

**SEARS**

**CRAFTSMAN**

**Model No.  
919.727321**

**IMPORTANT:**  
Read the Safety Guidelines  
and All Instructions Carefully  
Before Operating

**SAFETY GUIDELINES  
ASSEMBLY  
OPERATION  
MAINTENANCE  
TROUBLESHOOTING  
REPAIR PARTS**

**OWNERS MANUAL FOR**

**CRAFTSMAN  
PERMANENTLY LUBRICATED  
TANK MOUNTED  
AIR COMPRESSOR**

Record in the spaces provided.

- (1) The Model Number can be found on the maintenance label on top of the motor shroud or on the bar code label on the rear of air tank.
- (2) The Date Code Number can be found on the bar code label on the rear of the air tank.
- (3) The Serial Number can be found on the bar code label on the rear of the tank.
- (4) The Tank Registration Number is located on the metal data plate which is welded onto the backside of the air tank. (This data plate is painted the same color as the tank.)

Retain these numbers for future reference.

Model No \_\_\_\_\_

Serial No \_\_\_\_\_

Date Code \_\_\_\_\_

Tank Registration No \_\_\_\_\_

**Sold by Sears Canada, Inc., Toronto, Ont. M5B 2B8**

# TABLE OF CONTENTS

WARRANTY .....	2	OPERATING PROCEDURES .....	9
SAFETY GUIDELINES .....	2	MAINTENANCE .....	10
WARNING CHART .....	3-5	Air Filter - Inspection and Replacement .....	10
GENERAL INFORMATION .....	6	Check Valve -Replacement .....	10
GLOSSARY .....	6	Safety Valve - Inspection .....	10
SPECIFICATION CHART .....	7	Motor .....	10
DESCRIPTION OF OPERATION .....	7	Storage .....	10
TOOLS NEEDED FOR ASSEMBLY .....	7	TROUBLESHOOTING GUIDE .....	11-12
ASSEMBLY .....	8	AIR COMPRESSOR DIAGRAM .....	14
BREAK-IN PROCEDURES .....	8	PARTS LIST .....	15
Location of Air Compressor .....	8	COMPRESSOR PUMP DIAGRAM .....	16
Lubrication and Oil .....	8	PARTS LIST .....	17
Grounding Instructions .....	8	SERVICE NOTES .....	18
Voltage and Circuit Protection .....	9	HOW TO ORDER REPAIR PARTS .....	Back Cover
Break-in Procedure .....	9		

## FULL ONE YEAR WARRANTY ON AIR COMPRESSORS

If this air compressor fails due to a defect in material or workmanship within one year from the date of purchase, RETURN IT TO THE NEAREST SEARS SERVICE CENTER THROUGHOUT CANADA AND SEARS WILL REPAIR IT, FREE OF CHARGE.

If this air compressor is used for commercial or rental purposes, the warranty will apply for ninety days (90) from the date of purchase.

This Craftsman Air Compressor warranty gives you specific legal rights and you may have other rights which vary from province to province.

**Sears Canada, Inc., Toronto, Ont. M5B 2B8**

## SAFETY GUIDELINES - DEFINITIONS

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

### ▲ DANGER

**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in **death or serious injury**.

### ▲ CAUTION

**CAUTION** indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.

### ▲ WARNING

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

### CAUTION

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in **property damage**.

