

# AIR COMPRESSOR 2 HP - TWIN TANK - 4 GALLON

# Model 95498

## SET UP AND OPERATING INSTRUCTIONS



#### CAUTION! Your Warranty Is Voided If:

 A. You do not put <u>compressor oil</u> in the Compressor's crankcase prior to its first use. Before each use, check the oil level. Never run the Compressor with low or no compressor oil. Running the Compressor with low or no oil will permanently damage the unit.
 B. You <u>drop</u> the Air Compressor.

Always lift the Air Compressor using its Handle.

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.

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For technical questions or replacement parts, please call 1-800-444-3353. Cover revised 08k, 09j

## **PRODUCT SPECIFICATIONS**

Electrical Requirements	120 V~ / 60 Hz / 16 A / 2 HP Motor / 3400 RPM	
Maximum Air Pressure	115 PSI	
Air Flow Capacity	5.8 Cubic Feet Per Minute (CFM) @ 40 PSI	
	4.4 Cubic Feet Per Minute (CFM) @ 90 PSI	
Auto Turn On/Shut Off	Pressure On @ 85 PSI / Pressure Off @ 115 PSI	
Air Tank Capacity	4 Gallons Total	
Air Outlet Size	1/4"-18 NPT Male Threads	
Recommended Oil Type	commended Oil Type SAE 15W-30W Non-Detergent Compressor Oil	

## SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

#### GENERAL SAFETY RULES AND PRECAUTIONS WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury. SAVE THESE INSTRUCTIONS

## WORK AREA

1. Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.



**Do not operate air tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.

3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed. Children should not be allowed in the work area.

## PERSONAL SAFETY

1. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

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- 2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- 3. Avoid accidental starting. Be sure the Compressor Control Knob (83) is in its "OFF" position before moving the Compressor *and* before performing any service, maintenance, or cleaning procedures on the unit.
- 4. **Remove adjusting keys or wrenches before turning the Compressor on.** A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.
- 5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.



**Use safety equipment.** Always wear eye protection. Always wear ANSI-approved safety impact glasses and full face shield when using this product. ANSI-approved hearing protection must also be used.

## **TOOL USE AND CARE**

- 1. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- 2. Do not use the Compressor if the Compressor's Pressure Switch (64) does not turn it on or off. Any tool that cannot be controlled with its Pressure Switch is dangerous and must be replaced.
- 3. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- 4. **Maintain tools with care.** Properly maintained tools are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "**Do not use**" until repaired.
- 5. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 6. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

## SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

2. When servicing a tool, use only identical replacement parts. Follow instructions in the *"Inspection, Maintenance, And Cleaning"* section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

#### SAVE THESE INSTRUCTIONS

## SPECIFIC SAFETY RULES AND PRECAUTIONS

- 1. Your Warranty is voided if:
  - a. You do not put <u>compressor oil</u> in the Compressor's crankcase prior to its first use. Before each use, check the oil level. Never run the Compressor with low or no compressor oil. Running the Compressor with low or no oil will permanently damage the unit.
  - b. You drop the Air Compressor. Always lift the Air Compressor using its Handle.
- 2. **Maintain labels and nameplates on the Air Compressor.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 3. This Air Compressor is NOT equipped and should not be used "as-is" to supply breathing quality air. For any application of air for human consumption, you must fit the Air Compressor with suitable in-line safety and alarm equipment (not included). This additional equipment is necessary to properly filter and purify the air to meet minimal specifications for Grade D breathing as described in Compressed Gas Association Commodity Specification G 7.1-1966, OSHA 29 CFR 1910. 134, and/or Canadian Standards Associations (CSA). In the event the Air Compressor is used for the purpose of breathing air application and proper in-line safety and alarm equipment is not simultaneously used, existing warranties are void, and Harbor Freight Tools disclaims any liability whatsoever for any loss, personal injury, or damage.
- 4. Never attempt to repair or modify the Air Tanks (51). Welding, drilling, or any other modification will weaken the Tanks resulting in damage from rupture or explosion. Always replace worn, cracked, or damaged Tanks.
- Never use plastic (PVC) pipe for compressed air. Serious injury or death could result. Any tube, pipe, or hose used must have a pressure rating higher than 150 PSI. Minimum recommended pipe size: Up to 50 feet long use 1/2" diameter. Greater than 50 feet use 3/4" diameter. Larger diameter pipe is always better.
- 6. Make sure all tools and equipment used with the Air Compressor are rated to the appropriate capacity. Do not use any tool or equipment that does not operate from 85 PSI to 115 PSI.
- 7. **Drain the Air Compressor every day.** Do not allow excessive moisture to build up inside the Air Compressor's Tanks. Do not open the Drain Valves (52) with

