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 serial number 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.

PITTSBURGH® AUTOMOTIVE

69814

20 Gallon Portable Oil Lift Drain



Visit our website at: http://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 1-888-866-5797 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.**

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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.
⚠ 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 INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

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

General

To reduce the risks of electric shock, fire, and injury to persons, read all the instructions before using the tool.

Work Area

1. **Keep the work area clean and well lighted.** Cluttered benches and dark areas increase the risks of electric shock, fire, and injury to persons.
2. **Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** The tool is able to create sparks resulting in the ignition of the dust or fumes.
3. ***Keep bystanders, children, and visitors away while operating the tool.*** Distractions are able to result in the 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. **Avoid unintentional starting. Be sure the switch is off before connecting to the air supply.** Do not carry the tool with your finger on the switch or connect the tool to the air supply with the switch on.
4. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
5.  **Always wear eye protection.** Wear ANSI-approved safety goggles.

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. **Disconnect the tool from the air source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool unintentionally. Turn off and detach the air supply, safely discharge any residual air pressure, and release the throttle and/or turn the switch to its off position before leaving the work area.
3. ***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.
4. **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.
5. **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.**

Air Source

1.  **Never connect to an air source that is capable of exceeding 200 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.
2. ***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.

 **SAVE THESE INSTRUCTIONS.**

Symbols and Specific Safety Instructions

Symbol Definitions

Symbol	Property or statement
PSI	Pounds per square inch of pressure
CFM	Cubic Feet per Minute flow
SCFM	Cubic Feet per Minute flow at standard conditions
NPT	National pipe thread, tapered

Symbol	Property or statement
NPS	National pipe thread, straight
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved eye protection.
	WARNING marking concerning Risk of Explosion.

Specific Safety Instructions

1. Study, understand, and follow all instructions before operating the device.
2. Do not exceed air pressure rating.
3. Do not use without an air regulator or relief valve.
4. Failure to heed and understand these instructions and markings may result in personal injury and/or property damage.
5. Keep handler closed when moving, to prevent spillage.
6. Do not climb or stand on handler.
7. No alterations shall be made to this product.
8. Use as intended only. Do not use for any other liquid.
9. Vehicle must be safely supported by a proper vehicle lift before service.
10. Use on flat, hard, level surface only.
11. Do not use near open flame or heat sources. Do not smoke during use.
12. Prior to using the Drain, read and understand all warnings, safety precautions, and instructions as outlined in the vehicle manufacturer's and the support device's instruction manuals.
13. Do not use the Drain with the vehicle's engine running.
14. Keep bystanders away during use.
15. Avoid burns. Allow the engine oil to completely cool before draining the oil into the Drain.
16. Do not leave unattended when operating or evacuating oil.
17. Remove the Drain before lowering the vehicle.
18. Recycle used oil according to regulations.
19. Install an in-line shutoff valve to allow immediate control over the air supply in an emergency, even if a hose is ruptured.
20. Wear ANSI-approved eye protection and heavy-duty work gloves during use.
21. If used oil does not evacuate the Tank upon pressurization, close the Ball Valve fully with the handle in the horizontal position. If this does not correct the problem, remove the unit from service immediately and contact a qualified service technician for repair.
22. 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.
23. Obey the manual for the air compressor used to power this tool.
24. Attach all accessories properly to the tool before connecting the air supply. A loose accessory may detach or break during operation.
25. The warnings and precautions 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.

