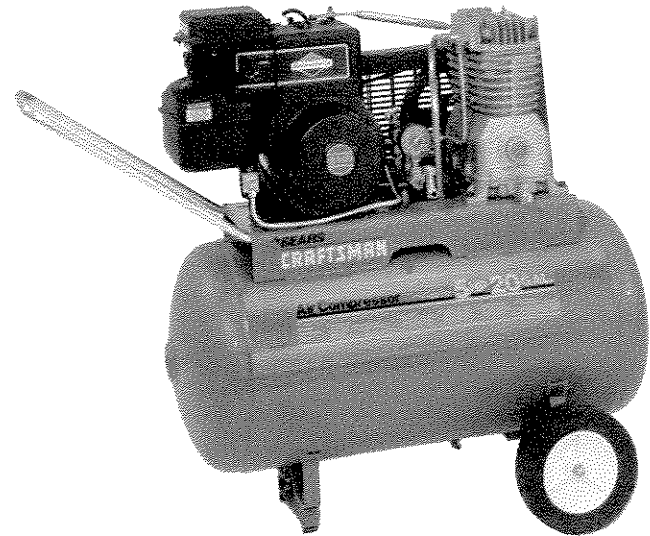


# SEARS

## OWNERS MANUAL

MODEL NO.  
919.157151

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



## CRAFTSMAN GASOLINE ENGINE AIR COMPRESSOR

Record in the spaces provided.

- (1) The model number which can be found on the label on the front of the air tank.
- (2) The code number which can be found on the foil label on the rear of the air tank.
- (3) The Manufacturer's Number (ASME Code Compressors only) 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.)
- (4) The Engine Manufacturer's name is located on the front of the engine.
- (5) The Engine Model Number stamped on top of the engine.
- (6) The Engine Type which can be found stamped on top of the engine.

Retain these numbers for future reference.

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

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

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

Engine Mfg. Name \_\_\_\_\_

Engine Mfg. Model \_\_\_\_\_

Engine Mfg. Type \_\_\_\_\_

ASSEMBLY  
OPERATION  
MAINTENANCE  
REPAIR PARTS

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

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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 that vary from state to state.

**Sears, Roebuck and Co., Sears Tower, Dept. 698/731A, 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 special attention to sections headed by these symbols.

**WARNING**

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

**CAUTION**

**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  |
|-----------------------|--|--|
| Insuitable solvents   | The solvents 1,1,1-Trichlorethane 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. |
| Fuel/Flammable vapors | Gasoline vapor is highly flammable, and could cause a fire or explosion.   | Refuel outdoors or in well ventilated areas. Do not refuel or check the gasoline level while the engine is hot or running.<br><br>The compressor must be run only in a well ventilated area.   |
| Muffler               | Operating the compressor without a muffler (or with a damaged one), will cause a fire hazard.  | Do not operate the air compressor with a damaged muffler, or with the muffler removed.<br><br>Do not tamper with the exhaust system.   |

| WHAT TO LOOK FOR                         | WHAT COULD HAPPEN  | HOW TO PREVENT IT  |
|--|--|--|
| Moving Parts                             | The gas engine can start if the engine shaft is turned. Serious injury can occur if someone gets caught in the moving flywheel, pulley or belt.  | <ul style="list-style-type: none"> <li>– Always disconnect the spark plug wire before performing any maintenance.</li> <li>– Never operate the compressor when the belt guard is removed.</li> </ul>   |
| 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>Exhaust gases from your compressor engine contain carbon monoxide; an odorless and toxic gas. If inhaled, you can become seriously ill.</p> | <p>Never directly inhale the compressed air produced by this unit.</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> <p>Do not operate the compressor in an enclosed area.</p>        |
| Air Tank                                 | <p>Modifications to the air compressor can cause the air tank to rupture or explode.</p> <p>Modifying the air tank will cause it to weaken. The tank can rupture or explode.</p>   | <p>Do not adjust, remove or tamper with the safety valve or unloader valve. If safety valve or unloader valve replacement is necessary, a part with the same pressure rating must be used.</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.</p>  |
| Vibration/<br>Excessive<br>Engine Speeds | Excessive vibration can weaken the air tank and cause rupture or explosion. Excessive vibration will occur if the compressor is not properly mounted, or if the engine operates above recommended RPM.   | <p>Never remove the stiffener bar. Make sure engine bolts and stiffener bar nuts are tight. The rubber feet must be attached before operating the compressor.</p> <p>Do not increase the engine RPM above recommended speed. Do not tamper with parts that may increase the governor speed.</p>  |
| Compressed<br>Air                        | <p>Compressed air can propel dust, dirt or loose particles it comes in contact with.</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 and release air pressure from hose before attaching or removing accessories.</p> <p>Check the manufacturer's maximum pressure rating for air tools and accessories. Regulator outlet pressure must never exceed the maximum pressure rating.</p> |
| Hot Parts                                | The compressor head, discharge tube, and gas engine get hot when the air compressor is running. If you touch them, you may be seriously burned.  | Never touch the air compressor head tubes or engine during or immediately after operation.   |

## SPECIFICATION CHART

|  |                   |
|--|-------------------|
| <b>Model No.</b>                       | <b>919.157151</b> |
| Engine Horsepower                      | 5                 |
| Compressor Displacement CFM            | 15.3              |
| Compressor Bore                        | 27/8"             |
| Compressor Stroke                      | 2"                |
| Air Tank Capacity – Gallons            | 20 ASME           |
| Approximate Unloader Reset Pressure    | 90                |
| Approximate Unloader Blow-Off Pressure | 110               |
| SCFM @ 40 psig                         | 12.0              |
| SCFM @ 90 psig                         | 10.0              |

## GLOSSARY

**CFM:** 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.

**CFM:** Cubic feet per minute.

**Unloader Blow-Off Pressure:** All models are continuously running outfits controlled by tank pressure. When the maximum tank pressure is obtained, the unloader valve will blow-off. This will cause the compressor to exhaust the air to the atmosphere and not the tank. This decreases the load on the engine and allows it to run at a near no-load condition.

**Unloader Reset Pressure:** When the tank pressure drops to a pre-determined point, the unloader valve closes. The tank pressure will now increase until it reaches the unloader blow-off pressure.

## ACCESSORIES FOR USE WITH SEARS AIR COMPRESSORS

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

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>SPRAY GUNS</li> <li>BLOW GUNS</li> <li>AIR CAULKING GUNS</li> <li>AIR POWERED WASHER GUNS</li> <li>SANDBLASTERS</li> <li>AIR BRUSHES</li> <li>AIR LINE FILTERS</li> <li>FIRE AIR CHUCKS</li> </ul> | <ul style="list-style-type: none"> <li>• PAINT TANKS</li> <li>• AIR TANKS</li> <li>• INFLATOR KITS</li> <li>• QUICK CONNECTOR SETS (various sizes)</li> <li>• VISCOSIMETER</li> <li>• AIR PRESSURE REGULATORS</li> <li>• OIL FOG LUBRICATORS</li> </ul> | <ul style="list-style-type: none"> <li>• AIR TOOLS:</li> <li style="padding-left: 20px;">Sanders</li> <li style="padding-left: 20px;">Drills</li> <li style="padding-left: 20px;">Impact wrenches</li> <li style="padding-left: 20px;">Hammers</li> <li>• AIR HOSE:</li> <li style="padding-left: 20px;">1/4", 5/16" OR 3/8" I.D.</li> <li style="padding-left: 20px;">in various lengths</li> </ul> |
|---|---|--|

## GENERAL INFORMATION

If you have purchased an air compressor unit consisting of 2 cylinder, single stage air compressor pump, an engine, an air tank, air hose, wheels, handle and associated controls and instruments. You will also find an air chuck.

