

# VERTICAL 60 GALLON AIR COMPRESSOR

*AC5161B AC5161BP* 

**User Manual** 



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## INTRODUCTION

## PRODUCT IDENTIFICATION





Attention: Read through the complete manual prior to the initial use of your Compressor

## **Using the Operator's manual**

The operating manual is an important part of your Compressor. It should be read thoroughly before initial use, and referred to often to make sure adequate safety and service concerns are being addressed.

Reading the owner's manual thoroughly will help avoid any personal injury or damage to your pump. By knowing how best to operate this machine you will be better positioned to show others who may also operate the unit.

You can refer back to the manual at any time to help troubleshoot any specific operating functions, so store it with the machine at all times.

#### **Record Identification Numbers**

#### Compressor

**Date of Purchase:** 

**Serial Number:** 

If you need to contact an Authorized Dealer or Customer Service (1-866-850-6662) for information on servicing, always provide the product model and identification numbers.

You will need to locate the model and serial number for the pump and record the information in the places provided below.

Dealer Name:
Dealer Phone:
Product Identification Numbers
Model Number:



## **SAFETY**

## **SAFETY**



#### Save these Instructions

#### **SAFETY RULES**



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

The safety alert symbol ( ) is used with a signal word (DANGER, CAUTION, WARNING), a pictorial and/or a safety message to alert you to hazards.

**DANGER** indicates a hazard which, if not avoided, will result in death or serious injury.

**WARNING** indicates a hazard which, if not avoided, could result in death or serious injury.

**CAUTION** indicates a hazard which, if not avoided, might result in minor or moderate injury.

**NOTICE** indicates a situation that could result in equipment damage. Follow safety messages to avoid or reduce the risk of injury or death.

## **Hazard Symbols and Meanings**



**EXPLOSION** 



**FLYING OBJECTS** 



**HEARING RISK** 



FIRE



**TOXIC FUMES** 



ELECTRIC SHOCK



MOVING PARTS



HOT SURFACE



READ MANUAL

# **A** WARNING





Risk of Fire or Explosion.

Never spray flammable liquids in confined area. It is normal for the motor and pressure switch to produce sparks while operating. If sparks come into contact with vapors from gasoline or other solvents, they may ignite, causing fire or explosion. Always operate the compressor in a well-ventilated area. Do not smoke while spraying. Do not spray where sparks or flame are present. Keep compressor as far from spray area as possible.

# Λ

## **WARNING**



Risk of Bursting.

- Do not weld, drill or modify the air tank of this compressor. Welding or modifications on the air compressor tank can severely impair tank strength and cause an extremely hazardous condition. Welding or modifying the tank in any manner will void the warranty.
- Check the manufacturer's maximum pressure rating for air tools and accessories. Compressor outlet pressure must be regulated so as to never exceed the maximum pressure rating of the tool. Relieve all pressure through the hose before attaching or removing accessories.
- Do not adjust the relief valve for any reason. Doing so voids all warranties. The relief valve has been pre-set at the factory for the maximum pressure of this unit. Personal injury and/or property damage may result if the valve is tampered with.
- Do not use plastic or pvc pipe for compressed air. Use only galvanized steel pipe and fittings for compressed air distribution lines.



## **SAFETY**

## **SAFETY**



## WARNING



Risk of Electrical Shock.

Never use an electric air compressor outdoors when it is raining or on a wet surface, as it may cause an electric shock.

## WARNING



Risk of Injury.

This unit starts automatically. ALWAYS shut off the main power disconnect, and bleed all pressure from the system before servicing the compressor, and when the compressor is not in use. Do not use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with moving parts. Stay alert and watch what you are doing when operating the compressor. Do not use the compressor while tired or under the influence of drugs or alcohol.



## WARNING



Risk of Burns.

High temperatures are generated by the pump and manifold. To prevent burns or other injuries, DO NOT touch the pump, manifold or transfer tube while the pump is running. Allow them to cool before handling or servicing. Keep children away from the compressor at all times.



## **WARNING**



Risk of airbourne chemicals.

Be certain to read all labels when you are spraying paints or toxic materials, and follow the safety instructions. Use a respirator mask if there is a chance of inhaling anything you are spraying. Read all instructions and be sure that your respirator mask will protect you. Never directly inhale the compressed air produced by a compressor as it is not suitable for breathing purposes.

