SchraderAir®

Schrader - Air solutions since 1845

Air compressor Owner's Manual

5 HP 2-Stage Electric

SA2560VL

The SchraderAir Prosumer line offers advanced design and performance features. The Prosumer line is ideal for personal, hobby shop, weekend mechanic and home use.

Assembled in USA

SCHRADER

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SAFETY GUIDELINES - DEFINITIONS

Safety is a combination of common sense, staying alert and knowing how your compressor works. Read this manual to understand this compressor.

DANGER

Means if safety information is not followed someone will be seriously injured or killed

WARNING

Means if safety information is not followed someone could be seriously injured or killed

CAUTION

Means if safety information is not followed someone may be seriously injured or killed

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

Improper operation or maintenance of this product could result in serious injury and property damage. Read and understand all warnings and operation instructions before using this compressor.

BEFORE USING THE AIR COMPRESSOR

Things you should know

Air compressors are utilized in a variety of air system applications. Because air compressors and other components (hoses, connectors, air tools, blow guns, etc.) make up a high pressure pumping system, the following safety precautions should be observed at all times.

Only persons familiar with these rules of safe operation should use the air compressor.

1. Read the instruction manual carefully before attempting to assemble, disassemble or operate your system. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Review and understand all safety instructions and operating procedures in this manual.
3. Review the maintenance methods for this compressor (See "Maintaining Your Compressor" section).

Inspect your work area

1. Keep work area clean.
2. Cluttered areas and benches invite accidents. Floors must not be slippery from wax or dust.

Inspect your compressor

1. To reduce the risk of injury from accidental starting, turn switch off and disconnect the power before checking it.
2. If any part is missing, bent or broken in any way, or any electrical part does not work properly, keep the compressor off and disconnected.
3. Check hoses for weak or worn condition before each use, making certain all connections are secure. Do Not use if defect is found.

WARNING

Do not operate compressor if damaged during shipping, handling or use. Damage may result in bursting and cause injury or property damage.

DANGER

This compressor is Not designed for and should not be used in breathing air applications.

WHEN INSTALLING OR MOVING THE COMPRESSOR

WARNING

This compressor is extremely top heavy. The compressor must be bolted to the floor with vibration pads before operating to prevent equipment damage, injury or death. Do not over tighten bolts as this may cause stress to the tank welds.

To reduce the risk of a dangerous environment

1. Keep work area well lit.
2. Operate compressor in a well-ventilated area free from flammable liquids and vapors.
3. Operate compressor in a ventilated area so that compressor may be properly cooled and the surrounding air temperature will not be more than 100°F.
4. Never use a compressor in a wet environment.
5. Protect material lines and air lines from damage or puncture. Keep hose and wires away from sharp objects, chemical spills, oil, solvents and wet floors.

WARNING

Do Not secure compressor with toggle bolts into drywall. Drywall sheeting or plaster will not support the weight of the compressor.

6. A minimum clearance of 30 inches between the compressor and a wall is required because objects could obstruct airflow.
7. The compressor should be located where it can be directly wired to a circuit breaker. The compressor should be wired by a licensed electrician.
8. Never store flammable liquids or gases in the vicinity of an operating compressor.
9. Do Not locate the compressor air inlet near steam, paint spray, sandblasting areas or any other source of contamination. The debris could damage the motor and pump.

WARNING

Never use plastic (PVC) pipe for compressed air. Serious injury or death could result.

CAUTION

Never use the shipping skid for mounting the compressor.

NOTICE

This compressor is not intended for outdoor installation.

WARNING

Never install a shut off valve between the compressor pump and tank. Personal injury and/or equipment damage could occur.

Note: Tank Outlet Size: 1/2" NPT

BEFORE EACH USE

Inspect your work area

1. Keep work area clean. Cluttered areas and benches invite accidents.
2. The floor must not be slippery from wax or dust

Inspect your compressor

1. To reduce the risk of injury from accidental starting, turn the switch off and disconnect power.
2. If any part is missing, bent or broken in any way, or any electrical part does not work properly, keep the compressor off and disconnect power. Do Not use if defect is found.
3. Check hoses for weak or worn condition before each use, making certain all connections are secure. Do Not use if a defect is found.