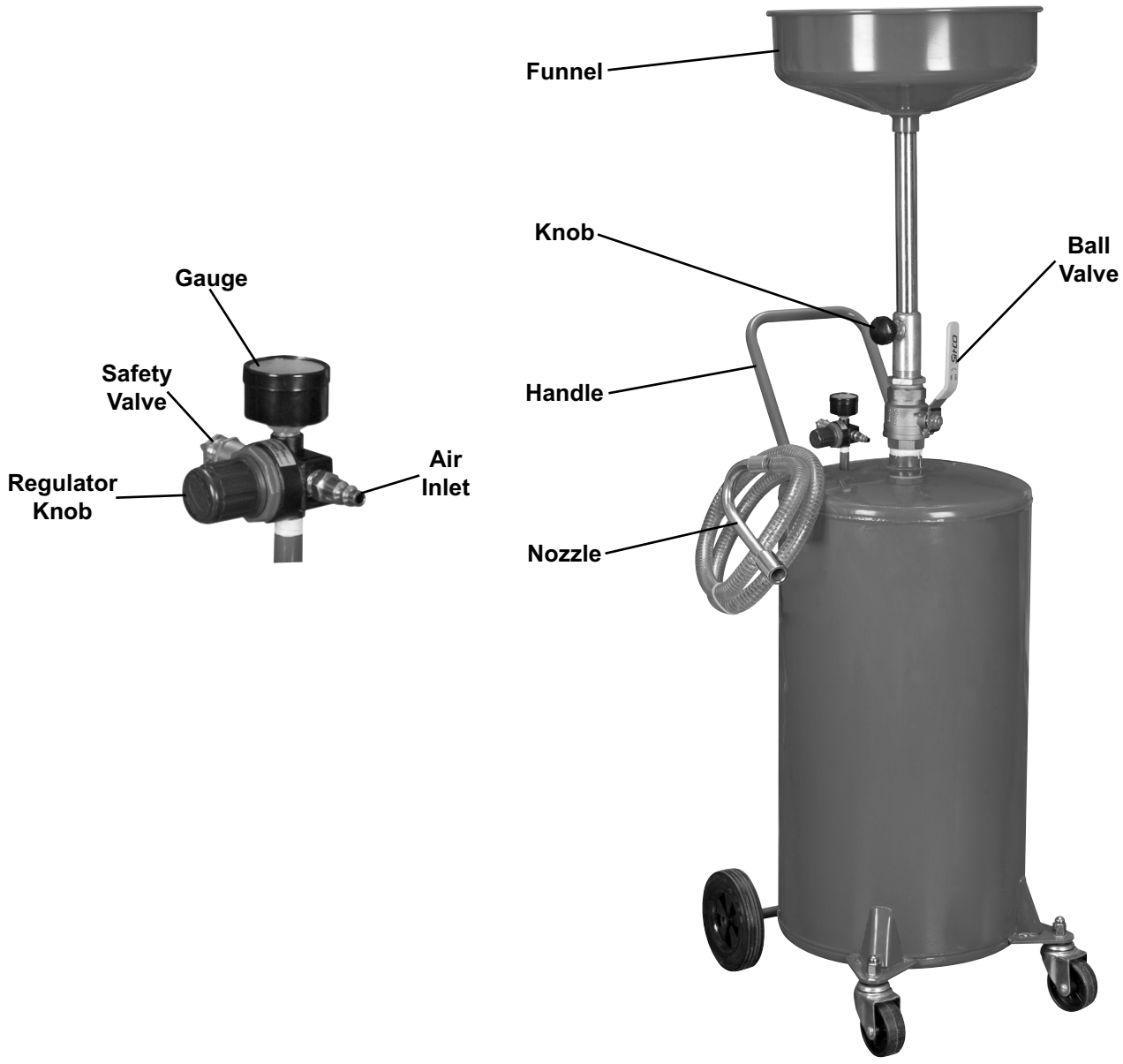
SAVE THESE INSTRUCTIONS.

PITTSBURGH® AUTOMOTIVE

Specifications

Capacity	20 Gallons
Working Air Pressure	10 PSI
Air Inlet	1/4 IN. - 18 NPT

Components and Controls



Initial Tool Set Up/Assembly

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.

Note: This air tool may be shipped with a protective plug covering the air inlet. Remove this plug before set up.

Assembly

1. Assemble the Drain on flat, hard level surface.
2. Slide one Wheel (21) onto each end of the axle of the Tank (15). Attach Wheels using Washers (22) and Retaining Rings (23).
3. If Casters are not already attached to Tank, fasten one Caster (20) to each bracket on the base of the Tank. Slide on Washer (19), and then use Acorn Nut (18) to attach it in place.
4. Insert Handle (10) into slot on the Tank. Fasten in place using Screws (12).
5. Thread Ball Valve (7) into top of Tank.
6. Thread Connector (5) into top of Ball Valve (7) and thread Sleeve (3) into Connector.
7. Thread Funnel (1) onto Drain Tube (2) until fastened securely.
8. Insert Drain Tube, with Funnel fastened to other end, into Sleeve. Adjust to required height and lock Drain Tube in place using Knob (4).

Air Supply

⚠WARNING

TO PREVENT SERIOUS INJURY FROM 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 a filter, regulator with pressure gauge, oiler, in-line shutoff valve, and quick coupler for best service, as shown on Figure A on page 7 and Figure B on page 8. **An in-line shutoff ball valve is an important safety device because it controls the air supply even if the air hose is ruptured. The shutoff valve should be a ball valve because it can be closed quickly.**

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.