more than 10 PSI of air pressure in the Tanks. Do not unscrew the Drain Valves so that *more than* four threads are showing.

- 8. Avoid injury. Never direct the Air Outlet Valve (68) at people or animals.
- 9. Do not alter or remove the Safety Release Valve (62).
- 10. Make sure the Air Compressor is located on a flat, level, sturdy surface capable of supporting the weight of the Compressor, operator(s), and any additional tools and equipment.
- 11. Industrial applications must follow OSHA guidelines.
- 12. **Never stand on the Air Compressor.** Serious injury could result if the Compressor is tipped.
- 13. Never leave the Air Compressor unattended when it is plugged in and running. Turn off the Compressor, and unplug the unit before leaving.
- 14. Do not allow children and other unauthorized people to handle or play with the Air Compressor.
- 15. Do not move or transport the Compressor if the Air Tanks (51) are under pressure.
- 16. **Do not force the Compressor.** This tool will do the work better and safer at the speed and capacity for which it was designed.
- 17. Avoid body contact with oils and lubricants used in the Compressor. If swallowed, seek medical treatment immediately. For skin contact, immediately wash with soap and water. For eye contact, immediately flush eyes with clean water.
- 18. **Prolonged exposure to noise levels above 85 dBA is hazardous to hearing.** Always wear hearing protection when operating or working around the Compressor when it is running.
- 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.*)
- 20. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
- 21. **WARNING!** 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.

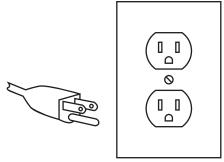
#### SAVE THESE INSTRUCTIONS

## GROUNDING

## **AWARNING** TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

#### **Grounded Tools: Tools with Three Prong Plugs**



**3-Prong Plug and Outlet** 

- 1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See 3-Prong Plug and Outlet.)
- 2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. (See 3-Prong Plug and Outlet.)
- 3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. (See 3-Prong Plug and Outlet.)

#### Symbology

	Double Insulated
	Canadian Standards Association

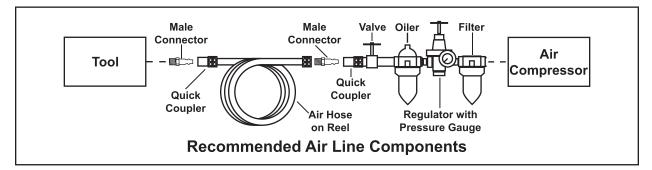
Symbology				
Ű	Underwriters Laboratories, Inc.			
V~	Volts Alternating Current			
Α	Amperes			
n <sub>0</sub> xxxx/min.	No Load Revolutions per Minute (RPM)			

## UNPACKING

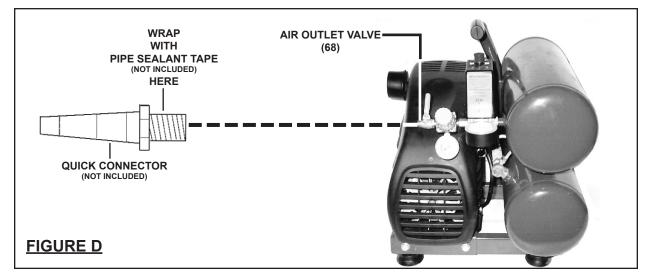
When unpacking, check to make sure all the parts shown on the **Parts List on page 13** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

## **ASSEMBLY INSTRUCTIONS**

1. Turn the Compressor's Pressure Switch (64) is in its **"OFF"** position prior to performing any service, maintenance, or cleaning of the Compressor.



