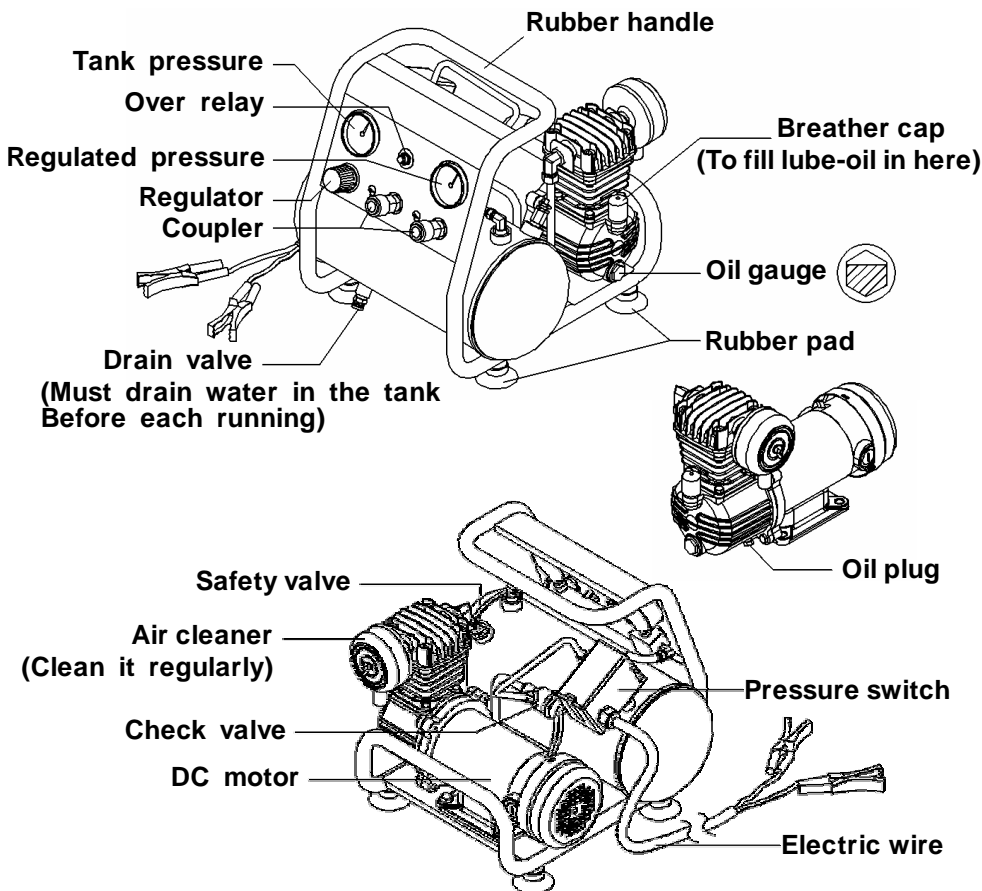
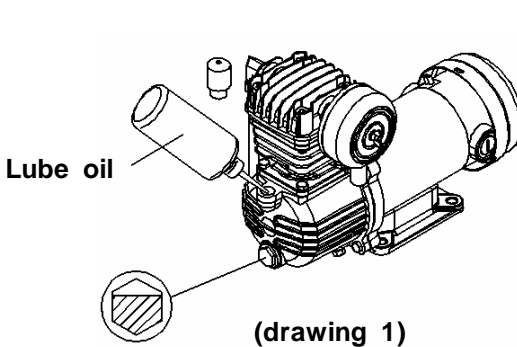


DC AIR COMPRESSOR OPERATION MANUAL

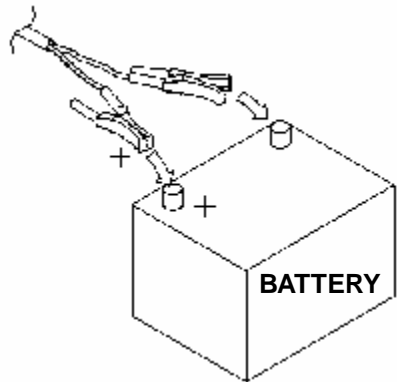
Read carefully before running
PLEASE CONFIRM YOUR BATTERY ARE 12V OR 24V