# 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

### RISK OF EXPLOSION OR FIRE



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>IT IS NORMAL FOR ELECTRICAL CONTACTS WITHIN THE MOTOR AND PRESSURE SWITCH TO SPARK.</p> <p>IF ELECTRICAL SPARKS FROM COMPRESSOR COME INTO CONTACT WITH FLAMMABLE VAPORS, THEY MAY IGNITE, CAUSING FIRE OR EXPLOSION.</p> <p>RESTRICTING ANY OF THE COMPRESSOR VENTILATION OPENINGS WILL CAUSE SERIOUS OVERHEATING AND COULD CAUSE FIRE.</p> <p>UNATTENDED OPERATION OF THIS PRODUCT COULD RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE.</p>	<p>ALWAYS OPERATE THE COMPRESSOR IN A WELL VENTILATED AREA FREE OF COMBUSTIBLE MATERIALS, GASOLINE OR SOLVENT VAPORS.</p> <p>IF SPRAYING FLAMMABLE MATERIALS, LOCATE COMPRESSOR AT LEAST 20 FEET AWAY FROM SPRAY AREA. AN ADDITIONAL LENGTH OF HOSE MAY BE REQUIRED.</p> <p>STORE FLAMMABLE MATERIALS IN A SECURE LOCATION AWAY FROM COMPRESSOR.</p> <p>NEVER PLACE OBJECTS AGAINST OR ON TOP OF COMPRESSOR. OPERATE COMPRESSOR IN AN OPEN AREA AT LEAST 12 INCHES AWAY FROM ANY WALL OR OBSTRUCTION THAT WOULD RESTRICT THE FLOW OF FRESH AIR TO THE VENTILATION OPENINGS.</p> <p>OPERATE COMPRESSOR IN A CLEAN, DRY, WELL VENTILATED AREA. <b>DO NOT OPERATE UNIT INDOORS OR IN ANY CONFINED AREA.</b></p> <p>ALWAYS REMAIN IN ATTENDANCE WITH THE PRODUCT WHEN IT IS OPERATING.</p>

### RISK OF BURSTING

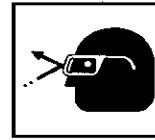


**AIR TANK: THE FOLLOWING CONDITIONS COULD LEAD TO A WEAKENING OF THE TANK, AND RESULT IN A VIOLENT TANK EXPLOSION AND COULD CAUSE PROPERTY DAMAGE OR SERIOUS INJURY.**

WHAT CAN HAPPEN	HOW TO PREVENT IT
<ol style="list-style-type: none"> <li>1. FAILURE TO PROPERLY DRAIN CONDENSED WATER FROM THE TANK, CAUSING RUST AND THINNING OF THE STEEL TANK.</li> <li>2. MODIFICATIONS OR ATTEMPTED REPAIRS TO THE TANK.</li> <li>3. UNAUTHORIZED MODIFICATIONS TO THE UNLOADER VALVE, SAFETY VALVE, OR ANY OTHER COMPONENTS WHICH CONTROL TANK PRESSURE.</li> <li>4. EXCESSIVE VIBRATION CAN WEAKEN THE AIR TANK AND CAUSE RUPTURE OR EXPLOSION.</li> </ol> <p><b><u>ATTACHMENTS &amp; ACCESSORIES:</u></b></p> <p>EXCEEDING THE PRESSURE RATING OF AIR TOOLS, SPRAY GUNS, AIR OPERATED ACCESSORIES, TIRES AND OTHER INFLATABLES <b>CAN CAUSE THEM TO EXPLODE</b> OR FLY APART, AND COULD RESULT IN SERIOUS INJURY.</p>	<p><b>DRAIN TANK DAILY OR AFTER EACH USE.</b> IF TANK DEVELOPS A LEAK, REPLACE IT IMMEDIATELY WITH A NEW TANK OR REPLACE THE ENTIRE COMPRESSOR.</p> <p><b>NEVER DRILL INTO, WELD, OR MAKE ANY MODIFICATIONS TO THE TANK OR ITS ATTACHMENTS.</b></p> <p>THE TANK IS DESIGNED TO WITHSTAND SPECIFIC OPERATING PRESSURES. <b>NEVER MAKE ADJUSTMENTS OR PARTS SUBSTITUTIONS TO ALTER THE FACTORY SET OPERATING PRESSURES.</b></p> <p>FOR ESSENTIAL CONTROL OF AIR PRESSURE, YOU MUST <b>INSTALL A PRESSURE REGULATOR AND PRESSURE GAUGE TO THE AIR OUTLET OF YOUR COMPRESSOR.</b> FOLLOW THE EQUIPMENT MANUFACTURERS RECOMMENDATION AND NEVER EXCEED THE MAXIMUM ALLOWABLE PRESSURE RATING OF ATTACHMENTS. <b>NEVER USE COMPRESSOR TO INFLATE SMALL LOW-PRESSURE OBJECTS SUCH AS CHILDREN'S TOYS, FOOTBALLS, BASKETBALLS. ETC.</b></p>

