

CENTRALPNEUMATIC®

3 GALLON OILLESS AIR COMPRESSOR

Model 97080

SET UP AND OPERATING INSTRUCTIONS



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.

SPECIFICATIONS

Electrical Requirements	120 V~ / 60 Hz / 2.6 A
Power Cord Type	18 AWG x 3 C / 6 ft. long
Power Plug Type	3 Prong Grounded
Pressure Switch Type	ON/OFF (Pull/Push) Rocker Switch
Air Inlet	1/4" - 18 NPT Female Thread
Fuse	3A
Compressor Style	Oilless
Pump Style	Single Cylinder
Maximum Air Pressure	100 PSI
Air Flow Capacity	1.0 SCFM @ 40 PSI 0.6 SCFM @ 90 PSI
Air Tank Capacity	3 Gallons
Accessories	Thread Seal Tape / Quick Coupler



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.
2. Do not operate air compressors in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Air Compressors create sparks which may ignite the dust or fumes.
3. Keep bystanders, children, and visitors away while operating an air 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 an air tool. Do not use an air tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating air tools may result in serious personal injury.
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 Power Switch (45) is in its “STOP” position, all pressure is safely released, and the unit is unplugged 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 air tool in unexpected situations.
6.  Use safety equipment. Always wear ANSI-approved safety impact glasses, dust mask/respirator and hearing protection during use.

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 Power Switch (45) does not turn it on or off. Any tool that cannot be controlled with its Pressure Switch is dangerous and must not be used until repaired.
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.

SPECIFIC SAFETY RULES AND PRECAUTIONS

1. **CAUTION! Your Warranty is voided if:** You drop the Air Compressor. Always lift the Air Compressor using its Handle.
2. Do not expose to a high-dust environment. Dusty conditions may increase wear on the Compressor.
3. **DANGER!** This Air Compressor is NOT equipped and should not be used “as-is” to supply breathing 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. **DANGER!** Never attempt to repair or modify the Air Tank (53). Welding, drilling, or any other modification will weaken the Tank resulting in damage from rupture or explosion. Always replace worn, cracked, or damaged Tanks.
5. Maintain labels and nameplates on the Air Compressor. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
6. **WARNING!** 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.
7. 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 100 PSI.

8. Drain the Air Compressor every day. Do not allow excessive moisture to build up inside the Air Compressor's Tank. Do not open the Drain Valve (54) with more than 10 PSI of air pressure in the Tank. Do not unscrew the Drain Valve so that more than four threads are showing.
9. Do not alter or remove the Safety Valve (25).
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. Do not move or transport the Compressor if the Air Tank (53) is under pressure.
12. Industrial applications must follow OSHA guidelines.
13. Never stand on the Air Compressor. Serious injury could result if the Compressor is tipped.
14. Never leave the Air Compressor unattended when it is plugged in and running. Turn off the Compressor, and unplug the unit before leaving.
15. Do not allow children and other unauthorized people to handle or play with the Air Compressor.
16. Do not modify the factory set pressure shutoff or startup switches. 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. **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.*)
19. 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.
20. **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

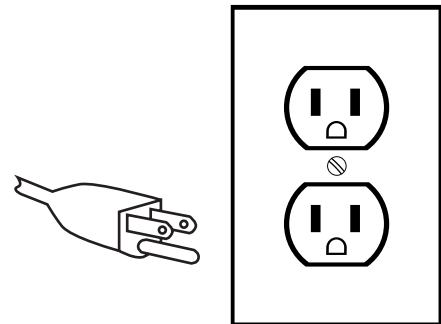
GROUNDING

 **WARNING!**

Improperly connecting the grounding wire can result in the risk of electric shock. 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.







GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

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. Your 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 following illustration. **(See 3-Prong Plug and Outlet.)**



3-Prong Plug and Outlet

SYMBOLOLOGY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
	Volts Alternating Current
	Amperes
	No Load Revolutions per Minute (RPM)

UNPACKING

When unpacking, check to make sure all the parts shown on the Parts List 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. **CAUTION!** Always make sure the Compressor's Power Switch (45) is in its "STOP" position prior to performing any service, maintenance, or cleaning of the Compressor.
2. To attach the Handle (47), align the two mounting holes in the Handle with the two threaded mounting holes in the Bracket on the Air Tank (53). Then secure the Handle to the Air Tank using two Screws (46). **(See Figure A.)**