Your air compressor can be used for operating paint spray guns, air tools, caulking guns, grease guns, air brushes, sandblasters, inflating tires and plastic toys,

spraying weed killers, insecticides, etc.

An air pressure regulator is usually necessary for most of these applications. Regulators can be purchased from most Sears stores or through the Sears General Catalog or Power Tool Catalog.

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

## DESCRIPTION OF OPERATION

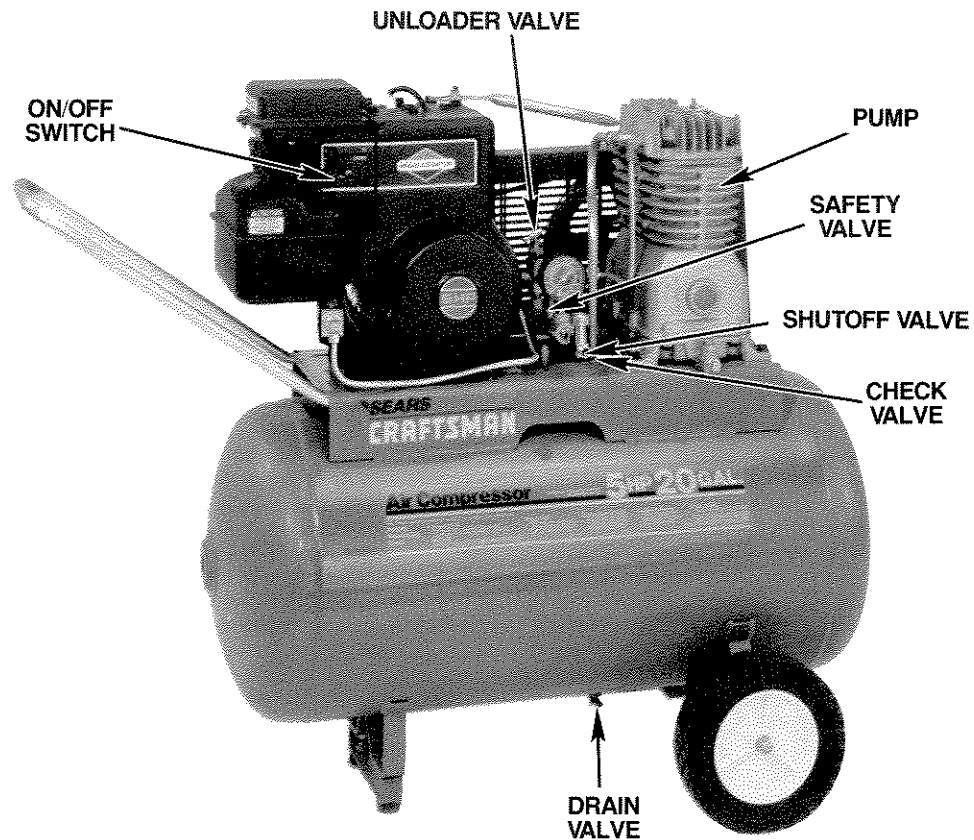


Figure 1

**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 filter and then through the air intake valves. The exhaust valve remains closed. On the upstroke of the piston, air is compressed. The intake valves close and compressed air is forced out through the exhaust valve, through the outlet tube, through the check valve and into the air tank. Working air is not available until the compressor has raised air tank pressure above that required at the air outlet.

**Throttle Control:** A throttle control has been incorporated as an extra feature. When maximum tank pressure is reached and the unloader valve unloads air, it also activates a throttle control on the engine. This gas saving feature holds the engine at a factory-set idling speed until air pressure in the air tank drops to reset pressure; it then reactivates the throttle control and accelerates the engine to full throttle.

**Unloader Valve:** All models are continuously running outfits controlled by tank pressure. When the maximum tank pressure is obtained, the unloader valve will exhaust the compressed air to the atmosphere (blow-off). When the tank pressure drops to a pre-determined point, the unloader valve closes and causes the tank pressure to increase.

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

**Check Valve:** When the air compressor is operating, the check valve is "open," allowing air to enter the air tank. When the compressor is shut-off, the check valve closes, allowing air pressure to remain inside the air tank.

**Shut Off Valve:** Turn the knob counterclockwise to open the valve and clockwise to close.

# ASSEMBLY INSTRUCTIONS

## Items You Will Need To Assemble Your Compressor

20 oz. of oil for the engine (see Briggs & Stratton instructions). Use 10W30 high quality motor oil.

16 oz. of Sears compressor oil, Sears 9-16426 or SAE 20-20W

pipe thread sealant

a  $\frac{9}{16}$ " socket or open-end wrench for attaching the wheels

a  $\frac{7}{16}$ " open-end wrench for attaching the foot extension bracket and rubber feet

a  $\frac{1}{4}$ " open-end wrench to tighten handle setscrew

an adjustable wrench for attaching the shut off valve and air outlet adapter.

## Installing Handle, Foot Extension Bracket, Wheels, Outlet Valve

### WARNING

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.

### CAUTION

Do not use the engine gas tank as a support for lifting the air compressor.

Insert the handle into pockets under the tank saddle. Put one set screw through hole in one side of tank saddle and tighten down on handle.

### CAUTION

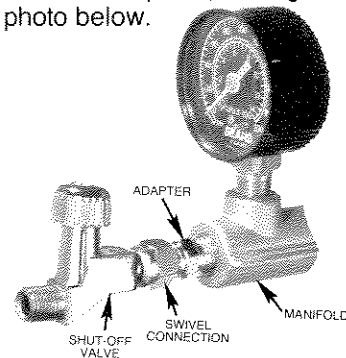
It may be necessary to brace or support one end of the outfit when attaching the wheels and the foot extension bracket because the

air compressor will have a tendency to tip before both wheels are assembled.

### WARNING

EXCESSIVE TANK VIBRATION CAN WEAKEN THE AIR TANK AND CAUSE RUPTURE OR EXPLOSION. RUBBER FEET MUST BE INSTALLED.

2. Attach the rubber feet to the bottom of the foot extension bracket. Attach foot extension bracket to the air tank bracket. Use one cap screw, one lock washer, and one hex nut at each end. Tighten.
3. The leg bracket on the underside of the air compressor tank has 2 holes on each side for mounting the wheels. Place one shoulder bolt through the hole in a wheel. Next, push the bolt through the **LOWER** hole of the leg bracket and screw on one hex locking nut. The special locking nut does not turn freely. Tighten the nut firmly until it contacts the tank leg. See pg. 16. The outfit will sit level if the wheels are properly installed.
4. Apply a small amount of pipe sealant to the tapered pipe threads on the adapter and tighten into the manifold. Install the swivel connection end of the shut-off valve to the straight threaded end of the adapter (pipe sealant is not required) and tighten this connection. See photo below.



5. Attach the spark plug wire to the spark plug.

## INSTALLATION AND BREAK-IN PROCEDURES

### Location of the Air Compressor

### WARNING

ENGINE EXHAUST CONTAINS CARBON MONOXIDE WHICH IS ODORLESS AND TOXIC. OPERATE ENGINE IN WELL VENTILATED AREAS ONLY.

Operate the air compressor in a clean, dry and well ventilated area. The air intake 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 walls or other obstructions that could interfere with the flow of air through the fan bladed fly-wheel. The air compressor crankcase and head are designed with fins to provide proper cooling. If humidity is high, a Sears air filter can be installed to remove

excessive moisture. Closely follow the instructions packaged with the filter for proper installation.

