

**Central
Hydraulics®**

**20 TON SHOP PRESS
WITH OIL FILTER CRUSHER**

Model 65330

SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>



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

Copyright© 2008 by Harbor Freight Tools®. All rights reserved. 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.

For technical questions or replacement parts, please call 1-800-444-3353.

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual (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.

SAFETY ALERT SYMBOL AND SIGNAL WORDS

In this manual, on the labeling, and all other information provided with this product:



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

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.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

IMPORTANT SAFETY INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF INJURY TO PERSONS

WARNING – When using shop equipment, basic precautions should always be followed, including the following:

Work area

- a. Do not install this Shop Press on any asphalt or wood surface. Make sure the Press is firmly secured to a dry, oil/grease free, flat, level, concrete surface capable of supporting the weight of the Press, the workpiece being pressed, and any additional tools and equipment. Do not install the Press on expansion seams or on cracked, defective concrete.
- b. Keep the work area clean and well lighted. Cluttered benches and dark areas increase the risks of injury to persons.
- c. Do not operate the Shop Press in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. The Press is able to create sparks resulting in the ignition of the dust or fumes.

- d. Keep bystanders, children, and visitors away while operating the Shop Press. Distractions are able to result in the loss of control of the tool.
- g. Never leave a compressed workpiece unattended. Whenever a workpiece is compressed, there is a very large amount of force that has been stored in the workpiece which must be controlled until the Press Head or Filter Crushing Head is relaxed.

Personal safety

- a. Never exceed the recommended **110 to 120 PSI** working pressure and **20 ton** pressing capacity for this Shop Press. This Press will do the job better and safer at the PSI and pressing capacity for which it was designed.
- b. Make sure to read and understand all instructions and safety precautions as outlined in the manufacturer's service manual for the workpiece you are pressing. Always use the manufacturer's recommended pressing points, minimum/maximum pressing force required, etc., for the workpiece you are pressing.
- c. Prior to using the Shop Press, make sure tool trays, stands, and all other tools and equipment are removed from the Working Bed.
- d. Always keep your hands and fingers safety away from the Press Head and Filter Crushing Head during the pressing process.
- e. Never attempt to remove a workpiece stuck in the moving parts of the Shop Press while it is connected to its air supply source.
- f. Once contact between the Press Head or Filter Crushing Head and the workpiece has been made, step away as far as possible and continue to slowly apply pressure until the procedure is completed.
- h. Always release a load from the Shop Press, and disconnect the unit from its air supply source before performing any services or maintenance on the unit.
- i. Stay alert. Watch what you are doing and use common sense when operating the Shop Press. Do not use the Press while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the Press increases the risk of injury to persons.
- j. 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.
- k. Avoid unintentional starting. Be sure the Lever on the Valve Body of the Air/Hydraulic Jack is off before connecting to the air supply.
- l. Remove adjusting keys and wrenches before connecting to the air supply. A wrench or a key that is left attached to a moving part of the Shop Press increases the risk of personal injury.
- m. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better

control of the tool in unexpected situations.

- n.  Use safety equipment. A dust mask, non-skid safety shoes and a hard hat must be used for the applicable conditions. Wear heavy-duty work gloves during use.

- o.  Always wear eye protection. Wear ANSI-approved safety goggles.

- p.  Always wear hearing protection when using the Shop Press. Prolonged exposure to high intensity noise is able to cause hearing loss.

- q. **WARNING!** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). *California Health & Safety Code 25249.5, et seq.*

Tool use and care

- a. **WARNING!** If you detect anything that may indicate imminent structural failure to the Shop Press, discontinue using the Press immediately. Disconnect the Press from its air supply source, and have the Press repaired before further use.
- b. Avoid off-center loads. If the Ram seems unusually hard to press, immediately stop the operation. Disconnect the Shop Press from its air supply source, and adjust the workpiece to eliminate or diminish an off-center load. Do not operate the Press if the workpiece tilts or binds during the down movement of the Ram.

- c. Use clamps or another practical way to secure and support the workpiece to Arbor Plates and Press Apron. Holding the work by hand or against the body is unstable and is able to lead to loss of control.

- d. Do not force the Shop Press. Use the correct equipment for the application. The correct equipment will do the job better and safer at the rate for which the equipment is designed.