Follow the safety precautions for electrical connections

1. Follow all local electrical and safety codes, as well as the National Electric Code (NEC) and the Occupational Safety and Health Act (OSHA).
2. Wiring and fuses should follow electrical codes, current capacity and be properly grounded.
3. Protect wires from contact with sharp objects.

CAUTION

All electrical connections should be made by a licensed electrician.

Plan ahead to protect your eyes, hands, face and ears

Dress for safety

1. Wear safety glasses (meeting ANSI Z87.1 or in Canada CSA Z94.3-99) and use hearing protection when operating the unit. Everyday glasses are not safety glasses.
2. Wear shoes to prevent shock hazards.
3. Tie back long hair.

Pay attention to your hands

WARNING

Keep fingers away from running compressor. Fast moving and hot parts may cause injury and/or burns.

WARNING

Be careful when touching the exterior of compressor, pump, motor and air lines; they may become hot enough to cause injury.

WARNING

Never operate the compressor without a belt guard. The compressor can start automatically without warning. Personal injury or property damage could occur from contact with moving parts.

CAUTION

The compressor may be hot even if the unit is stopped.

WARNING

Use of a mask or respirator per chemical manufacturers' instructions may be necessary if there is a chance of inhaling toxic fumes. Read mask and respirator instructions carefully. Consult a safety expert if you are not sure about the use of certain masks or respirators.

When operating

1. Do not exceed the pressure rating of any component of the system.
2. Release pressure within the system slowly to prevent flying dust and debris.
3. If the equipment starts to abnormally vibrate, STOP the compressor immediately and check for the cause.

WARNING

Never change the safety valve or pressure switch settings. Keep safety valve free from paint and other accumulations. See compressor specification decal for maximum operating pressure. Do not operate with the pressure switch set higher than the maximum operating pressure.

Spraying precautions

WARNING

Never point a spray gun at yourself or any other person or animal. Accidental discharge may result in serious injury. Reduce the risk of dangerous environment

WARNING

Extreme caution should be taken when spraying flammable liquids as the spark from a motor or pressure switch may cause a fire or explosion. Ample ventilation must be provided.

WARNING

Spray in a well ventilated area to keep fumes from collecting and causing serious injury and fire hazards.

1. Do Not spray in the vicinity of open flames or other places where a spark can cause ignition. Do Not smoke when spraying paint, insecticides, or other flammable substances.

Be informed about the materials you use

1. When spraying with solvents or toxic chemicals, follow the instructions provided by the chemical manufacturer. Consult a safety expert if unsure about the use of masks or respirators.
2. If the material you intend to spray contains trichloreoethane and methylene chloride, do not use accessories that contain aluminum or galvanized materials, as these chemicals can react with galvanized components causing corrosion and weakening equipment. Use stainless steel accessories.

Perform these maintenance operations

1. Do regular maintenance; keep all nuts, bolts, and screws tight, to be sure equipment is in safe working condition.
2. Inspect tank yearly for rust, pin holes or any other imperfections that could cause it to become unsafe.

WARNING

NEVER attempt to repair or modify a tank! Welding, drilling or any other modification will weaken the tank resulting in damage from rupture or explosion. Always replace worn, cracked or damaged tanks.

3. Clean electrical equipment with an approved cleaning agent, such as a dry, non-flammable cleaning solvent.
4. Drain tanks of moisture after each day's use. If unit will not be used for awhile, it is best to leave the drain cock open until such time as it is to be used. This will allow moisture to completely drain out and help prevent corrosion of inside of tank.
5. Always disconnect from power source before working on or near a motor, or its connected load. If power disconnect point is out-of-sight, secure it in the "OFF" position and tag it to prevent unexpected application of power.

WARNING

Disconnect power and depressurize system before servicing air compressor. Slightly open drain cock after shutting off compressor.

Daily

Check oil level at sight glass. Oil should be ½ way to slightly above in oil sight glass. Drain moisture from tank.