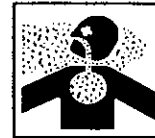
# HAZARD

## RISK FROM FLYING OBJECTS



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>THE COMPRESSED AIR STREAM CAN CAUSE SOFT TISSUE DAMAGE TO EXPOSED SKIN AND CAN PROPEL DIRT, CHIPS, LOOSE PARTICLES AND SMALL OBJECTS AT HIGH SPEED, RESULTING IN PROPERTY DAMAGE OR PERSONAL INJURY.</p>	<p>ALWAYS WEAR ANSI Z87.1 APPROVED SAFETY GLASSES WITH SIDE SHIELDS WHEN USING THE COMPRESSOR.</p> <p>NEVER POINT ANY NOZZLE OR SPRAYER TOWARD ANY PART OF THE BODY OR AT OTHER PEOPLE OR ANIMALS.</p> <p>ALWAYS TURN THE COMPRESSOR OFF AND BLEED PRESSURE FROM THE AIR HOSE AND TANK BEFORE ATTEMPTING MAINTENANCE, ATTACHING TOOLS OR ACCESSORIES.</p>

## RISK TO BREATHING



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>THE COMPRESSED AIR FROM YOUR COMPRESSOR IS NOT SAFE FOR BREATHING! THE AIR STREAM MAY CONTAIN CARBON MONOXIDE, TOXIC VAPORS OR SOLID PARTICLES FROM THE TANK.</p> <p>SPRAYED MATERIALS SUCH AS PAINT, PAINT SOLVENTS, PAINT REMOVER, INSECTICIDES, WEED KILLERS, CONTAIN HARMFUL VAPORS AND POISONS.</p>	<p>ALWAYS OPERATE AIR COMPRESSOR OUTSIDE IN A CLEAN, WELL VENTILATED AREA. AVOID ENCLOSED AREAS SUCH AS GARAGES, BASEMENTS, STORAGE SHEDS, WHICH LACK A STEADY EXCHANGE OF AIR. KEEP CHILDREN, PETS AND OTHERS AWAY FROM AREA OF OPERATION.</p> <p>NEVER INHALE AIR FROM THE COMPRESSOR EITHER DIRECTLY OR FROM A BREATHING DEVICE CONNECTED TO THE COMPRESSOR.</p> <p>WORK IN AN AREA WITH GOOD CROSS-VENTILATION. READ AND FOLLOW THE SAFETY INSTRUCTIONS PROVIDED ON THE LABEL OR SAFETY DATA SHEETS FOR THE MATERIAL YOU ARE SPRAYING. USE A NIOSH/MSHA APPROVED RESPIRATOR DESIGNED FOR USE WITH YOUR SPECIFIC APPLICATION.</p>

## RISK OF ELECTRICAL SHOCK



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>YOUR AIR COMPRESSOR IS POWERED BY ELECTRICITY. LIKE ANY OTHER ELECTRICALLY POWERED DEVICE, IF IT IS NOT USED PROPERLY IT MAY CAUSE ELECTRIC SHOCK.</p> <p>REPAIRS ATTEMPTED BY UNQUALIFIED PERSONNEL CAN RESULT IN SERIOUS INJURY OR DEATH BY ELECTROCUTION.</p> <p>ELECTRICAL GROUNDING: FAILURE TO PROVIDE ADEQUATE GROUNDING TO THIS PRODUCT COULD RESULT IN SERIOUS INJURY OR DEATH FROM ELECTROCUTION. SEE GROUNDING INSTRUCTIONS.</p>	<p>NEVER OPERATE THE COMPRESSOR OUTDOORS WHEN IT IS RAINING OR IN WET CONDITIONS.</p> <p>NEVER OPERATE COMPRESSOR WITH COVER COMPONENTS REMOVED OR DAMAGED.</p> <p>ANY ELECTRICAL WIRING OR REPAIRS REQUIRED ON THIS PRODUCT SHOULD BE PERFORMED BY AUTHORIZED SERVICE CENTER PERSONNEL IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.</p> <p>MAKE CERTAIN THAT THE ELECTRICAL CIRCUIT TO WHICH THE COMPRESSOR IS CONNECTED PROVIDES PROPER ELECTRICAL GROUNDING, CORRECT VOLTAGE AND ADEQUATE FUSE PROTECTION.</p>

