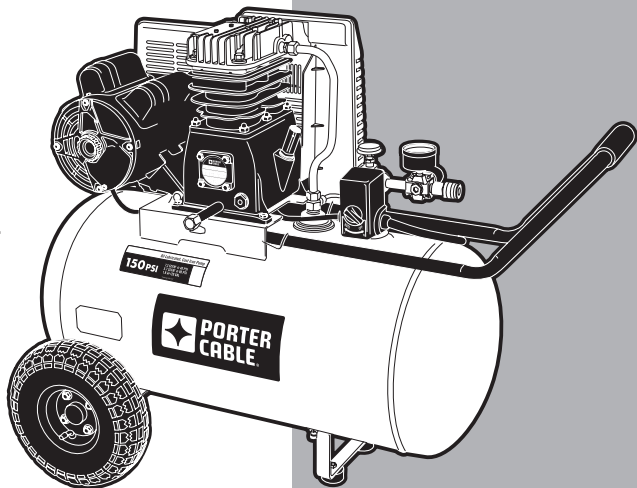


PORTER CABLE®

Air Compressor

Instruction manual

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C5512

SAFETY GUIDELINES - DEFINITIONS

This manual contains information that is important for you to know and understand. This information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these symbols.

<p>⚠ DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</p>	<p>⚠ CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</p>
<p>⚠ WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.</p>	<p>NOTICE : Indicates a practice not related to personal injury which, if not avoided, may result in property damage.</p>

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING: This product contains chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm. ***Wash hands after handling.***

⚠ WARNING: Some dust contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm such as asbestos and lead in lead based paint.

⚠ WARNING: To reduce the risk of injury, read the instruction manual.



SAVE THESE INSTRUCTIONS

HAZARD



⚠ DANGER: RISK OF EXPLOSION OR FIRE

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> • It is normal for electrical contacts within the motor and pressure switch to spark. 	<ul style="list-style-type: none"> • Always operate the compressor in a well ventilated area free of combustible materials, gasoline, or solvent vapors.
<ul style="list-style-type: none"> • If electrical sparks from compressor come into contact with flammable vapors, they may ignite, causing fire or explosion. 	<ul style="list-style-type: none"> • If spraying flammable materials, locate compressor at least 20' (6.1 m) away from spray area. An additional length of air hose may be required. • Store flammable materials in a secure location away from compressor.

<ul style="list-style-type: none"> Restricting any of the compressor ventilation openings will cause serious overheating and could cause fire. 	<ul style="list-style-type: none"> Never place objects against or on top of compressor. Operate compressor in an open area at least 12" (30.5 cm) away from any wall or obstruction that would restrict the flow of fresh air to the ventilation openings. Operate compressor in a clean, dry well ventilated area. Do not operate unit in any confined area. Store indoors.
<ul style="list-style-type: none"> Unattended operation of this product could result in personal injury or property damage. To reduce the risk of fire, do not allow the compressor to operate unattended. 	<ul style="list-style-type: none"> Always remain in attendance with the product when it is operating. Always turn off and unplug unit when not in use.

HAZARD



▲ DANGER:

RISK TO BREATHING (ASPHYXIATION)

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> The compressed air directly from your compressor is not safe for breathing. The air stream may contain carbon monoxide, toxic vapors, or solid particles from the air tank. Breathing these contaminants can cause serious injury or death. 	<ul style="list-style-type: none"> Never use air obtained directly from the compressor to supply air for human consumption. The compressor is not equipped with suitable filters and in-line safety equipment for human consumption.
<ul style="list-style-type: none"> Exposure to chemicals in dust created by power sanding, sawing, grinding, drilling, and other construction activities may be harmful. Sprayed materials such as paint, paint solvents, paint remover, insecticides, weed killers, may contain harmful vapors and poisons. 	<ul style="list-style-type: none"> Work in an area with good cross ventilation. Read and follow the safety instructions provided on the label or safety data sheets for the materials you are spraying. Always use certified safety equipment: NIOSH/OSHA respiratory protection or properly fitting face mask designed for use with your specific application.

HAZARD



⚠ WARNING: RISK OF BURSTING

Air Tank: On February 26, 2002, the U.S. Consumer Product Safety Commission published Release # 02-108 concerning air compressor tank safety:

Air compressor receiver tanks do not have an infinite life. Tank life is dependent upon several factors, some of which include operating conditions, ambient conditions, proper installations, field modifications, and the level of maintenance. The exact effect of these factors on air receiver life is difficult to predict.

If proper maintenance procedures are not followed, internal corrosion to the inner wall of the air receiver tank can cause the air tank to unexpectedly rupture allowing pressurized air to suddenly and forcefully escape, posing risk of injury to consumers.

Your compressor air tank must be removed from service by the end of the year shown on your tank warning label.

The following conditions could lead to a weakening of the air tank, and result in a violent air tank explosion:

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none">• Failure to properly drain condensed water from air tank, causing rust and thinning of the steel air tank.	<ul style="list-style-type: none">• Drain air tank daily or after each use. If air tank develops a leak, replace it immediately with a new air tank or replace the entire compressor.
<ul style="list-style-type: none">• Modifications or attempted repairs to the air tank.	<ul style="list-style-type: none">• Never drill into, weld, or make any modifications to the air tank or its attachments. Never attempt to repair a damaged or leaking air tank. Replace with a new air tank.
<ul style="list-style-type: none">• Unauthorized modifications to the safety valve or any other components which control air tank pressure.	<ul style="list-style-type: none">• The air tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.

Attachments & accessories:

<ul style="list-style-type: none">• Exceeding the pressure rating of air tools, spray guns, air operated accessories, tires, and other inflatables can cause them to explode or fly apart, and could result in serious injury.	<ul style="list-style-type: none">• Follow the equipment manufacturers recommendation and never exceed the maximum allowable pressure rating of attachments. Never use compressor to inflate small low pressure objects such as children's toys, footballs, basketballs, etc.
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Tires:

- **Over inflation of tires could result in serious injury and property damage.**
- Use a tire pressure gauge to check the tires pressure before each use and while inflating tires; see the tire sidewall for the correct tire pressure.
NOTE: Air tanks, compressors and similar equipment used to inflate tires can fill small tires very rapidly. Adjust pressure regulator on air supply to no more than the rating of the tire pressure. Add air in small increments and frequently use the tire gauge to prevent over inflation.

HAZARD



⚠ WARNING: RISK OF ELECTRICAL SHOCK

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none">• Your compressor is powered by electricity. Like any other electrically powered device, if it is not used properly it may cause electric shock.	<ul style="list-style-type: none">• Never operate the compressor outdoors when it is raining or in wet conditions.• Never operate compressor with protective covers removed or damaged.
<ul style="list-style-type: none">• Repairs attempted by unqualified personnel can result in serious injury or death by electrocution.	<ul style="list-style-type: none">• Any electrical wiring or repairs required on this product should be performed by authorized service center personnel in accordance with national and local electrical codes.
<ul style="list-style-type: none">• Electrical Grounding: Failure to provide adequate grounding to this product could result in serious injury or death from electrocution. Refer to Grounding Instructions paragraph in the <i>Installation</i> section.	<ul style="list-style-type: none">• Make certain that the electrical circuit to which the compressor is connected provides proper electrical grounding, correct voltage and adequate fuse protection.