## Permanent Installation

### WARNING

**BOLTING LEGS TO A STIFF SURFACE CAN CAUSE TANK RUPTURE RESULTING IN SERIOUS INJURY OR DAMAGE. DO NOT PERMANENTLY MOUNT COMPRESSOR TO ANY SURFACE WITHOUT USING THE VIBRATION MOUNT KIT.**

This compressor may be permanently mounted in one location such as a truck bed, if desired. A vibration mount kit is included for this purpose.

1. In order to maintain adequate ventilation for compressor cooling and to avoid contact with pick-up truck bed, always mount the outfit at least 8" from any vertical wall. Using the holes in the air tank legs as a guide, mark and drill four  $\frac{5}{16}$ " diameter holes in the mounting surface.
2. Insert the vibration mounts in the mounting holes. Place a flat washer under the mounting surface and secure each mount with a lock washer and nut. See figure 2.
3. Set the outfit on the exposed threaded ends of the mounts and secure each mount to the air tank legs with a lock washer and nut.

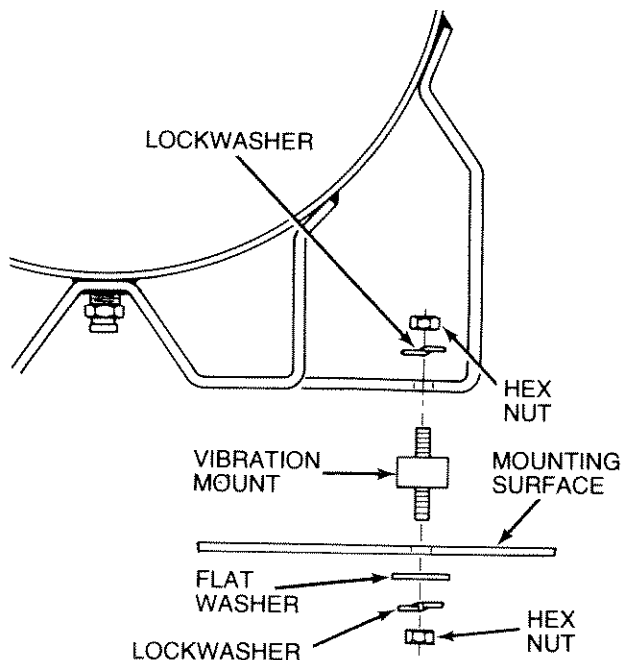


Figure 2

## Lubrication, Oil and Gasoline

### CAUTION

**Compressors are shipped without oil. Do not attempt to operate this air compressor without first adding oil to the compressor pump crankcase and engine crankcase.**

Place unit on a level surface. Remove compressor oil fill plug and slowly add a special compressor oil such as Sears 9-16426 or SAE 20-20W SF motor oil until it is even with the top of the oil fill hole. (It must not be allowed to be lower than  $\frac{3}{8}$ " – 6 threads down – from the top.) When filling the crankcase, the oil flows very slowly. If the oil is added too quickly, it will overflow and appear to be full. (Compressor crankcase oil capacity is 16 fluid ounces.) Under winter-type conditions use SAE 10W oil. (Multi-viscosity oil – 10W30 – will leave carbon deposits on critical components reducing performance and compressor life.) Replace oil fill plug.

Remove engine oil fill plug and slowly add oil to the point of overflowing. Use a high quality oil classified "FOR SERVICE SC, SD, SE or MS,." See Briggs & Stratton "OPERATING AND MAINTENANCE INSTRUCTIONS" for recommended SAE viscosity grades. (Engine crankcase capacity is 20 fluid ounces.)

For your convenience, purchase a  $\frac{1}{4}$ " NPT nipple,  $2\frac{1}{2}$ " long, and a  $\frac{1}{4}$ " NPT  $\times$   $\frac{1}{4}$ " NPT coupling (pipe collar) to allow ease in draining oil. Remove oil drain plug on the gas tank side of the engine and install the nipple. Thread the coupling on the end of the nipple and screw the drain plug in the coupling. See figure 3.

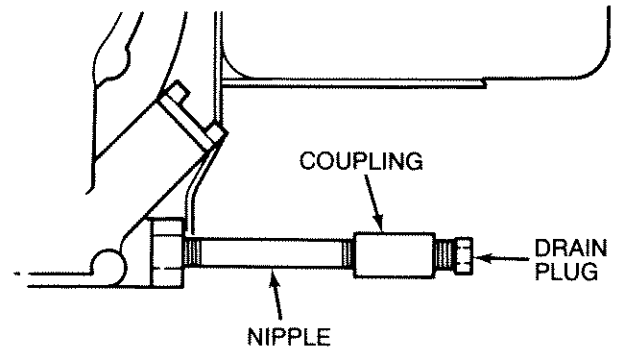


Figure 3

With the unit in a level position, fill the gas tank (approx.  $\frac{3}{4}$  gal.) with fresh, clean unleaded gasoline. Regular gas is an acceptable substitute. Do not use premium gasoline.

### WARNING

**GASOLINE VAPOR IS HIGHLY FLAMMABLE. REFUEL OUTDOORS PREFERABLY, OR ONLY IN WELL VENTILATED AREAS. DO NOT REFUEL OR CHECK GASOLINE LEVEL WHILE THE ENGINE IS RUNNING. DO NOT STORE, SPILL OR USE GASOLINE NEAR AN OPEN FLAME.**



**CAUTION**

Do not mix oil with gasoline.

**Break-in Procedures**

Open outlet valve to prevent pressure from building up in the tank. Set toggle lever of unloader valve in the vertical position to relieve compressor head pressure. See figure 4. Move the choke lever to "choke" position and move on-off lever to the "on" position. See Figure 5. Pull choke all the way out. Move stop switch away from spark plug.

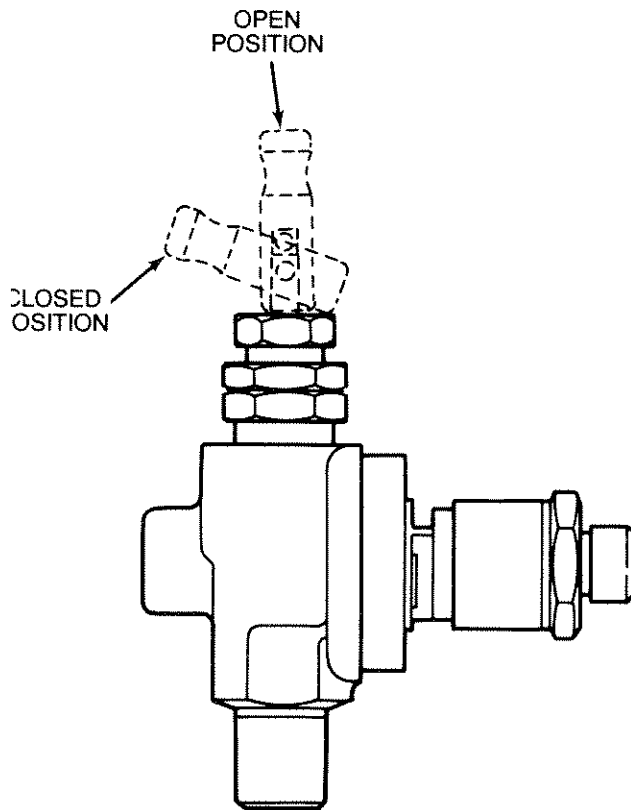


Figure 4

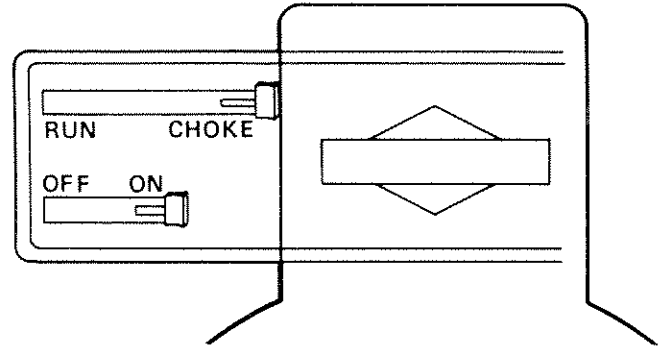


Figure 5

**NOTE**

A warm engine requires less choking than a cold engine.

