



ULTRA-QUIET OIL-FREE AIR COMPRESSOR

12/2013



MODEL: KC-4620A

INSTRUCTION MANUAL

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WARRANTY INFORMATION



2-YEAR LIMITED WARRANTY FOR THIS 4.6 GALLON OIL-FREE AIR COMPRESSOR

PROOF OF PURCHASE

Please keep your dated proof of purchase for warranty and servicing purposes.

REPLACEMENT PARTS

Replacement parts for this product are available at our authorized King Canada service centers across Canada.

LIMITED TOOL WARRANTY

King Canada makes every effort to ensure that this product meets high quality and durability standards. King Canada warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, normal wear and tear, negligence or accidents, repairs done by an unauthorized service center, alterations and lack of maintenance. King Canada shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products.

To take advantage of this limited warranty, return the product at your expense together with your dated proof of purchase to an authorized King Canada service center. Contact your retailer or visit our web site at www.kingcanada.com for an updated listing of our authorized service centers. In cooperation with our authorized serviced center, King Canada will either repair or replace the product if any part or parts covered under this warranty which examination proves to be defective in workmanship or material during the warranty period.

NOTE TO USER

This instruction manual is meant to serve as a guide only. Specifications and references are subject to change without prior notice.

PARTS DIAGRAM & PARTS LISTS

Refer to the Parts section of the King Canada web site for the most updated parts diagram and parts list.

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IMPORTANT SAFETY INSTRUCTIONS



RISK OF EXPLOSION OR FIRE WHAT CAN HAPPEN

It is normal for electrical contacts within the motor and pressure switch to spark.



If electrical sparks from the compressor come in contact with flammable vapors, they may ignite, causing fire or explosion. Restricting any of the compressor ventilation openings will cause serious overheating and could cause fire.



RISK OF BURSTING WHAT CAN HAPPEN

1. Modifications or attempted repairs to the tank.
2. Unauthorized modifications to the unloader valve, safety valve or any other components which control tank pressure.
3. Excessive vibration can weaken the air tank and cause rupture or explosion.

Attachments & Accessories; Exceeding the operating pressure of air tools can cause them to explode.

HOW TO PREVENT IT RISK OF BURNS WHAT CAN HAPPEN



Touching exposed metal such as the compressor head or outlet tubes, can result in serious burns.

HOW TO PREVENT IT

Always operate the compressor in a well ventilated area free of combustible materials, gasoline or solvent vapors. If spraying flammable materials, spray material at least 20 feet away from the compressor. An additional length of hose may be required. Store flammable materials in a secure location away from the compressor.

Never place objects against or on top of the compressor. Operate compressor in an open area at least 18 inches away from any wall or obstruction that would restrict the flow of fresh air to the ventilation openings.

Operate compressor in a clean, dry and well ventilated area.

The tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.

For essential control of air pressure, you must install a pressure regulator and pressure gauge to the air supply system.

HOW TO PREVENT IT

Never touch any exposed metal parts on compressor during or immediately after operation. The compressor will remain hot several minutes after use. Do not reach around protective shrouds or attempt maintenance until the compressor has cooled down completely.

This air compressor and other components used make up a high pressure system, the following safety rules and guidelines should be followed when using, cleaning or servicing.

- 1) Read and understand instruction manual before attempting to install and use compressor. Be thoroughly familiar with the operational controls and proper use.
- 2) All electrical and safety codes must be followed to ensure operator safety.
- 3) Applications requiring air free of oil or water should have the appropriate filters/water traps installed in the pressure system.
- 4) Wear safety glasses.
- 5) Do not operate if any part is damaged during shipping, handling or use, have the part replaced or repaired before attempting to use.
- 6) Never attempt to modify or adjust the ASME safety valve. The safety valve must be kept clean and free from paint or any other type of accumulation.
- 7) Never attempt to repair or modify air tank. Welding, drilling or any other modification will weaken the air tank resulting in damage from rupture or explosion.
- 8) Drain water from tank on a regular basis.