HAZARD



⚠ DANGER: RISK OF SERIOUS INJURY OR PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none">• Oil can leak or spill and could result in fire or breathing hazard; serious injury or death can result. Oil leaks will damage carpet, paint or other surfaces in vehicles or trailers.	<ul style="list-style-type: none">• Always place compressor on a protective mat when transporting to protect against damage to vehicle from leaks. Remove compressor from vehicle immediately upon arrival at your destination.

HAZARD



⚠ WARNING: RISK FROM FLYING OBJECTS

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> The compressed air stream can cause soft tissue damage to exposed skin and can propel dirt, chips, loose particles, and small objects at high speed, resulting in property damage or personal injury. 	<ul style="list-style-type: none"> Always wear certified safety equipment: ANSI Z87.1 eye protection (CAN/CSA Z94.3) with side shields when using the compressor. Never point any nozzle or sprayer toward any part of the body or at other people or animals. Always turn the compressor off and bleed pressure from the air hose and air tank before attempting maintenance, attaching tools or accessories.

HAZARD



⚠ WARNING: RISK OF HOT SURFACES

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> Touching exposed metal such as the compressor head, engine head, engine exhaust or outlet tubes, can result in serious burns. 	<ul style="list-style-type: none"> Never touch any exposed metal parts on compressor during or immediately after operation. Compressor will remain hot for several minutes after operation. Do not reach around protective shrouds or attempt maintenance until unit has been allowed to cool.

HAZARD



⚠ WARNING: RISK FROM MOVING PARTS

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> Moving parts such as the pulley, flywheel, and belt can cause serious injury if they come into contact with you or your clothing. 	<ul style="list-style-type: none"> Never operate the compressor with guards or covers which are damaged or removed. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents may cover moving parts and should be avoided as well.
<ul style="list-style-type: none"> Attempting to operate compressor with damaged or missing parts or attempting to repair compressor with protective shrouds removed can expose you to moving parts and can result in serious injury. 	<ul style="list-style-type: none"> Any repairs required on this product should be performed by authorized service center personnel.

HAZARD



⚠ WARNING: RISK OF UNSAFE OPERATION

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none">• Unsafe operation of your compressor could lead to serious injury or death to you or others.	<ul style="list-style-type: none">• Review and understand all instructions and warnings in this manual.• Become familiar with the operation and controls of the air compressor.• Keep operating area clear of all persons, pets, and obstacles.• Keep children away from the air compressor at all times.• Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times.• Never defeat the safety features of this product.• Equip area of operation with a fire extinguisher.• Do not operate machine with missing, broken, or unauthorized parts.

HAZARD



⚠ WARNING: RISK OF FALLING

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none">• A portable compressor can fall from a table, workbench, or roof causing damage to the compressor and could result in serious injury or death to the operator.	<ul style="list-style-type: none">• Always operate compressor in a stable secure position to prevent accidental movement of the unit. Never operate compressor on a roof or other elevated position. Use additional air hose to reach high locations.

HAZARD



⚠ WARNING: RISK OF INJURY FROM LIFTING

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none">• Serious injury can result from attempting to lift too heavy an object.	<ul style="list-style-type: none">• The compressor is too heavy to be lifted by one person. Obtain assistance from others before lifting.



⚠ CAUTION: RISK FROM NOISE

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none">Under some conditions and duration of use, noise from this product may contribute to hearing loss.	<ul style="list-style-type: none">Always wear certified safety equipment: ANSI S12.6 (S3.19) hearing protection.

**SAVE THESE INSTRUCTIONS
FOR FUTURE USE**

SPECIFICATION CHART

Model No.	C5512
Running Horsepower	1.6 *
Bore	2.875" (73.0 mm)
Stroke	2" (50.8 mm)
Voltage	120/240
Hz-Single Phase	60
Minimum Branch Circuit Requirement	15 amps
Fuse Type	Time Delay
Air Tank Capacity (Gallon)	20 (75.7 liters)
Approximate Cut-in Pressure	120 PSIG
Approximate Cut-out Pressure	150 PSIG
SCFM @ 40 psig	7.3 *
SCFM @ 90 psig	5.7 *

* Tested per ISO 1217

Refer to Glossary for abbreviations.

GLOSSARY

Become familiar with these terms before operating the unit.

CFM: Cubic feet per minute.

SCFM: Standard cubic feet per minute; a unit of measure of air delivery.

PSIG: Pounds per square inch gauge; a unit of measure of pressure.

Code Certification: Products that bear one or more of the following marks: UL®, CUL, ETL®, CETL, have been evaluated by OSHA certified independent safety laboratories and meet the applicable Standards for Safety.

Cut-In Pressure: While the motor is off, air tank pressure drops as you continue to use your accessory. When the tank pressure drops to a certain low level the motor will restart automatically. The low pressure at which the motor automatically restarts is called "cut-in" pressure.

Cut-Out Pressure: When an air compressor is turned on and begins to run, air pressure in the air tank begins to build. It builds to a certain high pressure before the motor automatically shuts off - protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called "cut-out" pressure.

Branch Circuit: Circuit carrying electricity from electrical panel to outlet.

DUTY CYCLE

This air compressor pump is capable of running continuously. However, to prolong the life of your air compressor, it is recommended that a 50%-75% average duty cycle be maintained; that is, the air compressor pump should not run more than 30-45 minutes in any given hour.

ACCESSORIES

Accessories for this unit are available at the store the unit was purchased.

⚠ WARNING: The use of any other accessory not recommended for use with this tool could be hazardous. Use only accessories rated equal to or higher than the rating of the air compressor.

ASSEMBLY

TOOLS REQUIRED FOR ASSEMBLY

1 - 9/16" socket or open end wrench

1 - 1/2" socket or open end wrench

UNPACKING

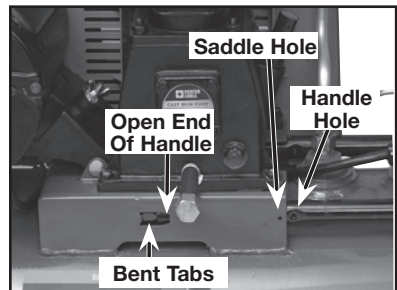
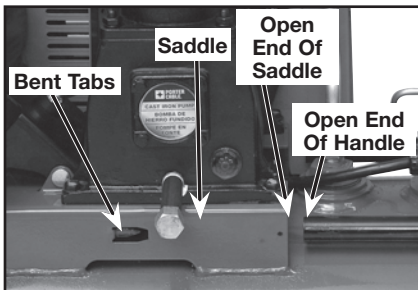
Remove unit from carton and discard all packaging. **NOTE:** Save all parts bags.