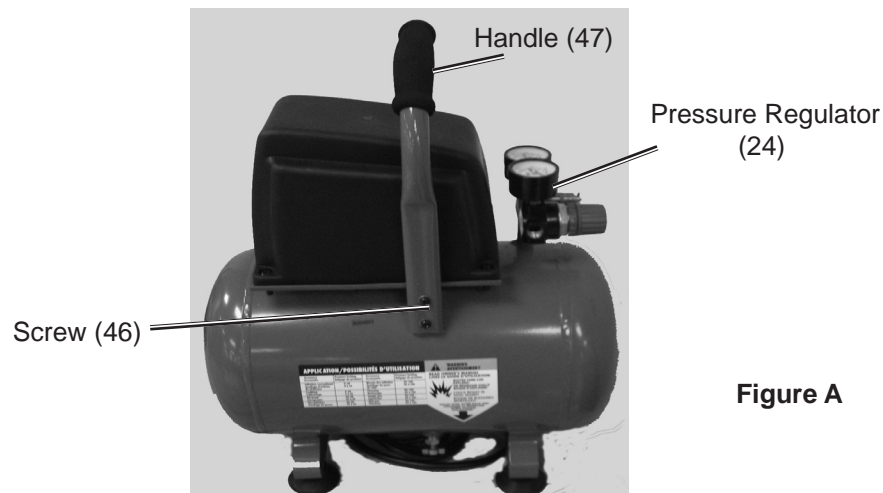


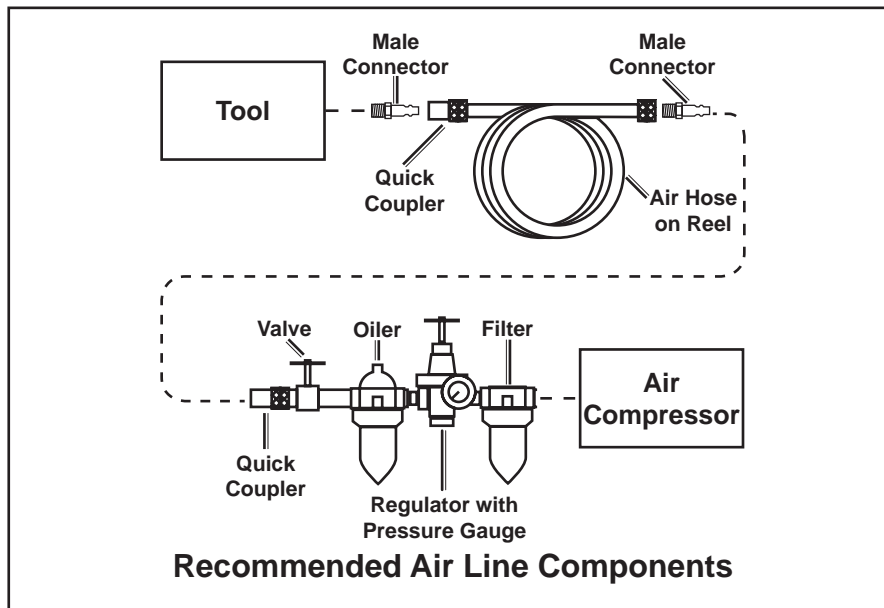
Figure A

HOSE CONNECTION

⚠️ 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 an in-line oiler, shut-off valve, regulator with pressure gauge, and filter for best service, as shown in the diagram above. **An in-line shutoff valve is an important safety device because it controls the air supply even if the air hose is ruptured.**

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.