**CAUTION**

Unit is top heavy. Make sure the compressor is stable and will not tip before pulling the starting cord.

1. Place your left hand on the air compressor handle, and your right hand on the starter handle, and pull cord out quickly to overcome engine compression and prevent "kickback". If engine does not start, push the choke about three-quarters of the way in or choke lever three quarters to the left and pull starter handle again. When engine starts, push choke in or choke lever to the left gradually.

**CAUTION**

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

2. Pump Break-in: Open the outlet valve to prevent tank pressure build-up. Run the air compressor for 30 minutes to seat the rings and lubricate all internal surfaces. This operation must be completed only once when first putting the unit in service.
3. After completing the above, and when ready to begin using the compressor, move the unloader valve toggle lever to a horizontal position. Close the outlet valve to build tank pressure.
4. Engine Break-in: After the 1st 5 hours of normal running, change the engine oil. Then after every 25 hours the engine oil should be changed.

**OPERATING PROCEDURES**

1. Before attaching an air hose or accessory, make sure the engine is off. Close the outlet valve or pressure regulator. (If an optional air pressure regulator is not used, do not use accessories rated at less than 110 psig.)
2. Attach hose and accessory.

**WARNING**

TOO MUCH AIR PRESSURE CAUSES A HAZARDOUS RISK OF BURSTING. CAREFULLY FOLLOW STEPS 3 THROUGH 10 EACH TIME THE COMPRESSOR IS USED.

3. Check the manufacturer's maximum pressure rating for air tools and accessories. **The compressor outlet pressure must never exceed the maximum pressure rating.**
4. Start the engine and allow tank pressure to build. Your outfit is ready for use.



**Compressed air from the outfit may contain water condensation and oil mist. 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.**

**When you are finished:**

5. Turn off engine.
6. Shut-off outlet valve or air pressure regulator.
7. Remove air tool or accessory.
8. Open outlet valve or regulator and allow air to slowly bleed from the tank. Close the outlet valve or regulator when the tank pressure is approximately 20 psig.



**WATER WILL CONDENSE IN TANK. IF NOT DRAINED, WATER WILL CORRODE AND WEAKEN THE AIR TANK CAUSING A RISK OF TANK RUPTURE. SEE STEP 9.**

9. With tank pressure at approximately 20 PSI, open the drain cock and allow moisture to drain. Turn the drain T-handle counterclockwise to open.

**NOTE**

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

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

## MAINTENANCE



**DURING MAINTENANCE, YOU COULD BE EXPOSED TO COMPRESSED AIR OR MOVING PARTS. PERSONAL INJURIES CAN OCCUR. BEFORE DOING ANY MAINTENANCE OR REPAIR, DISCONNECT THE SPARK PLUG WIRE TO PREVENT ACCIDENTAL STARTING, AND RELIEVE AIR TANK PRESSURE. NEVER OPERATE THE COMPRESSOR WITH THE BELT GUARD REMOVED.**

### Air Compressor

A clean air compressor and engine run cooler and provide longer service. Clean or blow off fins and any other parts of the air compressor and engine that collect dust or dirt. Do not place rags, containers or other material on or against the ventilation openings in the belt guard. Adequate ventilation is necessary to maintain proper air compressor operating temperature.

### Compressor Pump Air Intake Filter – Inspection and Replacement

**NOTE**

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.

If it is dirty, replace with a new filter. The filter may be removed by using a pair of needle nose pliers or a screwdriver. Pull or pry out the old filter and push in a new one.

### Compressor Oil – Checking and Changing



**Overfilling with oil will cause premature compressor failure. Do not overfill.**

Check oil level in the crankcase daily. The oil level should be even with the top of the fill hole and must not be allowed to be lower than 3/8" from the top (6 threads) at any time. It is recommended that the oil be changed after every 100 hours of operation. To drain the oil, remove the oil drain plug and collect the oil in a suitable container. Be sure to replace the plug securely before adding new oil. Use a special compressor oil such as Sears 9-16426 or SAE 20-20W SF motor oil. (Crankcase oil capacity is 16 fluid ounces.) Under extreme winter conditions use 10 weight oil. Multi-viscosity oil (10W30) will leave carbon deposits on critical components reducing performance and compressor life.

### Check Valve – Inspection and Replacement

Remove the check valve for inspection or replacement if air is leaking constantly back through the check valve. Use the following procedure to inspect, clean or replace the check valve.

1. Release air pressure from the air tank.
2. Loosen the top and bottom tube nuts and remove the outlet tube.
3. Unscrew the check valve (turn counterclockwise) using a socket wrench.
4. 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.
5. Apply sealant to the check valve threads. Reinstall the check valve (turn clockwise). The disc should still move freely – do not over tighten.
6. Replace the outlet tube and tighten top and bottom nuts.

## Safety Valve – Inspection and Replacement

### WARNING

IF THE SAFETY VALVE DOES NOT WORK PROPERLY OVER-PRESSURIZATION CAN OCCUR, AND CAUSE AIR TANK RUPTURE OR EXPLOSION. OCCASIONALLY PULL THE RING ON THE SAFETY VALVE AND MAKE SURE IT OPERATES FREELY. IF THE VALVE IS STUCK OR DOES NOT OPERATE SMOOTHLY, IT MUST BE REPLACED WITH THE SAME TYPE OF VALVE HAVING AN IDENTICAL PRESSURE RATING.

## Engine – Oil Change and Air Cleaner

See Briggs & Stratton “Operating and Maintenance Instructions” for information regarding engine oil changes and air cleaner service.

## Engine – Adjustments

Read the Briggs & Stratton “Operating and Maintenance Instructions” that were provided with your compressor.

The gasoline engine was adjusted and set at the factory to ensure correct operation. However, variations in gasoline quality and octane, humidity, altitude or load may adversely affect engine performance. As a result, minor adjustments of fuel mixture or speed controls may be necessary.

To adjust the fuel mixture, turn the needle valve clockwise until it closes. See figure 6.

### CAUTION

The needle valve point may be damaged if turned in too far.

Turn the needle valve 1½ revolutions counterclockwise to establish a point of reference. Start the engine and allow it to warm up.

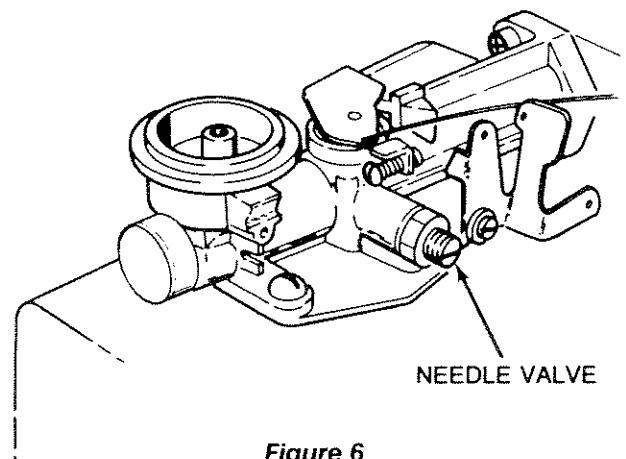


Figure 6

### NOTE

The air cleaner must be in place when any carburetor adjustments are made.