## **WARNING**



Risk of Eye Injury.

Always wear ANSI Z87.1 approved safety goggles when using an air compressor. Never point any nozzle or sprayer toward a person or any part of the body. Equipment can cause serious injury if the spray penetrates the skin.

## WARNING



Risk of Hearing Loss.

Always wear hearing protection when using an air compressor. Failure to do so may result in hearing loss.

## WARNING



Wash hands after handling. The power cord on this product contains lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm.

#### **NOTICE**

• ELECTRICAL WIRING. Refer to the air compressor's serial label for the unit's voltage and amperage requirements. Ensure that all wiring is done by a licensed electrician, in accordance with the National Electrical code.



This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov. Wash hands after handling.



## SAFETY

## **OVERVIEW**



## **CAUTION**

- 1. Drain the moisture from the tank on a daily basis. A clean, dry tank will help prevent corrosion.
- 2. Pull the pressure relief valve ring daily to ensure that the valve is functioning properly, and to clear the valve of any possible obstructions.
- 3. To provide proper ventilation for cooling, the compressor must be kept a minimum of 12 inches (31 cm) from the nearest wall, in a well-ventilated area.
- 4. To prevent damage to tank and compressor on stationary models, the tank must be shimmed to the pump base is level within 1/8" to distribute oil properly. All feet must be supported, shimming where necessary, prior to attaching to the floor. Fasten all feet to floor. We also recommend the use of vibration pads (094-0137) under tank feet.
- 5. Fasten the compressor down securely if transporting is necessary. Pressure must be released from the tank before transporting.
- 6. Protect the air hose from damage and puncture. Inspect them weekly for weak or worn spots, and replace if necessary.
- 7. To reduce the risk of electric shock, do not expose to rain. Store indoors.

#### Overview

#### BASIC AIR COMPRESSOR COMPONENTS

The basic components of the air compressor are the electric motor, Thermal Overload Protection System (TOPS), pump, and receiver (tank). The tank may be vertical or horizontal, varying in size and capacity.

The **electric motor** (see A) powers the pump.

**TOPS** senses both temperature and current, providing more complete motor overload protection than a magnetic starter, which senses only current. If TOPS senses an overload condition, it will automatically shutdown the compressor. Allow 10-15 minutes for the unit to cool down, then press the reset button on the motor to restart the compressor.

The **pump** (see B) compresses the air and discharges it into the tank.

The tank (see C) stores the compressed air.

The **pressure switch** (see D) shuts down the motor and relieves air pressure in the pump and transfer tube when the air pressure in the tank reaches the kick-out pressure. As compressed air is used and the pressure level in the tank drops to the kick-in pressure, the pressure switch restarts the motor automatically, without warning and the pump resumes compressing air.

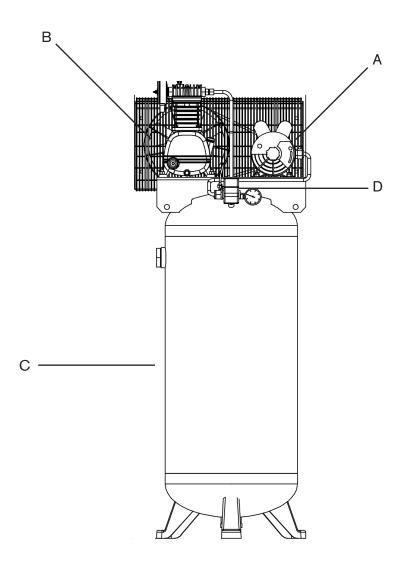
## **OVERVIEW**

## **ASSEMBLY**



#### **BASIC AIR COMPRESSOR COMPONENTS**

FIG 1



## Assembly

#### ASSEMBLING THE COMPRESSOR

 Unpack the air compressor. Inspect the unit for damage. If the unit has been damaged in transit, contact the carrier and complete a damage claim. Do this immediately as there are time limitations to damage claims.

#### The carton should contain:

- air compressor
- · operator and parts manuals
- Check the compressor's serial label to ensure that you have received the model ordered, and that it has the required pressure rating for its intended use.
- 3. Set up the compressor according to the following guidelines:







Never place the compressor in an area where there are fumes from flammable fluids such as paint, solvents, or gasoline. It is normal for the motor and pressure switch to produce sparks while operating. If sparks come into contact with flammable fumes, they may ignite, causing a fire or explosion. Always operate the compressor in a well ventilated area.

