

10 GALLON 5.5 HP GAS (HONDA) WHEELBARROW AIR COMPRESSOR



HONDA

Moteur **GX160** Engine

MODEL: KC-5510G1

INSTRUCTION MANUAL

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WARRANTY INFORMATION

1-YEAR LIMITED WARRANTY FOR THIS GAS 10 GALLON AIR COMPRESSOR

KING CANADA TOOLS
OFFERS A 1-YEAR LIMITED WARRANTY
FOR INDUSTRIAL USE.

IMPORTANT WARRANTY INFORMATION

KING CANADA AIR COMPRESSOR SERVICE INFORMATION

IF YOU ARE EXPERIENCING PROBLEMS WITH ONLY THE AIR COMPRESSOR, DO NOT RETURN TO THE RETAILER, CALL KING CANADA AT THE TOLL-FREE NUMBER BELOW FOR SERVICE INFORMATION.

TOLL FREE: 1-877-636-4214

HONDA ENGINE SERVICE INFORMATION

IF YOU ARE EXPERIENCING PROBLEMS WITH THE HONDA ENGINE, DO NOT RETURN TO THE RETAILER, CONTACT HONDA CANADA, INC. BY PHONE OR THROUGH THEIR WEB SITE FOR SERVICE INFORMATION.

TOLL FREE: 1-888-9HONDA9 (946-6329) or WEB SITE: www.honda.ca

PROOF OF PURCHASE

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

REPLACEMENT PARTS- AIR COMPRESSOR COMPONENTS ONLY (NOT ENGINE)

Replacement parts for the air compressor components only 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 1-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 purshase 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.

KING CANADA INC. DORVAL, QUÉBEC, CANADA H9P 2Y4

www.kingcanada.com

IMPORTANT SAFETY INSTRUCTIONS FOR AIR COMPRESSORS





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 air filters will cause serious overheating and could cause fire.



RISK OF BURSTING WHAT CAN HAPPEN

- 1. Failure to properly drain condensed water from the tanks, causing rust and thinning of the steel tanks.
- 2. Modifications or attempted repairs to the tanks.
- 3. Unauthorized modifications to the unloader valve, safety valve or any other components which control tank pressure.
- 4. Excessive vibration can weaken the air tanks and cause rupture or explosion.

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



RISK OF BURNS WHAT CAN HAPPEN

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



RISK OF PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR WHAT CAN HAPPEN

Oil can leak or spill and could result in fire or breathing hazard, serious injury or death can result. Oil leaks will damage carpet, paint or other surfaces in vehicules or trailers.

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 on a stable level surface in a clean, dry and well ventilated area.

HOW TO PREVENT IT

Drain tanks daily or after every use. If the tanks develop a leak, replace tanks or get a new air compressor. Never drill into, weld or make any modifications to the tanks or its attachments.

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

Regulate the output air pressure using the regulator.

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 the pump and/or engine or attempt maintenance until these components have cooled down completely.

HOW TO PREVENT IT

Always place compressor on a protective mat when transporting to protect against damage to vehicule from leaks. Remove compressor from vehicule immediately apon arrival.

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) Applications requiring air free of oil or water should have the appropriate filters/water traps installed in the pressure system.
- 3) Wear safety glasses.
- 4) Do not operate if any part is damaged during shipping, handling or use, have the part replaced or repaired before attempting to use.
- 5) Never operate the compressor with the belt guard removed, this compressor can start automatically without warning. Personal injury or property damage could occur from contact with moving parts.
- 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 tanks. Welding, drilling or any other modification will weaken the air tanks resulting in damage from rupture or explosion.
- 8) Drain water from tanks on a regular basis. Tanks rust from moisture build-up which weakens the air tanks.



IMPORTANT SAFETY INSTRUCTIONS FOR GAS ENGINES

BASIC SAFETY INFORMATION

EXHAUST FUMES ARE DANGEROUS

•Never operate the engine in a closed area or it may cause unconsciensness and death within a short time. Operate in a well ventilated area.

FUEL IS HIGHLY FLAMMABLE AND POISONOUS

- •Always turn off the engine when refueling.
- •Never refuel while smoking or in the vicinity of an open flame.

ENGINE AND MUFFLER MAY BE HOT

- •Place the engine in an appropriate location, away from children and pedestrians.
- •Avoid placing any flammable materials near the exhaust outlet during operation.
- •Keep a 4ft. clearance from buildings or other equipment around the engine to prevent overheating.

WARNING! The engine muffler will be very hot after use, avoid touching the engine or muffler while they are still hot during transport or when loading into a truck.

ELECTRIC SHOCK PREVENTION

- •Never operate in rain or snow.
- •Never touch the engine with wet hands or electric shock could occur.

FUEL

Make sure there is sufficient fuel in the tank.