Turn the needle valve clockwise (in) until the engine misses, noting the valve position (lean mixture). Turn the needle valve counterclockwise (out) until engine runs roughly, again noting valve position (rich mixture). Now, turn the needle valve clockwise (in) to the point midway between lean and rich where the engine runs smoothly.

If the compressor stalls frequently during acceleration from idle speed to full speed, richen mixture slightly (by turning the needle valve out slowly). If this adjustment does not eliminate the stalls, adjust the idle speed to a slightly higher level by loosening the two jam nuts on the throttle control cylinder, readjusting its position and retightening the nuts. See Figure 7. Proper idle speed is between 2400 and 2600 RPM.

If the throttle mechanism fails to operate smoothly, preventing the engine from returning to full throttle speed when tank pressure falls below 90 psig, it may be necessary to lubricate it with a light lubricating oil. See Figure 7.

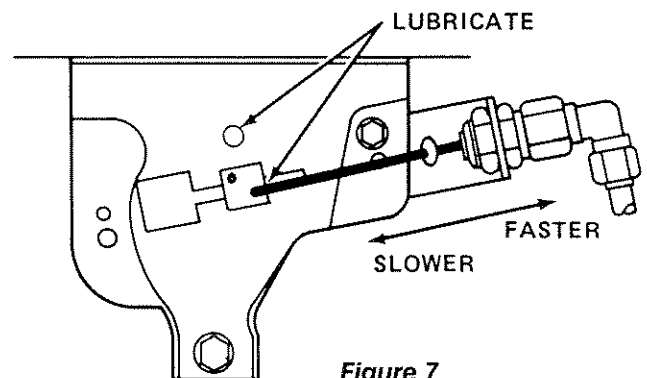


Figure 7

Proper no-load engine speed may be checked and adjusted using the following procedures:

1. Remove the belt guard and belt. Start engine.

### NOTE

This is the only time you should operate your compressor with the belt guard removed. Use caution when checking engine speed.

**WARNING**

HIGH ENGINE SPEEDS GREATLY INCREASE VIBRATION LOADS ON AIR TANK. THIS COULD WEAKEN THE TANK AND CAUSE IT TO RUPTURE OR EXPLODE. DAMAGE TO THE ENGINE CAN ALSO OCCUR. ENGINE RPM MUST BE SET PER SPECIFICATION.

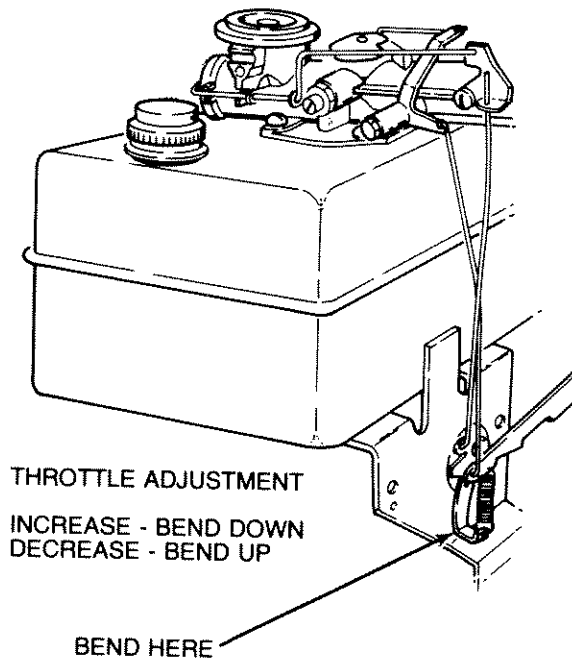
2. Measure engine speed with belt removed using a tachometer. Speed should be as follows:

| <u>Compressor Model No.</u> | <u>No-Load (Max) Speed ( ± 100 RPM)</u> |
|-----------------------------|---|
| 919.157151                  | 3700 RPM                                |

If speed is correct, go to Step 5.

3. Four bolts fasten the engine to tank base. Position yourself on the starter rope side of engine and locate that engine mounting bolt nearest you on the left. In this area, there is one vertical spring. Locate the vertical spring situated directly above the mounting bolt just described.

Locate lever to which the lower end of the vertical spring is attached. See figure 8. Using needle nosed pliers, bend the lever slightly downward to increase engine speed or bend slightly upward to decrease engine speed.



**Figure 8**

4. Check the engine speed again and readjust as necessary.
5. Shut off engine, install belt, adjust belt tension (see Belt – Replacement) and reinstall belt guard.

## Belt – Replacement

**WARNING**

SERIOUS INJURY OR DAMAGE MAY OCCUR IF PARTS OF THE BODY OR LOOSE ITEMS GET CAUGHT IN MOVING PARTS. NEVER OPERATE THE OUTFIT WITH THE BELT GUARD REMOVED. THE BELT GUARD SHOULD BE REMOVED ONLY AFTER THE SPARK PLUG WIRE HAS BEEN DISCONNECTED.

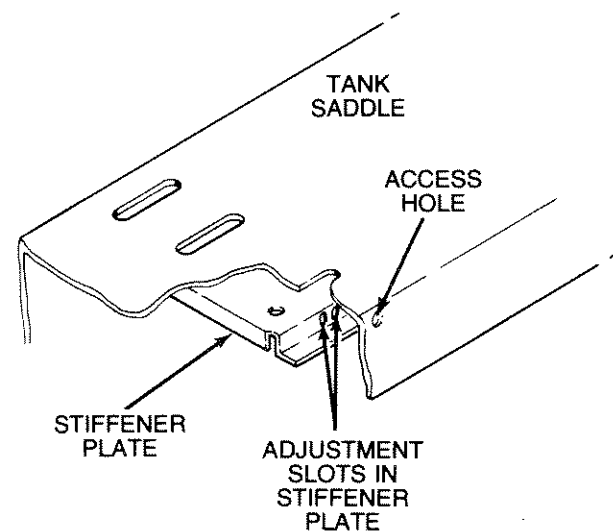
### To replace belt:

1. Disconnect spark plug wire.
2. Remove belt guard.
3. Loosen four engine mounting screws, two saddle/stiffener plate screws, handle set screw, and stiffener bar nut on engine and slide engine toward compressor.
4. Remove belt and replace with new.

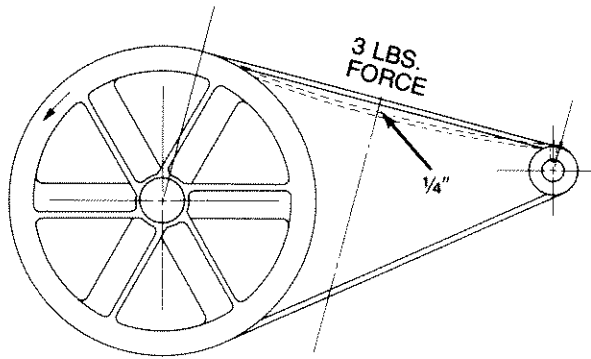
### NOTE

The belt must be centered over the grooves on the flywheel and engine pulley.