Verify the pressure switch un-loader is working by listening for a brief hissing sound when the compressor shuts off. Visually check the compressor for loose parts, excessive noise or vibration.

Monthly

(Make sure the main power is off.) Check the belts for tension. Belts should not move up and down when the compressor runs and when stopped, should not have more than ½ in of play when depressed. Be careful not to over tighten belts during adjustment.

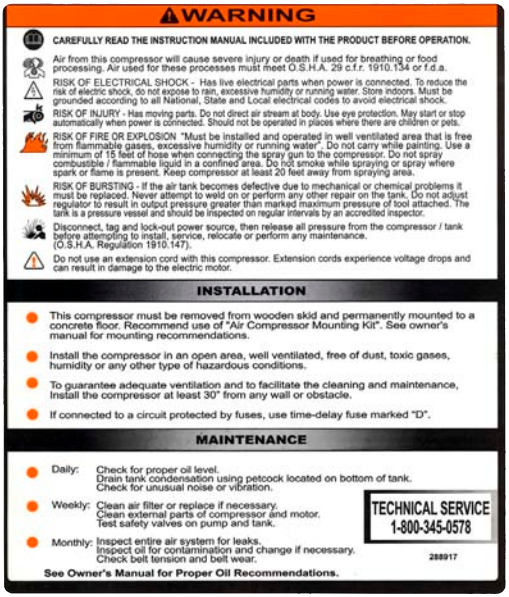
Remove and check air filter, replace if necessary. Change oil every 3 months or 300 hours. A compressor grade 30 wt. non-detergent oil (826020) should be used.

Check motor pulley set screw and pump flywheel bolt for tightness.

WARNING LABELS

Find and read all warning labels found on the air compressor.

Sample Warning Labels shown. Your decals may vary.



GLOSSARY OF TERMS

Air Filter
Porous element contained within a metal or plastic housing attached to the compressor cylinder head which removes impurity from the intake air of the compressor.

Air Tank
Cylindrical component which contains the compressed air.

Check Valve
Device which prevents compressed air from flowing back from the air tank to the compressor pump.

Electric Motor
Device which provides the rotational force necessary to operate the compressor pump.

Pressure Gauge
Device which shows the tank or regulated pressure of the compressed air.

Pressure Switch
Device which automatically controls the on/off cycling of the compressor. It stops the compressor when the cut-off pressure in the tank is reached and starts the compressor when the air pressure drops below the cut-in pressure.

PSI (Pounds per Square Inch)
Measurement of the pressure exerted by the force of air. The actual psi is measured by a pressure gauge on the compressor.

Pump
Device which produces the compressed air with a reciprocating piston contained within a cylinder.

Safety Valve
Device which prevents air pressure in the air tank from rising over a predetermined limit.

Thermal Overload Switch
Device, integrated into the electric motor winding, which automatically "shuts off" the compressor if the temperature of the electric motor exceeds a predetermined limit.

WIRING

WARNING

ALL ELECTRICAL WIRING SHOULD BE DONE BY A LICENSED ELECTRICIAN

General Information

Adequate wiring and motor protection should be provided for all stationary compressors. Wiring used for other machinery should not be used. A licensed electrician familiar with local electrical codes in your area should be used.

WARNING

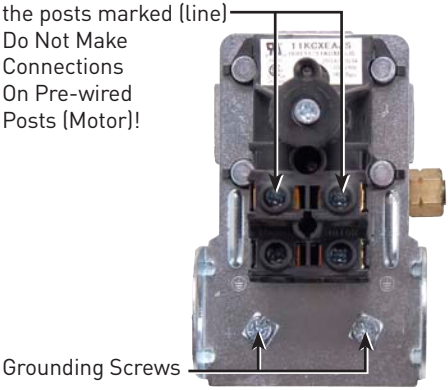
To reduce the risk of electrical hazards, fire hazards or damage to the compressor, use proper circuit protection. Your compressor is wired at the factory for operation using the voltage shown. Connect the compressor to a power source with the correct breaker size.

WARNING

Electrical connections must be properly grounded. Ground connections should be connected at the grounding screw.