# HAZARD

## RISK FROM MOVING PARTS



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p><b>MOVING PARTS</b> SUCH AS THE PULLEY, FLYWHEEL AND BELT <b>CAN CAUSE SERIOUS INJURY</b> IF THEY COME INTO CONTACT WITH YOU OR YOUR CLOTHING.</p> <p><b>ATTEMPTING TO OPERATE COMPRESSOR WITH DAMAGED OR MISSING PARTS OR ATTEMPTING TO REPAIR COMPRESSOR WITH PROTECTIVE SHROUDS REMOVED CAN EXPOSE YOU TO MOVING PARTS AND CAN RESULT IN SERIOUS INJURY.</b></p>	<p><b>NEVER OPERATE THE COMPRESSOR WITH GUARDS OR COVERS WHICH ARE DAMAGED OR REMOVED.</b></p> <p><b>ANY REPAIRS REQUIRED ON THIS PRODUCT SHOULD BE PERFORMED BY AUTHORIZED SERVICE CENTER PERSONNEL.</b></p>

## RISK OF BURNS



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p><b>TOUCHING EXPOSED METAL</b> SUCH AS THE COMPRESSOR HEAD OR OUTLET TUBES, <b>CAN RESULT IN SERIOUS BURNS.</b></p>	<p><b>NEVER TOUCH ANY EXPOSED METAL PARTS ON COMPRESSOR DURING OR IMMEDIATELY AFTER OPERATION. COMPRESSOR WILL REMAIN HOT FOR SEVERAL MINUTES AFTER OPERATION.</b></p> <p><b>DO NOT REACH AROUND PROTECTIVE SHROUDS OR ATTEMPT MAINTENANCE UNTIL UNIT HAS BEEN ALLOWED TO COOL.</b></p>

## RISK OF FALLING



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p>A PORTABLE COMPRESSOR CAN FALL FROM A TABLE, WORKBENCH OR ROOF <b>CAUSING DAMAGE TO THE COMPRESSOR AND COULD RESULT IN SERIOUS INJURY OR DEATH TO THE OPERATOR.</b></p>	<p><b>ALWAYS OPERATE COMPRESSOR IN A STABLE SECURE POSITION TO PREVENT ACCIDENTAL MOVEMENT OF THE UNIT. NEVER OPERATE COMPRESSOR ON A ROOF OR OTHER ELEVATED POSITION. USE ADDITIONAL AIR HOSE TO REACH HIGH LOCATIONS.</b></p>

## RISK OF PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR (Fire, Inhalation, Damage to Vehicle Surfaces)



WHAT CAN HAPPEN	HOW TO PREVENT IT
<p><b>OIL CAN LEAK OR SPILL</b> AND COULD RESULT IN FIRE OR BREATHING HAZARD, SERIOUS INJURY OR DEATH CAN RESULT. OIL LEAKS WILL DAMAGE CARPET, PAINT OR OTHER SURFACES IN VEHICLES OR TRAILERS.</p>	<p><b>ALWAYS PLACE COMPRESSOR ON A PROTECTIVE MAT WHEN TRANSPORTING TO PROTECT AGAINST DAMAGE TO VEHICLE FROM LEAKS. REMOVE COMPRESSOR FROM VEHICLE IMMEDIATELY UPON ARRIVAL AT YOUR DESTINATION.</b></p>

## GENERAL INFORMATION

You have purchased an air compressor unit consisting of a one cylinder, single-stage air compressor pump and air tank. Included are wheels, regulator, gauges, and handle.

