



**OWNERS MANUAL FOR
PERMANENTLY LUBRICATED AIR COMPRESSOR
(For Home Use Only)**

**MODEL NO.
FA125-1**

SPECIFICATION CHART

Model No.	FA125-1
Horsepower	1
SCFM @ 40 psig	3.7
SCFM @ 90 psig	2.7
Cut-In	100 PSI
Cut-Out	125 PSI
Bore	1 3/4"
Stroke	1 1/4"
Voltage-Single Phase	110-120
Minimum Branch Circuit Requirement	15 AMPS
*Fuse Type	Quick Acting
Amperage at Max. Pressure	10
Tank Size	2.5 Gallon

*A circuit breaker is preferred. Use only a fuse or circuit breaker that is the same rating as the branch circuit the air compressor is operated on. If the air compressor is connected to a circuit protected by fuses, use quick acting fuses.

NOTE:

For identification of Repair Parts, see Page 12 in this Manual.

IMPORTANT:

Read and retain the Safety Guidelines and All Instructions Carefully Before Operating.

WARRANTY:

See Page 3 of this Manual for Warranty Information.

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In the unlikely event you should have a problem with this product or if you are missing any parts, it is not necessary to return it to the store where you purchased it. Simply call our toll-free number and talk with our Service Representative.

OUR OFFICE HOURS ARE FROM
8:00 a.m. to 4:30 p.m. (CST)
MONDAY THROUGH FRIDAY

CALL TOLL-FREE 1-800-888-2468, Ext. 2

LIMITED WARRANTY

ONE YEAR FROM DATE OF PURCHASE

*All merchandise manufactured by DeVilbiss Air Power Company is warranted to be free of defects in workmanship and material which occur during the first year from the date of purchase by the original purchaser (initial user). Products covered under this warranty include: air compressors, *air tools, accessories and service parts.*

DeVilbiss Air Power will repair or replace, at DeVilbiss's option, products or components which have failed within the warranty period. Repair or replacement, and service calls on 60 and 80 gallon air compressors, will be handled by Authorized Warranty Service Centers and will be scheduled and serviced according to the normal work flow at the service center location, and depending on the availability of replacement parts.

All decisions of DeVilbiss Air Power Company with regard to this policy shall be final.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RESPONSIBILITY OF ORIGINAL PURCHASER (Initial User):

- Retain original sales receipts as proof of purchase for warranty work.
- Use reasonable care in the operation and maintenance of the product as described in the Owners Manual(s).
- Deliver or ship the product to the nearest DeVilbiss Air Power Authorized Warranty Service Center. Freight costs, if any, must be paid by the purchaser.
- Air compressors with 60 and 80 gallon tanks only will be inspected at the site of installation. Contact the nearest Authorized Warranty Service Center, that provides on-site service calls, for service call arrangement.
- If the purchaser does not receive satisfactory results from the Authorized Warranty Service Center, the purchaser should contact DeVilbiss Air Power Company.

THIS WARRANTY DOES NOT COVER:

- Merchandise sold as, reconditioned, floor models and/or display models sold "as is", any damaged or incomplete equipment sold "as is".
- Merchandise used as "rental" equipment.
- Merchandise that has become inoperative because of ordinary wear, misuse, negligence, accident, im proper and/or unauthorized repair or alterations including failure to operate the product in accordance with the instructions provided in the Owners Manual (s) supplied with the product.
- An air compressor that pumps air more than 50% during a one hour period is considered misuse because the air compressor is undersized for the required air demand. Maximum compressor pumping time per hour is 30 minutes.
- Merchandise sold by DeVilbiss Air Power which has been manufactured by and identified as the product of another company. The product manufacturer's warranty will apply.
- Repair and transportation costs of merchandise determined not to be defective.
- Cost associated with assembly, required oil, adjustments or other installation and start-up cost.
- ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

**Air Tools: O-Rings and driver blades are considered ordinary wear parts, therefore, they are warranted for a period of 45 days from the date of purchase.*

Form: SP-100-C
6/4/93



213 Industrial Drive • Jackson, TN 38301-9615 • Telephone: 1-800-888-2468, Ext. 2 • FAX: 1-800-888-9036

SAFETY GUIDELINES

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 following symbols. Please read the manual and pay attention to these sections.

DANGER

URGENT SAFETY INFORMATION - A HAZARD THAT WILL CAUSE SERIOUS INJURY OR LOSS OF LIFE.