- a. For optimum performance, locate the compressor close to the power panel, as specified in ELECTRICAL POWER REQUIREMENTS, and as close as possible to the place where the air will be used. This ensures maximum power to the compressor and maximum air pressure to the tool. If both of these conditions cannot be met, it is better to locate the compressor close to the power panel, and use a longer hose to reach the usage area.
- b. The compressor must be at least 12 inches (31 cm) from any wall or obstruction, in a clean, well-ventilated area, to ensure sufficient air flow and cooling.
- c. In cold climates, place the compressor in a heated building, to reduce problems with lubrication, motor starting, and freezing of water condensation.
- d. Remove the compressor from the shipping pallet and place it on the floor or a hard, level surface. The compressor must be level to ensure proper lubrication of the pump and good drainage of the moisture in the tank.



FIG 2

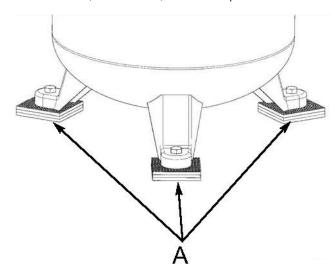
## **ASSEMBLY**

## **INSTALLATION**



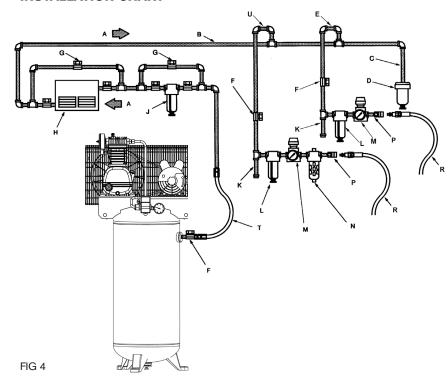
## **A** CAUTION

- The shipping pallet is not designed as a base for an operating the compressor. Operating the compressor while it is on the pallet will void your warranty.
- e. To prevent damage to tank and pump, the tank must be shimmed so the pump is level within 1/8" per lineal foot maximum to distribute oil properly. Fasten to floor and NEVER force tank feet to floor without shims when tightening. We also recommend the use of vibration pads (094-0137) under tank feet (see A).
- 5. Connect an air hose (not included) to the compressor.



#### Installation

#### **INSTALLATION CHART**



## **A** WARNING

Risk of bursting, resulting in injury. Never use Plastic pipe for compressed air.

## **A** CAUTION

- Never use lubricator for paint spraying or similar applications.
- A. Air flow
- B. Feeder line
- C. Drain leg
- D. Moisture trap with drain
- E. Non-lubricated supply line
- F. 1/4 turn valve
- G. Bypass
- H. Air dryer or aftercooler

- J. Line filter
- K. Drip tee with drain
- L. Air/water filter with petcock
- M. Regulator
- N. Lubricator
- P. Quick coupler
- R. Air hose to tool
- T. Flexible air line



## INSTALLATION

## **CONTROLS**



#### TYPICAL INSTALLATION

#### Air dryers and after coolers

An air dryer or aftercooler is installed directly in the air line.

#### Moisture removal and air filtration

As the air cools, moisture will condense in the lines. This moisture must be removed before it reaches the tool being used. To remove this moisture, run the main air line downhill to a moisture trap and drain. Air/ water filters should also be installed in the positions shown.

#### Air pressure regulation

The air pressure gauge on the pressure switch measures air pressure inside the tank, not pressure in the air line. Install an air regulator in the drop line for each tool, to regulate air pressure to that tool. Never exceed the maximum pressure rating of the tool.

#### Air lubrication

Install an air lubricator only for those tools requiring lubrication. Do not use a lubricator for paint spraying or similar applications. The oil will contaminate the paint and ruin the job.

#### Shut-off valves

Install shut-off valves in each drop line, to isolate the tool and its accessories for servicing. You can also install a bypass line around an accessory.