CAUTION

Overheating, short circuiting and fire damage will result from inadequate wiring.



	SA2560VL
Voltage	208/230V 1 phase
FLA	23
Breaker Size	30 amp

The motor is equipped with a manual, resettable overload device to protect it from overheating. In the event the compressor will not run and power is properly connected and on, press the motor overload reset button located on the non drive end of the motor.

STARTING THE COMPRESSOR

Prior to actually running the compressor, check the following items:

Crankcase oil - Make sure the sight glass shows ½ full or slightly above.

Make sure all rags, tools, oil, etc. are away from the unit.

Open the air system to free it of any pressure.

Switch the compressor on for a few revolutions to make sure the rotation is correct. Correct rotation is counterclockwise when facing the pump flywheel.

CAUTION

Make sure the pressure in the tank does not exceed its rating. 2-stage compressors should operate at a maximum of 165 psi. If the pressure gauge indicates a pressure that is higher than these maximum pressures, shut off compressor immediately and call 1-800-345-0578 ext. 620.

TROUBLESHOOTING GUIDE

Low discharge pressure	1. Compressor too small for application 2. Air leaks 3. Restricted intake air 4. Blown gasket(s) 5. Broken or misaligned valves	1. Reduce air demand or use a compressor with more air capacity. 2. Listen for air leaks. Apply a soap solution to all fittings and connections. Bubbles will form at points of leakage. Tighten or replace fittings or connections. 3. Clean or replace air filter. 4. Replace necessary gaskets. 5. Remove head and inspect for broken or misaligned valves. Replace valves, if necessary. ⚠ **CAUTION** ⚠ Install a new head gasket each time head is removed
Excessive noise "knocking"	1. Loose drive pulley or flywheel 2. Low on oil 3. Worn connecting rod or connecting rod bearing 4. Noisy check valve	1. Tighten drive pulley or flywheel bolt. 2. Check for proper oil level. Low or dirty oil may cause bearing damage. 3. Replace connecting rod and/or connecting rod bearings. 4. Replace check valve. ⚠ **DANGER** ⚠ Do not remove check valve with air pressure in tank
Excessive oil carryover	1. Worn piston rings 2. Restricted intake air 3. Too much oil in compressor 4. Incorrect oil viscosity	1. Replace with new piston rings. 2. Clean or replace air filter. 3. Drain oil to proper oil level. 4. Use a quality non-detergent 30 or 40 wt oil specified for each model (Page 4).
Water in tank and/ or discharge line	1. Normal. Amount of water will increase as humidity in the air increases.	1. Drain tank at least once per day. 2. Add an in-line filter to reduce moisture in the air line.
Will not run or motor hums.	1. Low voltage 2. Malfunctioning pressure switch 3. Malfunctioning check valve	1. Check voltage with volt meter across both legs of incoming power. Check reset button on motor. 2. Repair or replace pressure switch. 3. Replace check valve or pressure switch. ⚠ **DANGER** ⚠ Do not remove check valve with air pressure in tank

TROUBLESHOOTING GUIDE (CONTINUED)

Breaker or reset repeatedly trips	1. Incorrect breaker size 2. Low voltage 3. Malfunctioning motor 4. Loose electrical connections 5. Malfunctioning pressure switch 6. Malfunctioning check valve	1. Make sure the breaker is sized properly. See page 6 in this manual. 2. Check voltage with volt meter across both legs of incoming power. 3. Replace motor. 4. Check all electrical connections. 5. Adjust or replace pressure switch. 6. Replace check valve. ⚠ **DANGER** ⚠ Do not remove check valve with air pressure in tank
Tank does not hold pressure when not running and shut off valve is closed	1. Malfunctioning check valve 2. Loose fittings or connections 3. Crack or pin hole in tank	1. Replace check valve. ⚠ **DANGER** ⚠ Do not remove check valve with air pressure in tank 2. Tighten or replace fittings or connections. 3. Replace tank. Do not attempt to repair tank.
Pressure switch un-loader constantly leaking air	1. Malfunctioning check valve	1. Replace check valve if un-loader bleeds constantly. ⚠ **DANGER** ⚠ Do not remove check valve with air pressure in tank
Pressure switch not unloading	1. Malfunctioning pressure switch	1. Replace pressure switch if it does not release air pressure briefly when unit shuts off. ⚠ **DANGER** ⚠ Do not remove pressure switch with air pressure in tank
Excessive vibration	1. Improper installation 2. Loose belts 3. Misaligned flywheel or drive pulley	1. Make sure unit is mounted on a level surface with vibration pads. 2. Replace belts. Align and tighten properly. 3. Align flywheel and drive pulley.
Overheating	1. Compressor too small for application 2. Cooling surfaces dirty 3. Improper cooling	1. Reduce air demand or use a compressor with more air capacity. 2. Clean all cooling surfaces of dirt and dust. 3. Install compressor in an area with adequate cool dry air.