WARNING

IMPORTANT SAFETY INFORMATION - A HAZARD THAT *MIGHT* CAUSE SERIOUS INJURY OR LOSS OF LIFE.



Information for preventing damage to equipment.

NOTE

Information that you should pay special attention to.

WARNING

HAZARDS CAN OCCUR IF EQUIPMENT IS NOT USED PROPERLY. PLEASE READ THE FOLLOWING CHART.

WHAT TO LOOK FOR	WHAT COULD HAPPEN	HOW TO PREVENT IT
Hot Parts	When operated continuously, the air hose gets hot, especially near the compressor. If you maintain contact by grasping you may suffer minor burns or discomfort. On tank mounted units, the plumbing between the pump and tank gets hot.	Never touch the air compressor head during or immediately after operation. On tank mounted units, avoid prolonged contact with the pump to tank plumbing.
Flammable Vapors	It is normal for the motor and pressure switch to spark. A spark can ignite flammable vapors from gasoline or solvents, causing a fire or explosion.	The air compressor must only be used in well ventilated areas, free of gasoline or solvent vapors. Do not operate the compressor while you are carrying it, or in the spray area.
Unsuitable Solvents	The solvents 1,1,1 - Trichloroethane and Methylene Chloride can chemically react with aluminum used in paint spray guns, paint pumps, etc., and cause an explosion. These solvents can also react with galvanized components and cause corrosion and weakening of parts. This does not affect your air compressor - but it may affect the equipment being used.	Read the label or data sheet supplied with the material you intend to spray. If it contains the solvents listed do not use accessories that contain aluminum or galvanized parts. You must either change the material you intend to spray, or use only stainless steel spray equipment.

WHAT TO LOOK FOR	WHAT COULD HAPPEN	HOW TO PREVENT IT
Compressed Air	<p>Compressed air can propel dust, dirt or loose particles it comes in contact with. These propelled particles may cause serious injury or damage.</p> <p>Too much air pressure applied to air tools or accessories can cause damage or risk of bursting.</p>	<p>Never point any nozzle or sprayer toward a person or any part of the body.</p> <p>Always wear safety goggles or glasses when using the air compressor.</p> <p>Always turn the air compressor off before attaching or removing accessories.</p> <p>Check the manufacturer's pressure rating for air tools and accessories. Regulator outlet pressure must never exceed the maximum pressure rating.</p>
Electricity	Your air compressor is powered by electricity. Like any other electrically powered device, if it is not used properly it may cause electrical shock.	<p>Always unplug the air compressor prior to maintenance or repair.</p> <p>Never use the air compressor in the rain.</p> <p>Always plug the cord into an electrical outlet with the specified voltage and adequate fuse protection.</p>
Moving Parts	This compressor cycles automatically when the pressure switch is in the ON/OFF position. If you attempt repair or maintenance while the compressor is operating, or with the switch in the ON/AUTO position, you can expose yourself to moving parts. These moving parts can cause serious injury or damage if they come into contact with you or your clothing.	<p>Never operate the compressor with the belt guard removed.</p> <p>Always unplug the unit and release air pressure from the tank and any accessories before doing repair or maintenance.</p>
Toxic Vapors	<p>It is normal for compressed air to contain toxic or irritating vapors. Such vapors are harmful if inhaled.</p> <p>Certain materials you are spraying (like paint, weed killer, sand or insecticide) can be harmful if you inhale them.</p>	<p>Never directly inhale the compressed air produced by this unit.</p> <p>Read labels and safety data for all materials you spray. Follow all safety precautions.</p> <p>Read and follow the safety instructions provided on the label or safety data sheet for the material you are spraying. Use a respirator mask if there is a chance of inhaling anything you are spraying. Read all instructions . . . be sure that the respirator mask is suitable for your application.</p>
Air Tank	<p>Modifications to the air compressor in an attempt to reach higher air pressure can cause the air tank to rupture or explode.</p> <p>Changing the air tank will cause it to weaken.</p>	<p>Do not adjust, remove or tamper with the safety valve or pressure switch. If safety valve or pressure switch replacement is necessary, a part with the same rating must be used.</p> <p>Never use a motor with a higher horsepower rating than the one supplied.</p> <p>Never replace the air tank with a different model or a larger tank.</p> <p>Never drill into, weld or in any way modify the air tank. The tank may rupture or explode.</p>

GLOSSARY

SCFM or CFM: Standard Cubic Feet per Minute; a unit of measurement of air delivery.

