Owner's Manual

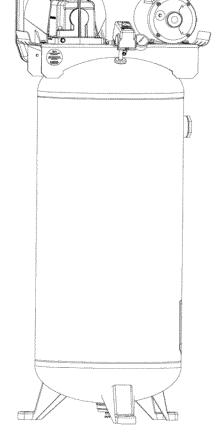
CRAFTSMAN

PROFESSIONAL

AIR COMPRESSOR

Oil Lubricated Single Stage Belt Drive, Electric 60 Gallon Vertical

Model No. 921.16476



CAUTION:

Before using this product, read this manual and follow all its Safety Rules and Operating Instructions.

- Safety Instructions
- Installation & Operation
- Maintenance & Storage
- Troubleshooting Guide
- Parts List
- Español, p. 18
- Français, p. 29

Sears Brands Management Corporation, Hoffman Estates, IL 60179 U.S.A. www.craftsman.com

TABLE OF	CONTENTS
WARRANTY	SERVICE INTERVAL
SPECIFICATION CHART	TROUBLESHOOTING CHART
SAFETY GUIDELINES	PARTS DRAWINGS AND PARTS LISTS
GLOSSARY OF TERMS	
OVERVIEW5	
ASSEMBLY5	
TYPICAL INSTALLATION	
COMPRESSOR CONTROLS	
ELECTRICAL POWER REQUIREMENTS	
OPERATING INSTRUCTIONS	
MAINTENANCE	

WARRANTY

CRAFTSMAN ONE YEAR FULL WARRANTY

FOR ONE YEAR from the date of purchase, this product is warranted against any defects in material or workmanship. Defective product will receive free repair or free replacement if repair is unavailable.

For warranty coverage details to obtain repair or replacement, visit the web site: www.craftsman.com

This warranty does not cover the air filter or drive belt, which are expendable parts that can wear out from normal use within the warranty period.

This warranty is void if this product is ever used while providing commercial services or if rented to another person.

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

Sears Brands Management Corporation, Hoffman Estates, IL 60179 U.S.A.

SPECIFICATION CHART

MODEL NO.	RUNNING H.P.	TANK CAPACITY GALLONS	VOLTAGE/ AMPS/PHASE	APPROXIMATE CUT-IN PRESSURE	APPROXIMATE CUT-OUT PRESSURE
921.16476 (WLB3106016)	3.1	Vert. 60 (228 Liters)	230/15/1	120 (8,27 bar)	150 (10,34 bar)

SAFETY GUIDELINES

The following information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the following symbols. Please read the manual and pay attention to these sections.

DANGER: – A POTENTIAL HAZARD THAT WILL CAUSE SERIOUS INJURY OR LOSS OF LIFE.

WARNING: – A POTENTIAL HAZARD THAT COULD CAUSE SERIOUS INJURY OR LOSS OF LIFE.

CAUTION: - A POTENTIAL HAZARD THAT MAY CAUSE MODERATE INJURY OR DAMAGE TO EQUIPMENT.

IMPORTANT SAFETY INSTRUCTIONS

WARNING:

RISK OF FIRE OR EXPLOSION.	Never spray flammable liquids in a confined area. It is normal for the motor and pressure switch to produce sparks while operating. If sparks come into contact with vapors from gasoline or other
	solvents, they may ignite, causing fire or explosion. Always operate the compressor in a
And a	well-ventilated area. Do not smoke while spraying. Do not spray where sparks or flame are
	present. Keep compressor as far from spray area as possible. Store flammable materials in a
MIDIC DE PUID DE LINO PER LA CONTRACTOR DE LA CONTRACTOR	secure location away from compressor. Equip the area of operation with a fire extinguisher.
RISK OF BURSTING.	Do not weld, drill or modify the air tank of this compressor. Welding or modifications on the air
23	compressor tank can severely impair tank strength and cause an extremely hazardous condition.
1 3	Welding or modifying the tank in any manner will void the warranty. If tank develops a leak, replace
	it immediately with a new tank or replace the entire compressor.
RISK OF ELECTRICAL SHOCK	
	cause an electric shock. Failure to provide adequate grounding to this product could result in
Q 2	serious injury or death from electrocution. Make certain that the electrical circuit to which the
	compressor is connected provides proper electrical grounding, correct voltage and adequate fuse
	protection.
RISK OF INJURY.	This unit starts automatically. ALWAYS shut off the main power disconnect, and bleed all pressure
	from the system before servicing the compressor, and when the compressor is not in use. Do not
元	use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with
<u> </u>	moving parts. Stay alert and watch what you are doing when operating the compressor. Do not use
	the compressor while tired or under the influence of drugs or alcohol.
RISK OF BURSTING.	Check the manufacturer's maximum pressure rating for air tools and accessories. Compressor
	outlet pressure must be regulated so as to never exceed the maximum pressure rating of the tool.
C 3	Relieve all pressure through the hose before attaching or removing accessories. Never use
10	compressor to inflate small low pressure objects such as children's toys, footballs, basketballs, etc.
RISK OF BURNS.	High temperatures are generated by the pump and manifold. To prevent burns or other injuries, DO
4	NOT touch the pump, manifold or transfer tube while the pump is running. Allow them to cool
7.7	before handling or servicing. Keep children away from the compressor at all times. Do not reach
and the same of th	around protective shrouds or attempt to maintenance until unit has been allowed to cool.
RISK TO	Always wear MSHA/NIOSH approved, properly fitting face mask or respirator and work in a
BREATHING/INHALATION	well ventilated area when using tools that generate dust. Some dust created by power
HAZARD	sanding, grinding, drilling and other construction activities contains chemicals known (to the State
200	of California) to cause cancer, birth defects or other reproductive harm. Some examples of these
	chemicals are:
	lead from lead-based paints
	crystalline silica from bricks and cement and other masonry products
	arsenic and chromium from chemically treated lumber.
RISK TO BREATHING.	Be certain to read all labels when you are spraying paints or toxic materials, and follow the safety
books and	instructions provided on the lable or safety sheets for the materials you are spraying. Use a
	MSHA/NIOSH approved respirator mask if there is a chance of inhaling anything you are spraying.
	Read all instructions and be sure that your respirator mask will protect you. Work in an area with
	good cross ventilation.
RISK OF EYE INJURY.	Always wear ANSI Z87.1 approved safety goggles when using an air compressor. Never point any
	nozzle or sprayer toward a person, animal or any part of the body. Equipment can cause serious
***	injury if the spray penetrates the skin.
RISK OF BURSTING.	•Do not adjust the tank safety valve for any reason. Doing so voids all warranties. The relief valve
LA C.	has been pre-set at the factory for the maximum pressure of this unit. Personal injury and /or
と 達	property damage may result if the relief valve is tampered with.
1/3	Do not use plastic or pvc pipe for compressed air. Use only galvanized steel pipe and fittings for
• •	compressed air distribution lines.
	compressed an distribution intes.