- e. Do not use the Shop Press if the Lever on the Valve Body of the Air/Hydraulic Jack does not turn the Press on or off. Any equipment that cannot be controlled is dangerous and must be repaired.

- f. Disconnect the Shop Press from the air source before making any adjustments, changing accessories, or storing the Press. Such preventive safety measures reduce the risk of starting the Press unintentionally. Turn off and detach the air supply, safely discharge any residual air pressure, and release the Lever on the Valve Body of the Air/Hydraulic Jack before leaving the work area.

- g. Keep the Air/Hydraulic Jack properly filled with hydraulic oil. For instructions, refer to the Air/Hydraulic Jack owner's manual (included).

- h. Keep the Shop Press out of reach of children and other untrained persons. A Shop Press is dangerous in the hands of untrained users.

- i. Maintain the Shop Press with care. A properly maintained Shop Press reduces the risk of binding and is easier to control.

- j. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that affects the Shop Press' operation. If damaged, have the Press serviced before using. Many accidents are caused by poorly maintained equipment. There is a risk of bursting if the equipment is damaged.
- k. Use only accessories that are identified by the manufacturer for the specific Shop Press model. Use of an accessory not intended for use with the specific model increases the risk of injury to persons.
- l. Only use with accessories rated to handle the forces exerted by this Shop Press during operation. Other accessories not designed for the forces generated may break and forcefully launch pieces.
- m. Attach all accessories properly to the Shop Press before connecting the air supply. A loose accessory may detach or break during operation.
- n. Install an in-line shutoff valve to allow immediate control over the air supply in an emergency, even if a hose is ruptured.

Service

- a. Equipment service must be performed only by qualified repair personnel.
- b. When servicing the Shop Press, use only identical replacement parts. Use only authorized parts.
- c. Use only the lubricants supplied with the Shop Press or specified by the manufacturer.

Air source

- a.  Never connect to an air source that is capable of exceeding **120 PSI**. Over pressurizing the tool may cause bursting, abnormal operation, breakage of the tool or serious injury to persons. Use only clean, dry, regulated compressed air at the rated pressure or within the rated pressure range as marked on the tool. Always verify prior to using the tool that the air source has been adjusted to the rated air pressure or within the rated air-pressure range.
- b. Never use oxygen, carbon dioxide, combustible gases or any bottled gas as an air source for the tool. Such gases are capable of explosion and serious injury to persons.

SYMBOL DEFINITIONS

Symbol	Property or statement
n_o	No-load speed
.../min	Revolutions or reciprocation per minute
PSI	Pounds per square inch of pressure
ft-lb	Foot-pounds of torque
BPM	Blows per minute
CFM	Cubic Feet per Minute flow
SCFM	Cubic Feet per Minute flow at standard conditions
NPT	National pipe thread, tapered
NPS	National pipe thread, straight

Chart continued in next column.

Symbol	Property or statement
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved eye protection.
	WARNING marking concerning Risk of Hearing Loss. Wear hearing protection.
	WARNING marking concerning Risk of Respiratory Injury. Wear NIOSH-approved dust mask/respirator.
	WARNING marking concerning Risk of Explosion.



SAVE THESE INSTRUCTIONS

PRODUCT SPECIFICATIONS

Maximum Pressing Capacity	20 Tons (40,000 Pounds)
Air Pressure Range*	110 PSI to 120 Maximum PSI
Operating Methods	Air Operated and Manually Operated
Air Inlet Size	1/4" x 18 NPT
Ram Stroke	6-1/2"
Crusher Diameter	5-1/8" O.D.
Oil Filter Capacity	Up to 6" H x 4" Diameter
Press Head Diameter	4-1/2"
Distance Between Uprights	16-3/4"
Arbor Plate Dimensions	2-1/16" L x 7-1/4" W x 3/4" Thick
Mounting Hole Diameter	1/2" (Qty. 4)

*Exceeding maximum air pressure limit may cause damage/injury.

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown throughout the manual as soon as possible. **Note:** Two or more able bodied people will be needed to set up this heavy piece of equipment.