MAIN PARTS NAMES

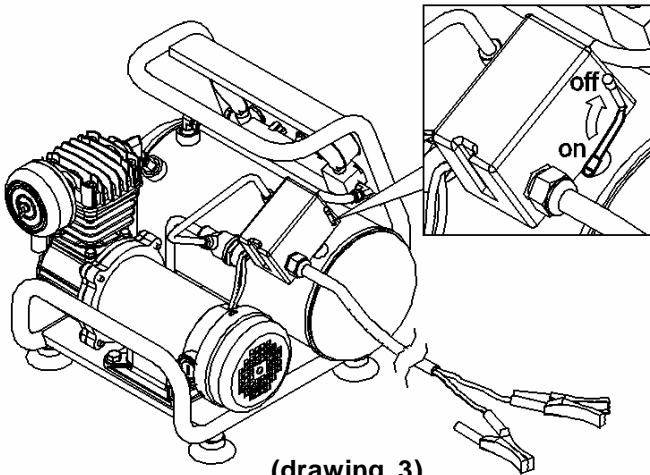




(drawing 1)



(drawing 2)



(drawing 3)

NOTICES FOR AIR COMPRESSOR

1. Check lube-oil if it's enough before running the compressor.
Only after the motor stop adding lube-oil. (drawing 1)
2. Change lube-oil in the first 100 hours afterwards, each 500 hours.
3. When you want to connect electric wire to battery that you have to make sure the pressure switch turn "off". (drawing 3)
4. When the compressor is unused, the switch must be turned "off".
5. When the compressor is unused , the electric wire must be pulled out.
6. Check the voltage is the same, and then connect the battery.
7. Electric wire clip "+" to connect the battery "+", and "-" to connect the battery "-".(drawing 2)

IMPORTANT SAFETY INSTRUCTIONS



SAVE THESE INSTRUCTIONS




WARNING




IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE.

READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT.

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p data-bbox="135 512 300 544">▲ WARNING</p> <p data-bbox="148 571 269 667">Risk of Unsafe Operation</p>	<p data-bbox="337 499 628 635">Unsafe operation of your air compressor could lead to serious injury to you or others.</p>	<ul data-bbox="669 499 1005 1401" style="list-style-type: none"><li data-bbox="669 499 1005 635"> Review and understand all instructions and warnings in this manual.<li data-bbox="669 643 1005 770"> Become familiar with the operation and controls of the air compressor.<li data-bbox="669 778 1005 874"> Keep operating area clear of all persons, pets, and obstacles.<li data-bbox="669 882 1005 978"> Keep children away from the air compressor at all times.<li data-bbox="669 986 1005 1153"> Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times.<li data-bbox="669 1161 1005 1225"> Never defeat the safety features of this product.<li data-bbox="669 1233 1005 1297"> Equip area of operation with a fire extinguisher.<li data-bbox="669 1305 1005 1401"> Do not operate machine with missing, broken, or unauthorized parts.

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>⚠ WARNING</p> <p>Risk of Air Tank Bursting</p> 	<p>The following Conditions could lead to a weakening of the tank, and RESULT IN A VIOLENT TANK EXPLOSION RESULTING IN SERIOUS INJURY TO YOU OR OTHERS:</p> <ul style="list-style-type: none"> I Failure to properly drain condensed water from the tank, causing rust and thinning of the tank wall. I Modifications or attempted repairs to the tank. I Unauthorized modifications to the pressure switch, safety valve, or any other components, which control tank pressure. 	<ul style="list-style-type: none"> I Follow the equipment manufacturers recommendation and never exceed the maximum allowable pressure rating of attachments. Never use the compressor to inflate small low-pressure objects such as children’s toys, footballs, basketballs, etc.
<p>⚠ WARNING</p> <p>Risk of Attachments and Accessories Bursting</p> 	<p>Exceeding the pressure rating of air tools, spray guns, air operated accessories, tires AND other inflatable can cause them to explode or fly apart, and could result in serious injury to you and others.</p>	