IMPORTANT SAFETY INSTRUCTIONS

WARNING:

RISK OF FIRE.	Unattended operation of this compressor could result in personal injury or property damage. To reduce the risk of fire, do not allow the compressor to operate unattended. Always disconnect electrical power by turning the pressure switch to off and drain the tank daily or after each use.
RISK TO BREATHING.	Air obtained directly from the compressor should never be used to supply air for human consumption. The air stream may contain carbon monoxide, toxic vapors, or solid particles from tank. Breathing these contaminant's can cause serious injury or death. In order to use air produced by this compressor for breathing, suitable filters and in-line safety equipment must be properly installed. In-line filters and safety equipment must be properly installed. In-line filters and safety equipment used in conjunction with the compressor must be capable of treating air to all applicable local and federal codes prior to human consumption.
RISK OF INJURY	Always operate the compressor in a stable secure position to prevend accidental movement of the unit. Never operate the compressor on a table, workbench, roof or other elevated position. Use additional air hose to reach high locations.
RISK TO HEARING.	Always wear hearing protection when using an air compressor. Failure to do so may result in hearing loss.
*	The interconnect cord on this product contains lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.
NOTE: ELECTRICAL WIRING.	Refer to the air compressor's serial label for the unit's voltage and amperage requirements. Ensure that all wiring is done by a licensed electrician, in accordance with the National Electrical code.

A CAUTION:

Drain the moisture from the tank on a daily basis. A clean, dry tank will help prevent corrosion.

Pull the tank safety valve ring daily to ensure that the valve is functioning properly, and to clear the valve of any possible obstructions.

To provide proper ventilation for cooling, the compressor must be kept a minimum of 12 inches (31 cm) from the nearest wall, in a well–ventilated area. Restricting any of the compressor ventilation openings will cause overheating and could cause fire, never place objects against or on top of compressor.

Fasten the compressor down securely if transporting is necessary. Pressure must be released from the tank before transporting. Protect the air hose and interconnect cord from damage and puncture. Inspect them weekly for weak or worn spots, and replace if necessary.

To reduce the risk of electric shock, do not expose to rain. Store indoors.

On oil-lubed compressors, oil can leak or spill and could result in fire or breathing hazard. Oil leaks will damage paint, carpet or other surfaces in vehicles or trailers. Always place the compressor on a protective mat when transporting to protect against damage to vehicle from leaks. Remove compressor from vehicle immediately upon arroval at your destination.

To prevent damage to tank and compressor on stationary models, the tank must be shimmed so the pump base is level within 1/8" to distribute oil properly. All feet must be supported, shimming where necessary, prior to attaching to the floor. Fasten all feet to floor. We also recommend the use of vibration pads (094-0137) under tank feet.

GLOSSARY OF TERMS

4

CFM: Cubic feet per minute; a unit of measure of air flow.

PSI: Pounds per square inch; a unit of measure of air pressure.

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 factory set low pressure point, the motor will restart automatically. The low pressure at which the motor automatically restarts is called "cut-in" pressure.

Cut-out pressure: When an air compressor is turned on and begins to run, air pressure in the air tank begins to build. It builds to the factory set high pressure point 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.

Well-ventilated: Means of providing fresh air in exchange for dangerous exhaust or vapors.

Dedicated circuit: An electrical circuit reserved for the exclusive use of the air compressor.

OVERVIEW

BASIC AIR COMPRESSOR COMPONENTS

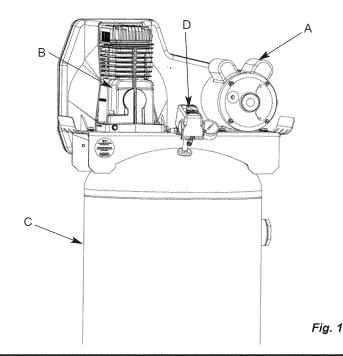
The basic components of the air compressor are the electric motor, pump, pressure switch and tank (see *Fig. 1*).

The **electric motor** (see **A**) powers the pump. The electric motor is equipped with an **overload protector** to help prevent possible motor burnout. If the motor becomes overheated, the overload protector will shut it down. Should this occur, allow the motor to cool for 10-15 minutes, then press (never force) the motor reset switch to restart the motor.

The **pump** (see **B**) compresses the air and discharges it into the tank.

The tank (see C) stores the compressed air.

The **pressure switch** (see D) shuts down the motor when the tank reaches a pre-set "cut-out" pressure. As compressed air is used and the tank drops to a pre-set "cut-in" pressure, the switch restarts the motor automatically, and the pump resumes compressing air.



ASSEMBLY

ASSEMBLING THE COMPRESSOR



This compressor was shipped with oil in the pump crankcase. Check oil before operating the air compressor, see Check Oil under Maintenance.

 Unpack the air compressor. Inspect the unit for damage. If the unit has been damaged in transit, contact the carrier and complete a damage claim. Do this immediately because there are time limitations to damage claims.