#### Controls

#### **COMPRESSOR CONTROLS**

#### **Motor Reset Switch**

TOPS senses both temperature and current, providing more complete motor overload protection than a magnetic starter, which senses only current. If TOPS senses an overload condition, it will automatically shut down the compressor. Allow 10-15 minutes for the unit to cool down, than press the reset button on the motor to restart the compressor. If the motor shuts down because of overload, wait 10-15 minutes so the motor can cool down, then press (NEVER force) the reset switch on the front of the motor to restart the motor.

#### Pressure Switch (see A)



• For your safety, tank pressure is preset within the switch and must never be tampered with.

This switch turns on the compressor. It is operated manually, but when in the ON position, it allows the compressor to start up or shut down automatically, without warning, upon air demand. ALWAYS set this switch to OFF when the compressor is not being used, and before unplugging the compressor.

The pressure switch also automatically bleeds pressure from the pump head when the pump stops. This feature eliminates back pressure in the pump, ensuring easier starting.

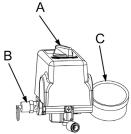
#### Pressure Relief Valve (see B)

If the pressure switch does not shut down the motor when pressure reaches the preset level, this valve will pop open automatically to prevent over pressurization. To operate manually, pull the ring on the valve to relieve air pressure in the tank. Pull the ring daily to test.

## Tank Pressure Gauge (see C)

FIG 5

This gauge measures the pressure level of the air stored in the tank. It is not adjustable by the operator, and does not indicate line pressure.



Measures pressure in tank, not line pressure.



## **ELECTRICAL POWER REQUIREMENTS**

## **ELECTRICAL POWER REQUIREMENTS**



## **Electrical Power Requirements**

#### **ELECTRICAL WIRING**

Refer to the air compressor's serial label for the unit's voltage and amperage requirements. Ensure that all wiring is done by a licensed electrician, in accordance with the National Electrical Code. Use electrical conduit to protect the wiring.

#### **MAIN POWER PANEL**

For best performance and reliable starting, the air compressor must be installed on a dedicated circuit, as close as possible to the electrical power panel. Provide circuit breaker or fuse protection at your main power panel. Use time delay fuses on the circuit, because the compressor will momentarily draw several times its specified amperage when first started.

#### MAIN POWER DISCONNECT SWITCH

Install a main power disconnect switch in the line from the panel to the compressor. The main power disconnect switch must be located near the compressor, for ease of use and safety. When turned OFF, the main power disconnect switch shuts off all power to the compressor. When it is turned ON, the compressor will start and stop automatically, controlled by the pressure switch.

#### LOW VOLTAGE PROBLEMS

Low voltage will cause difficult starting or an overload. Low voltage can be caused by a low supply voltage from the local power company, other equipment running on the same line, or inadequate wiring. If any other electrical devices are drawing from the compressor's circuit, it may fail to start.

Low voltage to the compressor can be caused by a supply wire of insufficient gauge for the distance between the compressor and the power source. The longer the distance, the larger the wire gauge (lower the number) must be, to overcome the inherent voltage loss caused by the wire resistance. Refer to the National Electrical Code to determine proper wire size for your circuit.

If the wiring is not adequate, the input voltage will drop by 20 to 40 volts at startup. Low voltage or an overloaded circuit can result in sluggish starting that causes the circuit breaker to trip, especially in cold conditions.

#### **GROUNDING INSTRUCTIONS**

This product must be connected to a grounded, metallic, permanent wiring system, or an equipment - grounding terminal or lead on the product.



## BREAK-IN OF THE PUMP



## Break-In of the Pump

#### **BREAK-IN OF THE PUMP**

### **NOTICE**

- The pump is shipped with break-in oil which should be changed after the first 8 hours of operation.
- 1. Make sure the power is connected at the power panel.
- 2. Check the oil level in the pump (see "Checking the Oil" in the maintenance section).
- 3. Open the petcock (see F).



## **CAUTION**



Escaping air and moisture can propel debris that may cause eye injury. Wear safety goggles when opening petcock.

4. Turn ON the main power disconnect switch. Turn the pressure switch to the AUTO position (see D). The motor should start. Allow the compressor to run for 30 minutes, to break in the internal parts.