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>⚠ WARNING</p> <p>Risk of Electric Shock</p> 	<ul style="list-style-type: none"> Your air compressor is powered by electricity. Like any other electrically powered device, if it is not used properly, it may cause electrical shock. Electrical grounding: failure to provide adequate grounding to this product could increase the risk of electric shock. 	<ul style="list-style-type: none"> Any electrical wiring or repairs required to this product should be performed by qualified service personnel or a licensed electrician, in accordance with national and local electrical codes. Make certain that the electrical circuit to which the compressor is connected provides proper electrical grounding, correct voltage, and adequate fuse protection. Never operate the compressor outdoors when it is raining, or in a wet environment.
<p>⚠ WARNING</p> <p>Risk of Explosion or Fire</p> 	<p>It is normal for electrical contact within the motor and pressure switch to spark, whenever the compressor starts or stops. Never operate the compressor in an atmosphere where flammable vapors are present. Doing so can result in serious injury to you or others.</p>	<ul style="list-style-type: none"> Always operate the compressor in a well-ventilated area, free of gasoline or solvent vapors. If spraying flammable materials, locate compressor at least 20 feet away from spray area. Store flammable materials in a secure location away from compressor.
<p>⚠ WARNING</p> <p>Risk to Breathing</p> 	<ul style="list-style-type: none"> The compressed air from your compressor is not safe for breathing. The air stream may contain carbon monoxide or other vapors, or particles from the tank or other components. Sprayed materials such as paint 	<ul style="list-style-type: none"> Never inhale air from the compressor, either directly or from a breathing device connected to the compressor. Work in an area equipped with good cross ventilation. Read and follow the safety instructions provided on the label or safety data sheet for the material you are spraying.

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>▲ WARNING Risk to Breathing (continued)</p>	<p>solvents, paint remover, insecticides, weed killers, etc., contain harmful vapors and poisons.</p> <p>I Breathing compressor or sprayed materials vapor can result in serious injury.</p>	<p>Use an approved respirator designed for use with your specific application.</p>
<p>▲ WARNING Risk from Compressed Air</p> 	<p>The compressed air stream can cause soft tissue damage, and can propel dirt, chips, loose particles and small objects at high speed, resulting in property damage or personal injury.</p>	<p>I Always wear approved safety glasses with side shields when using the compressor.</p> <p>I Never point any nozzle or sprayer toward any part of the body or at other people or animals.</p> <p>I Always turn the compressor off and bleed pressure from the air line before attempting maintenance, attaching tools or accessories.</p>
<p>▲ WARNING Risk from Moving Parts</p> 	<p>The compressor cycles automatically when the pressure switch is in the on/auto position. If you attempt repair or maintenance while the compressor is operating or plugged in, you can expose yourself to moving parts. These moving parts can cause serious injury.</p>	<p>I Always unplug the compressor and release air pressure from the tank and any attachments before attempting any maintenance or repair.</p> <p>I Never operate the compressor with guards or covers which are damaged or removed.</p>
<p>▲ WARNING Risk of Burn</p> 	<p>Contact with hot parts such as the compressor head or outlet tubes could result in a serious skin burn.</p>	<p>I Never touch hot components during or immediately after operation of the compressor. Do not reach around protective shrouds or attempt maintenance until unit has been allowed to cool.</p>

GLOSSARY

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.

CUT-IN PRESSURE: While the motor is off, air tank pressure drops as you continue to use your accessory or air tool. When the tank pressure drops to a certain level the motor will restart automatically re-started is called “cut-in pressure”.

CUT-OUT PRESSURE: When you turn on your air compressor, it begins to run, air pressure in the air tank begins to build. It builds to a certain pressure before the motor automatically shuts off – protecting your air tank from pressure higher than its design rating. The pressure at which the motor shuts off is called “cut-out pressure”.

DUTY CYCLE

All manufactured air compressors are recommended to be operated on not more than a 50% duty cycle. This means an air compressor that pumps air more than 50% of one hour is considered misuse because the air compressor is undersized for the required air demand.

GENERAL INFORMATION

This air compressor requires oil. Now you can enjoy all the benefits of having an oil lubricated professional air compressor. When oil is changed regularly, it will give you long, trouble-free life.

Your air compressor can be used for operating paint spray guns, air tools, caulking guns, grease guns, air brushes, sandblaster, inflating tires or spraying weed killers, insecticides, etc. An air pressure regulator is supplied for these applications.

Separate air transformers which combine the functions of air regulation and/or moisture and dirt removal should be used where applicable.

