

# SEARS

## CRAFTSMAN

**NOTE:** For identification of Repair Parts, see separate Parts List Manual.

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

# GENERAL MANUAL FOR PERMANENTLY LUBRICATED TANK MOUNTED TWIN CYLINDER AIR COMPRESSOR

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

Record in the spaces provided.

- (1) The model number which can be found on the maintenance label on the top of the motor cover or on the tank.
- (2) The code number which can be found on the foil label on the rear of the air tank.
- (3) The Manufacturers 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. \_\_\_\_\_

Code No. \_\_\_\_\_

Mfg. No. \_\_\_\_\_

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.

MG-PERMTWIN 6/18/93

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## 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/DEPARTMENT THROUGHOUT THE UNITED STATES 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 from the date of purchase.

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

**Sears, Roebuck and Co., Sears Tower, Dept. 731CR-W, Chicago, IL 60684**

# 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.



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



**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.



**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        | The metal compressor components, such as manifold, tubes, etc., become hot when the air compressor is running. If you touch them, you may be seriously burned.   | Avoid contact with metal components of the compressor during or immediately after operation. Reaching under or removing portions of the plastic enclosures such as the filter cover and console cover exposes hot surfaces. Allow compressor to cool prior to servicing.  |
| Flammable Vapors | It is normal for the motor and pressure switch to spark when compressor starts or stops. A spark can ignite vapors from gasoline or solvents, causing a fire or explosion.   | If spraying a flammable material, provide ample ventilation. Never spray in a closed area. There must be a flow of fresh air at all times.<br><br>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.  |
| Air Tank         | Modifications to air compressor components in an attempt to reach higher air pressure can cause the air tank to rupture or explode.<br><br>Incompatibility between tank and compressor will cause the tank to rupture.<br><br>Modifications to the air tank will cause it to weaken. | 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 ratings must be used.<br><br>Never replace the air tank with a different model or a larger tank. Return to Authorized Service Center if replacement is required.<br><br>Never drill into, weld or in any way modify the air tank. The tank may rupture or explode. If leaks develop due to corrosion or tank is damaged, return to Authorized Service Center for replacement. |

# SAFETY GUIDELINES

| 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. <b>NOTE: IF A REGULATOR IS NOT SUPPLIED WITH YOUR COMPRESSOR, YOU MUST INSTALL ONE BEFORE USING AIR TOOLS AND ACCESSORIES WITH PRESSURE RATINGS LESS THAN 200 PSIG.</b></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 outdoors when it is raining.</p> <p>Always plug the cord into an electrical outlet with the specified voltage and adequate fuse protection.</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>Use a mask or respirator if there is a chance of inhaling toxic sprayed materials. Masks and respirators have limits and will only provide protection against some kinds and limited amounts of toxic material. Read mask and respirator instructions carefully. Consult with a safety expert or industrial hygienist if you are not sure about the use of a certain mask or respirator.</p>             |
| 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. | If the material you intend to spray contains the solvents listed at left (read the label or data sheet), 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.  |

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# GLOSSARY

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**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.

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

**U.L. Listed:** This product is Listed by Underwriters Laboratories, Inc. (UL). Samples of this product have been evaluated by UL and meet the applicable UL Standards for Safety.

**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 - protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called "cut-out pressure."

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## ACCESSORIES FOR USE WITH SEARS AIR COMPRESSORS

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The following accessories are available through the current general sale catalog or at full-line Sears stores.

- SPRAY GUNS
- BLOW GUNS
- AIR CAULKING GUNS
- POWER WASHER
- SANDBLASTERS
- AIR BRUSHES
- AIR LINE FILTERS
- TIRE AIR CHUCKS
- PAINT TANKS
- AIR TANKS
- INFLATOR KITS
- QUICK CONNECTOR SETS (various sizes)

- VISCOSIMETER
- AIR PRESSURE REGULATORS
- OIL FOG LUBRICATORS
- AIR TOOLS:
  - Sanders
  - Drills
  - Impact Wrenches
  - Hammers
- AIR HOSE:
  - 1/4", 5/16" or 3/8" I.D.
  - in various lengths

- NAILER/STAPLERS
  - Decking
  - Farming
  - Roofing
  - Siding
  - Finishing
  - Carpenting
  - Upholstery
  - Picture Framing
- DRAIN CLEANER
- DUSTER GUN

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## GENERAL INFORMATION

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You have purchased an air compressor unit consisting of a 2 cylinder, single-stage air compressor pump and air tank. Included with portable compressors only are an air hose, tire air chuck, wheels, regulator, gauges, and handle. Stationary units are not supplied with regulators.

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, caulking guns, grease guns, air brushes, sandblaster, or inflating tires and plastic toys, spraying weed killers, insecticides, etc. An air pressure regulator is required for most of the applications.