⚠ CAUTION: This compressor was shipped with oil in the pump crankcase. Check oil before operating air compressor, see **Check Oil** under *Maintenance*.

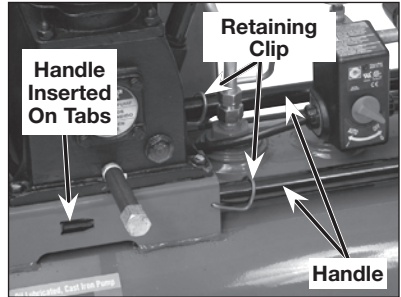
TO INSTALL HANDLE

⚠ CAUTION: The wheels and handle do not provide adequate clearance, stability, or support for pulling the unit up and down stairs or steps. The unit must be lifted or pushed up a ramp. Do not lift the unit by the manifold assembly, the unit could be damaged.

1. To make installation easier, submerge handle grip into warm soapy water. Remove handle grip from soapy water and slide onto handle.
2. Insert the open end of the handle under the saddle. Before attaching handle, you may have to pull the open ends of the handle apart so they fit tightly against the side of the saddle. Looking in from the open end of the saddle, position the handle toward the two bent tabs, on the inside walls of the saddle.
3. Slowly push the open ends of the handle onto both tabs at the same time. Continue pushing the handle into the saddle until the holes on the side of the saddle and handle are in line.



4. Guide the straight end of each retaining clip through the saddle hole and both handle holes.
5. Rotate each retaining clip and press down until it snaps into place over the handle.
6. If the handle has excessive movement, it is improperly installed. Check the following.
 - A. Are both tabs inside the handle?
 - B. Does each clip pass through both the saddle and handle?

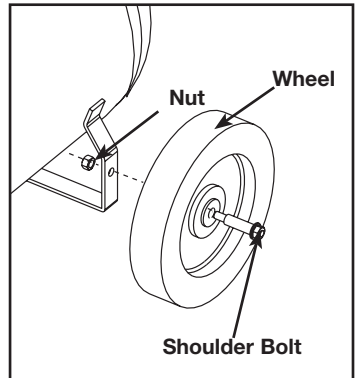


TO ASSEMBLE WHEELS

⚠ CAUTION: It will be necessary to brace or support one side of the unit when installing the wheels because the compressor will have a tendency to tip.

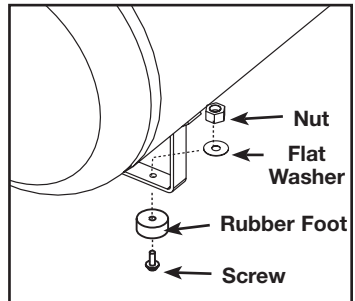
1. Attach wheels with shoulder bolts and nuts as shown.
2. Tighten securely. **NOTE:** The unit will sit level if the wheels are properly installed.

⚠ CAUTION: The wheels and handle do not provide adequate clearance, stability or support for pulling the unit up and down stairs or steps. The unit must be lifted, or pushed up a ramp.



ASSEMBLE RUBBER FEET

1. Attach rubber feet with the screws, washers, and nuts provided as shown.
2. Tighten securely.



INSTALLATION

HOW TO SET UP YOUR UNIT

Location of the Air Compressor

- Locate the air compressor in a clean, dry and well ventilated area.
- The air compressor should be located at least 12" (30.5 cm) away from the wall or other obstructions that will interfere with the flow of air.
- The air compressor pump and shroud are designed to allow for proper cooling. Do not place rags or other objects on top of compressor.

GROUNDING INSTRUCTIONS

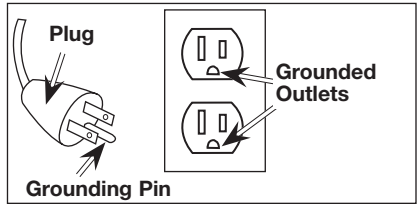
⚠ WARNING: Risk of Electrical Shock. In the event of a short circuit, grounding reduces the risk of shock by providing an escape wire for the electric current. This air compressor must be properly grounded.

The portable air compressor is equipped with a cord having a grounding wire with an appropriate grounding plug (see illustration).

1. The cord set and plug with this unit contains a grounding pin. This plug **MUST** be used with a grounded outlet.

IMPORTANT: The outlet being used must be installed and grounded in accordance with all local codes and ordinances.

2. Make sure the outlet being used has the same configuration as the grounded plug. **DO NOT USE AN ADAPTER.** See illustration.



3. Inspect the plug and cord before each use. Do not use if there are signs of damage.
4. If these grounding instructions are not completely understood, or if in doubt as to whether the compressor is properly grounded, have the installation checked by a qualified electrician.

⚠ DANGER: Risk of Electrical Shock. **IMPROPER GROUNDING CAN RESULT IN ELECTRICAL SHOCK.**

Do not modify the plug provided. If it does not fit the available outlet, a correct outlet should be installed by a qualified electrician.

Repairs to the cord set or plug **MUST be made by a qualified electrician.**

EXTENSION CORDS

If an extension cord must be used, be sure it is:

- a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product
- in good condition
- no longer than 50 feet
- 12 gauge (AWG) or larger. (Wire size increases as gauge number, decreases. 10 AWG and 8 AWG may also be used. **DO NOT USE 14 OR 16 AWG.**)

NOTICE: Risk of Property Damage. The use of an undersized extension cord will cause voltage to drop resulting in power loss to the motor and overheating. Instead of using an extension cord, increase the working reach of the air hose by attaching another length of hose to its end. Attach additional lengths of hose as needed.

VOLTAGE AND CIRCUIT PROTECTION

Refer to the *Specification* chart for the voltage and minimum branch circuit requirements.

NOTICE: Risk of Operation. Certain air compressors can be operated on a 15 amp circuit if the following conditions are met.

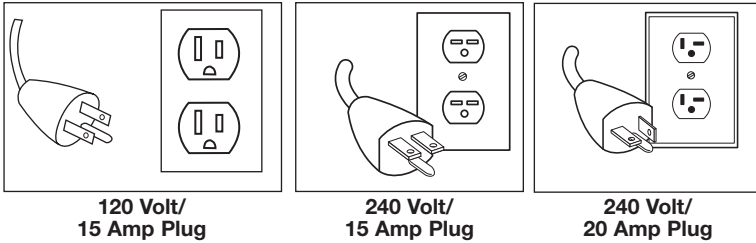
1. Voltage supply to circuit must comply with the National Electrical Code.
2. Circuit is not used to supply any other electrical needs.
3. Extension cords comply with specifications.

4. Circuit is equipped with a 15 amp circuit breaker or 15 amp time delay fuse.
NOTE: If compressor is connected to a circuit protected by fuses, use only time delay fuses. Time delay fuses should be marked "D" in Canada and "T" in the US.