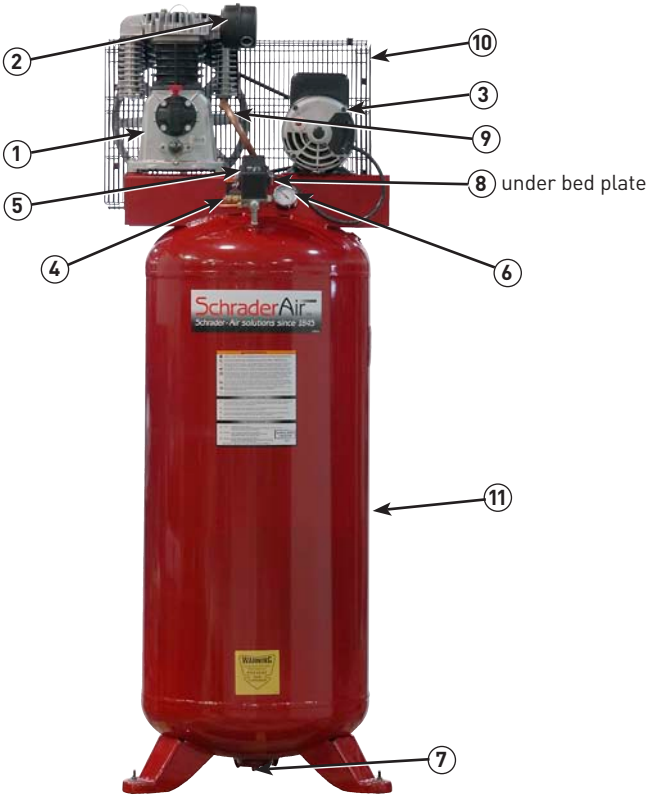


Illustration Number	Part Description	SA2560VL
1	Pump	SA289094
2	Air Filter	82288609
3	Electric Motor	289093
4	Safety Valve	283805
5	Pressure Switch	82780
6	Tank Gauge	283495
7	Tank Drain	82650
8	Check Valve	82P7575
	Check Valve Bleed Fitting	82630
9	Discharge Tube	82604-2560VL
	Compression Fitting - Check Valve	829011
	Compression Fitting - Pump	82625
10	Belt Guard	289086
11	Tank	289090
	Un-loader Line	82600-2560VL
	Drive Belt	82817
	Drive Pulley	289100

Compressor Model SA2560VL
Pump (Part Number SA289094)