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

These accessories can be purchased from most Sears stores.

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# DESCRIPTION OF OPERATION

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**Air Compressor Pump:** To compress air, the pistons move up and down in the cylinders. 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:** The pressure release 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 or is shut off. If the air is not released, the motor will not be able to start. The pressure release valve allows the motor to restart freely. When the motor stops running, air will be heard escaping from the valve for a few seconds. No air should be leaking when the motor is running.

**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.

**Globe Valve:** Turn the knob counter-clockwise to open the valve and clockwise to close.

**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. 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.

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## Tools Needed for Assembly

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

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# ASSEMBLY FOR PORTABLE COMPRESSORS

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## Installing Wheels, Handles, Rubber Foot Strip



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.



It may be necessary to brace or support one end of the outfit when attaching the wheels and the rubber foot strip because the air compressor will have a tendency to tip.

2. Install one shoulder bolt and one nut for each wheel using upper bolt hole for 30 and 33 gallon units. Tighten securely. The outfit will sit level if the wheels are properly installed.
3. Clean and dry 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.

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## REMOVAL OF SHIPPING BOARDS AND INSTALLATION FOR STATIONARY (PERMANENTLY MOUNTED) UNITS

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It may be necessary to brace or support one side of the outfit when removing the shipping boards because the air compressor will have a tendency to tip.

1. Remove all packaging such that only the compressor on the pallet remains. Remove and discard the (4) screws and washers that hold the compressor to the pallet.

2. This compressor is designed to be bolted directly to a level floor. Prior to installing, place the new washers which are supplied with the compressor, between the feet and floor such that the ring base at the bottom of the tank does not contact the floor. Tighten bolts 15-20 ft. lbs.

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## INSTALLATION AND BREAK-IN PROCEDURES

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### 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 air. The air compressor head and shroud are designed to allow for proper cooling.

### Lubrication and Oil

This unit needs no lubrication or oiling.

### Break-In Procedures

The procedure is required only once, before the compressor is put into service. Operate the compressor with the regulator or shut-off valve fully open for 15 minutes. Make sure that no pressure is building in the tank. After 15 minutes, close the regulator or shut-off valve and allow the tank to fill to cut-out pressure and then the motor will stop. Your compressor is now ready for use.

## Extension Cords

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:

- a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product
- in good condition
- no longer than 50 feet
- 12 gauge (AWG) or larger. (Wire size increases as gauge number decreases. 10 AWG and 8 AWG may also be used. DO NOT USE 14 OR 16 AWG.)

## Voltage and Circuit Protection

Refer to your Parts List Manual 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, as noted in that Service Bulletin.

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 specifications.
4. Circuit is equipped with a 15 amp circuit breaker or 15 amp time delay fuse. Use a Fusetron Type "T" time delay fuse.

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

## GROUNDING INSTRUCTION

### - Portable Compressors



**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.

The 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. See illustration. **DO NOT USE AN ADAPTER.**

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

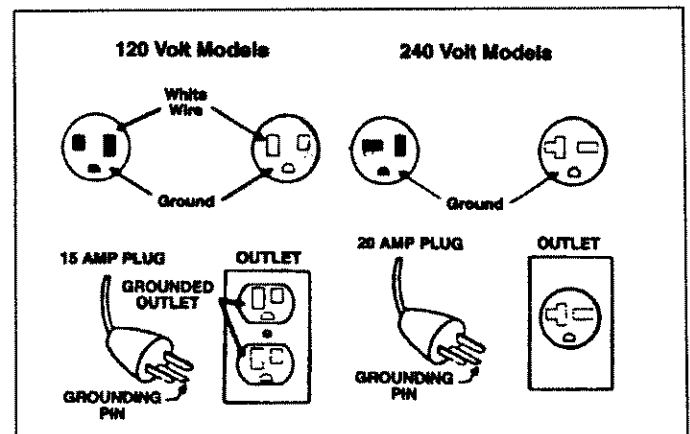


### IMPROPER GROUNDING CAN RESULT IN ELECTRICAL SHOCK.

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.

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.



## Wiring Instructions - Stationary (Permanently Mounted) Compressors

If your compressor is not equipped with a plug-in type power cord, perform electrical wiring according to the following instructions:



## DANGER

RISK OF ELECTRICAL SHOCK. IMPROPER ELECTRICAL GROUNDING CAN RESULT IN ELECTRICAL SHOCK. WIRING FOR THE PRESSURE SWITCH SHOULD BE DONE BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH NATIONAL AND LOCAL CODES AND ORDINANCES.

Install the compressor as close to the main power supply as possible. This practice will avoid using long lengths of electrical wiring for the power supply which can cause power loss to the motor. When connecting wires, make sure that :

1. The amperage rating of the electrical box is adequate.

Refer to the Specification Chart in the Outfit Parts Bulletin for your compressor.