This air compressor requires no oil. Now you can enjoy all the benefits of having an air compressor without ever having to purchase, add or change oil.

Your air compressor can be used for operating paint spray guns, air tools, blow guns, nailers/staplers, air brushes, and inflator kits. An air pressure regulator is required for most of the applications.

An inline air filter which removes moisture and dirt from compressed air should be used where applicable.

An inline regulator can be used if a more precise adjustment of air pressure is needed downstream.

## GLOSSARY

**CFM:** Cubic Feet per Minute.

**SCFM:** Standard Cubic Feet per Minute; a unit of measure of air delivery.

**PSI:** Pounds per Square Inch; a unit of measure of pressure.

**ASME:** American Society of Mechanical Engineers; made, tested, inspected and registered to meet the standards of the ASME.

**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 and the pressure switch lever is in "Auto", the motor will restart automatically. The low pressure at which the motor automatically restarts 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 - protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called "cut-out pressure."

**CSA:** Electrical products sold in Canada are required to be certified to the applicable CSA standard (s). Canadian Standards Association (CSA) is a standards writing and safety testing organization. Products that are CSA certified have been evaluated and tested and found to meet or exceed the applicable CSA standard (s) for safety and electrical performance.

## SPECIFICATION CHART

<b>Model No.</b>	<b>919.727321</b>
Bore	2 3/8"
Stroke	1.35"
Voltage - Single Phase	120
Minimum Branch Circuit Requirement	15 amps
Fuse Type	Time Delay
Amperage at Maximum Pressure	15.0
Air Tank/Capacity	ASME/25 gal. (U.S.)
Approximate Cut-in Pressure	100
Approximate Cut-out Pressure	130
SCFM @ 40 psi	7.8
SCFM @ 90 psi	5.5

## 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 tube, through the check valve and into the air tank.

**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:** The pressure switch is fitted with a small lever. It is labeled "Auto/O" for automatic run or off. In the "O" position, the motor will not run. In the "Auto" position, it 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.

**Pressure Release Valve:** The pressure release valve located on the side of the pressure switch is designed to automatically release compressed air trapped within the compressor head and outlet tube. This short release of air will occur when the air compressor reaches "cut-out" pressure or the unit is shut off. If the air is not released, the motor will not be able to start when next required.

**Flow Valve:** The flow valve allows air to flow from the head as the motor is getting "up to speed". Once the motor reaches normal operating speed, the flow valve closes and the pump begins to compress air, thus requiring less amp draw on initial start.

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

**Regulator:** The air pressure coming from the air tank is controlled by the regulator. The regulator control knob is a vibration proof design. Lift the regulator knob to engage and depress the knob to lock. 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.

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

**Drain Valve:** This valve is located at the bottom of the tank. To drain accumulated moisture from the tank, pull on the safety valve until tank pressure is 15 PSI. Unscrew the drain valve and allow the water to drain.

## TOOLS NEEDED FOR ASSEMBLY

- a 9/16" socket and an open end wrench for attaching the wheels
- a 3/8" open end wrench or socket to tighten handle screws

# ASSEMBLY

## Installing Wheels, Handles, Rubber Foot Strip

### ⚠ CAUTION

THE WHEELS AND HANDLE DO NOT PROVIDE ADEQUATE CLEARANCE, STABILITY OR SUPPORT FOR PULLING THE UNIT UP AND DOWN STAIRS OR STEPS. THE UNIT MUST BE LIFTED, OR PUSHED UP A RAMP.

1. Attach the handle to the compressor saddle by inserting the handle **inside** the compressor saddle and lining up the two bolt holes on each side. Install the four screws, two on each side. Tighten securely.
2. Install one shoulder bolt and one nut for each wheel. Tighten securely. The compressor will sit level if the wheels are properly installed.
3. Clean and dry underside of air tank leg opposite wheels. Remove the protective paper strip from the adhesive backed rubber foot strip. Attach the rubber foot strip to the bottom of leg. Press firmly into place.