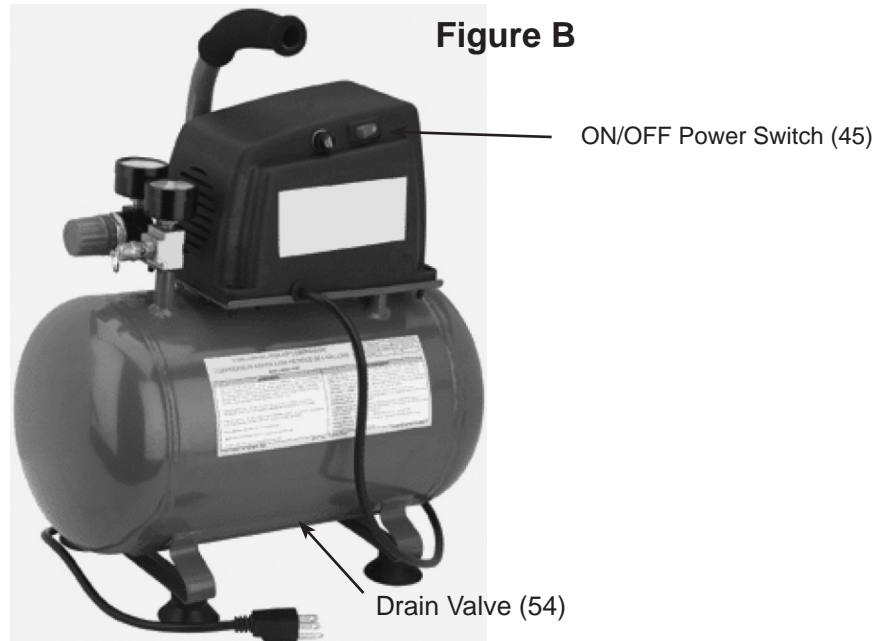
2. Attach an air hose to the compressor's air outlet. Connect the air hose to the air inlet of the tool.
3. Other components, such as a connector and quick coupler, will make operation more efficient, but are not required.

⚠️ 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.

OPERATING INSTRUCTIONS

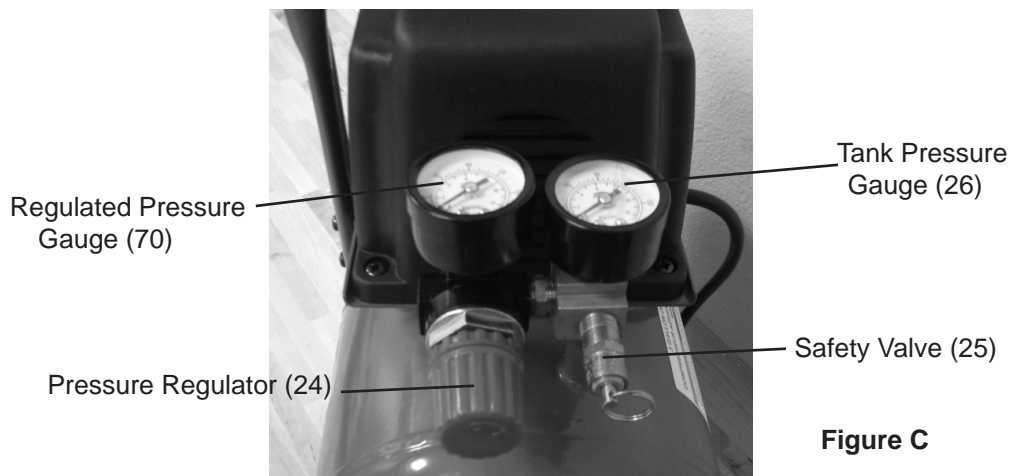
To Start The Compressor:

1. Check to make sure the Air Tank's Drain Valve (54), located at the bottom of the Air Tank (53), is fully closed. Pull on the Safety Valve (25) to verify that it is not stuck. **(See Figures B and C.)**



2. Plug the Power Cord (35) into the nearest 120 volt, grounded, electrical outlet.
3. Push in the "ON" side of the ON/OFF Power Switch (45) to turn the compressor on. **(See Figure B.)**

Figure C



To Adjust The Air Regulator:

1. Connect a high pressure air hose (not included) to the Pressure Regulator (24). Connect an air blow gun (not included) to the other end of the air hose. Turn the compressor on. Refer to Hose Connection Instructions on page 8.
2. When the maximum air pressure, 100 PSI, is reached as indicated by the Tank Pressure Gauge (26), the motor will stop.
3. Blow air out of the blow gun while you turn the Pressure Regulator (24) knob to adjust Pressure Regulator (24). Turn the Pressure Regulator (24) knob counterclockwise to decrease the PSI, turn it clockwise to increase the PSI. When the Regulated Pressure Gauge (70) shows the pressure that you want to limit the compressor to, the Pressure Regulator (24) is set. **(See Figure C.)**
4. Between the Pressure Regulator knob and valve body, a narrow ring acts as a lock-ring for the knob. Rotate the ring in a counterclockwise direction and tighten it against the knob to secure the setting. **(See Figure C.)**