2. The supply line has the same electrical characteristics (voltage, cycle, phase) as the motor.

Wiring must be such that full motor nameplate voltage plus or minus 10% is available at the motor terminals during starting. Refer to local codes for recommended wire sizes for correct wire size and maximum wire run; undersize wire causes high amp draw and overheating to the motor.



Electrical wiring must be located away from hot surfaces such as manifold assembly, compressor outlet tubes, heads, or cylinders.

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# OPERATING PROCEDURES

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

## WARNING

TOO MUCH AIR PRESSURE CREATES A HAZARDOUS RISK OF BURSTING. CAREFULLY FOLLOW STEPS 3 AND 5 EACH TIME THE COMPRESSOR IS USED.



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. If your compressor is not supplied with a regulator with gauge, install one before using accessories.
4. Turn the OFF/AUTO 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 com-

pressor 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 "OFF/AUTO" lever to "OFF".
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.

With tank pressure at approximately 20 psi, open the drain cock or drain valve.

### 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 cock or drain valve. The air compressor can now be stored.

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# MAINTENANCE

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## ▲ 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.

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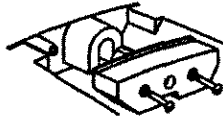
**ALL MAINTENANCE AND REPAIR OPERATIONS NOT LISTED MUST BE DONE BY QUALIFIED SERVICE PERSONNEL.**

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### 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 - Replacement - Stationary (Permanently Mounted) Compressors

1. Release all air pressure from air tank and disconnect outfit from supply circuit.
2. Remove rear shroud.
3. Remove tubes and compression fittings at the tee and remove the tee from the check valve.
4. Remove the pressure release tube and fitting from the check valve.
5. Unscrew from the check valve (turn counterclockwise) using a socket wrench.
6. The check valve may be cleaned with a solvent, such as paint and varnish remover.
7. Apply sealant to the check valve threads. Reinstall the check valve (turn clockwise). **DO NOT OVERTIGHTEN.**
8. Replace the pressure release tube, fitting and tee.
9. Replace the outlet tubes and tighten fittings.
10. Replace the shroud.
11. Connect compressor to supply circuit.

### Check Valve Replacement - Portable Compressors

#### ▲ WARNING

Risk of personal injury. Mainfold 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 console cover.
3. Loosen lower outlet tube nuts that secure outlet tubes to the upper manifold section.
4. Remove the six screws securing the upper manifold section to the lower section.
5. Lift upper manifold assembly and invert so that the flapper valve and o-ring are exposed.
6. Remove the two small screws securing the flapper valve and restrictor.
7. Replace flapper valve and re-assemble restrictor and two screws.
8. Assemble upper manifold assembly to the lower section. Make sure the o-ring is retained in the upper section as it is inverted and the outlet tube slides into the upper section. Tighten six screws.
9. Tighten lower outfit tube nuts.
10. Replace console cover.

### 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.

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# MAINTENANCE (cont'd)

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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



**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>Return the outfit to Sears Service Center 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.  |
| 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>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>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.</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> <div style="text-align: center;"> <p><b>DO NOT DRILL INTO, WELD OR OTHERWISE MODIFY AIR TANK OR IT WILL WEAKEN. THE TANK CAN RUPTURE OR EXPLODE.</b></p> </div>  |
| Air leaks between head and valve plate.   | Leaking seal.   | Torque head screws to 8 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.   | <p>If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator following the instructions on page 6.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>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 or restart.   | <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 motor or capacitor.</p> <p>Paint spray on internal motor parts.</p> <p>Fuse blown, circuit breaker tripped.</p> <p>Pressure release valve on pressure switch has not unloaded head pressure.</p> <p>Broken exhaust valve.</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 Sears Service Center for inspection or replacement, if necessary.</p> <p>Have checked at Sears Service Center. Do not operate the compressor in the paint spray area. See flammable vapor warning.</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 "Fusetron" type T 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 in its own branch circuit.</li> </ol> <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> <p>Remove head and valve plate, 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.  | Clean or replace regulator, or internal parts.   |

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# SERVICE NOTES

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# SERVICE NOTES

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**SEARS**  
CRAFTSMAN

**SERVICE**

**MODEL NO.**

**HOW TO ORDER  
REPAIR PARTS**

**GENERAL MANUAL FOR  
PERMANENTLY LUBRICATED  
TANK MOUNTED  
AIR COMPRESSOR**

Now that you have purchased your Sears Air Compressor, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Sears Air Compressor can be found on the label which is located on the top of the motor cover or on the tank.

**WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:**

- PART NUMBER
- MODEL NUMBER
- PART DESCRIPTION
- NAME OF ITEM

All parts listed may be ordered from any Sears Service Center and most Sears stores.

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.