The carton should contain:

- air compressor
- · operator/parts manual
- Check the compressor's serial label to ensure that you have received the model ordered, and that it has the required pressure rating for its intended use.
- Locate the compressor according to the following guidelines:
 - a. For optimum performance, locate the compressor close to the power panel, as specified in ELECTRICAL POWER REQUIREMENTS, and as close as possible to the place where the air will be used. This ensures maximum power to the compressor and maximum air pressure to the tool. If both of these conditions cannot be met, it is better to locate the compressor close to the power panel, and use a longer air hose to reach the usage area.
 - b. The flywheel side of the compressor must be at least 12 inches (31 cm) from any wall or obstruction, in a clean, well-ventilated area, to ensure sufficient air flow and cooling.
 - c. In cold climates, locate the compressors in a

- heated building when not in use. This will reduce problems with lubrication, motor starting and freezing of water condensation.
- d. Remove the compressor from the shipping pallet and place it on the floor or a hard, level surface. The compressor must be level to ensure proper lubrication of the pump and good drainage of the moisture in the tank.
- CAUTION: The shipping pallet is not designed as a base for an operating compressor. Operating the compressor while it is on the pallet will void your warranty.
 - e. To prevent damage to tank and pump, the tank must be shimmed so the pump is level within 1/8" per lineal foot maximum to distribute oil properly. Fasten to floor and NEVER force tank feet to floor without shims when tightening. We also recommend the use of vibration pads (094-0137) under tank feet (E).
- 4. Connect an air hose (not included) to the compressor.

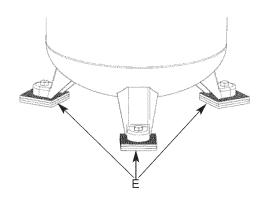
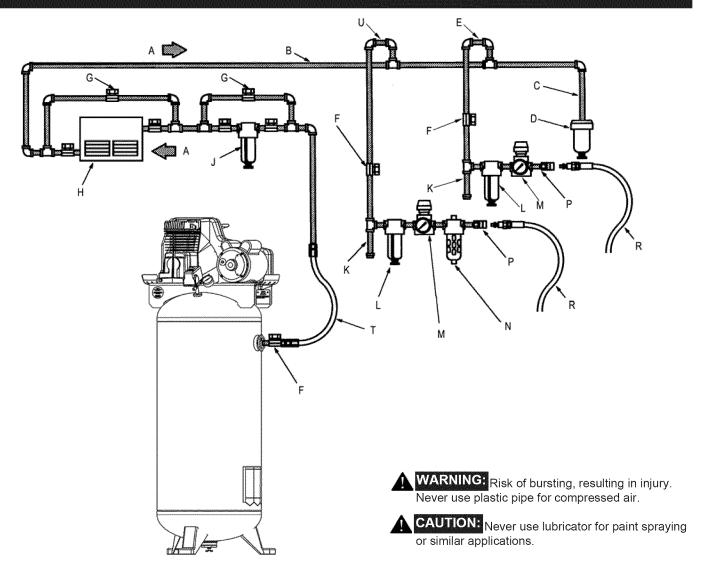


Fig. 2

TYPICAL INSTALLATION



Α	Air flow
В	Feeder line
С	Drain leg
D	Moisture trap with drain
E	Non-lubricated supply line
F	1/4 turn valve
G	Bypass
Н	Air dryer or aftercooler
J	Line filter
K	Drip tee with drain
L	Air/water filter with petcock
M	Regulator
N	Lubricator
Р	Quick coupler
R	Air hose to tool
Т	Flexible air line

Air dryers and after coolers

An air dryer or aftercooler is installed directly in the air line.

Moisture removal and air filtration

As the air cools, moisture will condense in the lines. This moisture must be removed before it reaches the tool being used. To remove this moisture, run the main air line downhill to a

moisture trap and drain. Air/water filters should also be installed in the positions shown.

Air pressure regulation

The air pressure gauge on the pressure switch measures air pressure *inside the tank, not pressure in the air line*. Install an air regulator in the drop line for each tool, to regulate air pressure to that tool. *Never exceed the maximum pressure rating of the tool*.

Air lubrication

Install an air lubricator only for those tools requiring lubrication. *Do not use a lubricator for paint spraying or similar applications*. The oil will contaminate the paint and ruin the job.

Shut-off valves

Install shut–off valves in each drop line, to isolate the tool and its accessories for servicing. You can also install a bypass line around an accessory.

COMPRESSOR CONTROLS

Main Power Disconnect

Install a main power disconnect switch in the power line to the compressor, near the compressor's location. It is operated manually, but when it is in the ON position, the compressor will start up or shut down automatically based on air demand. ALWAYS operate this switch to OFF when the compressor is not being used.

Pressure switch (see A)

This switch turns on the compressor. It is operated manually, but when in the ON position, it allows the compressor to start up or shut down automatically, without warning, upon air demand. ALWAYS set this switch to OFF when the compressor is not being used, and before unplugging the compressor.

WARNING: For your safety, tank pressure is preset within the switch and must never be tampered with.

This switch must not be adjusted by the operator; doing so will void the warranty. The pressure switch controls the level of air pressure in the tank by automatically starting and stopping the motor, as required to maintain the factory preset pressure level.

The pressure switch also automatically bleeds pressure from the pump head when the pump stops. This feature eliminates back pressure in the pump, ensuring easier starting.

Tank Safety Valve (see B)

Used to allow tank pressure to escape into the atmosphere.

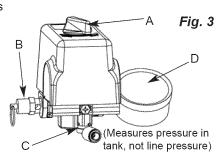
If the pressure switch does not shut off the compressor at it's "cut-out" pressure setting, the safety valve will protect against high pressure by releasing tank pressure at it's factory set pressure (slightly higher than the pressure switch "cut-out" setting). To operate manually, pull the ring on the valve to relieve air pressure in the tank.

Pressure Release Valve (see C)

The pressure release valve (located on the bottom of the pressure switch), is designed to release compressed air from the compressor head and outlet tube when the compressor reaches "cut-out" or is shut off. The pressure valve allows the motor to restart freely. When the motor stops running, air will be heard escaping from this valve for a few seconds. No air should be heard leaking when the motor is running or after brief release after reaching "cut-out" pressure.

Tank Pressure Gauge (see D)

This gauge measures the pressure level of the air stored in the tank. It is not adjustable by the operator, and does *not* indicate line pressure.

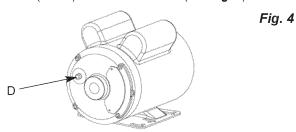


ELECTRICAL POWER REQUIREMENTS

MOTOR RESET SWITCH

WARNING: Ensure that all guards and shrouds are in place before pressing the reset switch to restart the motor.

If the motor shuts down because of overload, wait 10–15 minutes so the motor can cool down, then press (*NEVER force*) the reset switch (see **D**) to restart the motor (see *Fig. 4*).