PSIG or PSI: Pounds per square inch gauge.

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 re-starts is called "cut-in pressure."

CUT-OUT PRESSURE: When you turn on your air compressor and it 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. The high pressure at which the motor shuts off is called "cut-out pressure."

DUTY CYCLE

All DeVilbiss Air Power manufactured air compressors should 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. Maximum compressor pumping time per hour is 30 minutes.

STORAGE

When you have finished using the air compressor.

1. Set the "ON/OFF" switch to "OFF" and unplug the cord.
2. Relieve all pressure from the air compressor head and air hose by setting the opening the regulator.
3. Protect the electrical cord and air hose from damage by winding them loosely around the air compressor.
4. Store the air compressor in a clean and dry location.

DESCRIPTION OF OPERATION

Air Compressor Pump: To compress air, the piston moves up and down in the cylinder. On the downstroke, air is drawn in through the air intake valves. The exhaust valves remain closed. On the upstroke of the piston, air is compressed. The intake valves close and compressed air is forced out through the exhaust valves, through the outlet tubes, through the check valve and 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.

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: This unit DOES NOT require a pressure release valve.

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.

Motor Thermal Overload Protector: The electric motor has an automatic thermal overload protector. If the motor overheats for any reason, the thermal overload protector will shut off the motor. The motor must be allowed to cool before restarting.

Regulator: The air pressure coming from the air tank is controlled by the regulator. Turn the regulator knob clockwise to increase pressure and counter-clockwise to

decrease pressure. To avoid minor readjustment 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 that desired, then bring up to the desired pressure. Depending on the air requirements of each particular accessory, the outlet regulated air pressure may have to be adjusted while operating the accessory.

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 reserve air pressure in the tank.

Cooling System: 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 Intake Filter: The advance design of this unit requires no air filter.

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.

On/Auto-Off Switch: Turn this switch ON to provide automatic power to the pressure switch and OFF to remove power at the end of each use.

INSTALLATION AND BREAK-IN PROCEDURES

Location of the Air Compressor

Your compressor comes to you completely assembled and ready for use. Operate the air compressor in a dry, clean, cool and well ventilated area. The air compressor pump and case are designed to allow for proper cooling. Clean or blow off dust or dirt that collects on the air compressor. A clean air compressor runs cooler and provides longer service. The ventilation openings on your air compressor are necessary to maintain proper operating temperature. Do not place rags or other containers on or near these openings.

Voltage and Circuit Protection

See front cover.

Extension Cords

Use extra air hose instead of an extension cord to avoid voltage drop and power loss to the motor.

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 compressor
- in good condition
- no longer than 50 feet
- 14 gauge (AWG) or larger. (Wire size increases as gauge number decreases.) 12 AWG, 10 AWG and 8 AWG may also be used. DO NOT USE 16 OR 18 AWG.