## 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" away from the wall or other obstructions that will interfere with the flow of fresh intake and cooling air.

### Lubrication and Oil

This unit needs no lubrication or oiling.

### Grounding Instructions

#### ⚠ WARNING

**RISK OF ELECTRICAL SHOCK.** In the event of a short circuit, grounding reduces the risk of shock by providing an escape wire for the electric current. This air compressor must be properly grounded.

This portable 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.

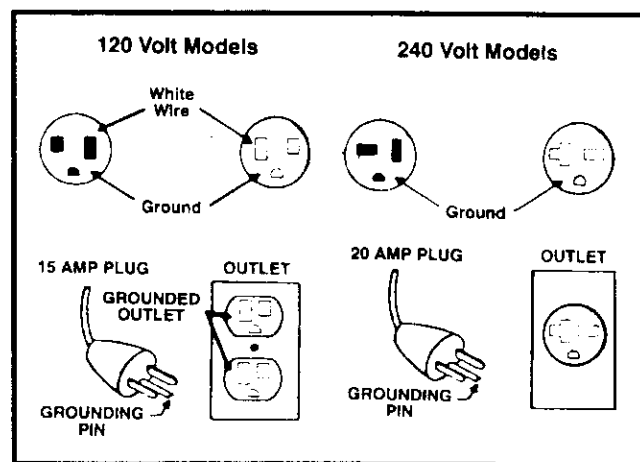
#### ⚠ DANGER

**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 technician.

If repairing or replacing cord or plug, the grounding wire must be kept separate from the current-carrying wires. Never connect the grounding wire to a flat blade plug terminal. The grounding wire has insulation with an outer surface that is green with or without yellow stripes.

If these grounding instructions are not completely understood, or if in doubt as to whether the compressor is properly grounded, have the installation checked by a qualified electrician.



### Voltage and Circuit Protection

Refer to page 5 (Specification Chart) for the voltage and circuit protection requirements of your compressor. Use only a fuse or circuit breaker that is the same rating as the branch circuit the air compressor is operated on. If the compressor is connected to a circuit protected by fuses, use only dual element time delay fuses.

Refer to Parts List Manual for your compressor. Certain air compressor models can be operated on a 15 amp circuit if:

1. Voltage supply to circuit is normal.



2. Circuit is not used to supply any other electrical needs (lights, appliances, etc.)
3. Extension cords comply with a 15 amp circuit breaker or 15 amp time delay fuse.
4. Circuit is equipped with a 15 amp circuit breaker or 15 amp time delay fuse.

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

### Extension Cords

It is preferable to use extra air hose instead of an extension cord to avoid voltage drop and power loss to the motor, and to prevent overheating.

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

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

## Break-in Procedure

### ⚠ CAUTION

**Serious damage may result if the following break-in instructions are not closely followed.**

This procedure is required only once, before the air compressor is put into service.

1. Set the pressure switch "AUTO/O" lever in the "O" position for "Off".
2. Plug the power cord into the correct branch circuit receptacle.
3. Do not attach hose to outlet. Leave the outlet open to the atmosphere.
4. Turn the regulator **clockwise**, opening it fully, to prevent air pressure build-up in the tank.
5. Move the "AUTO/O" lever to "AUTO". The compressor will start.
6. **RUN THE COMPRESSOR FOR 15 MINUTES.** Make sure the regulator is open and there is no tank pressure build-up.
7. After 15 minutes, close the regulator by turning it **counterclockwise**. The air tank will fill to cut-out pressure and then the motor will stop.

## OPERATING PROCEDURES

1. Before attaching air hose or accessories, make sure the "AUTO/O" lever is set to "O" and the air regulator is closed.
2. Attach hose and accessories.