If any of the above conditions cannot be met, or if operation of the compressor repeatedly causes interruption of the power, it may be necessary to operate it from a 20 amp circuit. It is not necessary to change the cord set.

120/240 DUAL VOLTAGE MOTOR

This model has a dual voltage motor, 120 and 240 volt. It is wired for 120 volt but can be converted to 240 volt operation. Instructions for connecting the motor for operation at 240 volt can be found printed on the label attached to the side of the motor.



⚠ CAUTION: When converting to 240V operation, the attached three-prong 120V cord assembly must be replaced with a three-pronged 240V cord assembly (K-0080: 240V/20 Amp Plug) that can be purchased through a Authorized Service Center.

TRANSPORTING

When transporting the compressor in a vehicle, trailer, etc., make sure the tank is drained and the unit is secured with straps to prevent tipping. Use care when driving to prevent tipping the unit over in the vehicle. Damage can occur to the compressor or surrounding items if the compressor is tipped.

LIFTING

Always use two people when lifting and lift from the recommended lift points. DO NOT lift by wheels or shroud.

MOVING

⚠ CAUTION: The wheels and handle do not provide adequate clearance, stability, or support for pulling the unit up and down stairs or steps. The unit must be lifted or pushed up a ramp.

1. Grasp handle of compressor and tilt compressor back to rest on wheels.

⚠ WARNING: Risk of Unsafe Operation. Ensure proper footing and use caution when rolling compressor so that unit does not tip or cause loss of balance.

2. When location is reached slowly lower compressor to ground. **Always store compressor in a horizontal position.**

NOTE: Should the unit tip over, hard starting and smoking will occur due to oil spillage.



AIR DISTRIBUTION SYSTEM

⚠ WARNING: Risk of Unsafe Operation. Unit cycles automatically when power is on. When servicing, you may be exposed to voltage sources, compressed air, or moving parts. Before servicing unit unplug or disconnect electrical supply to the air compressor, bleed tank of pressure, and allow the air compressor to cool.

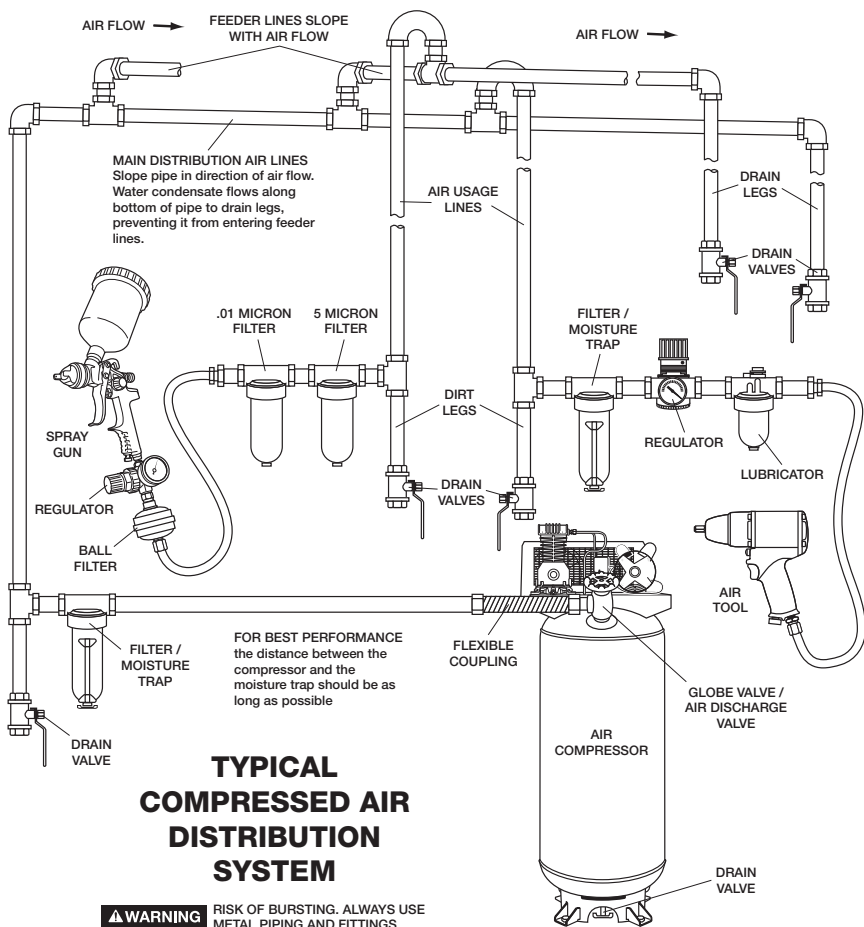
IMPORTANT: The regulator assembly on the unit should be removed and a flexible coupling should be assembled to the pipe nipple for a plumbed-in air distribution system. Follow these instructions to correctly convert to a permanent air distribution system.

⚠ WARNING: Risk of bursting. Plastic or PVC pipe is not designed for use with compressed air. Regardless of its indicated pressure rating, plastic pipe can burst from air pressure. Use only metal pipe for air distribution lines.

The next figure represents a typical air distribution system. The following are tips to remember when setting up the air compressor's air distribution system.

NOTE: Compressed air from oil lube air compressors will contain water condensation and oil mist. Several drains, traps and filters will be needed to supply air without water (including aerosols) or oil to spray equipment, air tools and accessories requiring filtered air. Always read the instructions for the air tools and accessories being used.

- Use pipe that is the same size as the air tank outlet. Piping that is too small will restrict the flow of air.
- If piping is over 100' (30.5 m) long, use the next larger size.
- Bury underground lines below the frost line and avoid pockets where condensation can gather and freeze. Apply pressure before underground lines are covered to make sure all pipe joints are free of leaks.
- A flexible coupling is recommended to be installed between the pipe nipple and main air distribution line to allow for vibration.
- A separate regulator is recommended to control the air pressure. Air pressure from the tank is usually too high for individual air driven tools.
- DO NOT install lubricators between the tank and any spray equipment, air tool or accessory requiring oil-free filtered air.
- Drain all traps, filters and dirt legs daily.



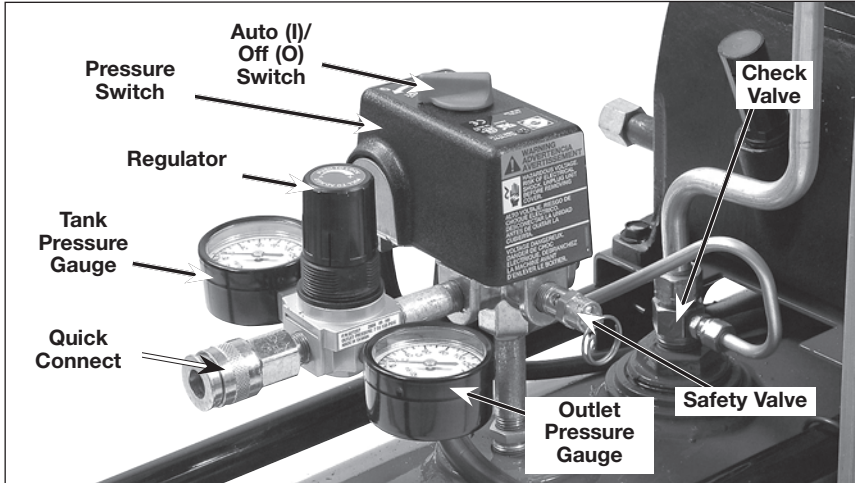
TYPICAL COMPRESSED AIR DISTRIBUTION SYSTEM

WARNING RISK OF BURSTING. ALWAYS USE METAL PIPING AND FITTINGS.