ON-RECEIPT INSPECTION

DAMAGE: Each air compressor outfit is carefully tested and checked before shipment. With improper handling, damage may result in transit and cause problems with compressor operation.

Immediately upon arrival, check equipment for both concealed and visible damages to avoid expenses being incurred to correct such problems. This should be done regardless of any visible signs of damage to the shipping container. If this product was shipped

directly to you, report any damages to the carrier and arrange for inspection of goods immediately.

STORAGE

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

1. Review the “Maintenance” and “Operating Procedures” sections and perform maintenance as necessary. Be sure to drain from the air tank.
2. Protect the electrical cord and air hose from damage (such as being stepped on or run over). Store the air compressor in a clean and dry location.

DESCRIPTION OF OPERATION

DRAIN VALVE: The drain valve is located at the bottom of the air tank and is used to drain condensation at the end of each use.

ON/AUTO-OFF SWITCH: Turn this switch to “on” to provide automatic power to the pressure switch and to “off” to remove power when finished using the compressor or when compressor will be left unattended.

AIR INTAKE FILTER: This filter is designed to clean air coming into the compressor pump. This filter must always be clean and free from obstructions. See “Maintenance”.

AIR COMPRESSOR PUMP: To compress air, the piston moves up and down in the cylinder. On the down stroke, air is drawn in through the air intake valve. The exhaust valve remains closed. On the upstroke of the piston, air is compressed. The intake valve closes and compressed air is forced out through the exhaust valve, through the outlet tube, through the check valve and into the air tank. Useable air is not available until the compressor has raised the air tank pressure above that required at the air outlet.

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 SWITCH

UNLOADING VALVE: The pressure switch unloading 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.

PRESSURE SWITCH: The pressure switch automatically starts the motor when the air tank pressure drops to 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).

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 or equal to the tank pressure. See “Operating Procedures”.

TANK PRESSURE GAUGE: The tank pressure gauge indicates the air pressure in the tank.

REGULATOR: The air pressure coming from the air tank is controlled by the regulator knob. Turn the knob clockwise to increase pressure and counter-clockwise to decrease pressure. To avoid minor re-adjustment after making a change in pressure setting, always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting, first reduce to some pressure less than desired pressure. Depending on the air requirements of each particular accessory, the outlet regulated air pressure may have to be adjusted while you are operating the accessory.

INSTALLATION AND BREAK-IN PROCEDURES

LOCATION OF THE AIR COMPRESSOR

Locate the air compressor in a clean, dry and well-ventilated area. The air filter must be kept clear of obstructions, which could reduce air delivery of the air compressor. The air compressor should be located at least 12 inches away from the wall or other obstructions that will interfere with the flow of air. The air compressor head and shroud are designed to allow for proper cooling. If humidity is high, an air filter can be installed on the air outlet adapter to remove excessive moisture. Follow the instructions packaged with the air filter for proper installation.

LUBRICATION AND OIL

CAUTION: Do not attempt to operate this air compressor without first adding oil to the crankcase. Serious damage will result from even limited operation unless filled with oil and broken in correctly. Make sure to closely follow initial start-up procedures. Compressor oil is provided; on a level surface, please fill the crankcase to proper level indicated on the sight glass.

WARNING: Compressors are shipped without oil. A small amount of oil may be present in the pump upon receipt of the air compressor. This due to factory testing and does not mean the pump contains oil.

CAUTION: Multi-Viscosity motor oils, like 10W 30, should not be used in an air compressor. They leave carbon deposits on critical components, thus reducing

performance and compressor life.
Use air compressor oil only.

Initial Start Up Procedure:

1. Open the air receiver's drain valve.
2. Plug power supply cord into correct power source.
3. Run the compressor for a minimum of two(2) minutes in the n-load condition to lubricate the bearings and pistons, and to seat the piston rings.
4. Close air receiver drain valve and outlet valve. Your compressor is now ready for use.

Piping

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. If a pipe line is necessary, use pipe that is the same size, or larger than, the air tank outlet. Piping that is too small will restrict the flow of air. If piping is over 100 feet 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.