ELECTRICAL WIRING

Refer to the air compressor's serial label for the unit's voltage and amperage requirements. Ensure that all wiring is done by a licensed electrician, in accordance with the National Electrical Code. Use electrical conduit to protect the wiring.

MAIN POWER PANEL

For best performance and reliable starting, the air compressor must be installed on a dedicated circuit, as close as possible to the electrical power panel. Provide circuit breaker or fuse protection at your main power panel. Use time delay fuses on the circuit, because the compressor will momentarily draw several times its specified amperage when first started.

MAIN POWER DISCONNECT SWITCH

Install a main power disconnect switch in the line from the panel to the compressor. The main power disconnect switch must be located near the compressor, for ease of use and safety. When turned OFF, the main power disconnect switch shuts off all power to the compressor. When it is turned ON, the compressor will start and stop automatically, controlled by the pressure switch.

LOW VOLTAGE PROBLEMS

Low voltage will cause difficult starting or an overload. Low voltage can be caused by a low supply voltage from the local power company, other equipment running on the same line, or inadequate wiring. If any other electrical devices are drawing from the compressor's circuit, it may fail to start.

Low voltage to the compressor can be caused by a supply wire of insufficient gauge for the distance between the compressor and the power source. The longer the distance, the larger the wire gauge (lower the number) must be, to overcome the inherent voltage loss caused by the wire resistance. Refer to the National Electrical Code to determine proper wire size for your circuit.

If the wiring is not adequate, the input voltage will drop by 20 to 40 volts at startup. Low voltage or an overloaded circuit can result in sluggish starting that causes the circuit breaker to trip, especially in cold conditions.

GROUNDING INSTRUCTIONS

This product must be connected to a grounded, metallic, permanent wiring system, or an equipment - grounding terminal or lead on the product.

OPERATING INSTRUCTIONS

BREAK-IN OF THE PUMP

- 1. Make sure the power is connected at the power panel.
- Check the oil level in the pump (see "Checking the Oil" in the maintenance section).
- 3. Open the petcock (see C).



CAUTION: Escaping air and moisture can propel debris that may cause eye injury. Wear safety goggles when opening petcock.

Turn ON the main power disconnect switch. Turn the
pressure switch to the AUTO position (see B). The motor
should start. Allow the compressor to run for 30 minutes, to
break in the internal parts.

NOTE: After about 30 minutes, if the unit does not operate properly, SHUT DOWN IMMEDIATELY, and contact a Sears or other qualified service center. **DO NOT** return the unit to the store where it was purchased.

5. Shut OFF the main power disconnect. Close the petcock (see **D**). Connect your air hose(s) to the tank outlet(s).

NOTE: As compressed air is used, the pressure switch will restart the motor automatically to supply more compressed air to the tank.

DAILY START-UP

- Check the oil level in the pump (see "Checking the Oil" in the maintenance section).
- 2. Make sure the main power disconnect switch is shut OFF.
- 3. Close the tank petcock (see D).
- 4. Turn ON the main power disconnect switch. Turn the pressure switch to the AUTO position (see B). The pump will start filling the tank with air. When the air pressure in the tank reaches the level preset at the factory, the pressure switch will turn off the electric motor. As air is used and the pressure level in the tank drops, the pressure switch will start the motor and the pump will begin refilling the tank.



WARNING: High temperatures are generated by the pump. To prevent burns or other injuries, DO NOT touch the pump or transfer tube while the pump is running. Allow it to cool before handling or servicing. Keep children away from the compressor at all times.

NOTE: If the unit does not operate properly, SHUT DOWN IMMEDIATELY, and contact a Sears or other qualified service center.

SHUTDOWN

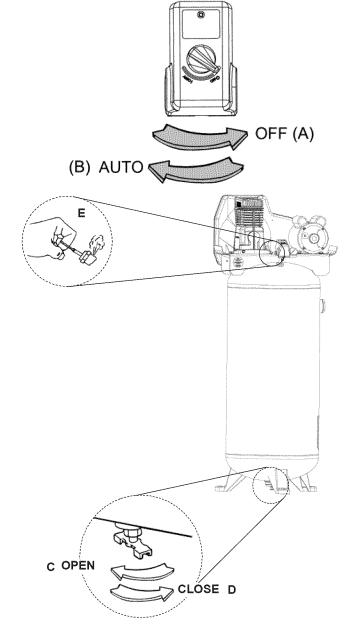
- 1. Turn the pressure switch to the OFF position (see A).
- 2. Shut OFF the main power disconnect switch.
- Reduce pressure in the tank through the outlet hose. You
 can also pull the tank safety valve ring (see E) and keep it
 open to relieve pressure in the tank.



CAUTION: Escaping air and moisture can propel debris that may cause eye injury. Wear safety goggles when opening petcock.

4. Open the petcock (see C) to allow moisture to drain from

the tank.



MAINTENANCE

MAINTENANCE

WARNING: To avoid personal injury, always shut off and unplug the compressor and relieve all air pressure from the system before performing any service on the air compressor.

Regular maintenance will ensure trouble–free operation. Your electric powered air compressor represents high–quality engineering and construction; however, even high–quality machinery requires periodic maintenance. The items listed below should be inspected on a regular basis

DRAINING THE TANK

Drain the moisture from the tank (for instructions, see "Shutdown" in the operating instructions section).



WARNING: Condensation will accumulate in the tank. To prevent corrosion of the tank from the inside, this moisture must be drained at the end of every workday. Wear protective eyewear.

CHECKING THE OIL

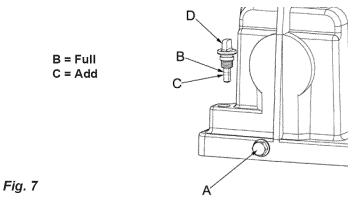
To check the oil level in the pump, unscrew the dipstick (\mathbf{D}) and wipe off oil. Screw the dipstick all the way in and then unscrew. The pump oil level should be between between add (see \mathbf{C}) and full (see \mathbf{B}). Replace the dipstick. Do not overfill or under fill.

NOTE: Use synthetic, non-detergent air compressor oil.

CHANGING THE OIL

Remove the oil plug (see $\bf A$) and drain the oil until it slows to a drip, then close. Add compressor oil (approx. 18 oz.) until it is between full (see $\bf B$) and add (see $\bf C$) when the dipstick (see $\bf D$) is screwed completely into the hole. Never overfill or underfill the pump.