TROUBLESHOOTING GUIDE

⚠ WARNING

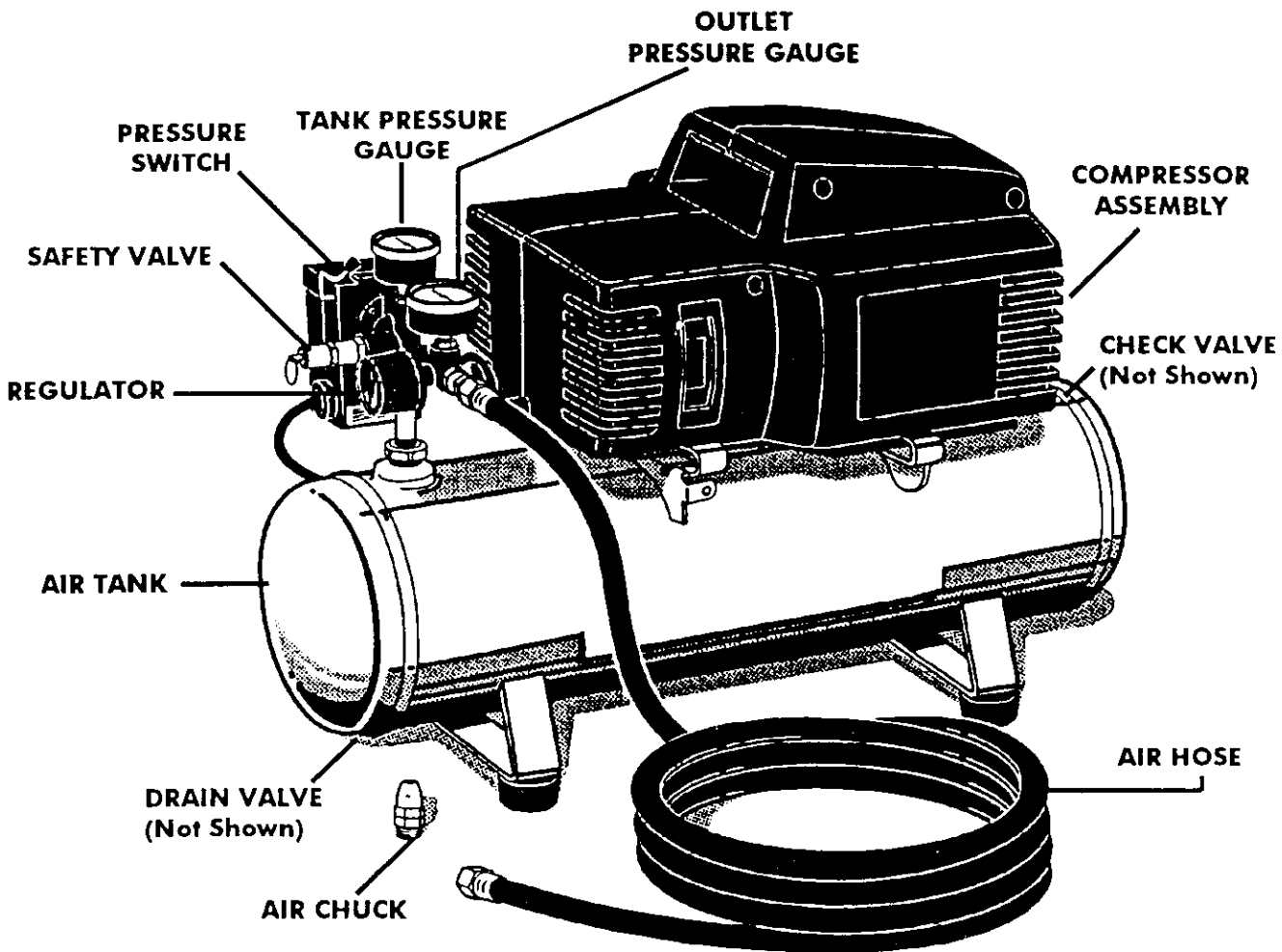
PERFORMING REPAIRS MAY EXPOSE VOLTAGE SOURCES, MOVING PARTS OR COMPRESSED AIR SOURCES. PERSONAL INJURY MAY OCCUR. PRIOR TO ATTEMPTING ANY REPAIRS, UNPLUG THE COMPRESSOR AND BLEED OFF TANK AIR PRESSURE.

PROBLEM	CAUSE	CORRECTION
Excessive tank pressure - safety valve pops off.	<p>Pressure switch does not shut off motor when compressor reaches "cut-out" pressure.</p> <p>Pressure switch "cut-out" too high.</p>	<p>Move the pressure switch lever to the "OFF" position. If the outfit doesn't shut off, and the electrical contacts are welded together, replace the pressure switch.</p> <p>If the contacts are good, check to see if the pin in the bottom of the pressure release valve is stuck. If it does not move freely, replace the valve.</p> <p>Return the outfit to an authorized dealer to check and adjust, or replace switch.</p>
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.	Defective or dirty check valve.	A defective check valve results in a constant air leak at the pressure release valve where there is 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 release valve.	<p>Defective pressure switch release valve.</p> <p>Defective check valve.</p>	<p>Remove and replace the release valve.</p> <p>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. Remove and clean or replace check valve. DO NOT OVER-TIGHTEN.</p>
Air leaks in air tank or at air tank welds.	Defective air tank.	<p>Air tank must be replaced. Do not repair the leak.</p> <p style="text-align: center;">⚠ WARNING</p> <p style="text-align: center;">DO NOT DRILL INTO, WELD OR OTHERWISE MODIFY AIR TANK OR IT WILL WEAKEN. THE TANK CAN RUPTURE OR EXPLODE.</p>
Air leaks between head and valve plate.	Leaking gasket.	Torque head screws to 8 ft. lbs. If this does not stop leak, replace gasket.
Pressure reading on the regulated pressure gauge drops when an accessory is used.	It is normal for "some" pressure drop to occur.	<p>If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator following the instructions on page 10.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">Adjust the regulated pressure under flow conditions (while accessory is being used).</p>

