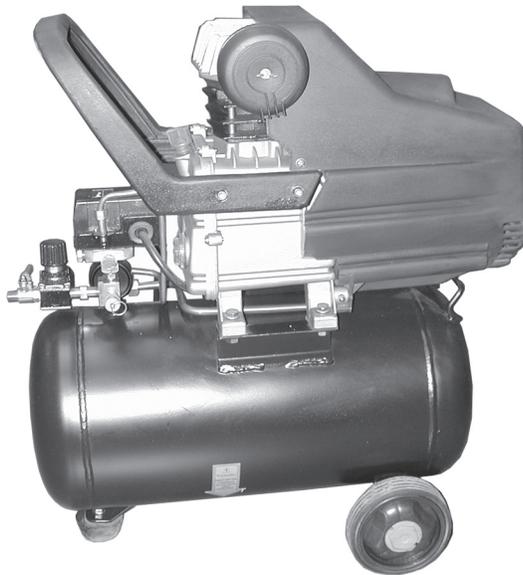


CENTRAL PNEUMATIC®

AIR COMPRESSOR 2.5 HP - 8 GALLON

Model 90385

ASSEMBLY AND OPERATING INSTRUCTIONS



Distributed Exclusively by



**HARBOR FREIGHT
TOOLS**



3491 MISSION OAKS BLVD., CAMARILLO, CA 93011
VISIT OUR WEB SITE AT [HTTP://WWW.HARBORFREIGHT.COM](http://www.harborfreight.com)

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

SPECIFICATIONS

Item	Description
Power Consumption	120 VAC, 60 Hz
Motor	2.5 HP (rated), 3400 RPM; 2 capacitor motor
Pump	Single stage, oil lubrication
Tank	8 gallon capacity; Cut-in pressure: 90 PSI, Cut-out pressure: 120 PSI
Air Outlet Size	1/4 Inch - 18 NPT
Pressure Gauge	0 ~ 200 PSI (CSA approved)
SCFM	4.5 SCFM @ 115 PSI, 5.6 SCFM @ 90 PSI, 6.2 SCFM @ 70 PSI, and 7.25 SCFM @ 40 PSI
Features	Overload protection Clear view oil window
Weight	65 lbs.



THIS COMPRESSOR MUST BE OPERATED ON A MINIMUM 15 AMP CIRCUIT.

SAVE THIS MANUAL

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

GENERAL SAFETY RULES



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 power 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, animals 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.

Electrical Safety

4. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
5. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
6. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
7. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
8. **Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.

Personal Safety

9. **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.
10. **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.
11. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
12. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
13. **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.

14. **Use safety equipment. Always wear eye protection.** Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

Tool Use and Care

15. **Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
16. **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.
17. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
18. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
19. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
20. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
21. **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.
22. **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

23. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
24. **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 FOR THIS PRODUCT

1. **Maintain labels and nameplates on the Air Compressor.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
3. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Air Compressor.
4. **Do not force the Air Compressor.** This tool will do the work better and safer at the pressure and capacity for which it was designed.
5. **Always unplug the Air Compressor from its electrical outlet before performing and inspection, maintenance, or cleaning procedures.**
6.  **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)
7.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
8. **Never leave the air compressor unattended while running.** Turn power off if you have to leave the mixer.
9. **Before each use, check all nuts, bolts, and screws for tightness.** Vibration may cause these to loosen.
10. **Always connect the Line Cord to a Ground Fault Circuit Interrupter (GFCI) protected electrical outlet. Always use a 115V electrical source (+/- 10% maximum variation).**
11. **Drain compressor every day.** Do not allow moisture to build up inside the compressor. Do not allow compressor to sit pressurized for longer than one hour.
12. **Make sure all equipment is rated to the appropriate capacity.** Adjust the output air pressure to the tool's operating capacity.
13. **Avoid body injury.** Never direct the air outlet at persons or animals.

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.

Grounded 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 Figure A.)
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 Figure A.)
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 Figure A.)