NOTE: When the maximum air pressure, 100 PSI, is reached as indicated by the Tank Pressure Gauge (26), the motor will stop. The Compressor will automatically restart when the air pressure drops below 85 PSI. **(See Figure C.)**

To Stop The Compressor:

1. Push the ON/OFF Power Switch (45) to its "OFF" position.
2. Unplug the Air Compressor from its electrical outlet. Place a collector can (not included) under the Air Tank (53) and turn the Drain Valve (54) counterclockwise.
3. Pull out on the Safety Valve (25) to release all remaining air pressure from the Air Tank (53). **(See Figure C.)** This will not only drain the air, but will also drain any accumulated moisture. After all air is drained, turn the Safety Valve (25) clockwise.
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. Remove any moisture in the Air Tank (53) by opening the Tank Drain Valve (54). Then, retighten the Drain Valve (54). **(See Figure B.)**
6. 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

1. **WARNING!** Make sure the ON/OFF Power Switch (45) of the Air Compressor is in its "STOP" position, the unit is unplugged from its electrical outlet, and air is drained from the Tank (53) before performing any inspection, maintenance, or cleaning procedures or leaving it unattended.
2. **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.
3. Daily, purge the Air Tank (53) of all air and moisture to prevent corrosion. To do so, slowly and carefully unscrew (no more than four threads) the Tank Drain Valve (54) 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.
4. **CAUTION!** All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.
5. To replace the Fuse (43), unscrew the fuse and replace with a 250V, 3A fuse.

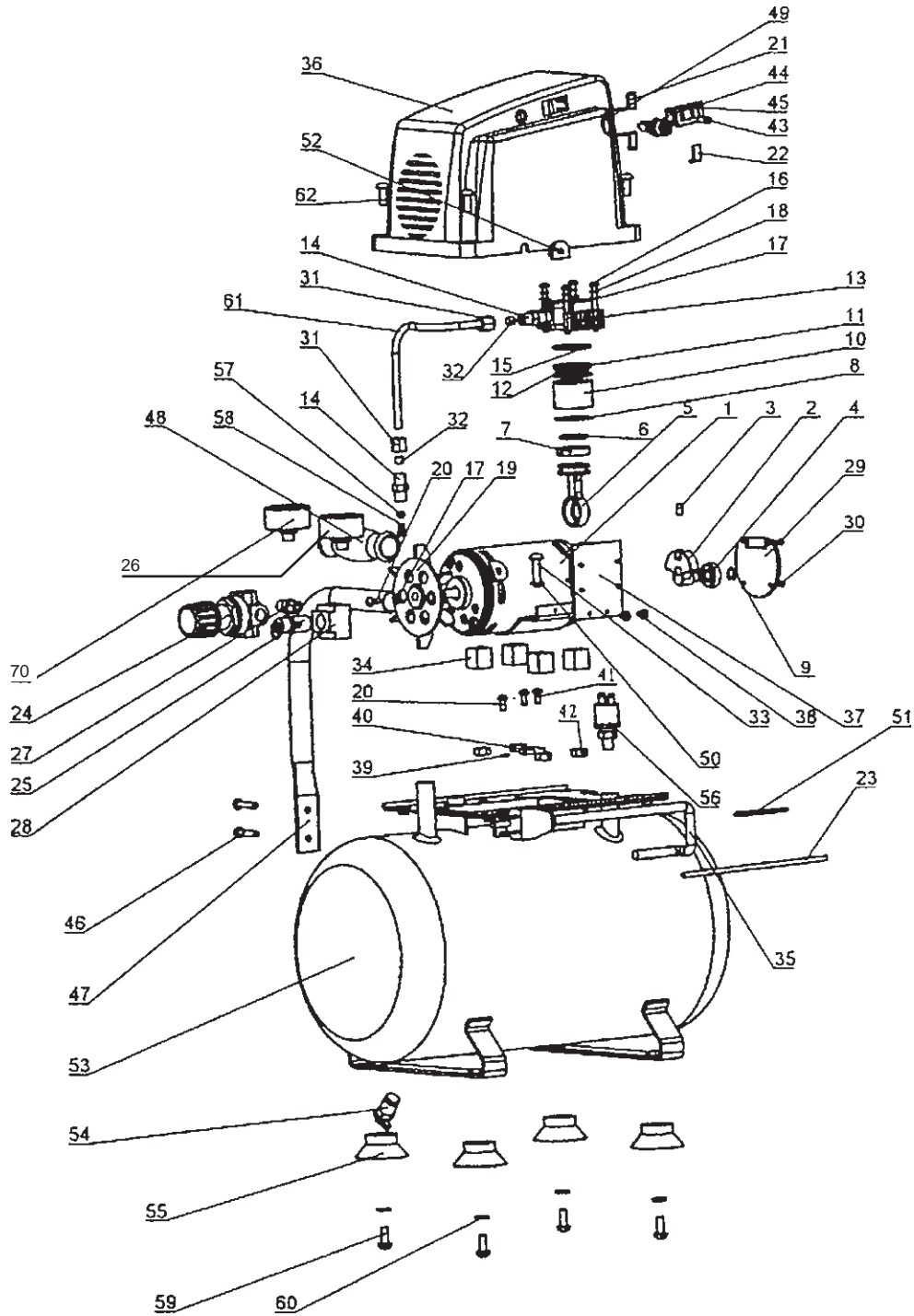
TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Compressor will not start.	<ol style="list-style-type: none"> 1. Blown fuse or circuit breaker tripped. 2. Loose electrical connections. 3. Bad Capacitors. 	<ol style="list-style-type: none"> 1. Replace fuse. 2. Make sure Compressor is plugged into a working, 120 volt, grounded, electrical outlet. 3. Replace Capacitors.
Low pressure.	<ol style="list-style-type: none"> 1. Defective check valve. 2. Air leak in safety valve. 3. Defective Valve Plate. 4. Drain Valve not fully closed. 	<ol style="list-style-type: none"> 1. Have a qualified service technician replace check valve. 2. Check valve by pulling on ring. If condition persists, have a qualified service technician replace valve. 3. Replace Valve Plate. 4. Close Drain Valve.
Safety valve releasing.	<ol style="list-style-type: none"> 1. Defective pressure switch. 2. Defective Safety Valve. 	<ol style="list-style-type: none"> 1. Have a qualified service technician replace pressure switch. 2. Replace Safety Valve.
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.