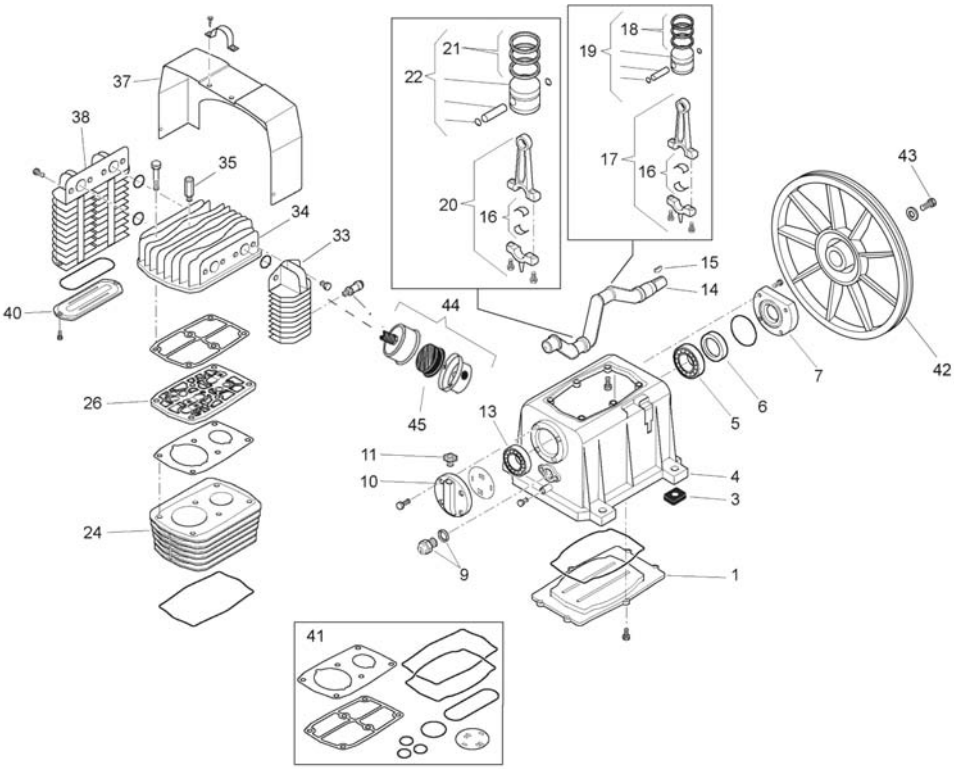


Diagram Number	P/N	Description
1	SA013164008	Lower Cover
3	SA113163029	Vibration Damper
4	SA113164007	Crank Case
5	SA30302140	Bearing
6	SA010008000	Oil Seal
7	SA113165008	Front Cover
9	SA012031000	Oil Level Sight Glass
10	SA113141006	Rear Cover
11	SA012047000	Oil Plug
13	SA033027000	Bearing
14	SA113164012	Crankshaft
15	SA018008000	Key
16	SA113144018	Connecting Rod Bearing
17	SA413163026	High Pressure Connecting Rod
18	SA213163002	High Pressure Piston Ring Kit
19	SA413163022	High Pressure Piston
20	SA413144011	Low Pressure Connecting Rod
21	SA213163001	Low Pressure
22	SA413163014	Low Pressure Piston Piston
24	SA113163001	Cylinder
26	SA413163003	Valve Plate
32	SA047002000	Safety Valve(16.5 Bar)
33	SA113163025	Output Manifold
34	SA113163503	Head
35	SA047086000	Safety Valve(6 Bar)
37	SA113163024	Shroud
38	SA13141039	Intake Manifold
40	SA113141040	Intake Manifold Cover
41	SA213163003	Gasket Set
42	SA82013164011	Flywheel
43	General Hardware	Flywheel Bolt
44	82288609	Air Filter Assembly
45	82288665	Air Filter Element

Maintenance supplies and accessories

907001

AUTOMATIC AIR COMPRESSOR DRAIN

The NEW standard for solenoid drains.

BUILT IN, SELF CLEANING STAINER

- Self cleaning, resists clogging
- Does not stick open - NO wasted air
- Built in strainer
- Easy installation
- 4" long x 3.5" wide
- Weight is 1.3 lbs.

Drain Specifications

- 0.5 to 10 second open cycle, 30 second to 45 minute off cycle
- 250 PSI
- 115v / 60 Hz
- 0.156 diameter precision orifice
- Includes LED lights and test button

Item No.	Description
827001	Automatic air compressor drain

824679

AIR COMPRESSOR MOUNTING PADS

install on most air compressors. Includes:

- (4) Rubber floor mounting pads
- (4) Metal / rubber bushings

Item No.	Description
824679	Stationary Air Compressor Mounting Pads & Bushings

Order Schrader Compressor Oil (826020) and Air Filter elements (82288665) directly from Schrader by calling technical support at 1.800.288.1804.