5. Push the engine back into regular position. Achieve belt tension by inserting a large screwdriver into the hole in the saddle which is located on the belt guard side of the saddle below the engine and prying the stiffener plate back. See figure 9. Proper tension is approximately 1/4" belt deflection measured midway between the pulley and flywheel when a 3-pound weight or equivalent finger pressure is applied at this point. See figure 10.



**Figure 9**



**Figure 10**

- i. Hold belt tension until two engine mounting screws are tightened securely.
- j. Tighten remaining engine mounting screws, saddle/stiffener plate screws, handle set screw and stiffener bar nut.
- k. Reinstall belt guard and screws.

#### **NOTE**

Once the engine pulley has been moved from its factory set location, the grooves of the flywheel and pulley must be aligned within  $\frac{1}{16}$ " to prevent belt wear.

#### **Pulley and Flywheel – Alignment**

The compressor flywheel and motor pulley must be inline (in the same plane) within  $\frac{1}{16}$ " to assure belt retention within sheave grooves. To check alignment, disconnect spark plug wire and remove the beltguard. Place a straightedge against the outside of the flywheel and measure the distance from it to the nearest groove. Alignment is achieved when the other end of the straightedge is within  $\frac{1}{16}$ " of the measured dimension at the pulley grooves. Squareness is achieved when the pulley grooves are an equal distance from the straightedge on both sides of the motor shaft.

## **STORAGE**

#### **Before You Store The Air Compressor:**

1. Review the "Operating Procedures" and "Maintenance" sections on the preceding pages and perform maintenance as necessary. Drain the water from the air tank.
2. Review the Briggs and Stratton "Operating and Main-

tenance Instructions".

3. Remove the air tool or accessory.
4. Protect the air hose from damage (such as being stepped on or run over). Wind it loosely around the outfit handle.
5. Store the compressor in a clean and dry location.

# TROUBLESHOOTING GUIDE

**WARNING**

**PERFORMING TROUBLESHOOTING OR REPAIRS CAN EXPOSE MOVING PARTS OR COMPRESSED AIR SOURCES. PERSONAL INJURY COULD OCCUR IF EXPOSED. PRIOR TO ATTEMPTING ANY TROUBLESHOOTING OR REPAIRS, THE ENGINE SPARK PLUG WIRE SHOULD BE REMOVED. NEVER OPERATE THE OUTFIT WITH THE BELT GUARD REMOVED. THE BELT GUARD SHOULD BE REMOVED ONLY WHEN THE SPARK PLUG WIRE IS REMOVED.**

| PROBLEM  | CAUSE   | CORRECTION  |
|--|---|---|
| Excessive tank pressure – safety valve pops off.   | Unloader valve does not release pressure when tank reaches "blow-off" pressure. | Unloader valve must be replaced.  |
| Air leaks at fittings or hose  | Tube or hose fittings are not tight enough.                                     | Tighten fittings where air can be heard escaping. Check fittings under soapy water solution. <b>DO NOT OVER-TIGHTEN.</b>  |
| Air leaks inside check valve   | Defective or dirty check valve.   | Remove and clean or replace check valve. <b>DO NOT OVER-TIGHTEN.</b>  |
| Continuous air leak at unloader valve  | Defective check valve.  | Turn off engine, move unloader valve toggle lever to vertical position. If air leaks out of tank through unloader valve, clean or replace check valve.  |
| Air leaks in air tank  | Defective air tank.   | Air tank must be replaced. Do not attempt repair of any leaks.  |
| <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"><b>WARNING</b></div> <p style="text-align: center;"><b>DO NOT DRILL INTO, WELD, OR OTHERWISE MODIFY AIR TANK OR IT WILL WEAKEN.</b></p> |   |   |
| 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.  |
|  | Loose pulley.   | Tighten pulley set screw.   |
|  | Low oil level (Compressor or engine).   | Maintain prescribed oil level. Add oil.   |
|  | Loose flywheel.   | Tighten screw.  |
|  | Loose compressor or engine mounting screws.                                     | Check screws. Tighten as required.  |
|  | Loose belt.   | Tension belt per instructions on page 12, step 5.   |
|  | Carbon build up.  | Remove the head and valve plate. Clean the valve plate and the top of the piston. (Be sure carbon does not fall into the cylinder.) Reassemble using new gaskets and torque screws, 25 to 30 ft. lbs. |
|  | Stiffener bar loose.  | Check both nuts and tighten if required.  |

## TROUBLESHOOTING GUIDE (continued)

| PROBLEM  | CAUSE   | CORRECTION  |
|--|---|---|
| Compressor is not supplying enough air to operate accessories. | Prolonged excessive use of air.                               | Decrease amount of air usage.   |
|  | Compressor is not large enough for air requirement.           | Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, you need a larger compressor. |
|  | Restricted air intake filter.                                 | Clean or replace air intake filter.   |
|  | Loose belt.   | Adjust belt tension.  |
|  | Hole in hose.   | Check and replace.  |
|  | Check valve restricted.                                       | Remove and clean or replace.  |
| Excessive belt wear  | Air leaks.  | Tighten fittings. (See Air Leaks section of Troubleshooting Guide.)   |
|  | Loose belt.   | Adjust tension per instruction on page 12, step 5.  |
|  | Pulley misalignment.  | Align pulleys per instructions on page 13.  |
| Squealing sound  | Loose pulley.   | Check for worn keyway or pulley bore. Also check bent motor shaft. Replace parts if necessary.  |
|  | Loose belt.   | Adjust belt tension per instructions on page 12, step 5.  |
| Engine will not run  | There is no oil in the compressor.                            | Add oil to top of fill hole in base.  |
|  | The stop switch is in the "stop" position.                    | Move the stop switch away from the spark plug.  |
|  | The gasoline tank is empty.                                   | Fill the tank with gas.   |
|  | The choke is not set properly.                                | Re-set the choke. Remember, a warm engine requires less choking than a cold engine.   |
|  | Improper fuel mixture.  | Adjust the fuel mixture.  |
|  | Air tank pressure is too high.                                | Open the ball valve and reduce tank pressure to less than 40 psig.  |
| Excessive vibration  | The unloading valve toggle lever is in a horizontal position. | Place unloading valve toggle lever in a vertical position.  |