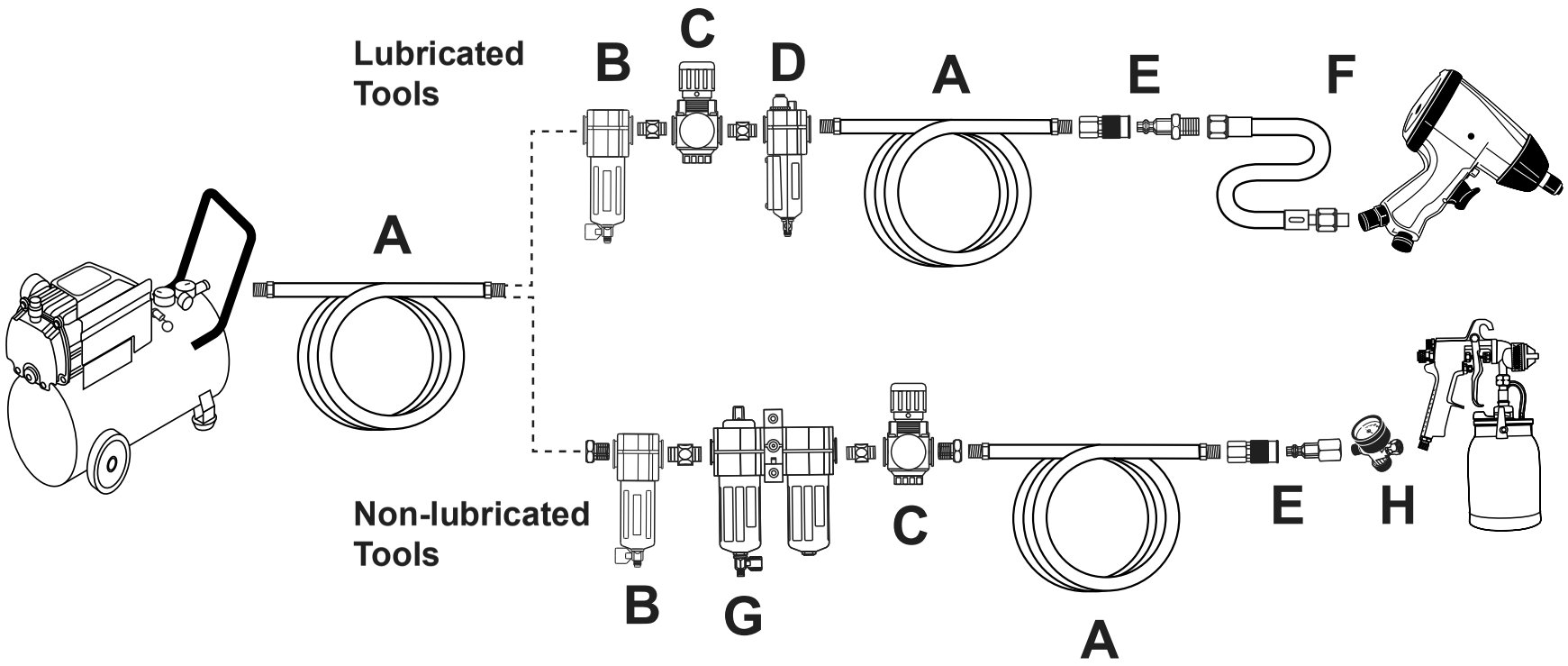
2. Attach an air hose to the compressor's air outlet. Connect the air hose to the air inlet of the tool. Other components, such as a coupler plug and quick coupler, will make operation more efficient, but are not required.

Note: Air flow, and therefore tool performance, can be hindered by undersized air supply components. The air hose must be long enough to reach the work area with enough extra length to allow free movement while working.

3. Close the in-line shutoff valve between the compressor and the tool.
4. Turn on the air compressor according to the manufacturer's directions and allow it to build up pressure until it cycles off.
5. 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 at any time. Adjust the pressure gradually, while checking the air output gauge to set the right pressure range.
6. Inspect the air connections for leaks. Repair any leaks found.
7. If the tool will not be used at this time, turn off and detach the air supply.