OPERATION

KNOW YOUR AIR COMPRESSOR

READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR UNIT. Compare the illustrations with your unit to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.



DESCRIPTION OF OPERATION

Become familiar with these controls before operating the unit.

Auto(I)/Off(O) Switch: Place this switch in the Auto (I) position to provide automatic power to the pressure switch and Off (O) to remove power at the end of each use.

Pressure Switch: The pressure switch automatically starts the motor when the air tank pressure drops below the factory set "cut-in" pressure. It stops the motor when the air tank pressure reaches the factory set "cut-out" pressure.

Safety Valve: If the pressure switch does not shut off the air compressor at its "cut-out" pressure setting, the safety valve will protect against high pressure by "popping out" at its factory set pressure (slightly higher than the pressure switch "cut-out" setting).

Tank Pressure Gauge: The tank pressure gauge indicates the reserve air pressure in the tank.

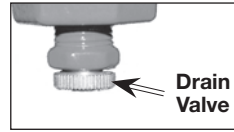
Outlet Pressure Gauge: The outlet pressure gauge indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator and is always less than or equal to the tank pressure.

Regulator: Controls the air pressure shown on the outlet pressure gauge. Pull the knob out and turn clockwise to increase pressure and counterclockwise to decrease pressure. When the desired pressure is reached push knob in to lock in place.

Cooling System (not shown): This compressor contains an advanced design cooling system. At the heart of this cooling system is an engineered fan. It is perfectly normal for this fan to blow air through the vent holes in large amounts. You know that the cooling system is working when air is being expelled.

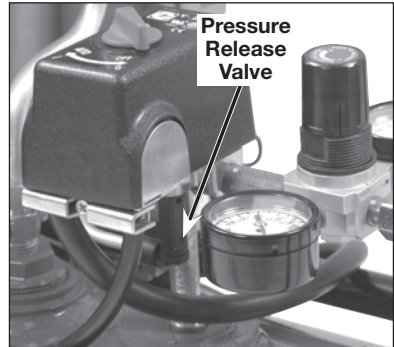
Air Compressor Pump (not shown): Compresses air into the air tank. Working air is not available until the compressor has raised the air tank pressure above that required at the air outlet.

Drain Valve: The drain valve is located at the base of the air tank and is used to drain condensation at the end of each use.



Check Valve: When the air compressor is operating, the check valve is "open", allowing compressed air to enter the air tank. When the air compressor reaches "cut-out" pressure, the check valve "closes", allowing air pressure to remain inside the air tank.

Pressure Release Valve: The pressure release valve located on the side of the pressure switch, is designed to automatically release compressed air from the compressor head and the outlet tube when the air compressor reaches "cut-out" pressure or is shut off. The pressure release valve allows the motor to restart freely. When the motor stops running, air will be heard escaping from this valve for a few seconds. No air should be heard leaking when the motor is running or after the unit reaches "cut-out" pressure.



Motor Overload Protector: The motor has a thermal overload protector. If the motor overheats for any reason, the overload protector will shut off the motor. The motor must be allowed to cool down before restarting. To restart:

1. Set the Auto/Off switch to "Off" and unplug unit.
2. Allow the motor to cool.
3. Depress the red reset button on the motor.
4. Plug the power cord into the correct branch circuit receptacle.
5. Set the Auto/Off switch to "Auto" position.

Air Intake Filter (not shown): This filter is designed to clean air coming into the pump. This filter must always be clean and ventilation openings free from obstructions. See *Maintenance*.

HOW TO USE YOUR UNIT

How to Stop

Set the Auto/Off switch to "Off".

Before Starting

⚠ WARNING: Do not operate this unit until you read this instruction manual for safety, operation and maintenance instructions.

Break-in Procedure

NOTICE: Risk of property damage. Serious damage may result if the following break-in instructions are not closely followed.

This procedure is required **before** the air compressor is put into service and when the check valve or a complete compressor pump has been replaced.

1. Make sure the Auto/Off switch is in the "Off" position.
2. Check oil level in pump. See **Oil** paragraph in the *Maintenance* section for instructions.

3. Plug the power cord into the correct branch circuit receptacle. (Refer to **Voltage and Circuit Protection** paragraph in the *Installation* section of this manual.)
4. Open the drain valve (counterclockwise) fully to permit air to escape and prevent air pressure build up in the air tank during the break-in period.
5. Move the Auto/Off switch to "Auto" position. The compressor will start.
6. Run the compressor for 20 minutes. Make sure the drain valve is open and there is minimal air pressure build-up in tank.
7. After 20 minutes, close the drain valve by turning clockwise. The air receiver will fill to "cut-out" pressure and the motor will stop.

The compressor is now ready for use.

Before Each Start-Up

1. Set the Auto/Off switch to "Off".
2. Pull the regulator knob out and turn counterclockwise to set the outlet pressure to zero.
3. Attach hose and accessories.

⚠ WARNING: Risk of unsafe operation. Firmly grasp air hose in hand when installing or disconnecting to prevent hose whip.

⚠ WARNING: Risk of unsafe operation. Do not use damaged or worn accessories.

NOTE: The hose or accessory will require a quick connect plug if the air outlet is equipped with a quick connect socket.

⚠ WARNING: Risk of Bursting. Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.

NOTICE: Risk of property damage. Compressed air from the unit may contain water condensation and oil mist. Do not spray unfiltered air at an item that could be damaged by moisture. Some air tools and accessories may require filtered air. Read the instructions for the air tools and accessories.

How to Start

1. Set the Auto/Off switch to "Auto" and allow tank pressure to build. Motor will stop when tank pressure reaches "cut-out" pressure.
2. Pull the regulator knob out and turn clockwise to increase pressure. When the desired pressure is reached push knob in to lock in place.

⚠ WARNING: If any unusual noise or vibration is noticed, stop the compressor immediately and have it checked by a trained service technician.

The compressor is ready for use.