ASSEMBLY INSTRUCTIONS

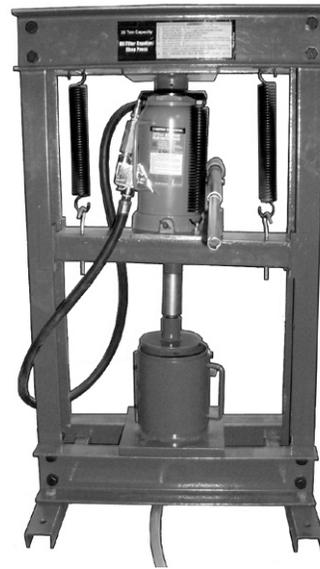


Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

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

1. Attach the two Legs (16) to the Working Bed (15) using four Bolts (17), four Flat Washers (18), four Spring Washers (19), and four Nuts (20). **(See Assy. Diagram.)**
2. Attach the two Uprights (12) to the Working Bed (15) using four Bolts (4), four Flat Washers (3), four Spring Washers (2) and four Nuts (1). *Hand tighten only.* **(See Assy. Diagram.)**
3. Attach the two Screw Hooks (6) to the Frame (7) using two Flat Washers (8) and two Nuts (10). Leave the Nuts untightened to provide easy Springs attachment. **(See Assy. Diagram.)**
4. Slide the Frame (7) down between the two Uprights (12) onto the Working Bed (15). **(See Assy. Diagram.)**
5. Attach the Top Cross Beam (22) to the two Uprights (12) using four Bolts (4), four Flat Washers (3), four Spring Washers (2), and four Nuts (1). **(See Assy. Diagram.)**
6. Attach one end of the Springs (5) to the mounting holes on the Top Cross Beam (22) and the other end of the Springs to the Screw Hooks (6) on the Frame (7). **(See Assy. Diagram.)**

7. With the help of another person, elevate and position the Air/Hydraulic Jack (21) to Top Cross Beam (22). Tighten Set Screw (25) against Ram top of the Jack. Raise Frame (7) and tighten Nut (10) to secure the Jack (21). **(See Assy. Diagram.)**
8. Tighten all Nuts and Bolts.
9. **If you will use the unit as a common Press:** Place the Press Plates (26) on the Working Bed (15). Then screw the Press Head (9) under the Frame (7). **(See Assy. Diagram.)**
10. **If you will use the unit as a filter crusher:** Screw the Filter Crushing Head (13) and Connecting Rod (11) under the Frame (7). Attach the Drain Hose (24) to the bottom outlet of the Crushing Housing (14) with one Clamp (23). Then place the Crusher attachment on the Working Bed (15). NOTE: Make sure the Drain Hose empties into a proper oil container. **(See Assy. Diagram.)**
11. Use a proper lifting device to move the assembled Shop Press to the desired work location.
12. Use the four 1/2" diameter mounting holes in the Legs (16) as a template for drilling four 1/2" diameter holes in the concrete floor surface. Temporarily remove the Shop Press from its work location. Then drill the four 1/2" mounting holes in the concrete. **(See Assy. Diagram.)**
13. Set the Shop Press back into position, and firmly secure the Shop Press to the concrete floor surface using appropriate concrete anchors (not included).
14. The Shop Press is now ready to use.

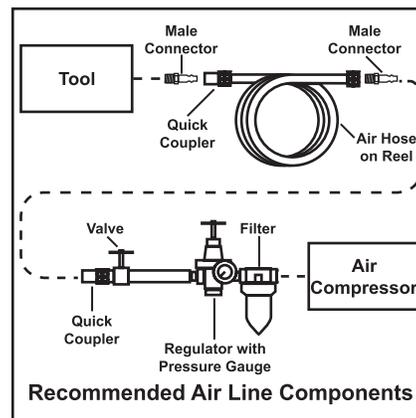


Air Supply

⚠ WARNING TO PREVENT EXPLOSION:



Use only clean, dry, regulated, compressed air to power this tool. Do not use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.



1. Incorporate shut-off valve, regulator with pressure gauge, and filter for best service, as shown in the previ-

ous diagram. **An in-line shutoff valve is an important safety device because it controls the air supply should the air hose rupture.**

Note: If an automatic oiler system is not used, add a few drops of Pneumatic Tool Oil to the airline connection before operation. Add a few more drops after each hour of continual use.

2. Attach an air hose to the compressor's air outlet. Connect the air hose to the air inlet of the tool. Other components, such as a connector and quick coupler, will make operation more efficient, but are not required.