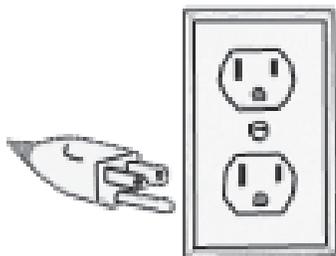


Figure A

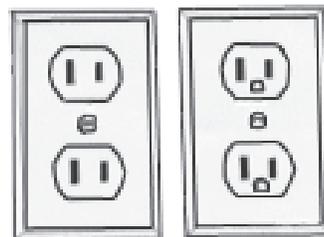


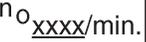
Figure B

Double Insulated Tools: Tools with Two Prong Plugs

4. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. (See Figure B on page 6.)
5. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. (See Figure B on page 6.)

SYMBOLGY

Table B

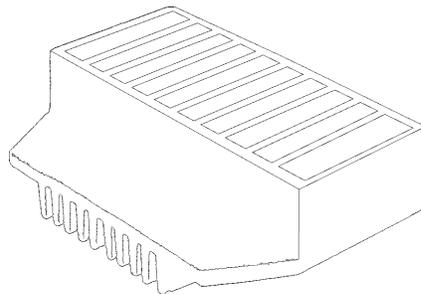
	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
	Volts Alternating Current
	Amperes
	No Load Revolutions per Minute (RPM)

UNPACKING

When unpacking, check to make sure that all the parts are included. Refer to the Assembly section, and the Assembly Drawing and Parts List at the end of this manual.

If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

In addition, this unit is packed with a rubber block to help prevent damage to the Motor Cover (82) during shipment, shown below.



This block should be removed BEFORE use of this compressor, it can interfere with proper operation. It may be set aside for additional shipping purposes, if desired.

ASSEMBLY INSTRUCTIONS

Warning: Fill compressor with oil before using; running without oil, or with low oil voids warranty. Do not plug in the Air Compressor until you are ready to use it, as set forth below.

Adding Oil

1. Unscrew (*do not pull*) the Oil Plug (79). (See Figure C.)
2. Check the level of the oil by viewing the Oil Leveler (72) window (below the Oil Plug).

Note: Fill the oil tank with approximately 25 ounces of oil.

3. Add 30-weight, non-detergent oil through the fill hole as necessary, but do not overfill. Screw in the Oil Plug, being careful not to strip the plastic threads.

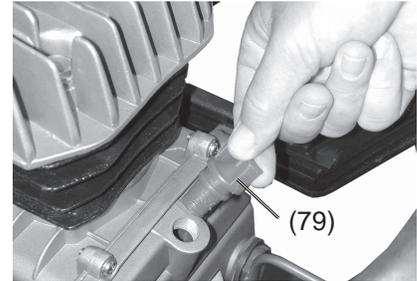


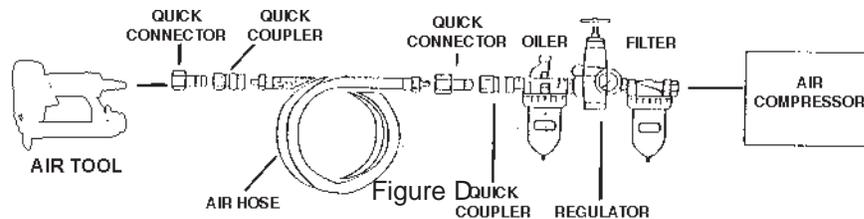
Figure C

Hose Connections

1. Close the Air Control Valve (69), right or left.
2. Connect the high pressure air hose to the air outlet.

The outlet is 1/4" NPT. For easy connection or removal, a quick coupler (not supplied) should be installed on the end of the outlet.

To extend the life of your air tools, it is recommended to install an oiler and water filter in series with the air output line of the Air Compressor as shown below.



3. Connect the high pressure air hose to the air tool.
4. Turn the Air Control Valve to the middle position to allow the air to pass.

Warning: Do not remove the factory sealed Air Control Valve (69); removal voids warranty.

Air Filter

If not already attached, mount the Air Filter (85) to the Cylinder Head (2) before using the air compressor.