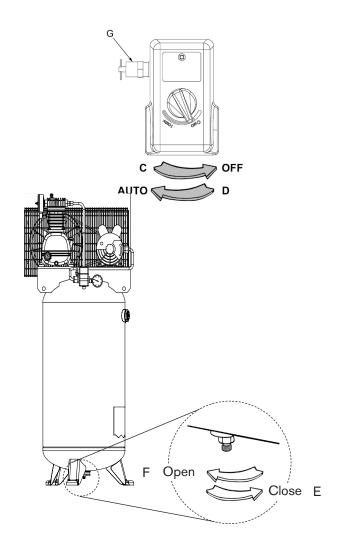
## **NOTICE**

- After about 30 minutes, If the unit does not operate properly, SHUT DOWN IMMEDIATELY, and contact Product Service.
- 5. After about 30 minutes, turn the pressure switch to the OFF position (see C).
- 6. Shut OFF the main power disconnect.
- 7. Close the petcock (see E). Turn in the clockwise direction.
- 8. Turn ON the main power disconnect switch. Turn the pressure switch to the AUTO position. The compressor will start and fill the tank to the cut-out pressure and stop.

#### **NOTICE**

As compressed air is used, the pressure switch will restart the motor automatically.

FIG 9





## **OPERATING**

## **OPERATING**



## Operating

#### **DAILY STARTUP**

- 1. Check the oil level in the pump (see "Checking the Oil" in the maintenance section).
- Make sure the main power disconnect switch is shut OFF.
- Close the tank petcock (see E).
- 4. Turn ON the main power disconnect switch. Turn the pressure switch to the AUTO position (see D). The pump will start filling the tank with air. When the air pressure in the tank reaches the level preset at the factory, the pressure switch will turn off the electric motor. As air is used and the pressure level in the tank drops, the pressure switch will start the motor and the pump will begin refilling the tank.

## **WARNING**



High temperatures are generated by the electric motor and the pump. To prevent burns or other injuries, DO NOT touch the compressor while it is running. Allow it to cool before handling or servicing. Keep children away from the compressor at all times.

## **NOTICE**

• If the unit does not operate properly, SHUT DOWN IMMEDIATELY. and contact your nearest Service Center or call the factory's Customer Service Department. DO NOT return the unit to the store where it was purchased.

#### **COLD WEATHER STARTING**

In cold weather check that the air filter(s) are clean. ALWAYS use synthetic, non-detergent air compressor oil.

Open the petcock (F) to depressurize the tank to zero PSI before starting. If the compressor will not start, relocate it in a warmer location.

#### **SHUTDOWN**

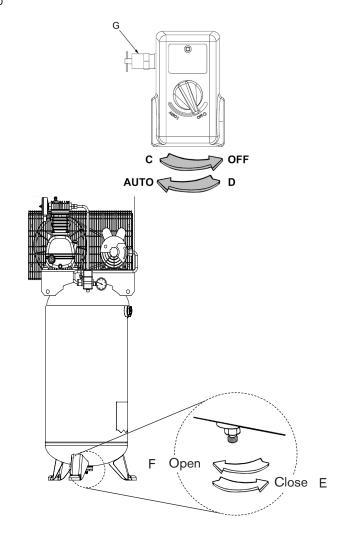
- 1. Turn the pressure switch to the OFF position (see C).
- 2. Shut OFF the main power disconnect switch.
- Reduce pressure in the tank through the outlet hose. You can also pull the tank safety valve ring (see G) and keep it open to relieve pressure in the tank
- 4. Open the petcock (see F) to allow moisture to drain from the tank.

## **CAUTION**



Escaping air and moisture can propel debris that may cause eye injury. Wear safety goggles when opening petcock.

FIG 10





## **MAINTENANCE**

## **MAINTENANCE**



#### Maintenance

## **A** WARNING

• This unit starts automatically. ALWAYS shut off the main power disconnect, and bleed all pressure from the system before servicing the compressor, and when the compressor is not in use. Do not use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with moving parts.

Regular maintenance will ensure trouble-free operation. Your electric powered air compressor represents high-quality engineering and construction; however, even high-quality machinery requires periodic maintenance. The items listed below should be inspected on a regular basis.

#### **DRAINING THE TANK**



## WARNING



Condensation will accumulate in the tank. To prevent corrosion of the tank from the inside, this moisture must be drained at the end of every workday. Be sure to wear protective eyewear. Relieve the air pressure in the system and open the petcock on the bottom of the tank to drain.

#### **CHECKING THE OIL**

Check the level of oil in the pump with the sight glass. The pump oil level must be between A and B (See Fig. 7). Do not overfill or under fill.