 WARNING! TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Do not install a female quick coupler on the tool. Such a coupler contains an air valve that will allow the air tool to retain pressure and operate accidentally after the air supply is disconnected.

Note: Air flow, and therefore tool performance, can be hindered by under-sized air supply components.

3. The air hose must be long enough to reach the work area with enough extra length to allow free movement while working.
4. Make sure the Lever on the Valve Body of the Air/Hydraulic Jack is in the off position. **(Refer to the Air/Hydraulic Jack owner's manual.)**
5. Close the in-line safety valve between the compressor and the Shop Press.
6. Turn on the air compressor according to the manufacturer's directions and

allow it to build up pressure until it cycles off.

7. Adjust the air compressor's output regulator so that the air output is enough to properly power the tool, but the output will not exceed the tool's maximum air pressure (120 PSI) at any time. Adjust the pressure gradually, while checking the air output gauge to set the right pressure range.
8. Inspect the air connections for leaks. Repair any leaks found.
9. If the Shop Press will not be used at this time, release the Lever on the Valve Body of the Air/Hydraulic Jack to prevent accidental operation.

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 Shop Press.

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

1. If the Shop Press requires more force to accomplish the task, verify that the unit receives sufficient, unobstructed airflow (CFM) and increase the pressure (PSI) output of the regulator up to the maximum air pressure rating (120 PSI) of this Press.
CAUTION! Do not exceed the maximum air pressure rating. If the tool still does not have sufficient force at maximum pressure and sufficient airflow, then a larger Shop Press may be required.
2. **If you will use the unit as a filter crusher:**
 - a. Place the Crushing Housing (14) in the middle of the Working Bed (15). **(See Assy. Diagram.)**
 - b. Screw the Filter Crushing Head (13) firmly onto the Connecting Rod (11). **(See Assy. Diagram.)**
 - c. Close the Release Valve on the Air/Hydraulic Jack. Then insert the end of the Jack Handle into the Handle Bracket of the Jack and pump the Jack Handle up and down. This action will manually lower the Filter Crushing Head (13). **(See Air/Hydraulic Jack Owner's Manual.)**
 - d. Lower the Filter Crushing Head (13), making sure the Crushing Head can be lowered *into* the Crushing Housing (14). **(See Assy. Diagram.)**
 - e. Raise the Crushing Head (13) all the way up by opening the Release Valve on the Air/Hydraulic Jack. Then place the oil filter that is to be crushed into the Crushing Housing (14). **(See Assy. Diagram.)**
 - f. Close the Release Valve on the Air/Hydraulic Jack. Use the Jack Handle of the Air/Hydraulic Jack to *manually* lower the Filter Crushing Head (13) onto the oil filter until the filter is crushed to within 25% of its original height. **(See Air/Hydraulic Jack Owner's Manual.)**
 - g. Open the Release Valve on the Air/Hydraulic Jack. This will allow the Springs (5) to again raise the Crushing Head (13) so you can remove the crushed oil filter. **(See Assy. Diagram and Air/Hydraulic Jack Owner's Manual.)**
 - h. For pneumatic operation, Place the Crushing Housing (14) in the middle of the Working Bed (15) **(See Assy. Diagram.)**
 - i. Screw the Filter Crushing Head (13) firmly onto the Connecting Rod (11). **(See Assy. Diagram.)**
 - j. Close the Release Valve on the Air/Hydraulic Jack. **(See Air/Hydraulic Jack Owner's Manual.)**
 - k. Connect the air supply source to the Air Valve Assembly of the Air/Hydraulic Jack. Then set the compressor's regulator between 110 and 120 PSI.