Call SchraderAir at 1.800.288.1804 for filters/regulators/lubricators, couplers & plugs, oil and air filters as well as compressor maintenance and air line accessory needs. *Specifications subject to change without notice. Product may not be exactly as pictured.*

Notes & Maintenance Record

Date	Oil Change	Air Filter Change	Belt Check/ Change	Check motor pulley screw	Check pump flywheel bolt	Notes
See Page 4	✔	✔	✔	✔	✔	

Oil capacity: 0.75 qts • Belt: 82817 • Air Filter Element: 82288665

SCHRADER INTERNATIONAL, INC'S LIMITED WARRANTY
Product: Prosumer Air Compressor

For (1) one year from the date of purchase or 18 months from date of shipment from factory, Schrader International, Inc. will at its option, replace or repair for the original purchaser free of charge, any part or parts found upon examination by manufacturer to be defective in material or workmanship or both. This will be your sole and exclusive remedy.

No Other Warranties:
THERE IS NO OTHER EXPRESSED WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE AND TO THE EXTENT PERMITTED BY LAW, ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. THIS IS THE EXCLUSIVE REMEDY AND LIABILITY FOR CONSEQUENTIAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT PERMITTED BY LAW.

What You Must Do:
Any and all Returns to Schrader International require an RFI number to be issued by Technical Service prior to returning part or parts. All transportation charges for parts submitted for replacement under this warranty must be borne by the purchaser. Consumer compressors used in commercial, industrial or rental applications (determined at the discretion of Schrader International) will be covered by warranty for (90) ninety days from date of purchase only. Notice of alleged defect must be communicated to Schrader International, Inc. Technical Service within (30) days of discovery of defect during the warranty period.

All claims pertaining to the merchandise must be communicated with Schrader International Inc. within 12 months of the invoice date or 18 months from date of shipment from the factory or they will not be honored. All shipments are carefully inspected before leaving the factory. Please inspect carefully at time of receipt of merchandise, noting any discrepancy or damage on the carrier's freight bill at time of delivery. Discrepancies or damage, including hidden or obvious damage that occurred in transit are the carrier's responsibility and related claims should be made by the customer directly with the carrier.

What Is Not Covered Under this Warranty:
- Any failure that results from an accident, purchaser's abuse, neglect or failure to operate products in accordance with instructions provided in the owner's manual(s) supplied with compressor.
- Cosmetic defects that do not interfere with the compressor's functionality.
- Damage due to incorrect voltage or improper wiring (example using extension cord).
- Pump wear or valve damage caused by any oil contamination or by failure to follow proper oil maintenance guidelines.
- This warranty is invalid if the factory-applied serial number has been altered or removed from the product, or an electric compressor has been used in conjunction with a generator.
- Freight damage.
- Pre-delivery service, e.g. assembly, oil or lubricants, and adjustment.
- Items or service that is normally required to maintain the product, e.g. lubricants, filters and gaskets, etc.
- Tank drain valve.
- Pressure switches modified from factory settings.
- Damage from inadequate air filter and/or oil maintenance.
- Damage to the unit caused by impacts from foreign objects, acts of God, fire, explosion or other casualty, vibration, excessive heat or moisture, incorrect or unreasonable use (including failure to provide reasonable and necessary maintenance), improper installation, misuse, abuse, neglect, negligence or vandalism.
- Loss of profit or revenue or for any incidental, consequential, indirect, special or punitive damages.

For Warranty claims and considerations, please have the following information when calling Technical Service: a copy of the invoice, date of purchase, serial number, alleged warranty issue and a call back telephone number. To locate the closest Authorized Service Center for service assistance, resolution of a service problem or for product information and operation, call, e-mail or write to:

Schrader International, Inc.
205 Frazier Road
Altavista, VA 24517
Telephone: 1.800.288.1804 Tech Service, ext. 620, Fax: 1.434.369.3577
e-mail: TechSvc@SchraderIntl.com

If a service center is used (you must acquire prior factory approval from Technical Service), the complete unit must be transported at customer's expense to and from the service center.

Mar 2012