OPERATING INSTRUCTIONS

Turning Compressor On

1. Plug the power cord into an electrical outlet with a grounding prong.
2. Pull up on the Auto/Off Pressure Switch (66) to turn on. Push down on the Switch to shut off.
3. Allow the Tank to fill to 80 PSI before using.

With the Air Compressor turned on, operation is automatic and under the control of the internal pressure switch.

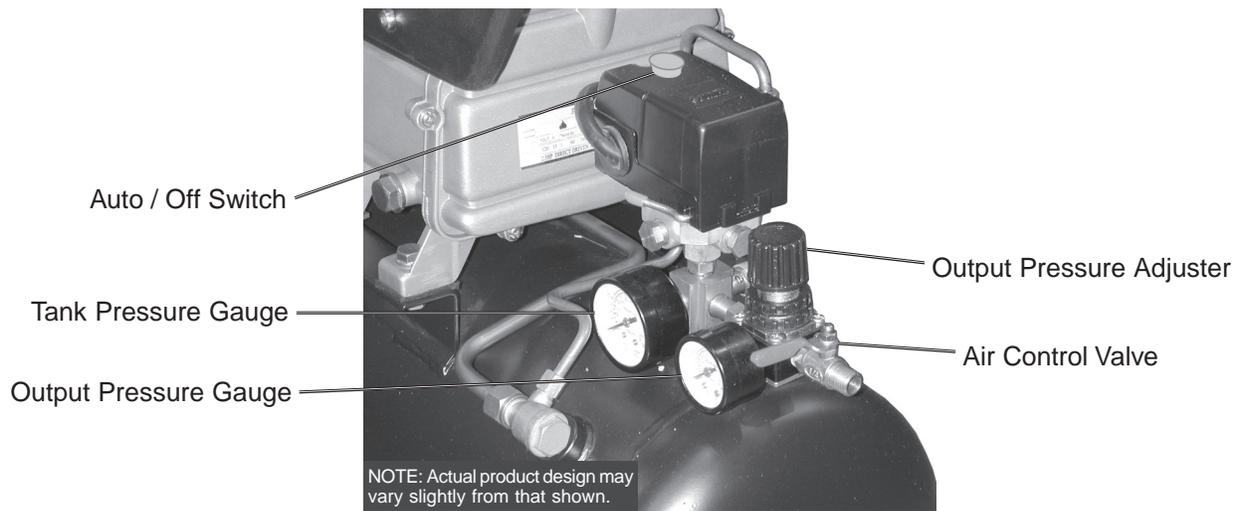


Figure E

Adjusting Pressure Switch

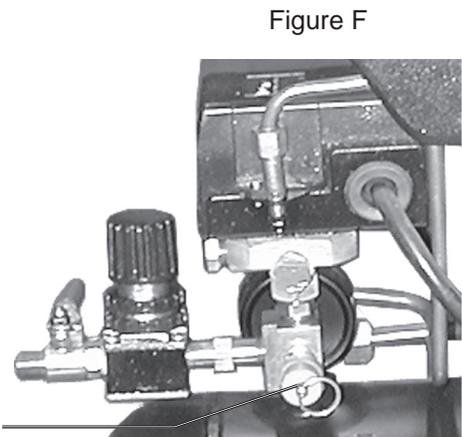
Caution: The internal pressure switch is adjustable but changes to the pressure levels are not recommended; any change to the automatic On/Off pressure levels will cause additional stress on the motor which may result in shortened motor life.

Using the Pressure Relief Valve

The Pressure Relief Valve (Figure F) is used when decompression is needed quickly and efficiently.

1. Press the Auto/Off Pressure Switch (66) down to turn power off.
2. Pull on the Pressure Relief Valve (67) ring to release pressure.
3. When all pressure is released, close the valve again.

Pressure Relief Valve



Empty Air and Condensation

The water Spill Valve (59) is located underneath the Air Tank. It must be used daily to release all trapped moisture through this valve. It will also get rid of any condensation that may cause tank corrosion.

Warning: Do not open the water Spill Valve (59) so that more than four threads are showing.