NOTE: The compressor is pre-filled with synthetic oil. Use synthetic, non-detergent air compressor oil.



DRIVE BELT TENSION ADJUSTMENT

NOTE: Drive belt tensioning and pulley alignment are done at the same time. They are discussed separately for clarity.

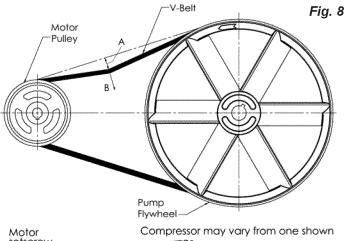


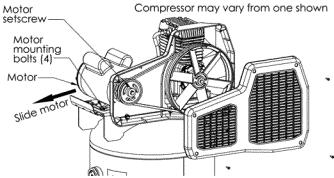
WARNING: This unit starts automatically.
ALWAYS shut off the main power disconnect, and bleed all pressure from the system before servicing the compressor, and when the compressor is not in

use. Do not use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with moving parts.

Proper belt tension and pulley alignment must be maintained for maximum drive efficiency and belt life. The correct tension exists if a deflection (see **A**) of 1/2" (13 mm) occurs by placing 10 lbs. (4.6 kg) of force (see **B**) midway between the motor pulley and the pump flywheel (See *Fig.* 8). This deflection can be adjusted by the following procedure. The pulley should be carefully aligned with the flywheel, and all setscrews should be kept tight.

- 1. Remove the front of the beltguard by removing the 5 screws using a Phillips head screwdriver.
- 2. Loosen the motor mounting bolts.
- 3. Shift the motor to the point where the correct deflection exists (A & B).
- 4. Retighten the motor mounting bolts to 130-180 in.-lbs.
- 5. Check to ensure that the tension remained correct.
- 6. Reinstall the belt guard. All moving parts must be guarded.





PULLEY ALIGNMENT

NOTE: Drive belt tensioning and pulley alignment are done at the same time. They are discussed separately for clarity.



WARNING: This unit starts automatically.

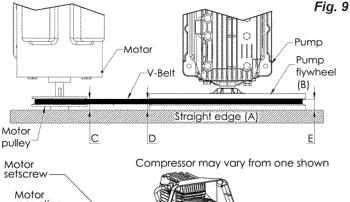
ALWAYS shut off the main power disconnect, and bleed all pressure from the system before servicing the compressor, and when the compressor is not in use. Do not use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with moving parts.

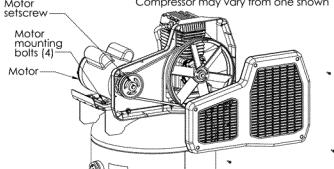
MAINTENANCE

NOTE: Once the motor pulley has been moved from its factory set location, the grooves of the flywheel and pulley must be aligned to within 1/16" to prevent excessive belt wear.

To check pulley alignment, remove the belt guard and place a straightedge (see **A**) against the pump flywheel (see **B**) (See *Fig.* 9). Measure and record the distance from the straightedge to the edge of the drive belt at point C. Then measure the distance from the straightedge to the edge of the drive belt again at points D and E. Both distances should be the same as at point C. If D or E are different from C, there is a misalignment which must be corrected before the compressor is run. To correct a pulley misalignment, use the following procedure.

- 1. Remove the front of the beltguard by removing the 5 screws using a Phillips head screwdriver.
- 2. Loosen the motor mounting bolts.
- 3. Loosen the setscrew on the motor pulley.
- 4. Align the motor pulley with the pump flywheel (C-D-E must be equal).
- 5. Retighten the motor pulley setscrew to 85-90 in.-lbs.
- Adjust the proper belt tension.
- 7. Retighten the motor mounting bolts to 130-180 in.-lbs.
- 8. Reinstall the belt guard. All moving parts must be guarded.





DRIVE BELT REPLACEMENT



WARNING: This unit starts automatically. ALWAYS shut off the main power disconnect, and bleed all pressure from the system before servicing the compressor, and when the compressor is not in use. Do not use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with moving parts.

- 1. Remove the front of the beltguard by removing the 5 screws using a Phillips head screwdriver.
- 2. Loosen the motor mounting bolts.

- 3. Shift the motor towards the pump to the point where the belt can be easily removed and installed.
- 4. Remove and replace belt. NOTE: The belt must be centered over the grooves on the flywheel and motor pulley.
- 5. Shift the motor back to the point where the correct deflection exists (see "Drive Belt Tension Adjustment").
- 6. Retighten the motor mounting bolts to 130-180 in.-lbs.
- 7. Check to ensure that the tension remained correct.
- 8. Reinstall the belt guard. All moving parts must be guarded.

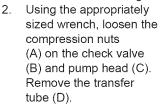
TO REPLACE OR CLEAN CHECK VALVE

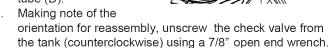
<u> 70</u>

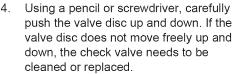
WARNING: This unit starts automatically.

ALWAYS shut off the main power disconnect, and bleed all pressure from the system before servicing the compressor, and when the compressor is not in use. Do not use the unit with the shrouds or belt guard removed. Serious injury could occur from contact with moving parts.

1. Turn air compressor off, remove the power cord from the outlet or lock out the power supply and relieve all the air pressure from the tank (refer to "Shutdown" in Operating Instructions). Make sure the compressor has cooled down before servicing.

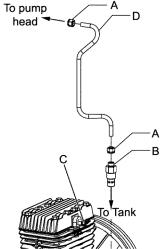


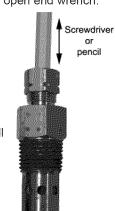




- Clean the check valve with warm soapy water and make sure to dry thoroughly before reinstalling. If the disc valve still does not move freely up and down, it will need to be replaced.
- 6. Apply thread sealant to the check valve threads and reinstall into the tank by turning clockwise.
- 7. Replace the transfer tube and tighten compression nuts.

 Perform the "Break-in of the pump" procedure in the Operating Instructions to make sure there are no leaks and the check valve is working properly.