SPECIFICATIONS & ELECTRICAL INFORMATION



SPECIFICATIONS

Model	KC-4620A
Voltage	120V
Horsepower	2 Peak HP
Amperage	7.6A
RPM (no load speed)	1,680
Phase	1
Hertz	60Hz
Operating pressure	90-120 PSI
CFM @ 40 PSI	3.80
CFM @ 90 PSI	2.35
Tank size	4.6 Gallon

ELECTRICAL INFORMATION

WARNING

ALL ELECTRICAL CONNECTIONS MUST BE DONE BY A QUALIFIED ELECTRICIAN. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY! ALL ADJUSTMENTS OR REPAIRS MUST BE DONE WITH THE COMPRESSOR DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

GENERAL INFORMATION- 120V single phase operation

This air compressor comes with a 120V single phase motor wired for 120V operation.

WARNING: YOUR COMPRESSOR MUST BE CONNECTED TO A 120V, WITH A MINIMUM 15-AMP. BRANCH CIRCUIT. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

GROUNDING

Your compressor must be properly grounded. Not all outlets are properly grounded. If you are not sure if your outlet is properly grounded, have it checked by a qualified electrician.

WARNING: IF NOT PROPERLY GROUNDED, THIS COMPRESSOR CAN CAUSE ELECTRICAL SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS. TO AVOID SHOCK OR FIRE, IF THE POWER CORD IS WORN OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.

If this compressor should malfunction or breakdown, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This cut-off is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING: TO MAINTAIN PROPER GROUNDING, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

120V OPERATION

As received from the factory, your compressor is ready to run for 120V operation. This machine is intended for use on a electrical circuit that has an outlet and a plug which looks like the one illustrated in Fig.1.

WARNING: DO NOT USE A TWO-PRONG ADAPTOR FOR THEY ARE NOT IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES. NEVER USE IN CANADA.

EXTENSION CORDS

The use of any extension cord will cause some loss of power. IT IS RECOMMENDED TO USE A LONGER AIR HOSE INSTEAD OF AN EXTENSION CORD. If you do not have a choice, use the chart in Fig.2 to determine the minimum wire size (A.W.G-American Wire Gauge) extension cord needed. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-hole receptacles which accept the tool's plug.

For circuits that are further away from the electrical circuit box, the wire size must be increased proportionately in order to deliver ample voltage to the compressor motor. Refer to Fig.2 for wire length and size.

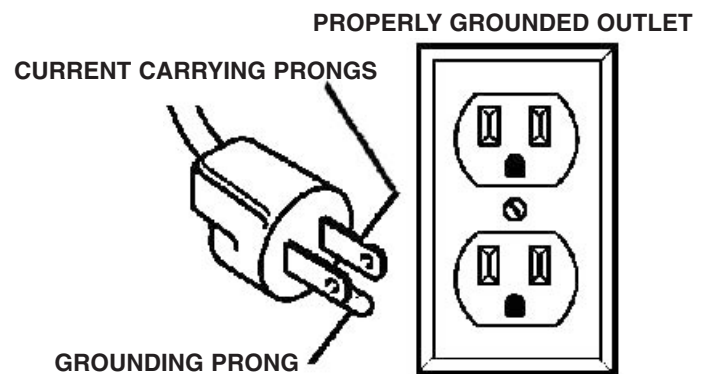


FIGURE 1

Tool's Amperage Rating	Cord Size in A.W.G.			
	Cord Length in Feet			
	25	50	100	150
3-6	18	16	16	14
6-8	18	16	14	12
8-10	18	16	14	12
10-12	18	16	14	12
12-16	14	12	-	-

FIGURE 2



ASSEMBLY & COMPRESSOR CONTROLS

ASSEMBLY AND LOCATION OF THE AIR COMPRESSOR

Your compressor requires minor assembly. Install the air filter (A) Fig.3 to the pump casting as shown.

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

ADDITIONAL REGULATORS AND CONTROLS

Since the air tank pressure is usually greater than that which is needed, an air pressure regulator is employed to control the air pressure ahead of any individual driven device. Separate air transformers which combine the function of air regulation, moisture and dirt removal should be used where applicable.

OPERATION CONTROLS

CHECK VALVE (A) FIG.4. When the air compressor is operating, the check valve is “open”, allowing compressed air to enter the air tank. When the air compressor reaches its “Cut-Out” pressure, the check valve “closes”, allowing air pressure to remain inside the air tank.