1. Push down on the Auto/Off Pressure Switch (66) to turn the compressor off.
2. Unscrew the water Spill Valve (59) two to three turns.

INSPECTION, MAINTENANCE, AND CLEANING

1.  **WARNING!** Make sure the Power Switch of the Air Compressor is in its “OFF” position and that the tool is unplugged from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.
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, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
3. Check compressor oil level daily. Fill if necessary with 30-weight, non-detergent oil.
4. Purge the Air Tank daily of all air and condensation to prevent corrosion.
5. Store the Air Compressor in a clean and dry location.
6. Check all air fittings for leaks before using.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR 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

Part #	Description	Qty.	Part #	Description	Qty.
1	BOLT	4	42	BOLT	2
2	CYLINDER HEAD	1	43	CENTRIFUGAL SWITCH SEAT WASHER	2
3	CYLINDER HEAD WASHER	1	44	CENTRIFUGAL SWITCH COVER	1
4A	BOLT	2	45	BOLT	4
4B	EXHAUSE VALVE PLATE SPACING	1	46	FAN	1
4C	EXHAUSE VALVE PLATE	1	47	RETAINING RING IN SHAFT	2
4D	VALVE SEAT	1	48	BOLT	4
5	COLUMN PIN	2	49	BOLT	4
6	INLET VALVE PLATE	1	50	TANK	1
7	CYLINDER UP WASHER	1	51	FLAT WASHER	4
8	CYLINDER	1	52	NUT	4
9	CYLINDER DOWN WASHER	1	53A	WHEEL	2
10A	PISTON AIR RING	2	53B	WHEEL COVER	2
10B	PISTON OIL RING	1	54	RETAINING RING IN SHAFT	2
11	RETAINING RING IN HOLE	2	55	EXHAUST ELBOW	1
12	PISTON	1	56A	EXHAUST COPPER TUBE	1
13	PISTON PIN	1	56B	EXHAUST BOLT	2
14	CONNECT ROD	1	57	PRESSURE RELIEF VALVE	1
15	CRANKCASE	1	58A	UNLOAD PIPE NUT	1
16	CRANKSHAFT	1	58B	UNLOAD PIPE ASSY.	1
17	IN-SIX ANGLE BOLT	1	59	UNLOAD WATER VALVE	1
18	RUBBER WASHER	4	60	BOLT	1
19	O RING	1	61	RUBBER FOOT PAD	1
20	BOLT	1	62	FLAT WASHER	1
21	STARTING CAPACITOR	1	63	BOLT	1
22	RUNNING CAPACITOR	1	64	ELE. CABLE	1
23	NUT	2	65	PRESSURE GAUGE	1
24	SAW WASHER	2	66	PRESSURE SWITCH	1
25	FLAT WASHER	2	67	PRESSURE RELIEF VALVE	1
26	CONNECTOR	2	68	NIPPER	1
27	NYLON BAND	2	69	AIR CONTROL VALVE	1
29	BOLT	2	70	PRESSURE VALVE	1
30	OVER-LOAD PROTECTOR BRACKET	1	71	PRESSURE GAUGE	1
31	OVER-LOAD PROTECTOR	1	72	OIL LEVELER	1
34	SHAFT OIL SEAL	1	72A	OIL LEVELER SEAL	1
35	BEARING	1	73	BOLT	1
36A	MOTOR STATOR ASSEMBLY	1	74	SPRING WASHER	1
36B	MOTOR ROTOR ASSEMBLY	1	75	CRANKCASE FROM COVER	1
37	BEARING	1	76	CRANKCASE RUBBER SEAL	1
38	WAVE WASHER	1	79	OIL PLUG	1
39	MOTOR BACK COVER	1	80	HANDLE	1
40	BOLT	1	81	BOLT	4
40A	TIGHTER WASHER	3	82	MOTOR COVER	1
41A	CENTRIFUGAL SWITCH SEAT	1	83	BOLT	2
41B	CENTRIFUGAL SWITCH BODY	1	84	BOLT	2
41C	BOLT	1	85	AIR FILLER	1

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

ASSEMBLY DRAWING