MAINTENANCE

CLEANING THE AIR FILTER

A dirty air filter will reduce the compressor's performance and life. To avoid any internal contamination of the pump, the filter should be cleaned frequently, and replaced on a regular basis. Felt filters should be cleaned in warm, soapy water, rinsed, and allowed to air dry before reinstallation. Paper filters should be replaced when dirty. Do not allow the filter to become filled with dirt or paint. If the filter becomes filled with paint, it should be replaced. Direct exposure to dirty conditions or painting areas will void your warranty.

CHECKING THE RELIEF VALVE

Pull the tank safety valve daily to ensure that it is operating properly and to clear the valve of any possible obstructions.

TESTING FOR LEAKS

Check that all connections are tight. A small leak in any of the hoses, transfer tubes, or pipe connections will substantially reduce the performance of your air compressor. If you suspect a leak, spray a small amount of soapy water around the area of the suspected leak with a spray bottle. If bubbles appear, repair or replace the faulty component. Do not over tighten any connections.

STORAGE

Before storing the compressor for a prolonged period, use an air blow gun to clean all dust and debris from the compressor. Disconnect the power cord and coil it up. Pull the tank safety valve to release all pressure from the tank. Drain all moisture from the tank. Clean the filter element and filter housing; replace the element if necessary. Drain the oil from the pump crankcase and replace it with new oil. Cover the entire unit to protect it from moisture and dust.

SERVICE INTERVAL

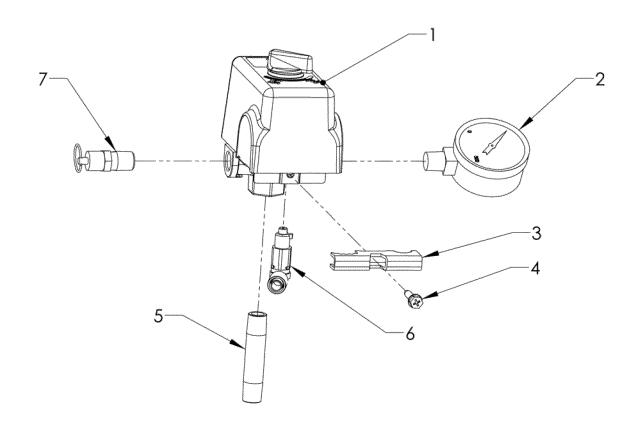
Perform the following maintenance at the intervals indicated below.	Daily or after each use	Every 100 operating hours
Inspect air filter (clean or replace as necessary)	•	
Check pump oil level	•	
Change pump oil (Use synthetic, non-detergent air compressor oil)		•
Operate the tank safety valve	•	
Check belt tension		•
Drain tank	•	
Check and tighten all bolts <i>(do not over tighten)</i>		•

TROUBLESHOOTING

Note: Troubleshooting problems may have similar causes and solutions.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Excessive current draw trips circuit breaker or	Low voltage/motor overload	Check that power supply is adequate and that compressor is on a dedicated circuit.
motor reset switch	Drive belt too tight	Readjust belt tension.
	Restricted air passages	Inspect and replace transfer tubes or the check valve, (see "To replace or clean check valve" in the maintenance section).
Compressor stalls	Low voltage to motor	Furnish adequate power.
	Bad check valve	Replace the check valve (see "To replace or clean check valve" in the maintenance section).
	Seized pump	Contact a Sears or other qualified service center.
Low discharge pressure	Air leaks	Tighten or replace leaking fittings or connections. Do not overtighten.
	Leaking valves	Contact a Sears or other qualified service center.
	Restricted air intake	Clean or replace air filter element(s).
	Blown gaskets	Contact a Sears or other qualified service center.
	Worn piston rings or cylinder	Contact a Sears or other qualified service center.
Compressor pump knocking	Loose motor pulley or pump flywheel	Retighten pulley and flywheel. Check alignment.
	Low oil level in pump crankcase	Keep oil at proper level at all times.
	Excess carbon on valves or top of piston	Contact a Sears or other qualified service center.
Oil in discharge air	Worn piston rings or cylinder	Contact a Sears or other qualified service center.
	Restricted air intake	Clean or replace the air filter element(s).
	Oil level too high	Reduce to proper level.
Overheating	Poor ventilation	Relocate compressor to an area with cool, dry, well circulated air, at least 12 in. from nearest wall.
	Dirty cooling surfaces	Clean all cooling surfaces thoroughly.
	Restricted air passages	Inspect and replace transfer tubes or the check valve, (see "To replace or clean check valve" in the maintenance section).
Excessive belt wear	Pulley out of alignment	Realign pulley with compressor flywheel.
	Improper belt tension	Readjust.
	Pulley wobbles	Replace the pulley and check for a damaged crankshaft or flywheel.
Compressor won't start	Too much back pressure in tank	Open petcock when starting motor.
in cold temperatures	40W oil in crankcase	Use synthetic, non-detergent air compressor oil.
	Compressor too cold	Move compressor to a warmer location.
Air leaking through bleeder valve after compressor shuts off	Dirty or defective check valve.	Replace or clean the check valve (see "To replace or clean check valve" in the maintenance section).