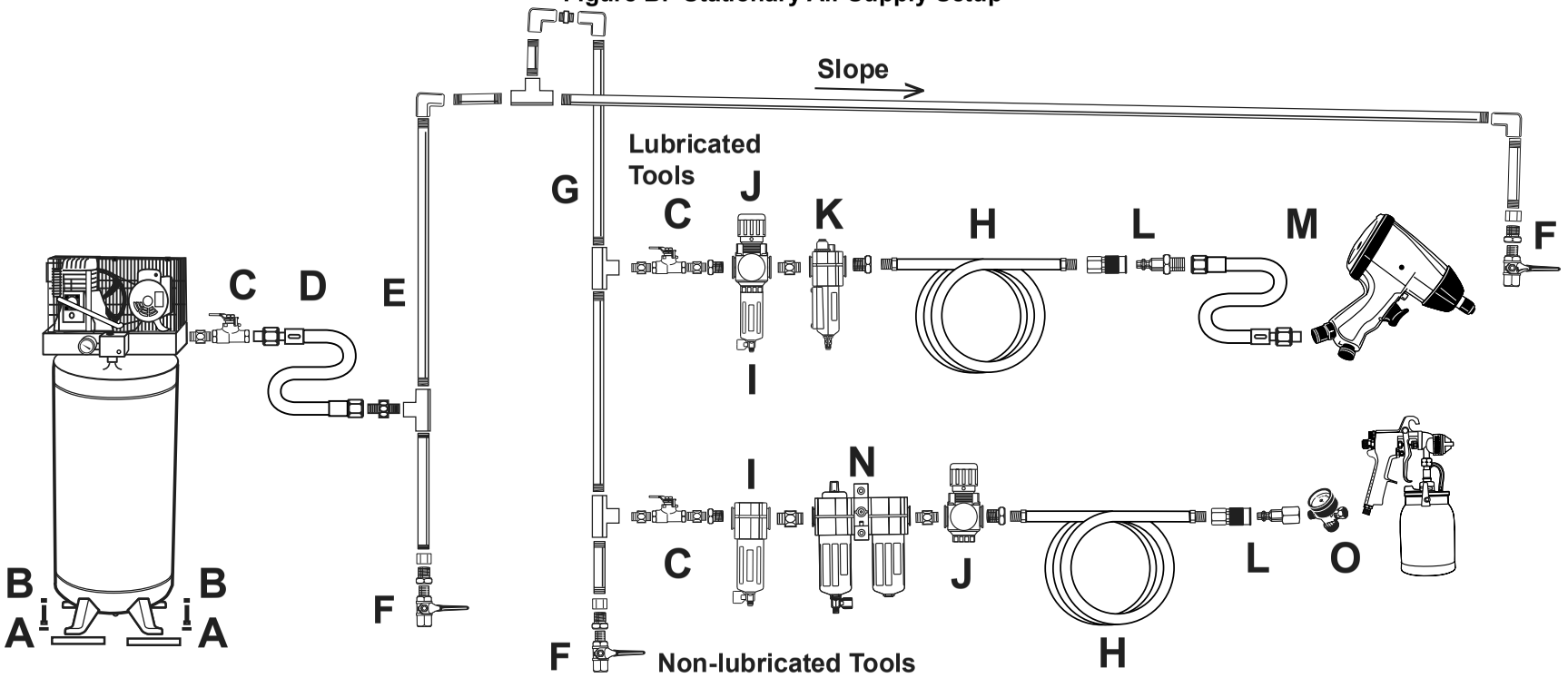
Note: Residual air pressure should not be present after the tool is disconnected from the air supply. However, it is a good safety measure to attempt to discharge the tool in a safe fashion after disconnecting to ensure that the tool is disconnected and not powered.

Figure A: Portable Air Supply Setup



	Description	Function
A	Air Hose	Connects air to tool
B	Filter	Prevents dirt and condensation from damaging tool or workpiece
C	Regulator	Adjusts air pressure to tool
D	Lubricator (optional)	For air tool lubrication
E	Coupler and Plug	Provides quick connection and release
F	Leader Hose (optional)	Increases coupler life
G	Air Cleaner / Dryer (optional)	Prevents water vapor from damaging workpiece
H	Air Adjusting Valve (optional)	For fine tuning airflow at tool

Figure B: Stationary Air Supply Setup



	Description	Function
A	Vibration Pads	For noise and vibration reduction
B	Anchor Bolts	Secures air compressor in place
C	Ball Valve	Isolates sections of system for maintenance
D	Isolation Hose	For vibration reduction
E	Main Air Line - 3/4″ minimum recommended	Distributes air to branch lines
F	Ball Valve	To drain moisture from system
G	Branch Air Line -1/2″ minimum recommended	Brings air to point of use
H	Air Hose	Connects air to tool
I	Filter	Prevents dirt and condensation from damaging tool or workpiece
J	Regulator	Adjusts air pressure to tool
K	Lubricator (optional)	For air tool lubrication
L	Coupler and Plug	Provides quick connection and release
M	Leader Hose (optional)	Increases coupler life
N	Air Cleaner / Dryer (optional)	Prevents water vapor from damaging workpiece
O	Air Adjusting Valve (optional)	For fine tuning airflow at tool

For technical questions, please call 1-888-866-5797.