NOTE: Use synthetic, non-detergent air compressor oil.

#### **CHANGING THE OIL**

Remove the oil plug (C) (Fig. 7) and drain the oil until it slows to a drip, then close. Add oil (approx. 33 oz. - 940 grams) to the pump by first removing the breather plug (E). Add oil until the level viewed through the sight glass (D) is between FULL (A) and ADD (B). Never overfill or under fill the pump.

NOTE: The compressor is pre-filled with synthetic oil. Use synthetic, non-detergent air compressor oil.

A = Full

B = Add

C = Oil drain plug

D = Oil level sight glass

E = Oil fill plug

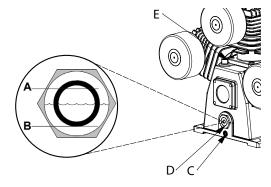


FIG 13

#### **BELT TENSION AND PULLEY ALIGNMENT**

# **WARNING**

• This unit starts automatically. ALWAYS shut off the main power disconnect, and bleed all pressure from the system before servicing the compressor, and when the compressor is not in use. Do not use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with moving parts.

NOTE: Drive belt tensioning and pulley alignment are done at the same time. They are discussed separately for clarity.

#### **ADJUSTING DRIVE BELT TENSION**

Proper belt tension and pulley alignment must be maintained for maximum drive efficiency and belt life. The correct tension exists if a deflection (see A) of 1/2" (13 mm) occurs by placing 10 lb (4.6 kg) of force (see B) midway between the motor pulley and the pump flywheel. This deflection can be adjusted by the following procedure. The pulley should be carefully aligned with the flywheel, and all setscrews should be kept tight.

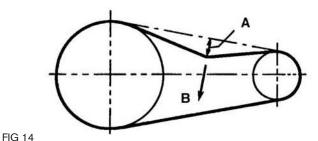
- 1. Remove the belt guard.
- 2. Loosen the motor mounting bolts.
- 3. Shift the motor to the point where the correct deflection exists.
- 4. Retighten the motor mounting bolts.
- 5. Check to ensure that the tension remained correct.
- 6. Reinstall the belt guard. All moving parts must be guarded.



## **MAINTENANCE**

## **MAINTENANCE**

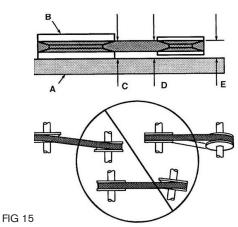




# **PULLEY ALIGNMENT**

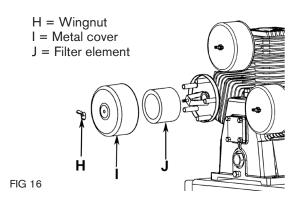
To check pulley alignment, remove the belt guard and place a straightedge (see A) against the pump flywheel (see B). Measure and record the distance from the straightedge to the edge of the drive belt at point C. Then measure the distance from the straightedge to the edge of the drive belt again at points D and E. Both distances should be the same as at point C. If D or E are different from C, there is a misalignment which must be corrected before the compressor is run. To correct a pulley misalignment, use the following procedure.

- 1. Remove the belt guard.
- 2. Loosen the motor mounting bolts.
- 3. Loosen the setscrew on the motor pulley.
- 4. Align the motor pulley with the pump flywheel (C = D = E).
- 5. Retighten the motor pulley setscrew.
- 6. Adjust the proper belt tension.
- 7. Retighten the motor mounting bolts.
- 8. Reinstall the belt guard. All moving parts must be guarded.



#### **CLEANING THE AIR FILTER**

A dirty air filter will reduce the compressor's performance and life. To avoid any internal contamination of the pump, the filter should be cleaned frequently, and replaced on a regular basis. Felt filters should be cleaned in warm, soapy water, rinsed, and allowed to air dry before reinstallation. Paper filters should be replaced when dirty. Do not allow the filter to become filled with dirt or paint. If the filter becomes filled with paint, it should be replaced. Direct exposure to dirty conditions or painting areas will void your warranty.



#### **CHECKING THE RELIEF VALVE**

Pull the relief valve daily to ensure that it is operating properly and to clear the valve of any possible obstructions.