PARTS DRAWING / ESQUEMA DE LAS PIEZAS / DESSIN DES PIÈCES



PARTS LIST / LISTA DE PIEZAS / LISTE DE PIÈCES

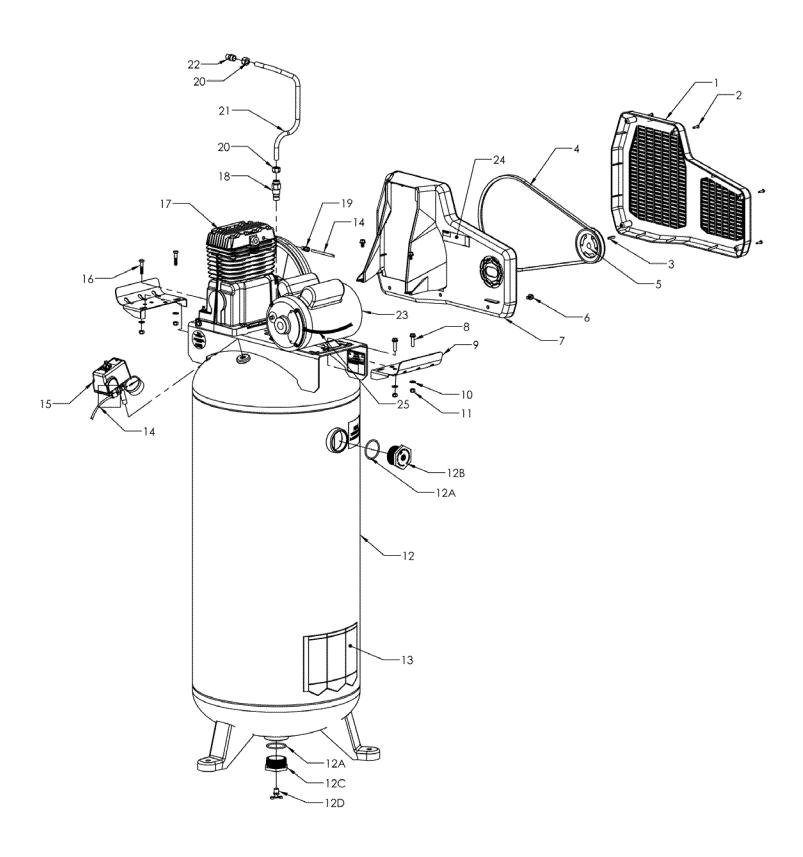
	Part No. Nº de pieza No / P	Qty Cant. Qté	Description	Descripción	Description
1	034-0228	1	Switch, pressure (<i>includes items</i> 3-4 & 6)	Interruptor (<i>incluye los artículos</i> 3-4 y 6)	Interrupteur (<i>inclut les éléments</i> 3-4 et 6)
2	032-0025		Gauge, 300# 1/4" bottom connect	Manómetro	Manomètre
3	071-0033	1	Strain relief	Alivio de esfuerzo	Soulagement de traction
4	061-0216	1	Screw	Tornillo	Vis
5	N/A	1	Nipple 1/4" X 2 1/2"	Latiguillo	Manchon fileté
6	136-0090	1	Valve, bleeder	Válvula	Soupape
7	136-0073	1	Valve, ASME	Válvula	Soupape

^{*}N/A - These are standard parts available at your local hardware store.

^{*}N/A - Estas son piezas estándar disponibles en su ferretería local.

^{*}N/A - Ces pièces sont des pièces standard disponibles en quincaillerie.

PARTS DRAWING / ESQUEMA DE LAS PIEZAS / DESSIN DES PIÈCES



PARTS LIST / LISTA DE PIEZAS / LISTE DE PIÈCES

Item	Part No.	Qty			
	Nº de pieza	Cant.	1	,	
	No / P		Description	Descripción	Description
1	125-0151	1	Belt guard, outer	Protector	Garant
2	N/A	5	Screw, #10-14	Tornillo	Vis
3	146-0016	1	Key	Chaveta	Clé
4	007-0037	1	V-Belt, 4L-530	Correa	Courroie
5	006-0142	1	Pulley, 4.25 x 5/8" bore	Polea	Poulie
6	N/A	5	Bolt, 5/16-18 x 1/2"	Perno	Boulon
7	125-0152	1	belt guard, inner	Protector	Garant
8	N/A	4	Screw, 5/16–18 x 1.25	Tornillo	Vis
9	114-0726	2	Bracket	Protector	Garant
10	N/A	4	Washer, flat 5/16	Arandela	Rondelle
11	N/A	4	Nut, 5/16-18 nylon stop	Tuerca	Écrou
12	153-0123	1	Tank assembly	Depósito	Ensemble du réservoir
12A	513-0001	2	O-ring, 2"	Depósito	Ensemble du réservoir
12B	512-0042	1	Bushing 2" NPSM X 3/8NPT	Buje	Bague
12C	512-0041	1	Bushing 2" NPSM X 1/4NPT	Buje	Bague
12D	072-0001	1	Petcock	Grifo de purga	Robinet de purge
13	098-3870	1	Label, warning	Etiqueta de advertencia	D'avertissement étiquette
14	145-0084	1	Tube, bleeder 1/4" x 17"	Tubo	Tube
15	See page 13	1	Manifold assembly	Colector	Ensemble du collecteur
16	N/A	4	Bolt, 5/16 x 1.5"	Perno	Boulon
17	See pages 16 & 17	1	Pump assembly	Bomba	Ensemble du pompe
18	031-0035	1	Check Valve, 1/2" x 1/2"	Válvula	Soupape
19	068-0002	1	Connector, male	Conector	Connecteur
20	058-0016	2	Nut, 1/2" O.D. tube	Tuerca	Écrou
21	145-0623	1	Tube, transfer	Tubo	Tube
22	068-0063	1	Connector, 1/4" X 1/2"	Conector	Connecteur
23	160-0266	1	Motor	Motor	Moteur
23A	166-0055	1	Capacitor, start, black	Condensador	Condensateur
23B	166-0018	1	Capacitor, run, silver	Condensador	Condensateur
23C	166-0029	1	Cover, start capacitor	Тара	Couvercle
23D	166-0028	1	Cover, run capacitor	Tapa	Couvercle
24	098-2856	1	Label, warning	Etiqueta de advertencia	D'avertissement étiquette
25	026-0233	1	Cord, interconnect	Cable	Câble

^{*}N/A - These are standard parts available at your local hardware store. *N/A - Estas son piezas estándar disponibles en su ferretería local. *N/A - Ces pièces sont des pièces standard disponibles en quincaillerie.

PARTS DRAWING / ESQUEMA DE LAS PIEZAS / DESSIN DES PIÈCES

165 Pump Assy

Head Bolt Torque Sequence Secuencia de apriete de los pernos con cabeza Séquence De Serrage Des Boulons À Tête

Sequence #'s 1, 2, 3, 4, 5, 6, 7 & 8 Torque to 220-300 lbs-in N^{o} de secuencia 1, 2, 3, 4, 5, 6, 7 y 8 Torsión hasta 24,9 - 33,9 N·m