- l. Close the Release Valve on the Air/Hydraulic Jack. **(See Air/Hydraulic Jack Owner's Manual.)**
 - m. Then squeeze and hold the Lever of the Air/Hydraulic Jack. This action will pneumatically lower the Filter Crushing Head (13). **(See Assy. Diagram and Air/Hydraulic Jack Owner's Manual.)**
 - n. Slowly lower the Filter Crushing Head (13), making sure the Crushing Head can be lowered *into* the Crushing Housing (14). **(See Assy. Diagram.)**
 - o. Raise the Crushing Head (13) all the way up by opening the Release Valve on the Air/Hydraulic Jack. Then place the oil filter that is to be crushed into the Crushing Housing (14). **(See Assy. Diagram and Air/Hydraulic Jack Owner's Manual.)**
 - p. Close the Release Valve on the Air/Hydraulic Jack. **(See Air/Hydraulic Jack Owner's Manual.)**
 - q. Then squeeze and hold the Lever of the Air/Hydraulic Jack to lower the Filter Crushing Head (13). **(See Assy. Diagram and Air/Hydraulic Jack Owner's Manual.)**
 - r. Continue lowering the Filter Crushing Head (13) onto the oil filter until the filter is crushed to within 25% of its original height. **(See Assy. Diagram.)**
 - s. Open the Release Valve on the Air/Hydraulic Jack. This will allow the Springs (5) to again raise the Crushing Head (13) so you can remove the crushed oil filter. **(See Assy. Diagram and Air/Hydraulic Jack Owner's Manual.)**
3. **If you will use the unit as a general Shop Press:**
 - a. To operate the Shop Press as a *general* Press, remove the Crushing Housing (14) and Crushing Head (13) from the unit. If necessary, the Connecting Rod (11) may be removed and the Press Head (9) can be screwed under the Frame (7) directly. Follow previous instructions for the manual and pneumatic operation of the Shop Press. **(See Assy. Diagram.)**
 4. To prevent accidents, turn off the tool, detach the air supply and safely discharge any residual air pressure in the Shop Press.

MAINTENANCE INSTRUCTIONS



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

⚠️ WARNING TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Detach the air supply from the Shop Press, and safely discharge any residual air pressure in the Press before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

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

Note: Note: These procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the manual and air-operated Shop Press.

1. Daily: Before each use, inspect the general condition of the Shop Press and its accessories. Check for bent, cracked, or broken parts, damaged hoses, and any other condition that may affect its safe operation.
2. Daily: Every day, perform maintenance on the air supply components (air compressor, regulator, oiler, filter, hoses, etc.) according to the component manufacturers' instructions.

The lubricator's oil level needs to be maintained and the moisture filter must be regularly drained. Performing routine maintenance on the air supply will allow the Shop Press to operate more safely and will also reduce wear on the Press.

3. Periodically, or when the Air/Hydraulic Jack does not work, or does not operate at its optimum capability: Check the hydraulic oil level in the Jack assembly as well as purge the system. Refer to the Jack assembly *owner's manual* (included) for filling (topping off) the Jack assembly.
4. To clean: Use a clean, damp cloth and mild detergent or solvent to clean the external parts of the Shop Press. Do not immerse any part in liquid.

⚠️ CAUTION

5. All maintenance, service, and repairs not mentioned in this manual must only be performed by a qualified service technician.

TROUBLESHOOTING

Problem	Possible Causes	Possible Solutions
Shop Press does not work, or does not operate at its optimum capability.	<ol style="list-style-type: none"> 1. Pressure Release Valve open. 2. Air compressor's Regulator not set at between 110 PSI and maximum 120 PSI. 3. Loose and/or damaged Hose connections. 4. Hydraulic oil level low. 5. Trapped air in the system 	<ol style="list-style-type: none"> 1. Close Valve. 2. Set Regulator between 110 PSI and 120 maximum PSI. 3. Inspect all Hose connections. 4. Refill (top off) Pump Assembly with Hydraulic oil. 5. Purge air (see Jack's manual).
Damaged workpiece.	<ol style="list-style-type: none"> 1. Workpiece not evenly centered on Arbor Plates. 2. Workpiece not secured to Arbor Plates and Press Apron. 	<ol style="list-style-type: none"> 1. Place the workpiece evenly centered on the Arbor Plates. 2. Use clamps to secure workpiece.