### ⚠ WARNING

**TOO MUCH AIR PRESSURE CREATES A HAZARDOUS RISK OF BURSTING. CARE-FULLY FOLLOW STEPS 3 AND 5 BELOW EACH TIME THE COMPRESSOR IS USED.**

### ⚠ CAUTION

**Compressed air from the outfit may contain water condensation. Do not spray unfiltered air at an item that could be damaged. Some air operated tools or devices may require filtered air. Read the instructions for the air tool or device.**

3. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.
4. Turn the "AUTO/O" lever to "AUTO" and allow tank pressure to build. Motor will stop when tank pressure reaches "cut-out" pressure.
5. Open the regulator by turning it clockwise. Adjust the regulator to the correct pressure setting. Your compressor is ready for use.

6. 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:

7. Set the "AUTO/O" lever to "O".
8. Turn the regulator **counterclockwise** and set the outlet pressure to zero.
9. Remove the air tool or accessory.
10. Open the regulator and allow the air to slowly bleed from the tank. Close the regulator when tank pressure is approximately 20 psi.
11. Drain water from air tank.

### ⚠ WARNING

**WATER WILL CONDENSE IN THE AIR TANK. IF NOT DRAINED, WATER WILL CORRODE AND WEAKEN THE AIR TANK CAUSING A RISK OF AIR TANK RUPTURE.**

### NOTE:

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

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

# MAINTENANCE

## ⚠ WARNING

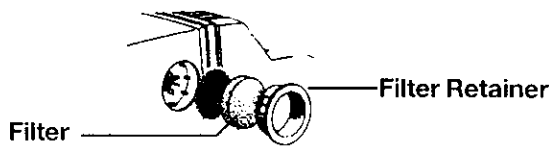
UNIT CYCLES AUTOMATICALLY WHEN POWER IS ON. WHEN DOING MAINTENANCE, YOU MAY BE EXPOSED TO VOLTAGE SOURCES, COMPRESSED AIR OR MOVING PARTS. PERSONAL INJURIES CAN OCCUR. BEFORE PERFORMING ANY MAINTENANCE OR REPAIR, UNPLUG THE COMPRESSOR AND BLEED OFF ALL AIR PRESSURE.

ALL MAINTENANCE AND REPAIR OPERATIONS NOT LISTED MUST BE DONE BY A QUALIFIED SERVICE TECHNICIAN.

## Air Filter - Inspection and Replacement

### ⚠ WARNING

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



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

A dirty air 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.

## Check Valve Cleaning - Replacement

### ⚠ WARNING

**Risk of personal injury. Manifold assembly contains compressed air which can be hazardous. Manifold gets hot during operation.**

**Before servicing:**

- Unplug or disconnect electrical supply to compressor.
- Bleed tank of pressure.
- Allow compressor to cool.

1. Release all air pressure from air tank and unplug outfit.
2. Remove shroud. (Key Nos. 1 and 2)
3. Loosen the top and bottom nuts and remove the outlet tube. (Key Nos. 31, 33, and 34)
4. Remove the pressure release tube, fitting, and connector. (Key Nos. 25, 26 and 27)
5. Unscrew the check valve (turn counterclockwise) using a socket wrench. (Key No. 17)
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 solvent, such as paint and varnish remover.
7. Apply a Teflon based pipe sealant to the check valve threads. Reinstall the check valve (turn clockwise).
8. Replace the pressure release tube and fitting.
9. Replace the outlet tube and tighten top and bottom nuts.
10. Replace the shroud.

## Safety Valve - Inspection

### ⚠ WARNING

If the safety valve does not work properly, over-pressurization may occur, causing air tank rupture or an explosion. Before starting compressor, pull the ring on the safety valve to make sure that the safety valve operates freely. If the valve is stuck or does not operate smoothly, it must be replaced with the same type of valve.

## Motor

The motor has an automatic reset thermal overload protector. If the motor overheats for any reason, the overload protector will shut off the motor. The motor must be allowed to cool down before restarting. The compressor will automatically restart after the motor cools.