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.

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

Workpiece and Work Area Set Up

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the air hose along a safe route to reach the work area without creating a tripping hazard or exposing the air hose to possible damage. The air hose must be long enough to reach the work area with enough extra length to allow free movement while working.
3. There must not be hazardous objects (such as utility lines or foreign objects) nearby that will present a hazard while working.

General Operating Instructions

Filling Tank With Oil

1. Open the Ball Valve by turning Valve's handle to a vertical position.
2. Loosen Knob and lower Funnel to lowest position.
3. Move the Drain under the raised vehicle, and position the Funnel directly below the oil drain plug.
4. Raise the Funnel until the Funnel is approximately 4″ below the oil drain plug. Then, tighten Knob to hold the Funnel in place.
5. Remove oil pan plug to drain the oil.

Note: Do not fill the Tank beyond its 20-gallon capacity. The hose is clear, so the oil in the tube will indicate the reservoir fill level. When oil level nears the top, drain the oil.

6. Before transporting the Oil Lift, open the Knob and lower the Drain Tube all the way. Then lock Drain Tube in place by turning the Lock Knob.
7. Use the Handle when moving the Oil Lift from one location to another. Only transport Oil Lift along flat, hard, level surfaces.

Pumping Oil From Tank

1. Raise Drain Tube to above Ball Valve. Rotate Ball Valve to horizontal position.
2. Place Nozzle securely in a used oil collection receptacle.
3. **Pull on the Safety Valve briefly before every use to make sure it operates smoothly.** The Safety Valve helps to relieve pressure if the tank is over-pressurized.
4. Connect the compressor's air supply hose to the Air Inlet. Turn on the air compressor, making sure it is set between 7-10 PSI.

WARNING! TO PREVENT SERIOUS INJURY: Do not leave Oil Lift unattended while it is evacuating oil.

5. Close Regulator by pulling out the knob and rotating counterclockwise. Pull Regulator's cap out and slowly turn it in a clockwise direction while observing the Pressure Gauge. **DO NOT EXCEED 10 PSI.**
6. The oil will be pushed from the Tank out the Nozzle.
7. Once oil is no longer being discharged from the Nozzle, turn off air compressor. Disconnect compressor air supply hose from the Air Inlet.

Note: Oil discharge rate will be affected by the ambient temperature and the viscosity of the oil.

8. Clean external surfaces of the tool with clean, dry cloth. Then store the tool indoors out of children's reach.

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

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn off the tool, detach the air supply, safely discharge any residual air pressure in the tool, and release the throttle and/or turn the switch to its off position 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.

Cleaning, Maintenance, and Lubrication

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

1. **Once a year after discharging contents of the Tank, remove the Drain Plug (24) to drain accumulated sludge.**
   To reattach the Drain Plug (24), wrap three turns of thread seal tape (not included) on the Drain Plug thread and secure in place. Do not overtighten.
2. Keep the outside of the Tank free of oil or grease. Use only a mild soap and damp cloth when cleaning. Do not use flammable or combustible solvents.
3. Before and during each use, inspect the Hose for damage.
4. After use, store in a dry, secure area out of reach of children.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Decreased output.	1. Not enough air pressure and/ or air flow.	1. Check for loose connections and make sure that air supply is providing enough air flow (CFM) at required pressure (PSI) to the tool's air inlet. **Do not exceed maximum air pressure.**
	2. Blockage of hose.	2. Gently blow air from Nozzle into Tube.
	3. Accumulated sludge.	3. After draining the oil, remove Plug and drain out sludge.
Housing heats during use.	1. Incorrect lubrication or not enough lubrication.	1. Lubricate using air tool oil according to directions.
	2. Worn parts.	2. Have qualified technician inspect internal mechanism and replace parts as needed.
Severe air leakage. (Slight air leakage is normal, especially on older tools.)	1. Cross-threaded housing components.	1. Check for incorrect alignment and uneven gaps. If cross-threaded, disassemble and replace damaged parts before use.
	2. Loose housing.	2. Tighten housing assembly. If housing cannot tighten properly, internal parts may be misaligned.
	3. Damaged valve or housing.	3. Replace damaged components.
	4. Dirty, worn or damaged valve.	4. Clean or replace valve assembly.