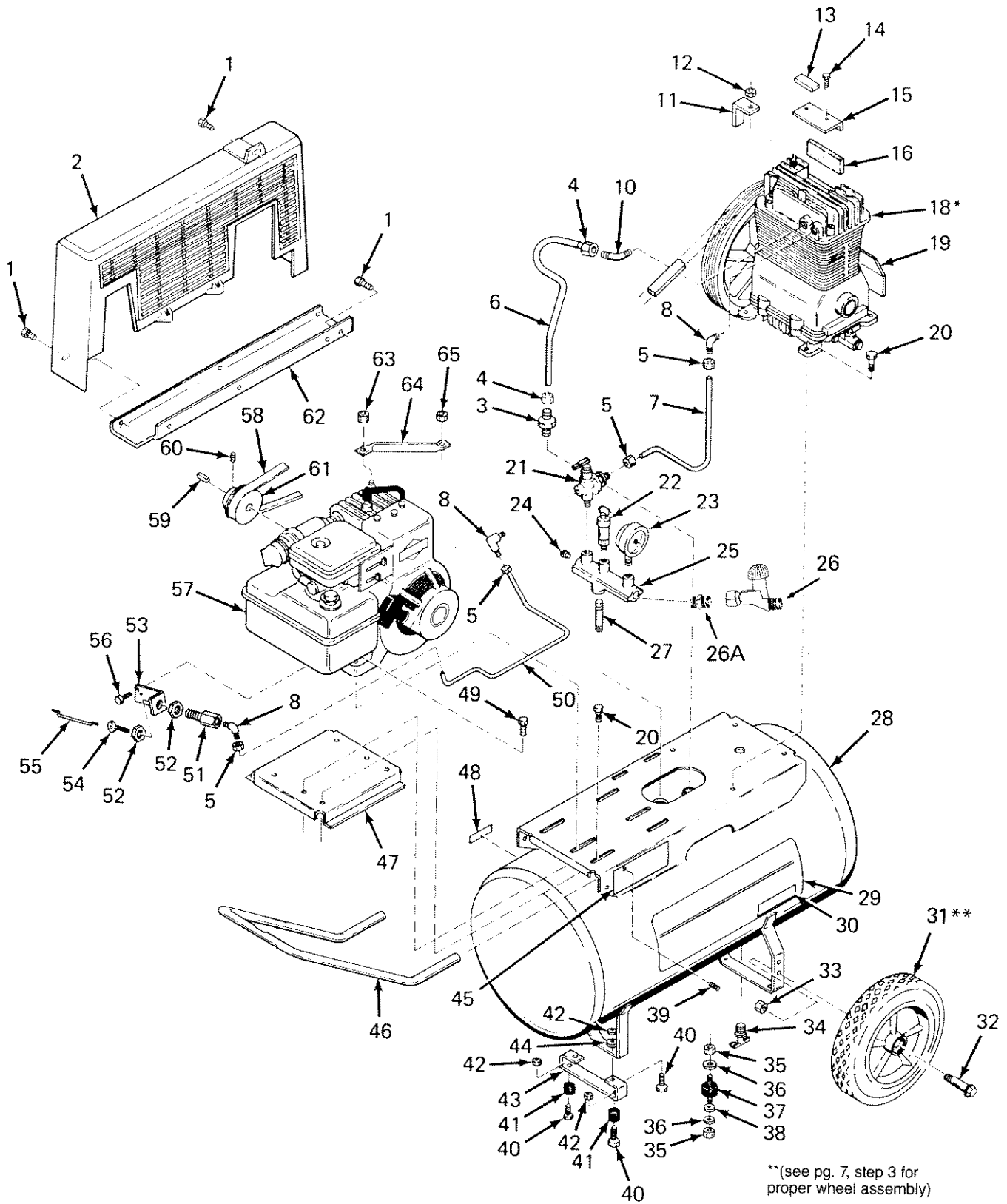
Excessive vibration

Stiffener bar or engine & compressor mounting screws are loose.



**EXCESSIVE VIBRATION COULD WEAKEN THE AIR TANK AND CAUSE IT TO RUPTURE OR EXPLODE. STIFFENER BAR NUTS AND MOUNTING SCREWS MUST BE KEPT TIGHTENED. NEVER OPERATE THE OUFIT UNLESS EQUIPPED WITH THE STIFFENER BAR AND RUBBER FEET.**

# AIR COMPRESSOR DIAGRAM



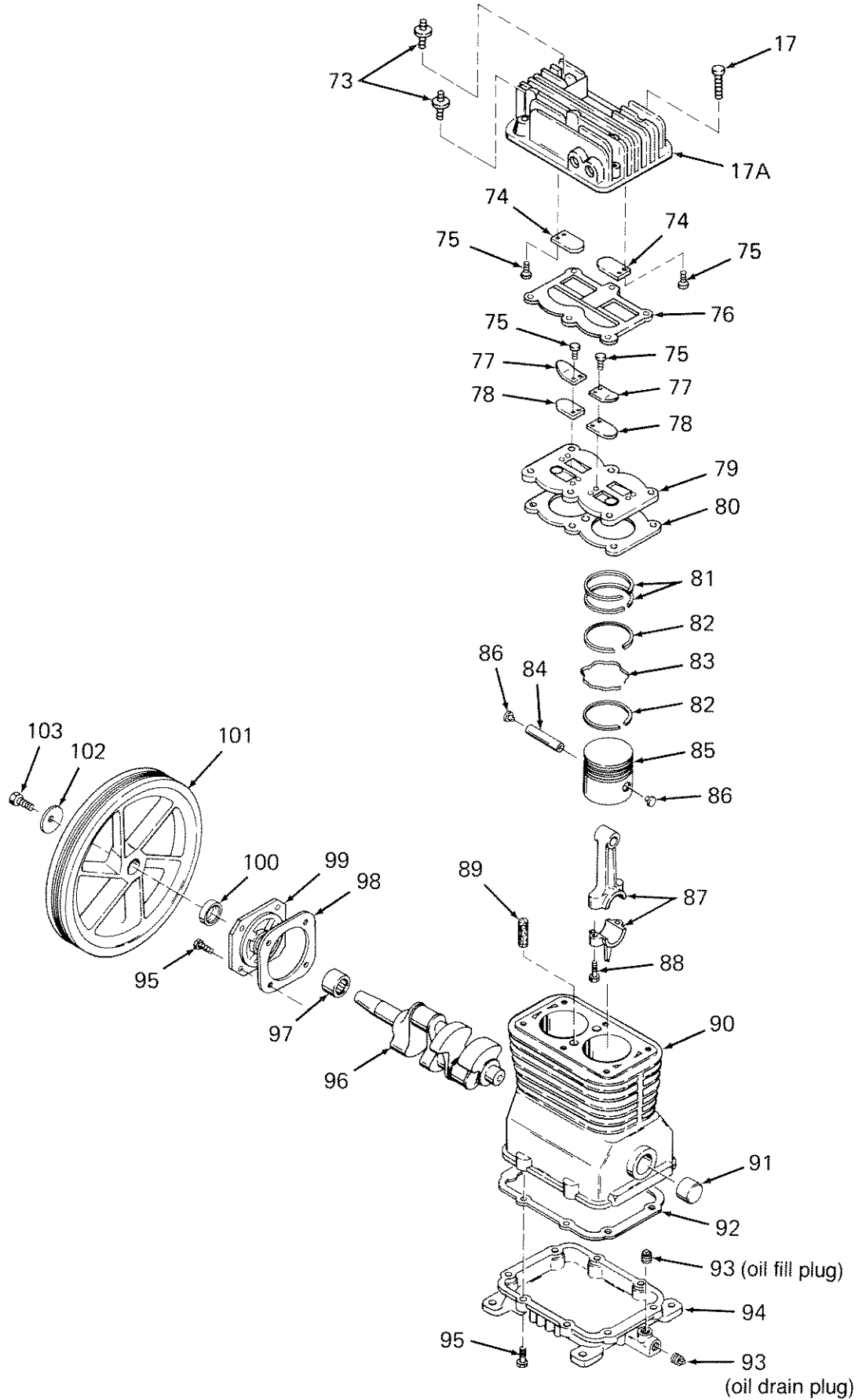
\*Key No. 18, see page 18 and 19 for individual parts breakdown.