If the overload protector shuts the motor off frequently, check for a possible voltage problem. Low voltage can also be suspected when:

1. The motor does not get up to full power or speed.
2. Fuses blow out when starting the motor; lights dim and remain dim when motor is started and is running.

## 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 water from the air tank.
2. Protect the electrical cord and air hose from damage (such as being stepped on or run over). Wind them loosely around the compressor handle.

Store the air compressor in a clean and dry location.

# 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.	Pressure switch does not shut off motor when compressor reaches cut-out pressure.  Pressure switch cut-out too high.	Move the pressure switch lever to the "O" position. If the compressor doesn't shut off, disconnect from the electrical outlet source and return to a Sears Service Center to replace the pressure switch.  Return the compressor to Sears Service Center to check and adjust, or replace switch.
Air leaks at fittings or hose.	Tube or hose fittings are not tight enough.	Tighten fittings using teflon tape where air can be heard escaping. Check fittings with soapy water solution. <b>DO NOT OVERTIGHTEN.</b>
Air leaks at pressure switch release valve.	Defective pressure switch release valve.  Defective or dirty check valve.	Return to Sears Service Center for replacement of pressure switch.  Check to see if the pin in the bottom of the pressure release valve is stuck. If it does not move freely, return to the Service Center for replacement of pressure switch.  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. <b>DO NOT OVERTIGHTEN.</b>
Air leaks in air tank or at air tank welds.	Defective air tank.	Air tank must be replaced. Do not repair the leak. Return compressor to Sears Service Center.  <b>⚠ WARNING</b> <b>DO NOT DRILL INTO, WELD OR OTHERWISE MODIFY AIR TANK OR IT WILL WEAKEN. THE TANK CAN RUPTURE OR EXPLODE.</b>
Air leaks between head and valve plate.	Leaking seal.	Torque head screws to 7-10 ft. lbs. If this does not stop leak, replace seal.
Pressure reading on the regulated pressure gauge drops when an accessory is used.	It is normal for some pressure drop to occur.	If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator.  <b>NOTE</b> Adjust the regulated pressure under flow conditions (while accessory is being used).
Air leak from safety valve.	Possible defect in safety valve.	Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced.
Knocking noise	Defective check valve.	Remove and clean, or replace.

PROBLEM	CAUSE	CORRECTION
Compressor is not supplying enough air to operate accessories.	<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>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 any paint spray or drywall sanding area.</p> <p>Check and replace if required.</p> <p>Remove and clean, or replace.</p> <p>Tighten fittings.</p>
Motor will not run or restart.	<p>Present tank pressure exceeds pressure switch "cut-in" pressure.</p> <p>Fuse blown, circuit breaker tripped.</p> <p>Motor overload protection switch has tripped.</p> <p>Possible defective motor or capacitor.</p> <p>Paint spray on internal motor parts.</p> <p>Check valve stuck open, putting pressure on head.</p> <p>Pressure release valve on pressure switch has not unloaded head pressure.</p> <p>Broken exhaust valve.</p>	<p>Motor will start automatically when tank pressure drops below "cut-in" pressure of pressure switch.</p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Check for proper fuse; only Time Delay fuses are acceptable.</li> <li>3. Check for low voltage conditions and/or proper extension cord.</li> <li>4. Disconnect the other electrical appliances from circuit or operate the compressor on its own branch circuit.</li> <li>5. Check for loose electrical connections.</li> </ol> <p>Let motor cool off and overload switch will auto-matically reset.</p> <p>Return to Sears Service Center for inspection or replacement, if necessary.</p> <p>Have compressor checked at Sears Service Center. Do not operate the compressor in the paint spray area. See flammable vapor warning.</p> <p>Remove and clean, or replace the check valve.</p> <p>Bleed the line by pushing the lever on the pressure switch to the "O" position; if the valve does not open, replace it.</p> <p>Inspect and replace if necessary.</p>
Regulator knob continuous air leak. Regulator will not shut off at air outlet.	Dirty or damaged regulator internal parts.	Replace regulator.