

3. Place the item to press on the Arbor Plate(s).

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

4. Insert slot on Jack Handle over Valve Release Screw. Turn Handle clockwise to close Valve Release Screw.
5. Insert Jack Handle into Fulcrum and pump Jack Handle to lower Jack Plate until Press Pin contacts workpiece. Continue to pump Jack Handle to press work piece in place.
6. After task is completed, insert slot on Jack Handle over Valve Release Screw. Turn Handle counterclockwise *SLOWLY* to open Valve Release Screw, allowing Jack Plate to rise.

WARNING! TO PREVENT SERIOUS INJURY:
During the release process the Jack may rise quickly. Stay clear.

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.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE,** inspect the general condition of the Shop Press and Bottle Jack. Check for:
   - loose hardware
   - cracked, bent or broken parts
   - loose or missing parts
   - misalignment or binding of moving parts
   - any other condition that may affect its safe operation.
2. **BEFORE EACH USE,** test the Jack for proper operation. If the Bottle Jack appears not to be working properly, follow instructions in *Bleeding the Bottle Jack* on page .
3. **AFTER USE,** wipe external surfaces of the tool with clean cloth.

Changing Hydraulic Oil

Change the hydraulic oil at least once every three years. To change the hydraulic oil:

1. With Jack fully lowered, unhook Springs from Eye Bolts, remove two bolts securing Jack to Jack Plate, then remove Jack from Jack Plate.
2. Remove the Oil Filler Plug.
3. Tip Bottle Jack to allow old hydraulic oil to drain out of the unit completely, and dispose of old hydraulic oil in accordance with local regulations.
4. Completely fill the unit with a high quality hydraulic oil (sold separately) until oil just begins to run out of the Oil Fill Hole.
5. Bleed Bottle Jack:
   a. Insert slot on Jack Handle over Valve Release Screw. Turn Handle counterclockwise to open the Valve Release Screw.
   b. Insert the Handle into the Plunger/Fulcrum Assembly. Apply pressure to the Saddle, and pump the Handle quickly several times.
   c. Check the Oil Fill Hole and, if necessary, top off the Oil Fill Hole with hydraulic oil.
   d. Replace the Oil Filler Plug.
   e. Place Jack Handle slot over Valve Release Screw. Turn Handle clockwise to close Valve Release Screw.
   f. Test the Jack several times before putting into use. If, after purging, the Jack still does not appear to be working properly, do not use the Jack until it has been repaired by a qualified service technician.
   g. When finished, make sure Jack is fully collapsed.
6. Clean with a clean cloth using a detergent or mild solvent.
7. Reinstall Bottle Jack on Shop Press.

Troubleshooting

⚠WARNING **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 jack is repaired: Test it carefully without a load by raising it and lowering it fully, checking for proper operation, BEFORE RETURNING THE JACK TO OPERATION.**

DO NOT USE A DAMAGED OR MALFUNCTIONING JACK!

POSSIBLE SYMPTOMS						PROBABLE SOLUTION (Make certain that the jack is not supporting a load while attempting a solution.)
Jack will not function at its weight capacity	Saddle lowers under load	Pump stroke feels spongy	Saddle will not lift all the way	Handle moves up when jack is under load	Oil leaking from filler plug	
X	X					Check that Release Valve is closed fully.
X	X			X		Valves may be blocked and may not close fully. To flush the valves: 1. Lower the Saddle and securely close the Release Valve. 2. Manually lift the saddle several inches. 3. Open the release valve and force the saddle down as quickly as possible.
X		X	X			Jack may be low on oil. Check the oil level and refill if needed.
						Jack may require bleeding - see instructions on page 7.
					X	Unit may have too much hydraulic oil inside, check fluid level and adjust if needed.