## PARTS LIST

| KEY NO. | PART NUMBER   | DESCRIPTION                                       |
|---------|---------------|---|
| 1       | SSF-953-ZN    | Self-tapping screw (7 used)                       |
| 2       | CAC-87        | Belt guard  |
| 3       | CAC-437       | Check valve                                       |
| 4       | STD575050     | nut (2 used for 1/2" O.D. Tube)                   |
|         | STD575051     | ferrule (2 used for 1/2" O.D. Tube)               |
| 5       | STD575025     | nut (4 used)                                      |
|         | STD575026     | ferrule (4 used)                                  |
| 6       | CAC-85        | Outlet tube                                       |
| 7       | CAC-86        | Pressure release tube                             |
| ✓✓ 8    | SSP-6422      | Elbow (3 used)                                    |
| 10      | SSP-6423      | Elbow   |
| 11      | CAC-2         | Bracket   |
| 12      | SSF-8113-ZN   | Lock nut  |
| 13      | LA-1779       | Label   |
| 14      | SSF-935       | Screw, #8-32 x 3/8" (2 used)                      |
| 15      | 265-18        | Filter retainer                                   |
| ✓ 16    | 9-16279       | Intake filter                                     |
| 17      | SSF-955       | Screw, 3/8-16 x 1 1/2" (4 used)                   |
| 17A     | CAC-293       | Cylinder head                                     |
| 18      | CAC-4002-1    | Compressor pump assembly C Model 919.157151       |
| 19      | LA-1836       | Warning Label                                     |
| 20      | SSF-928       | Screw, 3/16-18 x 7/8" (6 used)                    |
| 21      | CAC-423       | Unloader valve                                    |
| 22      | TIA-4150      | Safety valve ASME                                 |
| 23      | C-GA-335      | Pressure gauge                                    |
| 24      | SS-3222-CD    | Pipe plug   |
| 25      | CAC-226       | Manifold  |
| 26      | CAC-4284      | Shutoff valve                                     |
| 26A     | H-2099        | Adapter   |
| 27      | SS-2109       | Nipple  |
| 28      | TA-4095       | Air tank, 20 gallon ASME                          |
| 29      | LA-1839       | Tank label  |
| 30      | LA-1841-1     | Specification label                               |
| 31      | CAC-4293      | Wheel, 8" (2 used)                                |
| 32      | CAC-60        | Shoulder bolt (2 used)                            |
| 33      | STD541437     | Hex nut (2 used)                                  |
| 34      | SS-2707       | Drain cock  |
| ✗ 35    | SS-656-CD     | Nut (8 used)                                      |
| ✗ 36    | SS-1503-CD    | Lock washer (8 used)                              |
| ✗ 37    | CAC-165       | Vibration mount (4 used)                          |
| ✗ 38    | SS-6506-CD    | Washer (4 used)                                   |
| 39      | SS-391        | Set screw   |
| 40      | STD522507     | Cap screw (4 used)                                |
| 41      | SST-5301      | Rubber feet (2 used)                              |
| 42      | STD541025     | Hex nut, 1/4-20 (4 used)                          |
| 43      | CAC-185-1     | Foot bracket                                      |
| 44      | 21181-506     | Lock washer (2 used)                              |
| 45      | LA-1837       | Sears Craftsman label                             |
| 46      | SUDL-43       | Handle  |
| 47      | CAC-42        | Stiffener plate                                   |
| 48      | Not Available | Code number label                                 |
| 49      | SSF-3077      | Screw (4 used)                                    |
| 50      | CAC-98        | Throttle control tube                             |
| ✓✓ 51   | CAC-4275      | Air cylinder (Includes two #52 & one #54 & #55)   |
| ✓✓ 52   | Not Avail.    | Jam nut, 9/16"-18 (2 used) – available in key #51 |
| ✓✓ 53   | CAC-1036      | Throttle bracket                                  |

# COMPRESSOR PUMP DIAGRAM



## PARTS LIST (continued)

| KEY<br>NO. | PART NUMBER     | DESCRIPTION  |
|------------|-----------------|--|
| ✓✓         | 54 CAC-1037     | Throttle screw   |
| ✓✓         | 55 CAC-1038     | Throttle link  |
| ✓✓         | 56 SSF-991-ZN   | Self-tapping screw #10-16 × 3/8  |
|            | 57 CAC-425-1    | Engine 5 HP  |
|            | 58 C-BT-215     | Poly-V-Belt  |
|            | 59 SS-10448     | Engine shaft key   |
|            | 60 SS-391       | Set screw  |
|            | 61 C-PU-2862    | Engine pulley  |
|            | 62 CAC-142      | Belt guard closure   |
|            | 63 SSF-8110-ZN  | Lock nut   |
|            | 64 CAC-103      | Stiffener bar  |
|            | 65 SSF-8111-ZN  | Lock nut   |
|            | 73 SSF-6627     | Stud 3/8"-16 Both ends (2 used)  |
| ●          | 74 265-25       | Intake flapper valve – square corners<br>(2 used on head)           |
| ●          | 75 SSF-9821     | Screw #5-40 × 1/4" (8 used)  |
| ✓          | 76 CAC-291      | Head gasket  |
|            | 77 CAC-294      | Restrictor plate (2 used)  |
| ●          | 78 265-196      | Exhaust flapper valve – beveled corners<br>(2 used on valve plate)  |
|            | 79 CAC-289      | Valve plate  |
| ✓          | 80 CAC-54-1     | Valve plate gasket   |
| +          | 81 CAC-56       | Compression ring (4 used)  |
| +          | 82 CAC-58       | Oil ring (4 used)  |
| +          | 83 CAC-57       | Oil ring expander (2 used)   |
|            | 84 265-19       | Piston pin (2 used)  |
|            | 85 CAC-55       | Piston (2 used)  |
|            | 86 CAC-207      | Piston pin plug (4 used)   |
|            | 87 265-410      | Connecting rod assembly (2 used) (Includes two SSF-927 screws)   |
|            | 88 SSF-927      | Screw, 1/4-20 × 1 1/8" (4 used)  |
| ✓          | 89 265-6        | Vent filter  |
|            | 90 CAC-51       | Crankcase and cylinder   |
|            | 91 265-41       | Needle bearing   |
| ✓          | 92 265-16       | Base gasket  |
|            | 93 SSP-1413     | Oil fill/drain plug (2 used)   |
|            | 94 265-3        | Base   |
|            | 95 SSF-925      | Cap screw, 1/4-20 × 7/8" (12 used)   |
|            | 96 CAC-373      | Crankshaft   |
|            | 97 265-23       | Needle bearing   |
| ✓          | 98 265-13       | End plate gasket   |
|            | 99 265-9        | End plate  |
| ✓          | 100 265-111     | Oil seal   |
|            | 101 265-2       | Flywheel   |
|            | 102 SSN-1014-ZN | Belleville washer  |
|            | 103 STD523107   | Cap screw, 5/16-18 × 3/4"  |
|            |                 | <b>NOT ILLUSTRATED</b>   |
|            | 9-16269         | Air chuck  |
|            | 9-16163         | Air hose assembly (1/4" I.D. × 15')  |
|            | 271979          | "Briggs & Stratton" Operating and Maintenance Instructions   |
|            | SI-30-01-3-A    | Owners manual  |

### PARTS ORDERING INFORMATION

- ✓ Key No. 16, 76, 80, 89, 92, 98, and 100, available as individual parts and part of Gasket Kit KK-4312-2.
- ⊕ Key No. 81, 82, and 83, only available in Ring Kit KK-4313.
- Key No. 74, 75, and 78, only available in Valve Kit KK-4275.
- ✕ Key No. 35, 36, 37, and 38, available in Vibration Mount Kit KK-4282.
- ✓✓ Key Nos. 8, 51, 52, 53, 54, 55 & 56 available individually or in the throttle control assy. KK-4486.

# **SEARS**

## **OWNERS MANUAL**

### **SERVICE**

**MODEL NO.  
919.157151**

### **HOW TO ORDER REPAIR PARTS**

## **CRAFTSMAN GASOLINE ENGINE 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 is 919.\_\_\_\_\_.  
This number can be found on the label which is located on the front of the tank.

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

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

If service or repair parts are required for the engine, supply all engine nameplate information including manufacturers name.

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.

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

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