#### **TESTING FOR LEAKS**

Check that all connections are tight. A small leak in any of the hoses, transfer tubes, or pipe connections will substantially reduce the performance of your air compressor. If you suspect a leak, spray a small amount of soapy water around the area of the suspected leak with a spray bottle. If bubbles appear, repair or replace the faulty component. Do not overtighten any connections.

#### **STORAGE**

Before storing the compressor for a prolonged period, use an air blow gun to clean all dust and debris from the compressor. Disconnect the power cord and coil it up. Pull the pressure relief valve to release all pressure from the tank. Drain all moisture from the tank. Clean the filter element and filter housing; replace the element if necessary. Drain the oil from the pump crankcase and replace it with new oil. Cover the entire unit to protect it from moisture and dust.



# **MAINTENANCE**

# **TROUBLESHOOTING**



## **SERVICE INTERVAL**

Inspect and clean air filter	Weekly
Check pump oil level	Daily
Change pump oil	Every 200 hours of use
Operate the pressure relief valves	Daily
Check belt tension	Every 250 hours of use
Drain tank	Daily
Check and tighten all bolts (Do not overtighten)	After first 8 hour and every 500 hours of use

# Troubleshooting

## TROUBLESHOOTING CHART

PROBLEM	POSSIBLE CAUSE	SOLUTION
Excessive current draw trips circuit breaker	Low voltage/motor overload	Check that power supply is adequate and that compressor is on a dedicated circuit.
	Drive belt too tight	Readjust belt tension
	Restricted air passages	Inspect and replace transfer tubes or check valve, as required.
Compressor stalls	Low voltage motor	Furnish adequate power.
	Bad check valve	Replace the check valve.
	Seized pump	Contact authorized service center.
Low discharge pressure	Air leaks	Tighten or replace leaking fittings or connections. Do not overtighten.
	Leaking valves	Contact authorized service center.
	Restricted air intake	Clean or replace air filter element(s).
	Blown gaskets	Contact authorized service center.
	Worn piston rings or cylinder	Contact authorized service center.
Compressor pump knocking	Loose engine pulley or compressor flywheel	Retighten pulley and flywheel. Check alignment.
	Low oil level in pump crankcase	Keep oil at proper level at all times.
	Excess carbon on valves or top of piston	Contact authorized service center.
Oil in discharge air	Worn piston rings or cylinder	Contact authorized service center.
	Restricted air intake	Clean or replace the air filter element(s).
	Oil level too high	Reduce to proper level.





PROBLEM	POSSIBLE CAUSE	SOLUTION
Overheating	Poor ventilation	Relocate compressor to an area with cool, dry, well circulated air, at least 12 in. from nearest wall.
	Dirty cooling surfaces	Clean all cooling surfaces thoroughly.
Excessive belt wear	Pulley out of alignment	Realign pulley with compressor flywheel.
	Improper belt tension	Readjust.
	Pulley wobbles	Replace the pulley and check for a damaged crankshaft or flywheel.
Compressor won't start in cold temperatures	Too much back pressure in tank	Open petcock when starting motor.
	40W oil in crankcase	Use synthetic, non-detergent air compressor oil.
	Compressor too cold	Move compressor to a warmer location.

**CFM:** Cubic feet per minute; a unit of measure of air flow.

**PSI:** Pounds per square inch; a unit of measure of air pressure.

Kick-in pressure: Factory set low pressure point that starts the compressor to repressurize the tank to a higher pressure.

Kick-out pressure: Factory set high pressure point that stops the compressor from increasing the pressure in the tank above a certain level.

Well-ventilated: A means of providing fresh air in exchange for dangerous exhaust or vapors.

Dedicated circuit: An electrical circuit reserved for the exclusive use of the air compressor.

ASME: American Society of Mechanical Engineers. Indicates that the components are manufactured, tested and inspected to the specifications set by ASME.



## **CSA: Canadian Standards Association**

Indicates that the products that have this marking have been manufactured, tested and inspected to standards that are set by CSA.



## **Canadian Standards Association (USA)**

Indicates that the products that have this marking have been us manufactured, tested and inspected to standards that are set by CSA. These products also conform to U.L. standard 1450.



THE POWER YOU NEED.

IF YOU NEED ASSISTANCE WITH THE ASSEMBLY OR OPERATION OF YOUR COMPRESSOR PLEASE CALL

1-866-850-6662