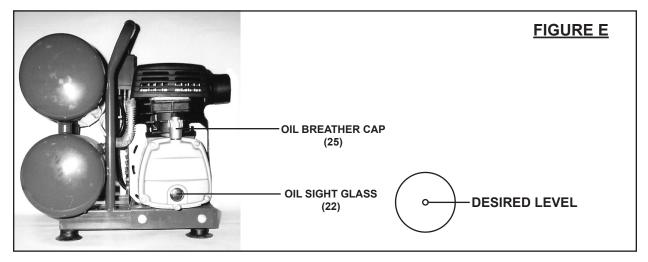
2. **To extend the life of your tools and equipment,** it is recommended that you install an oiler and water filter in-line with the Air Outlet Valve (68) of the Air Compressor. **(See Figure C.)** 



 Prior to using the Air Compressor, the unit requires the attachment of a 1/4"-18 NPT Male Quick Connector (not included). To do so, wrap approximately 3" of pipe thread sealant tape (not included) around the male threads of the Quick Connector. Then firmly screw the Quick Connector into the Air Outlet Valve (68). (See Figure D.)

## **PRE-START INSTRUCTIONS**

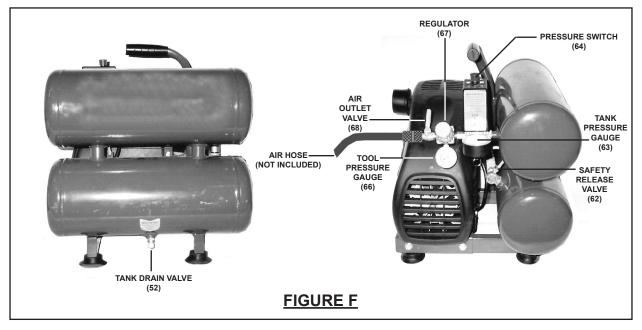
#### To Add Compressor Oil:



- IMPORTANT! Prior to first using the Compressor, the Compressor <u>MUST</u> be filled with a high quality S.A.E. 15W-30w grade non-detergent compressor oil. (See Figure E.)
- To do so, *unscrew* and remove the Oil Breather Cap (25). Pour approximately 1/2 quart of compressor oil into the Oil Breather Cap hole. Do not overfill. (See Figure E.)
- 3. Observe the level of compressor oil through the Oil Sight Glass (22). The oil level should appear between the "**MINIMUM**" and "**MAXIMUM**" marks on the Indicator. (See Figure E.)
- 4. If necessary, continue adding compressor oil, while re-checking the Oil Sight Glass (22). Maintain oil level at the center of indicator in the Oil Sight glass.
- 5. When finished adding compressor oil, re-install the Oil Breather Cap (25) back into the Oil Breather Cap hole.

## **OPERATING INSTRUCTIONS**

#### To Start The Compressor:



- 1. Check to make sure the Air Tank's Drain Valve (52), located on the *bottom* Air Tank (51), is fully closed.
- 2. Turn the Air Outlet Valve (68) to its closed position.
- 3. Connect an air hose (not included) to the previously installed Quick Connector. Then, connect the other end of the air hose to the pneumatic tool (not included).
- 4. Plug the Power Cord (55) into the nearest 120 volt, grounded, electrical outlet.
- 5. Pull **up** on the Pressure Switch (64) to its "**START**" position to turn on the unit.
- 6. When the Tank Pressure Gauge (63) reaches at least **85 PSI**, turn the Air Outlet Valve to its open position to allow air to the pneumatic tool.
- 7. Once the air pressure reaches the pneumatic tool, observe the Tool Pressure Gauge (66). Adjust the Regulator (67) to feed the proper PSI to the tool. To do so, turn the Regulator *clockwise* to increase the PSI. Turn the Regulator *counterclockwise* to decrease the PSI.
- <u>Note:</u> When the maximum air pressure, **115 PSI**, is reached as indicated by the Tank Pressure Gauge (63), the motor will stop. The Compressor will automatically restart when the air pressure drops below **85 PSI**.
- **IMPORTANT:** To decompress the air pressure in the Air Tanks (51), push down on the Pressure Switch (64) to its "**STOP**" position. Then, pull out on the Safety Release Valve to immediately release air pressure from the Air Tanks.
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#### To Stop The Compressor:

- 1. Push down on the Pressure Switch (64) to its "**STOP**" position.
- 2. Unplug the Air Compressor from its electrical outlet.
- 3. Turn the Air Outlet Valve (68) to its **closed** position. (See Figure F.)
- 4. Squeeze the trigger on the pneumatic tool to release any remaining air pressure from the tool. Then disconnect the air hose from the tool, and store the tool in a clean, dry, safe location out of reach of children.
- 5. Disconnect the other end of the air hose from the Compressor's Air Outlet Valve (68), and store the air hose in a clean, dry, safe location out of reach of children.
- 6. Pull out on the Safety Release Valve (62) to release all remaining air pressure from the Air Tanks (51). **(See Figure F.)**
- 7. Remove any moisture in the Air Tanks (51) by opening the Tank Drain Valve (52). Then, retighten the Drain Valve. **(See Figure F.)**
- 8. Allow the Air Compressor to completely cool. Then store the unit in a clean, dry, safe location out of reach of children.

## INSPECTION, MAINTENANCE, AND CLEANING



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

# **AWARNING** TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

- 1. **Before each use,** inspect the general condition of the Air Compressor. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, loose air fittings, and any other condition that may affect the safe operation of the Compressor. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
- 2. **Before each use,** check the <u>compressor oil level</u> in the Oil Sight Glass (22). If necessary, fill the crankcase of the Air Compressor with the proper amount and type of compressor oil.
- 3. **Daily,** purge the Air Tanks (51) of all air and moisture to prevent corrosion. To do so, slowly and carefully unscrew (no more than four threads) the Tank Drain Valve (52) until the compressed air and condensation begins to be released from the Tanks. Allow sufficient time for all of the air and condensation to escape from the Tanks. Then, firmly re-tighten the Drain Valve.

Problem	Possible Cause	Possible Solution
Compressor will not start.	<ol> <li>Blown fuse or circuit breaker tripped.</li> </ol>	1. Replace or reset fuse/circuit breaker.
	<ol> <li>Loose electrical connections.</li> </ol>	<ol> <li>Plug Compressor into a working, 120 volt, grounded, electrical outlet.</li> </ol>
	3. Bad capacitors.	3. Replace capacitors.
Low pressure.	1. Restricted air filter.	1. Replace air filter.
	2. Defective check valve.	<ol> <li>Have a qualified service technician replace check valve.</li> </ol>
	3. Air leak in safety valve.	<ol> <li>Check valve by pulling on ring. If condition persists, have a qualified service technician replace valve.</li> </ol>
	4. Defective valve plate.	4. Replace valve plate.
Safety valve releasing.	1. Defective pressure switch.	<ol> <li>Have a qualified service technician replace pressure switch.</li> </ol>
	2. Defective safety valve.	2. Replace safety valve.

## TROUBLESHOOTING

Problem	Possible Cause	Possible Solution		
Oil discharge in air.	<ol> <li>Too much oil in crankcase.</li> </ol>	<ol> <li>Drain crankcase and refill to proper level on sight glass.</li> </ol>		
	2. Compressor overheated.	2. Reduce air pressure regulation.		
	<ol> <li>Restricted oil breather cap.</li> </ol>	3. Clean or replace oil breather cap.		
Pressure switch will not turn off Compressor.	Defective pressure switch.	Immediately unplug Compressor from its electrical outlet. Do not operate Compressor until a qualified service technician can replace pressure switch.		