TROUBLESHOOTING GUIDE (Continued)

PROBLEM	CAUSE	CORRECTION
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.
Knocking Noise	Defective check valve.	Remove and clean, or replace.
Compressor is not supplying enough air to operate accessories.	<p>Prolonged excessive use of air.</p> <p>Compressor is not large enough for air requirement.</p> <p>Restricted air intake filter.</p> <p>Hole in hose.</p> <p>Check valve restricted.</p> <p>Air leaks.</p>	<p>Decrease amount of air usage.</p> <p>Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, you need a larger compressor.</p> <p>Clean or replace air intake filter. Do not operate the air compressor in the paint spray area.</p> <p>Check and replace if required.</p> <p>Remove and clean, or replace.</p> <p>Tighten fittings. (See Air Leaks Section of Troubleshooting Guide.)</p>
Motor will not run.	<p>Motor overload protection switch has tripped.</p> <p>Tank pressure exceeds pressure switch "cut-in" pressure.</p> <p>Wrong gauge wire or length of extension cord.</p> <p>Check valve stuck open.</p> <p>Loose electrical connections.</p> <p>Possible defective capacitor.</p> <p>Paint spray on internal motor parts.</p> <p>Possible defective motor.</p> <p>Fuse blown, circuit breaker tripped.</p> <p>Pressure release valve on pressure switch has not unloaded head pressure.</p>	<p>Let motor cool off and overload switch will automatically reset.</p> <p>Motor will start automatically when tank pressure drops below "cut-in" pressure of pressure switch.</p> <p>Check for proper gauge wire and cord length.</p> <p>Remove and clean, or replace.</p> <p>Check wiring connection inside pressure switch and terminal box area.</p> <p>Return to an Authorized Warranty Service Center for inspection or replacement, if necessary.</p> <p>Have checked at an Authorized Warranty Service Center. Do not operate the compressor in the paint spray area. See flammable vapor warning.</p> <p>Have checked at an Authorized Warranty Service Center.</p> <ol style="list-style-type: none"> 1. Check fuse box for blown fuse and replace, if 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; only "Fusetron" type T fuses are acceptable. 3. Check for low voltage conditions and/or proper extension cord. 4. Disconnect the other electrical appliances from circuit or operate the compressor in its own branch circuit. <p>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 continuous air leak. Regulator will not shut off at air outlet.	Dirty or damaged regulator internal parts.	Clean or replace regulator, or internal parts.

PARTS LIST



PARTS AVAILABLE FOR THIS UNIT

<u>DESCRIPTION</u>	<u>PART NUMBER</u>
AIR CHUCK	SSH-8
REGULATOR	CAC-4296-1
TANK PRESSURE GAUGE	C-GA-345
OUTLET PRESSURE GAUGE	C-GA-345
SAFETY VALVE	TIA-4150
DRAIN VALVE	SS-2707
CHECK VALVE	CAC-1275
REPLACEMENT PRESSURE SWITCH	DAC-4105 (100 to 125 PSI)

SERVICE NOTES

PERMANENTLY LUBRICATED AIR COMPRESSOR

**MODEL NO.
FA125-1**

Attach Sales Receipt here.

Retain Original Sales Receipt as Proof of Purchase for Warranty Repair Work.

An "Authorized Warranty Service Center Directory" is included with your unit.

When ordering repair parts from your local Authorized Service Center, always give the following information:

- Model number of your compressor
- Part number and description of the item you wish to purchase.

If you have any questions or need the location of the nearest Authorized Service Center call our Customer Service Hotline (Toll-Free) 1-800-888-2468, Ext. 2, Monday thru Friday 8 a.m. to 4:30 p.m. (CST) and talk with our Trained Customer Service Representatives.

The model number can be found on the maintenance label on the air tank.

Model No. _____

The code number which can be found on the foil label on the rear of the air tank.

Code No. _____

The Manufactures Number (ASME code compressor only) is located on the metal data plate which is welded on to the backside of the air tank

MFG No. _____