MAINTENANCE

CUSTOMER RESPONSIBILITIES

	Before each use	Daily or after each use	Every 8 hours	Every 40 hours	Every 100 hours	Every 160 hours	Yearly	See tank warning label
Check Safety Valve	•							
Drain Tank		•						
Oil Leaks			•					
Check Pump Oil			•					
Change Pump Oil						•		
Unusual Noise and/or Vibration			•					
Air Filter					• (1)			
Drive Belt-Condition				•				
Motor Pulley/ Flywheel alignment					•			
Air compressor pump intake and exhaust valves							•	
Remove tank from service								• (2)
Head Bolts - Check the torques of the head bolts after the first five hours of operation.								
1 - more frequent in dusty or humid conditions								
2 - For more information, call our Customer Care Center at (888)-848-5175								

⚠ WARNING: Risk of unsafe operation. Unit cycles automatically when power is on. When performing maintenance, you may be exposed to voltage sources, compressed air, or moving parts. Personal injuries can occur. Before performing any maintenance or repair, disconnect power source from the compressor and bleed off all air pressure.

To ensure efficient operation and longer life of the air compressor outfit, a routine maintenance schedule should be prepared and followed. The following routine maintenance schedule is geared to an outfit in a normal working environment operating on a daily basis. If necessary, the schedule should be modified to suit the conditions under which your compressor is used. The modifications will depend upon the hours of operation and the working environment. Compressor outfits in an extremely dirty and/or hostile environment will require a greater frequency of all maintenance checks.

NOTE: See *Operation* section for the location of controls.

TO CHECK SAFETY VALVE

⚠ WARNING: Risk of bursting. If the safety valve does not work properly, over-pressurization may occur, causing air tank rupture or an explosion.

⚠ WARNING: Risk from flying objects. Always wear certified safety equipment: ANSI Z87.1 eye protection (CAN/CSA Z94.3) with side shields.

Before starting compressor, pull the ring on the safety valve to make sure that the safety valve operates freely. If the valve is stuck or does not operate smoothly, it must be replaced with the same type of valve.

TO DRAIN TANK

⚠ WARNING: Risk of unsafe operation. Air tanks contain high pressure air. Keep face and other body parts away from outlet of drain. Use eye protection [ANSI Z87.1 (CAN/CSA Z94.3)] when draining as debris can be kicked up into face.

⚠ WARNING: Risk from noise. Use ear protection (ANSI S12.6 (S3.19)) as air flow noise is loud when draining.

NOTE: All compressed air systems generate condensate that accumulates in any drain point (e.g., tanks, filter, aftercoolers, dryers). This condensate contains lubricating oil and/or substances which may be regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

1. Set the Auto/Off lever to "Off" and unplug unit.
2. Pull the regulator knob out and turn counterclockwise to set the outlet pressure to zero.
3. Remove the air tool or accessory.
4. Pull ring on safety valve allowing air to bleed from the tank until tank pressure is approximately 20 psi. Release safety valve ring.
5. Drain water from air tank by opening drain valve (counterclockwise) on bottom of tank.

⚠ WARNING: Risk of Bursting. Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.

NOTICE : Risk of Property Damage. Drain water from air tank may contain oil and rust which can cause stains.

6. After the water has been drained, close the drain valve (clockwise). The air compressor can now be stored.

NOTE: If drain valve is plugged, release all air pressure. The valve can then be removed, cleaned, the reinstalled.

OIL

NOTICE : Risk of property damage. Use air compressor oil only. Multi-weight automotive engine oils like 10W30 should not be use in air compressors. They leave carbon deposits on critical components, thus reducing performance and compressor life.

NOTE: Use 30W compressor oil or a heavy duty SAE 30W, non-detergent, SF grade or better oil. DO NOT use multi-weight automotive engine oils, they will reduce compressor life. Under extreme winter condition use SAE-10 weight oil.

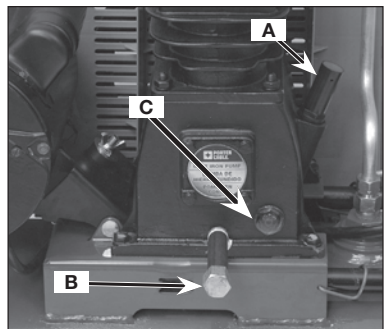
NOTE: Crankcase oil capacity is approximately 16 fluid ounces (0.47 L).

Checking

1. The oil level should be to the middle of the sight glass (C).
2. If needed remove oil fill plug (A) and slowly add oil until it reaches the middle of the sight glass.

Changing

1. Remove the oil fill plug (A).
2. Remove the oil drain plug (B) and drain oil into a suitable container.



3. Replace the oil drain plug (B) and tighten securely.
4. Slowly add compressor oil until the oil level is in the middle of the sightglass (C). **NOTE:** When filling the crankcase, the oil flows very slowly into the pump. If the oil is added too quickly, it will overflow and appear to be full.

NOTICE : Risk of property damage. Overfilling with oil will cause premature compressor failure. Do not overfill.

5. Replace oil fill plug (A) and tighten securely.

AIR FILTER - INSPECTION AND REPLACEMENT

⚠ WARNING: Hot surfaces. Risk of burn. Compressor heads are exposed when filter cover is removed. Allow compressor to cool prior to servicing.

⚠ CAUTION: Keep the air filter clean at all times. Do not operate the air compressor with the air filter removed.

A dirty air filter will not allow the compressor pump to operate at full capacity. Before using the compressor pump, check the air filter to make sure it is clean and in place.

If it is dirty, replace it with a new filter.

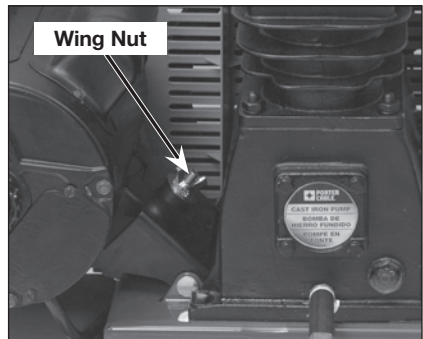
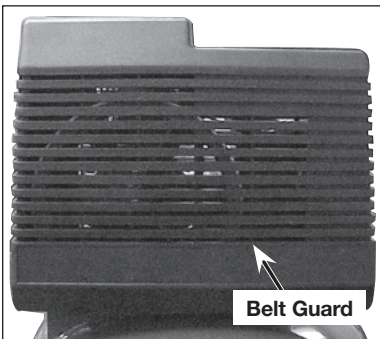
1. Using a pair of needle nose pliers or a screwdriver pull or pry out the old filter and carefully clean the filter area.
2. Push the new air filter in place.

IMPORTANT: Do not operate the compressor with the air filter removed.

BELT - REPLACEMENT

⚠ WARNING: Risk of unsafe operation. Serious injury or damage may occur if parts of the body or loose items get caught in moving parts. Never operate the outfit with the belt guard removed. The belt guard should be removed only when the air compressor power is disconnected.

1. Set the Auto/Off lever to "Off" and unplug unit.
2. Remove the front of the belt guard by disengaging the snaps. Insert a flat bladed screwdriver at each snap location and pry the beltguard apart.



3. Loosen the wing nut on hold down plate and tilt motor to allow for easy removal or installation of the belt.
4. Remove belt.