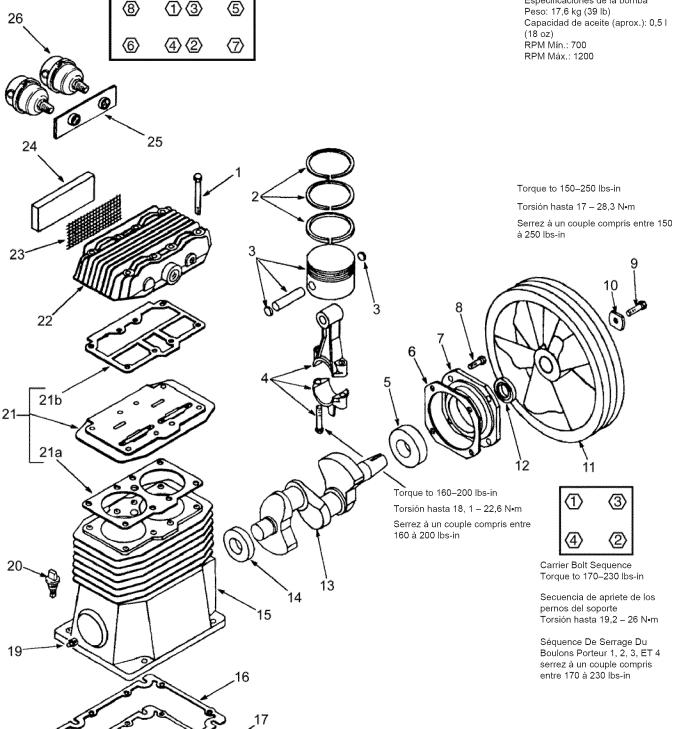
> Séquence De Serrage Des Boulons 1, 2, 3, 4, 5, 6, 7 et 8

serrez à un couple compris entre 220 à 300 lbs-in

Pump Specifications Weight-39 lbs. Oil Capacity (approx.)-18 oz. Min. RPM-700 Max. RPM-1200 Max. Ambient Temp-104°F (40°C)

Especificaciones de la bomba

Capacidad de aceite (aprox.): 0,5 l



Torque to 30-50 lbs-in Torsión hasta 3,4 – 5,7 N•m Serrez à un couple compris entre 30 à 50 lbs-in

PARTS LIST / LISTA DE PIEZAS / LISTE DE PIÈCES

165 Pump Assy

ltem	Part No.	Qty	Description	Descripción	Description
Artículo		Cant			
Article	No / P	Qté			
1	059-0144	8	Screw, 5/16-18 x 2.50" lg	Tornillo	Vis
2	054-0112	1	Ring set	Juego de anillos	Jeu d'anneaux
3	048-0065	2	Piston assembly	Pistón	Ensemble du piston
4	047-0092	2	Rod, 165 pump	Varilla	Tige
5	051-0043	1	Bearing	Cojinete	Roulement
6	046-0149	1	Gasket	Junta	Joint
7	045-0053	1	Carrier, includes items 5 & 12	Soporte, <i>incluye los artículos 5 y</i> 12	Support, <i>inclut les éléments 5 et</i> 12
8	N/A	4	Screw, 5/16-18 x 1" lg	Tornillo	Vis
9	N/A	1	Screw, 5/16-18 x 1.0" lg	Tornillo	Vis
10	060-0053	1	Washer	Arandela	Rondelle
11	044-0064	1	Flywheel, 12" A width	Volante, A	Volant-moteur, A
12	046-0161	1	Seal	Sello	Joint
13	053-0043	1	Crankshaft, 165 pump	Cigüeñal	Vilebrequin
14	051-0013	1	Bearing	Cojinete	Roulement
15	049-0050	1	Crankcase, includes item 14	Cárter, <i>incluye los artículos 14</i>	Carter, <i>inclut les éléments 14</i>
16	046-0263	1	Gasket	Junta	Joint
17	077-0148	1	Base	Base	Base
18	061-0113	14	Screw, #10-24 x 1/2	Tornillo	Vis
LI	061-0112	1	Plug, 5/16-18	Tapón	Bouchon
20	056-0019	1	Dipstick	Varilla de aceite	Jauge de niveau
21	043-0142	1	Plate, assy, <i>includes 21a–21b</i>	Conjunto de placa, <i>incluye los</i> artículos 21a-21b	Ensemble du plaque, <i>inclut les</i> <i>éléments 21a-21b</i>
21a	046-0152	1	Gasket	Junta	Joint
21b	046-0151	1	Gasket	Junta	Joint
22	042-0103	1	Head	Cabezal	Tête
23	118-0023	1	Screen	Malla	Crépine
24	019-0052	1	Filter, felt	Filtro	Filtre
25	019-0096	1	Plate	Placa	Placa
26	019-0165	2	Filter, canister <i>includes 26a</i>	Filtro	Filtro
26a	019-0166	2	Element	Elemento	Elemento

^{*}N/A - These are standard parts available at your local hardware store.

Felt filter models *include items* 23 and 24. Canister filter models *include items* 25 and 26. Les modèles muni d'un filtre en feutre *comprends art.* 23 et 24. Les modèles muni d'un filtre en boîte *comprends art.* 25 et 26. Los modelos de filtro de fieltro *ncluyen art.* 23 y 24. Los modelos de filtro lata de *incluyen art.* 25 y 26.

Available Service Kits					
	046-0159	1	(includes items 6, 16,	Juntas, conjunto completo incluye los artículos 6, 16, 21a y 21b)	Joints, jeu complet (<i>inclut les éléments</i> 6, 16, 21a et 21b)
	165-0083	4	and gasket sets, valve plate assembly and	modelo de filtro de fieltro incluye conjuntos de anillo y junta, conjunto de la placa de	Jeu de pièces de réparation, le modèle muni d'un filtre en feutre comprend des jeux de bagues et de joints, l'assemblage de la plaque et de joints, l'assemblage de la plaque de la soupape et l'élément du filtre
	165-0055	- Чення	ring and gasket sets, valve plate assembly	modelo de filtro de lata incluye conjuntos de anillo y junta, conjunto de la placa de	Jeu de pièces de réparation, le modèle muni d'un filtre en boîte comprend des jeux de bagues et de joints, l'assemblage de la plaque et de joints, l'assemblage de la plaque de la soupape et l'élément du filtre
	040-0429	8	Pump assembly includes items 1-24 excluding 9-10 and 11	Bomba (incluye los artículos 1-24 excepto 9-10 y 11)	Pompe (inclut les éléments 1-24 à l'exclusion de 9-10 et 11)

^{*}N/A - Estas son piezas estándar disponibles en su ferretería local.

^{*}N/A - Ces pièces sont des pièces standard disponibles en quincaillerie.