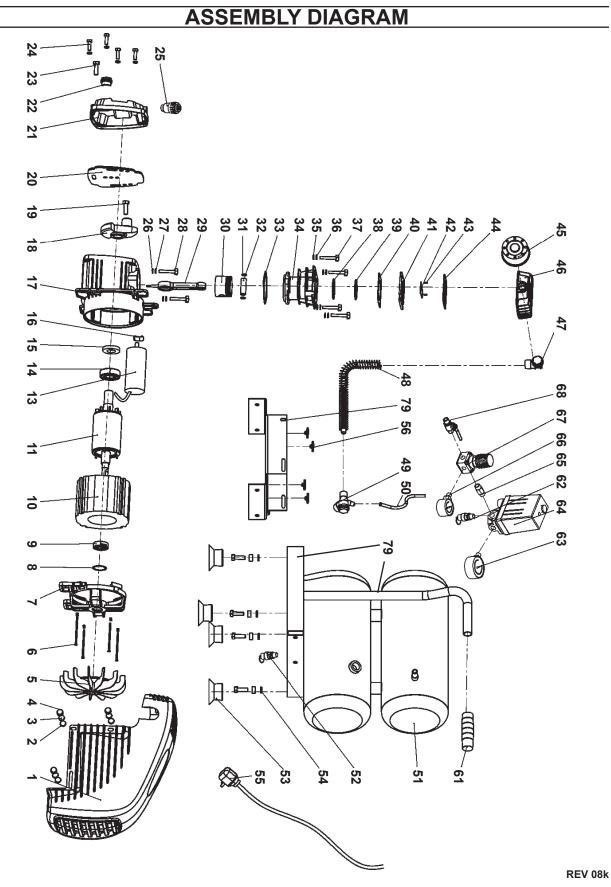
## PLEASE READ THE FOLLOWING CAREFULLY

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.

Part	Description	Part	Description	Part	Description
1	Plastic Housing	24	Pan Head Screw	46	Cylinder Head
2	Spring Washer	25	Oil Breather Cap	47	Elbow Exhaust
3	Washer	26	Spring Washer (#8)	48	Exhaust Pipe
4	Screw (M5 x 14)	27	Washer (#8)	49	Check Valve
5	Fan	28	Screw (M8 x 20)	50	Unload Pipe
6	Screw (5 x 115)	29	Connecting Rod	51	Air Tank
7	Rear Cap	30	Piston	52	Tank Drain Valve
8	Washer	31	Spring Washer	53	Rubber Foot
9	Bearing (6202)	32	Piston Pin	54	Screw (M6 x 20)/Nut (M6)
10	Stator	33	Cylinder Gasket	55	Power Cord
11	Rotor	34	Cylinder	56	Rubber Gasket
13	Running Capacitor	35	Spring Washer (#6)	61	Rubber Grip
14	Bearing (6204)	36	Washer (#6)	62	Safety Release Valve
15	Oil Seal	37	Screw (M6 x 40)	63	Tank Pressure Gauge
16	Nut (M8)	38	Gasket	64	Pressure Switch
17	Crankcase	39	Sealer Ring	65	Connector
18	Crankshaft	40	Valve Gasket	66	Tool Pressure Gauge
19	Screw (M8 x 16 – Left hand)	41	Valve Plate Assy.	67	Regulator
20	Gasket	42	Air Intake Valve	68	Air Outlet Valve
21	Crankcase Cover	43	Limit Pin	79	Frame Assy.
22	Oil Sight Glass	44	Cylinder Gasket		
23	Drain Plug	45	Air Filter		

#### PARTS LIST

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.



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

## LIMITED 1 YEAR / 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 for a period of one year from date of purchase that the tank is free of defects in materials and workmanship (90 days if used by a professional contractor or if used as rental equipment). Harbor Freight Tools also warrants to the original purchaser, for a period of ninety days from date of purchase, that all other parts and components of the product are free from defects in materials and workmanship. This warranty does not apply to damage due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, 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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