⚠ WARNING: Risk of moving parts. Use caution when rolling belt onto flywheel, fingers can get caught between the belt and flywheel.

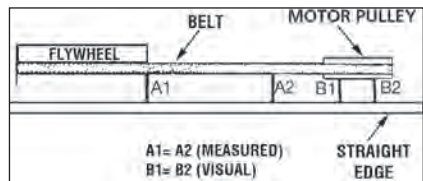
5. Replace belt. **NOTE:** The belt must be centered over the grooves on the flywheel and motor pulley.
6. Turn the wing nut on the hold down plate until it makes contact with the washer, plus one additional turn.
7. Replace the belt guard.

MOTOR PULLEY/FLYWHEEL ALIGNMENT

NOTE: Once the motor pulley has been moved from its factory set location, the grooves of the flywheel and pulley must be aligned to within 1/16" (1.6 mm) to prevent excessive belt wear.

The air compressor flywheel and motor pulley must be in-line (in the same plane) within 1/16" (1.6 mm) to assure belt retention within flywheel belt grooves. To check alignment, perform the following steps:

1. Set the Auto/Off lever to "Off", unplug unit and relieve all air pressure from the air tank.
2. Remove belt guard.
3. Place a straightedge against the outside of the flywheel and the motor drive pulley.
4. Measure the distance between the edge of the belt and the straightedge at points A1 and A2 in figure. The difference between measurements should be no more than 1/16" (1.6 mm).
5. If the difference is greater than 1/16" (1.6 mm) loosen the set screw holding the motor drive pulley to the shaft and adjust the pulley's position on the shaft until the A1 and A2 measurements are within 1/16" (1.6 mm) of each other.
6. Tighten the motor drive pulley set screw.
7. Visually inspect the motor drive pulley to verify that it is perpendicular to the drive motor shaft. Points B1 and B2 of Figure should appear to be equal. If they are not, loosen the setscrew of the motor drive pulley and equalize B1 and B2, using care not to disturb the belt alignment performed in step 2.
8. Retighten the motor drive pulley setscrew. Torque to 70-100 in-lbs (7.9-11.3 Nm).
9. Reinstall belt guard.



AIR COMPRESSOR PUMP INTAKE AND EXHAUST VALVES

Once a year have a Trained Service Technician check the air compressor pump intake and exhaust valves.

AIR COMPRESSOR HEAD BOLTS - TORQUING

The air compressor pump head bolts should be kept properly torqued. Check the torques of the head bolts after the first five hours of operation. Torque to 28-39 ft.-lbs (38.0-52.9 Nm).

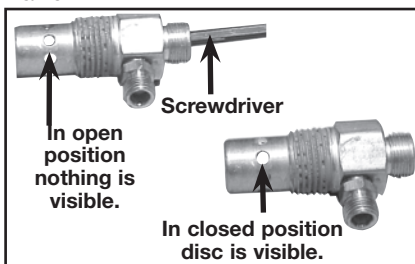
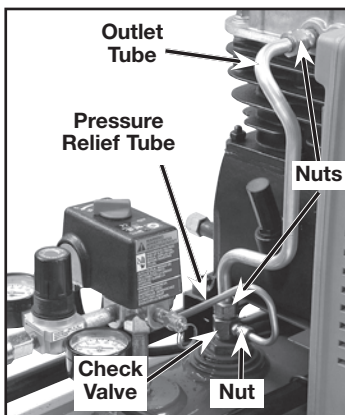
SERVICE AND ADJUSTMENTS

ALL MAINTENANCE AND REPAIR OPERATIONS NOT LISTED MUST BE PERFORMED BY TRAINED SERVICE TECHNICIAN.

⚠ WARNING: Risk of Unsafe Operation. Unit cycles automatically when power is on. When servicing, you may be exposed to voltage sources, compressed air, or moving parts. Before servicing unit unplug or disconnect electrical supply to the air compressor, bleed tank of pressure, and allow the air compressor to cool.

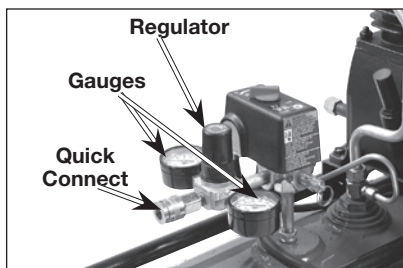
TO REPLACE OR CLEAN CHECK VALVE

1. Release all air pressure from air tank. See **To Drain Tank** in the *Maintenance* section.
2. Unplug air compressor.
3. Using an adjustable wrench loosen outlet tube nut at air tank and pump. Carefully move outlet tube up away from check valve.
4. Using an adjustable wrench loosen pressure relief tube nut at air tank. Carefully move pressure relief tube away from check valve.
5. Unscrew the check valve (turn counterclockwise) using a 7/8" open end wrench. Note the orientation for reassembly.
6. Using a screwdriver, carefully push the valve disc up and down. **NOTE:** The valve disc should move freely up and down on a spring which holds the valve disc in the closed position, if not the check valve needs to be cleaned or replaced.
7. Clean or replace the check valve. A solvent, such as paint or varnish remover can be used to clean the check valve.
8. Apply sealant to the check valve threads. Reinstall the check valve (turn clockwise).
9. Replace the pressure release tube. Tighten nut.
10. Replace the outlet tube and tighten nuts.
11. Perform the Break-in Procedure. See **Break-in Procedure** in the *Operation* section.

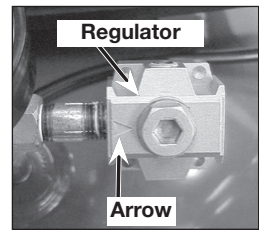
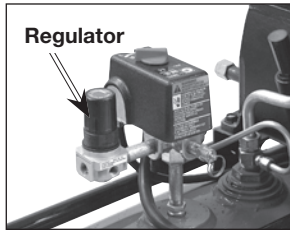
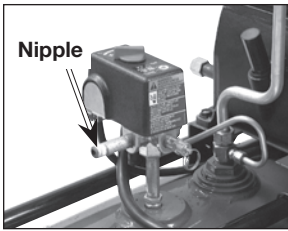


TO REPLACE REGULATOR

1. Release all air pressure from air tank. See **To Drain Tank** in the *Maintenance* section.
2. Set the Auto/Off lever to "Off" and unplug unit.
3. Using an adjustable wrench remove the gauges and quick connect from the regulator.



4. Remove the regulator.
5. Apply pipe sealant tape to the nipple on the standpipe.
6. Assemble the regulator and orient as shown.



NOTE: Arrow indicates flow of air. Make sure it is pointing in the direction of air flow.

7. Reapply pipe sealant to gauges and quick connect.
8. Reassemble outlet pressure gauge and quick connect. Orient gauges to read correctly. Tighten connect with wrench.

STORAGE

Before you store the air compressor, make sure you do the following:

1. Review the *Maintenance* section on the preceding pages and perform scheduled maintenance as necessary.
2. Drain water from air tank. See **To Drain Tank** under *Maintenance*.