Grounding Instruction

WARNING: Risk of electric shock!
In the event if 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 air compressor is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be used with an outlet that has been installed and grounded in accordance with all local codes and ordinances. The outlet must have the same configuration as the plug. **DO NOT USE AN ADAPTER.**

Inspect the plug and cord before each use. Do not use if there are signs of damage.

DANGER: Improper grounding can result in electrical shock. Do not modify the plug that has been provided. If it does not fit the available outlet, the correct outlet should be installed by a qualified electrician.

OPERATING PROCEDURES

Daily Start-up Checklist

1. Before attaching air hose or accessories, make sure the pressure switch lever is set to "OFF" and the air regulator or shut-off valve is closed.
2. Attach hose and accessories. 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.
3. Turn the pressure switch lever to "ON/AUTO" and allow tank

pressure to build. Motor will stop when tank pressure reaches “cut-out” pressure.

4. Open the regulator by turning it clockwise. Adjust the regulator to the correct pressure setting. Your compressor is ready for use.
5. Always operate the air compressor in well-ventilated areas; free of gasoline or other solvent vapors. Do not operate the compressor near the spray area.

When you are finished:

6. Set the pressure switch lever to “OFF”.
7. Using the air tool or accessory, bleed the tank pressure down to zero.
8. Remove the air tool or accessory.
9. Drain water from air tank by opening drain cock valve on bottom of tank. 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.

Note:

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

10. After the water has been drained, close the drain valve. The air compressor can now be stored.

MAINTENANCE

WARNING: UNIT CYCLES AUTOMATICALLY WHEN POWER IS ON. WHEN DOING MAINTENANCE, YOU MAY BE EXPOSED TO VOLTAGE SOURCES, COMPRESSED AIR OR MOVING PARTS. PERSONAL INJURIES CAN OCCUR. BEFORE PERFORMING ANY MAINTENANCE OR REPAIR, UNPLUG THE COMPRESSOR AND BLEED OFF ALL AIR PRESSURE.

To ensure efficient operation and longer life of the air compressor unit, a routine maintenance schedule should be prepared and followed. The following routine maintenance schedule is geared to a unit 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 units in an extremely dirty and/or hostile environment will require a greater frequency of all maintenance checks.

ROUTINE MAINTENANCE SCHEDULE

1. Drain water from the air tank, any moisture separators or transformers.
2. Check for any unusual noise and/or vibration.
3. Manually check all safety valves to make sure they are operating properly
4. Inspect air filter, replace if necessary.
5. Inspect air lines and fittings for leaks; correct as necessary.

Each year of operation of if a problem is suspected:

- I Check condition of air compressor pump intake and exhaust valves.
- I Check condition of check valve. Replace if damaged or worn out.

Filling with Oil:

1. Remove the oil filler plug.
2. Slowly pour the proper oil into the pump crankcase.
3. Always keep oil level in the middle of the sight glass.

Changing the Oil:

Note: Every 300 hours or 3 months, whichever comes first.

1. Remove the oil drain plug. Allow

COLD WEATHER CONDITIONS:

AMBIENT TEMPERATURES AT POINT OF OPERATION	SAE VISCOSITY	ISO VISCOSITY
-16°C TO 0°C (3.2°F~32°F)	SAE 10W	ISO 32
1°C TO 26°C (33.8°F~78.8°F)	SAE 20W	ISO 68
ABOVE 27°C (80.6°F)	SAE 30W	ISO 100

oil to drain completely.

2. Replace the oil drain plug(The use of a sealing compound or Teflon tape to avoid leakage is recommended.)
3. Refill with the recommended oil to the proper level.

SERVICE INSTRUCTIONS

Air Filter – Inspection and Replacement:

- I Keep the air filter clean at all times. Do not operate the compressor with the air filter removed.
- I A dirty filter will not allow the compressor to operate at full capacity. Before you use the compressor, check the air filter to be sure it is clean.
- I If it is dirty, check and replace the filter element.

WARNING: SAFETY VALVE – INSPECTION IF THE SAFETY VALVE DOES NOT WORK PROPERLY, OVER-PRESSURIZATION MAY OCCUR, CAUSING AIR TANK RUPTURE OR AN EXPLOSION. OCCASIONALLY 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.