TANK PRESSURE GAUGE (A) FIG.5. The tank pressure gauge indicates the reserve air pressure in the tank.

REGULATOR (B) FIG.5. The air pressure coming from the air tank is controlled by the regulator. Turn the regulator knob clockwise to increase pressure or counterclockwise to decrease pressure.

“ONE TOUCH” 1/4” QUICK RELEASE COUPLERS (C) FIG.5. Connect an air hose with a 1/4” male coupler installed and connect it to one of the female quick release couplers.

OUTLET PRESSURE GAUGE (D) FIG.5. The outlet pressure gauge indicates the air pressure available at the outlet side of the regulator. The pressure is controlled by the regulator and is always less than or equal to the tank pressure.

ON/AUTO-OFF SWITCH (A) FIG.6. Turn this switch ON to provide power to the automatic pressure switch and OFF to remove power at the end of each use.

PRESSURE SWITCH (B) FIG.6. The pressure switch automatically starts the motor when the tank pressure drops below the factory set “Cut-In” pressure. It also stops the motor when the air tank pressure reaches the factory set “Cut-Out” pressure.

ASME SAFETY VALVE (C) FIG.6. If the pressure switch does not shut off the air compressor at its cutout pressure setting, the safety valve will protect against high pressure by “popping out” at its factory set pressure (slightly higher than the pressure switch cut-out setting).

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

DRAIN VALVE (D) FIG.6. The drain valve is located at the base of the air tank and is used to drain condensation at the end of each use. Turn drain valve counterclockwise to open (no pressure build-up) or clockwise to close it (permits pressure build-up).