PARTS LIST

Part	Description	Qty.	Part	Description	Qty.
1	Motor	1	34	Damping Pad	1
2	Crank	1	35	Power Cord	1
3	Screw	1	36	Motor Cover	1
4	Bearing (608-2RS)	1	37	Circuit Board	1
5	Connecting Rod	1	38	Screw (M4 x 8)	2
6	Silica Gel Ring (21.2 x 2.5)	1	39	Washer	1
7	Piston Ring	1	40	Wire Clip	1
8	Paper Pad	1	41	Screw (M4 x 15)	2
9	Hoop (#8)	1	42	Nut	4
10	Cylinder	1	43	Fuse (3 Amp)	1
11	Cylinder Washer	1	44	Fuse Box	1
12	Silica Gel Ring (31 x 2)	1	45	Power Switch	1
13	Cylinder Head	1	46	Screw (M5 x 16)	2
14	Connector	2	47	Handle	1
15	Silica Gel Ring (31.5 x 1.8)	1	48	Handle Soft Grip	1
16	Screw (M4 x 40)	4	49	Cords	1
17	Flat Washer (#4)	5	50	Flat Washer (#6)	1
18	Spring Washer (#4)	5	51	Zip Tie	1
19	Fan	1	52	Rubber Sheath	1
20	Screw (M4 x 10)	1	53	Air Tank	1
21	Flag Terminal (4.8 x 0.6)	2	54	Drain Valve	1
22	Flag Terminal Bushing (4.8)	2	55	Rubber Foot	4
23	Tube	6.30"	56	Pressure Controller	1
24	Pressure Regulator	1	57	Ball	1
25	Safety Valve	1	58	Spring	1
26	Tank Pressure Gauge	1	59	Screw (M6 x 15)	4
27	Two-Way Valve	1	60	Flat Washer (#6)	6
29	Muffler Board	1	61	Copper Tube	1
30	Screw (M3 x 6)	4	62	Screw (M6 x 20)	4
31	Copper Connector Rod	2	65	Quick Connect Coupler	1
32	Copper Hoop	2	66	Thread Seal Tape	1
33	Screw (M6 x 25)	4	70	Regulated Pressure Gauge	1

ASSEMBLY DIAGRAM



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.

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

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.

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 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 RISKS 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.