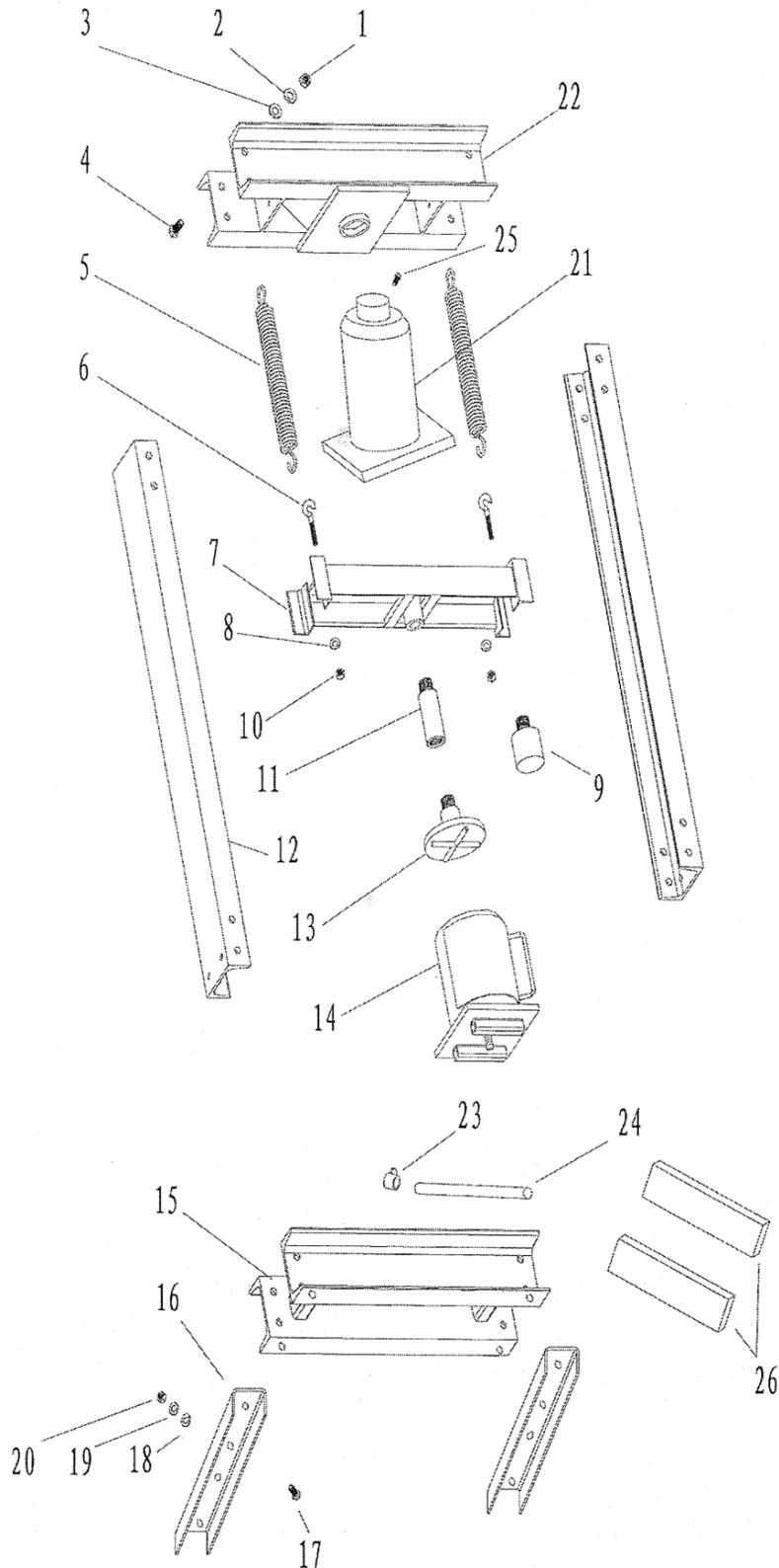


Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect air supply before service.

PARTS LIST

Part #	Description	Qty.	Part #	Description	Qty.
1	Nut	16	14	Crushing Housing	1
2	Spring Washer	16	15	Working Bed	1
3	Flat Washer	16	16	Leg	2
4	Bolt	16	17	Bolt	4
5	Spring	2	18	Flat Washer	4
6	Screw Hook	2	19	Spring Washer	4
7	Frame	1	20	Nut	4
8	Flat Washer	2	21	Air/Hydraulic Jack	1
9	Press Head	1	22	Top Cross Beam	1
10	Nut	2	23	Clamp	1
11	Connecting Rod	1	24	Drain Hose	1
12	Upright	2	25	Set Screw	3
13	Filter Crushing Head	1	26	Press Plate	2

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.

3491 Mission Oaks Blvd. • PO Box 6009 • Camarillo, CA 93011 • (800) 444-3353

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL 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 Serial Number Here: _____

Note: If product has no serial number, 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.