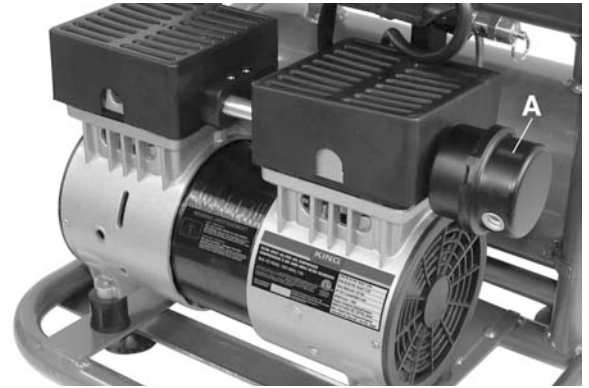


FIGURE 3

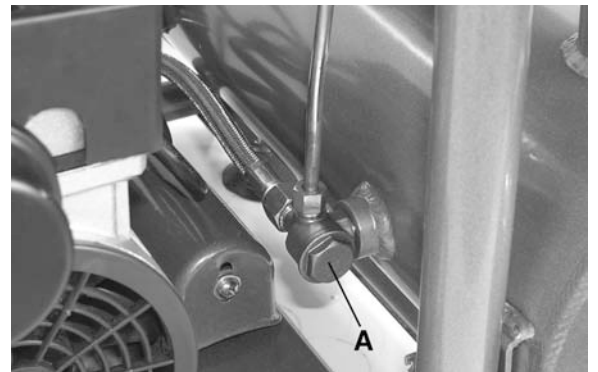


FIGURE 4

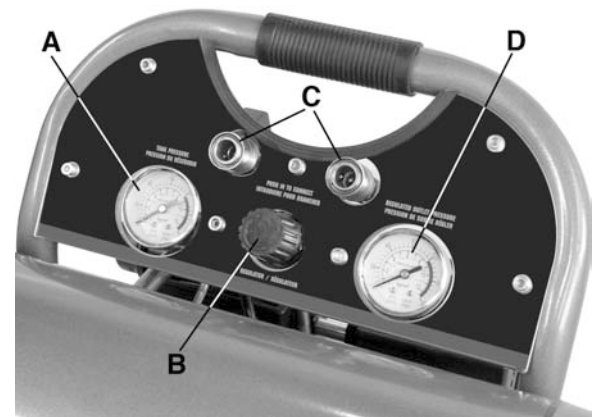


FIGURE 5

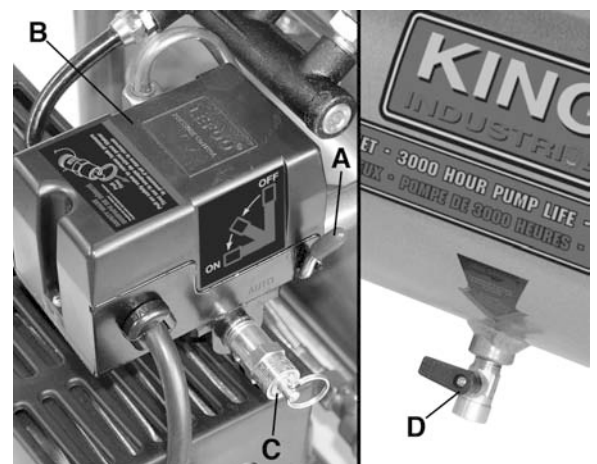


FIGURE 6

OPERATIONAL GUIDELINES & MAINTENANCE



Preparation for use:

1. Before attaching an air hose or accessories, make sure the On/Off switch is set to "OFF" and the air regulator is closed (completely turned counter-clockwise).
2. Connect an air hose having a male fitting (B) Fig.7 (not supplied) into one of the female quick connect couplers (A). Pull the female quick connect coupler ring backwards and push the male fitting into the coupler until it is secured, release the female quick connect coupler ring. Attach optional air tool or accessory to a female quick connect coupler installed at the other end of the air hose. To prevent air leaks, it is recommended to install Teflon Tape (not supplied) on the threads at both ends of the hose fittings.



FIGURE 7

WARNING: Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating of the tool being used.

3. Turn the switch to the On position and allow tank pressure to build. Motor will stop when tank pressure reaches "cut-out" pressure.
4. Open the regulator by turning it clockwise. Adjust the regulator to the correct pressure setting. The compressor is ready for use.

After Use:

1. Set the switch to Off. Disconnect power cord from power source.
2. Turn the regulator counterclockwise to set the outlet pressure to zero.
3. Disconnect the air tool or accessory.
4. Pull ring on safety valve (C) Fig.6, allowing air to bleed from the tank until tank pressure is approximately 20 psi. Release safety valve ring.
5. Drain water from air tank. Turn drain valve (D) Fig.6, counterclockwise to open.

WARNING!: WATER WILL CONDENSE IN THE AIR TANK.

Moisture in compressed air

When humidity is high or when the compressor is in continuous use for an extended period of time, this moisture will collect in the air tank. When using a spray gun or sandblast gun, this water will be carried from the tank through the hose and out of the gun as droplets mixed with the spray material. This will cause water spots in a paint job, especially when spraying other than water based paint. If sandblasting, it will cause the material to cake and clog the gun, rendering it ineffective. **DRAIN WATER FROM AIR TANK ON A REGULAR BASIS** or an optional air control unit with dirt and moisture removal should be used to prevent these undesirable results.

NOTE: If drain valve is plugged, pull ring on safety valve (C) Fig.6, and hold until all air pressure has been released. The drain valve can then be removed, cleaned, and reinstalled.

6. After the water has been completely drained, turn drain valve clockwise to close. The air compressor can now be stored.

KEEP TOOL CLEAN

Periodically blow out all air passages with dry compressed air. Clean all plastic parts with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

CAUTION: Wear safety glasses while using compressed air.



TROUBLESHOOTING

TROUBLE	POSSIBLE CAUSE	CORRECTIVE ACTION
No start condition.	Fuse blown or circuit breaker tripped. Loose electrical connections. Overheated motor.	Check for cause of blown fuse/breaker and replace. Check wiring connections. Turn compressor off, wait until total cool-down before restarting.
Low pressure.	Air leak in safety valve. Defective check valve.	Check valve manually by pulling on ring. If condition persists replace valve. Replace check valve.
Safety valve releasing.	Defective pressure switch or improper adjustment.	Check for proper adjustment and if problem persists, replace pressure switch.
Tank pressure drops when compressor shuts off.	Loose drain valve. Loose connections at regulator or pressure switch.	Tighten drain valve. Check connections for leaks, seal with Teflon tape.
Excessive moisture coming out of air hose.	Excessive water in the tank. Humidity too high.	Drain tank through drain valve. Move compressor to area of less humidity. Risk of electric shock!