▲ WARNING: Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.

3. Protect the electrical cord and air hose from damage (such as being stepped on or run over). Wind them loosely around the compressor handle.
4. Store the air compressor in a clean and dry location.

SERVICE

REPLACEMENT PARTS

Use only identical replacement parts. For a parts list or to order parts, visit our service website at www.deltaportercableservicenet.com. You can also order parts from your nearest PORTER-CABLE Factory Service Center or PORTER-CABLE Authorized Warranty Service Center. Or, you can call our Customer Care Center at (888) 848-5175.

SERVICE AND REPAIRS

All quality tools will eventually require servicing and/or replacement of parts. For information about PORTER-CABLE, its factory service centers or authorized warranty service centers, visit our website at www.deltaportercable.com or call our Customer Care Center at (888) 848-5175. All repairs made by our service centers are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by others.

You can also write to us for information at PORTER-CABLE, 4825 Highway 45 North, Jackson, Tennessee 38305 - Attention: Product Service. Be sure to include all of the information shown on the nameplate of your tool (model number, type, serial number, etc.).

ACCESSORIES

⚠ WARNING: Since accessories, other than those offered by PORTER-CABLE, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only PORTER-CABLE recommended accessories should be used with this product.

A complete line of accessories is available from your PORTER-CABLE Factory Service Center or a PORTER-CABLE Authorized Warranty Service Center. Please visit our Web Site www.deltaportercable.com for a catalog or for the name of your nearest supplier.

TROUBLESHOOTING

⚠ WARNING: Risk of Unsafe Operation. Unit cycles automatically when power is on. When servicing, you may be exposed to voltage sources, compressed air, or moving parts. Before servicing unit unplug or disconnect electrical supply to the air compressor, bleed tank of pressure, and allow the air compressor to cool.

PROBLEM	CAUSE	CORRECTION
Excessive tank pressure - safety valve pops off	Pressure switch does not shut off motor when compressor reaches "cut-out" pressure.	Move Auto/Off lever to the "Off" position, if the unit does not shut off contact a Trained Service Technician.
	Pressure switch "cut-out" too high.	Contact a Trained Service Technician.
Air leaks at fittings	Tube fittings are not tight enough.	Tighten fittings where air can be heard escaping. Check fittings with soapy water solution. DO NOT OVER TIGHTEN.
Air leaks at or inside check valve	Check valve seat damaged.	A defective check valve results in a constant air leak at the pressure release valve when there is pressure in the tank and the compressor is shut off. Replace check valve. Refer the To Replace or Clean Check Valve in the <i>Service and Adjustments</i> section.
Air leaks at pressure switch release valve	Defective pressure switch release valve.	Contact a Trained Service Technician.
Air leaks in air tank or at air tank welds	Defective air tank.	Air tank must be replaced. Do not repair the leak. ⚠ WARNING: Risk of bursting. Do not drill into, weld or otherwise modify air tank or it will weaken. The tank can rupture or explode.
Air leaks between head and valve plate	Leaking seal.	Contact a Trained Service Technician.

PROBLEM	CAUSE	CORRECTION
Pressure reading on the regulated pressure gauge (if equipped) drops when an accessory is used	It is normal for "some" pressure drop to occur.	If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator as instructed in the <i>Operation</i> section. NOTE: Adjust the regulated pressure under flow conditions (while accessory is being used).
Air leak from safety valve	Possible defect in safety valve.	Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced.
Compressor is not supplying enough air to operate accessories	Prolonged excessive use of air.	Decrease amount of air usage.
	Compressor is not large enough for air requirement.	Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, you need a larger compressor.
	Hole in hose.	Check and replace if required.
	Check valve restricted.	Remove and clean, or replace.
	Air leaks.	Tighten fittings.
	Restricted air intake filter.	Clean or replace air intake filter. Do not operate the air compressor with the filter removed. Refer to the Air Filter paragraph in the <i>Maintenance</i> section.
	Loose belt.	Loosen wingnut and then tighten wingnut until it contacts the washer, plus one turn.
Restricted air intake	Dirty air filter.	Clean or replace. See Air Filter paragraph in the <i>Maintenance</i> section.
Regulator knob has continuous air leak.	Damaged regulator.	Replace.
Regulator will not shut off air outlet.	Damaged regulator.	Replace.

PROBLEM	CAUSE	CORRECTION
Motor will not run	Motor overload protection switch has tripped.	Refer to Motor Overload Protection under <i>Operation</i> . If motor overload protection trips frequently, contact a Trained Service Technician
	Tank pressure exceeds pressure switch "cut-in" pressure.	Motor will start automatically when tank pressure drops below "cut-in" pressure of pressure switch.
	Check valve stuck open.	Remove and clean, or replace.
	Loose electrical connections.	Check wiring connection inside pressure switch and terminal box area.
	Possible defective motor or starting capacitor.	Have checked by a Trained Service Technician.
	Paint spray on internal motor parts.	Have checked by a Trained Service Technician. Do not operate the compressor in the paint spray area. See flammable vapor warning.
	Pressure release valve on pressure switch has not unloaded head pressure.	Bleed the line by pushing the lever on the pressure switch to the "Off" position; if the valve does not open, replace switch.
	Fuse blown, circuit breaker tripped.	<ol style="list-style-type: none"> 1. Check fuse box for blown fuse and replace as necessary. Reset circuit breaker. Do not use a fuse or circuit breaker with higher rating than that specified for your particular branch circuit. 2. Check for proper fuse. You should use a time delay fuse. 3. Check for low voltage conditions and/or proper extension cord. 4. Disconnect the other electrical appliances from circuit or operate the compressor on its own branch circuit.

PROBLEM	CAUSE	CORRECTION
Knocking Noise	Possible defect in safety valve.	Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced.
	Defective check valve.	Remove and clean, or replace.
	Loose pulley.	Tighten pulley set screw.
	Loose flywheel.	Tighten flywheel screw.
	Compressor mounting screws loose.	Tighten mounting screws.
	Loose belt.	Loosen wingnut and then tighten wingnut until it contacts the washer, plus one turn.
	Carbon build-up in pump.	Have checked by a Trained Service Technician.
	Belt too tight.	Loosen wingnut and then tighten wingnut until it contacts the washer, plus one turn.
Excessive belt wear	Loose belt.	Loosen wingnut and then tighten wingnut until it contacts the washer, plus one turn.
	Tight belt.	Loosen wingnut and then tighten wingnut until it contacts the washer, plus one turn.
	Loose pulley.	Have checked by a Trained Service Technician.
	Pulley misalignment.	See Motor Pulley/Flywheel Alignment paragraph in the <i>Maintenance</i> section.
Squealing sound	Compressor pump has no oil.	See Oil-Checking paragraph in the <i>Maintenance</i> section.
	Loose belt.	Loosen wingnut and then tighten wingnut until it contacts the washer, plus one turn.