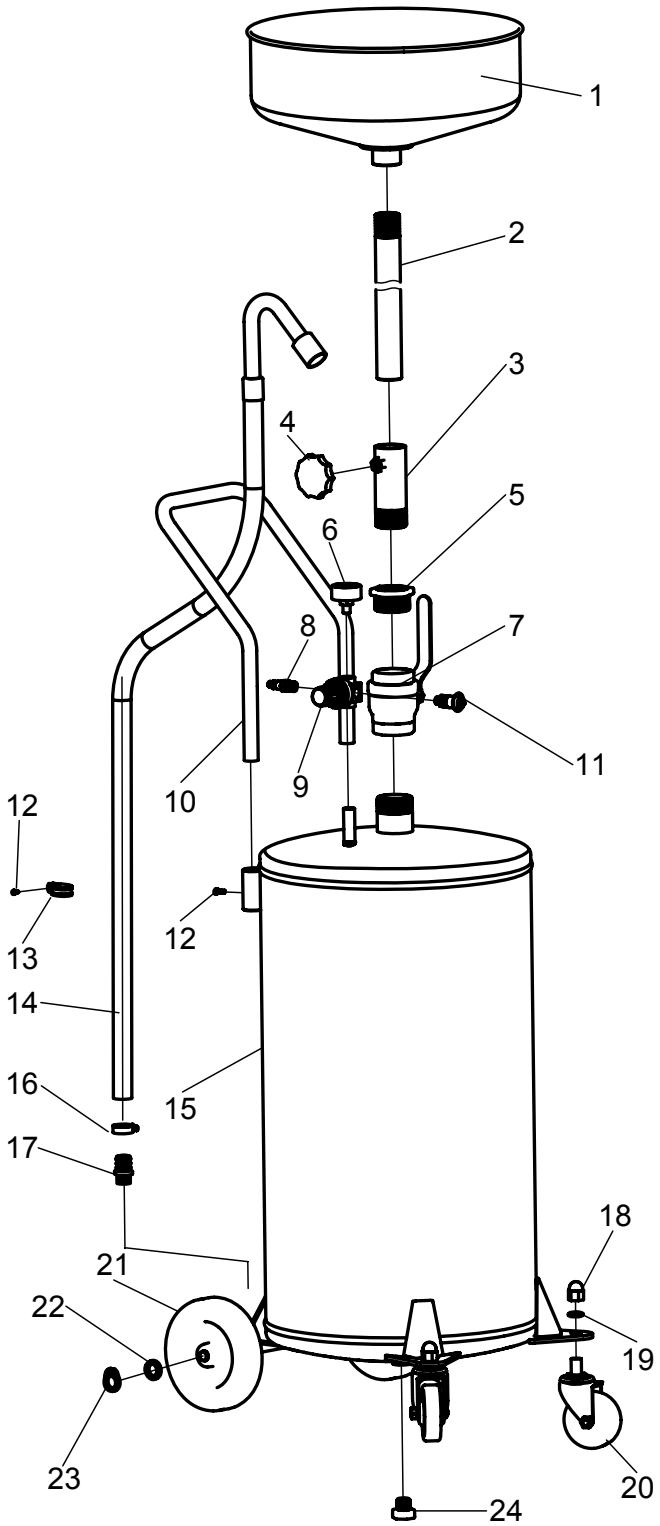
Follow all safety precautions whenever diagnosing or servicing the tool.
Disconnect air supply before service.

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.

Parts List and Diagram

Part	Description	Qty
1	Funnel	1
2	Drain Tube	1
3	Sleeve	1
4	Knob	1
5	Connector	1
6	Pressure Gauge	1
7	Ball Valve	1
8	Tube Connector	1
9	Regulator	1
10	Handle	1
11	Bleeding Valve	1
12	Screw	3
13	Loop Clamp	1
14	Hose/Nozzle Asm.	1
15	Tank	1
16	Loop Clamp	2
17	"Barbed" Fitting	1
18	Acorn Nut	2
19	Washer	2
20	Caster	2
21	Wheel	2
22	Washer	4
23	Retaining Ring	2
24	Drain Plug	1



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. Specify UPC 193175323569 when ordering parts.

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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