Parts List and Assembly Diagram

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS DOCUMENT AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Record Product's Date Code Here:_____

Note: **If product has no date code, record month and year of purchase instead.**

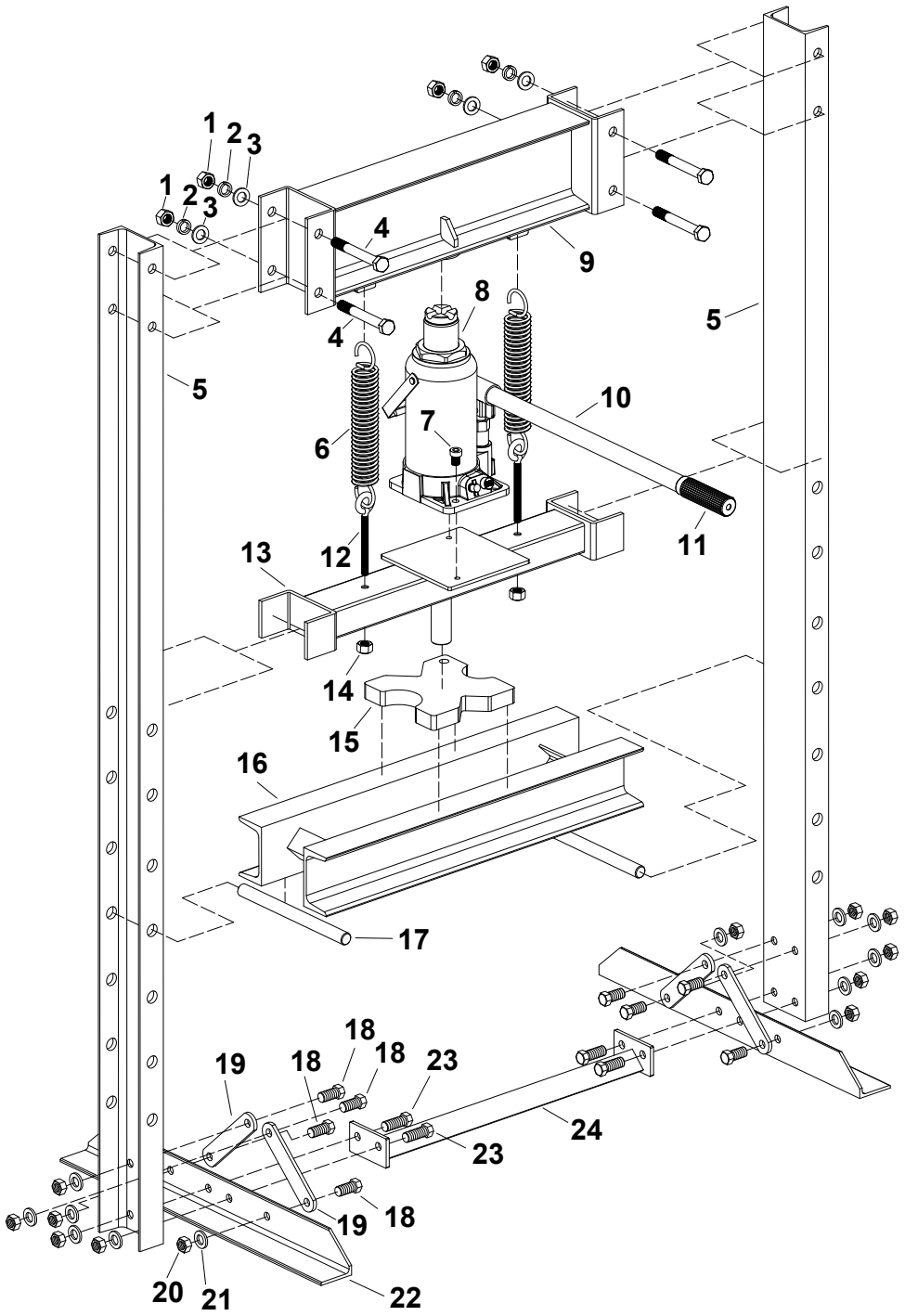
Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Specify UPC 193175591739 when ordering parts.

Parts List

Part	Description	Qty
1	Nut M12	4
2	Spring Washer M12	4
3	Washer M12	4
4	Bolt M12x110	4
5	Post	2
6	Spring	2
7	Bolt M8x16	2
8	Bottle Jack	1
9	Upper Beam	1
10	Jack Handle	1
11	Handle Sleeve	1
12	Eye Bolt M8	2

Part	Description	Qty
13	Jack Plate	1
14	Nut M8	2
15	Arbor Plate	2
16	Press Apron	1
17	Support Pin	2
18	Bolt M10x20	8
19	Base Support	4
20	Nut M10	12
21	Washer M10	12
22	Base Plate	2
23	Bolt M10x25	4
24	Support Plate	1

Assembly Diagram



Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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