Units with External Brass Check Valve Replacement

1. Release all air pressure from air tank and unplug outfit.
2. Remove shroud.
3. Loosen the top and bottom nut of the outlet tube and remove.
4. Remove the pressure release tube and fitting.
5. Unscrew the check valve (turn counterclockwise) using a socket wrench.
6. Check that the valve disc moves freely inside the check valve and that the spring holds the disc in the upper, closed position. The check valve may be cleaned with a suitable solvent.
7. Apply sealant to the check valve threads. Reinstall the check valve (turn clockwise).
8. Replace the pressure release tube and fitting.
9. Replace the pressure release tighten top and bottom nuts.
10. Replace the shroud.

TROUBLESHOOTING GUIDE

PERFORMING REPAIRS MAY EXPOSE VOLTAGE SOURCES, MOVING PARTS OR COMPRESSED AIR SOURCES, PERSONAL INJURY MAY OCCUR. PRIOR TO ATTEMPTING ANY REPAIRS, UNPLUG THE COMPRESSOR AND BLEED OFF TANK AIR PRESSURE.

PROBLEM	CAUSE	CORRECTION
Excessive tank pressure - safety valve pops off.	Defective pressure switch. Improper wiring.	<p>I Move the pressure switch lever to the "OFF" position. If the unit doesn't shut off, unplug. If the electrical contacts are welded together, replace the pressure switch.</p> <p>I If the contacts are good, check to see if the pin in the pressure release valve is stuck. If it does not move freely, replace the valve.</p> <p>I Adjust or replace pressure switch.</p>
Air leaks at fittings.	Fittings are not tight enough.	Tighten fittings where air can be heard escaping. Check fittings with a soap and water solution. DO NOT OVER TIGHTEN.
Air leaks at or inside check valve.	Defective or dirty check valve.	A defective check valve results in a constant air leak at the pressure release valve where there is a pressure in the tank and the compressor is shut off. Remove and clean or replace check valve. DO NOT OVER TIGHTEN.
Air leaks at pressure switch unloader valve.	Defective pressure switch unloader valve, or defective check 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 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.	Blown head gasket.	Replace gasket or contact Authorized Service Technician.

PROBLEM	CAUSE	CORRECTION
<p>Pressure reading on the regulated pressure gauge drops when accessory is used.</p>	<p>It is normal for "some" pressure drop to occur.</p>	<p>If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator following the instructions.</p> <p>Note: Adjust the regulated pressure under flow conditions (while accessory is being used).</p>
<p>Air leak from safety valve.</p>	<p>Possible defective safety valve.</p>	<p>Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced.</p>
<p>Compressor is not supplying enough air to operate accessories.</p>	<ul style="list-style-type: none"> Prolonged excessive use of air. Compressor is not large enough for air requirement. Restricted air intake filter. Unit is not plugged in. Hole in hose. Check valve restricted. Air leaks. 	<ul style="list-style-type: none"> Decrease amount of air usage. Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, you need a larger compressor. Clean or replace air intake filter. Do not operate the air compressor in the paint spray area. Plug unit into "live" electrical outlet. Check and replace if required. Remove and clean, or replace. Tighten fittings. (See Air Leaks section of troubleshooting guide).
<p>Motor will not run.</p>	<p> Tank pressure exceeds pressure switch "cut-in" pressure.</p>	<p> Motor will start automatically when tank pressure drops below "cut-in" pressure of pressure switch.</p>

PROBLEM	CAUSE	CORRECTION
<p>Motor will not run. (con't)</p>	<ul style="list-style-type: none"> Check valve is stuck open. Loose electrical connections. Possible defective capacitor. Paint spray on internal motor parts. Possible defective motor. Pressure unloader valve on pressure switch has not unloaded head pressure. 	<ul style="list-style-type: none"> Remove and clean, or replace. Check wiring connection inside pressure switch and terminal box area. Return to an Authorized warranty Service Center for inspection or replacement if necessary. Have checked at an Authorized Warranty Service Center. Do not operate the compressor in the paint spray area. See flammable vapor warning. Have checked at an Authorized Warranty Service Center. Bleed the line by pushing the lever on the pressure switch to the "off" position; if the valve does not open, replace it.
<p>Regulator knob has continuous air leak. Regulator will not shut off at air outlet.</p>	<p>Dirty or damaged regulator internal parts.</p>	<p>Replace regulator.</p>