SPECIFIC SAFETY INFORMATION

TAMPERING WITH FACTORY SET ENGINE SPEED SETTINGS.

Engine speed has been factory set to provide safe operation. Tampering with the engine speed adjustment could result in overheating and could cause a fire. Never attempt to "speed-up" the engine to obtain more performance.

ATTEMPTING TO FILL THE FUEL TANK WHILE THE ENGINE IS RUNNING.

Gasoline and gasoline vapors can become ignited by coming in contact with hot components such as the muffler, engine exhaust gases, or from an electrical spark.

Turn engine off and allow it to cool before adding fuel to the tank. Equip area of operation with a fire extinguisher certified to handle gasoline or fuel fires.

SPARKS, FIRE, HOT OBJECTS

Cigarettes, sparks, fires, or other hot objects can cause gasoline or gasoline vapors to ignite.

Add fuel to tank in well ventilated area. Make sure there are no sources of ignition near the engine.

INADEQUATE VENTILATION

Materials placed against or near the engine or operating in areas

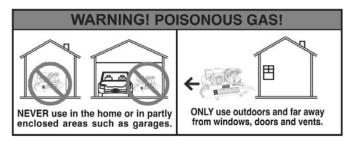
where the temperature exceeds 40° C ambient (such as storage rooms or garages) can interfere with its proper ventilation features causing overheating and possible ignition of the materials or buildings.

Operate engine in a clean, dry, well ventilated area a minimum of four feet from any building, object or wall. DO NOT OPERATE UNIT INDOORS OR IN ANY CONFINED AREA.

RISK OF BREATHING - INHALATION HAZARD

Operate engine in clean, dry, well ventilated area. Never operate unit in enclosed areas such as garages, basements, storage, sheds, or in any location occupied by humans or animals.

Keep children, pets and others away from area of operating unit. Breathing exhaust fumes will cause serious injury or death. **Gasoline engines produce toxic carbon monoxide exhaust fumes.**





WHEN REFUELING

STOP ENGINE! NO SMOKING! DO NOT SPILL GASOLINE!



KEEP FLAMMABLE MATERIALS AWAY. RISK OF FIRE.



GASOLINE ENGINES PRODUCE TOXIC CARBON MONOXIDE EXHAUST FUMES.

REFER TO THE HONDA ENGINE
INSTRUCTION MANUAL FOR FURTHER
INFORMATION ON SPECIFIC GUIDELINES
TO FOLLOW FOR SET-UP, OPERATION,
MAINTENANCE AND SERVICING

SPECIFICATIONS & BREAK-IN PROCEDURES



SPECIFICATIONS

Model	KC-5510G1
Honda engine	5.5 HP (GX160)
Engine no load speed	3,600 RPM
	163 co
Fuel	Unleaded gasoline
	3.1 L
	150 PSI
Operating pressure	95-125 PSI (field adjustable to 150 PSI)
	14.1
	11.2
Tank size	10 Gallon (2 x 5 gallon)

IMPORTANT HONDA ENGINE INSTRUCTIONS

REFER TO HONDA ENGINE INSTRUCTION MANUAL

NOTE: TO AVOID ENGINE DAMAGE AND VOIDING HONDA CANADA WARRANTY, IT IS VERY IMPORTANT TO READ THE HONDA INSTRUCTION MANUAL BEFORE OPERATING.

- -USER MUST ADD FUEL AND ENGINE OIL.
- -USER MUST BE FAMILAR WITH STARTING/STOPPING ENGINE AND SETTING ENGINE SPEED INSTRUCTIONS.
- -USER MUST FOLLOW ENGINE MAINTENANCE SCHEDULE.

IMPORTANT AIR COMPRESSOR BREAK-IN PROCEDURES

NOTE: SERIOUS DAMAGE TO THE AIR COMPRESSOR MAY RESULT IF THE FOLLOWING BREAK-IN INSTRUCTIONS ARE NOT CLOSELY FOLLOWED. THESE PROCEDURES ARE REQUIRED BEFORE THE AIR COMPRESSOR CAN BE PUT INTO SERVICE, AFTER REPLACING THE CHECK VALVE, AND WHEN A PISTON OR A CYLINDER SLEEVE ARE REPLACED.

- 1) Make sure the oil level in the crankcase reaches the centre dot of the oil sight glass (A) Fig.1.If needed, refer to maintenance section in this manual for instructions on filling the crankcase with oil.
- 2) Pull then turn regulator knob (A) Fig.2 counterclockwise to open air flow.
- 3) Move load master valve lever (B) Fig.2 to a horizontal position (unloaded position) as shown to allow the compressor pump to run without compressing air.
- 4) Make sure there is sufficient amount of fuel in the gas tank and oil in the engine crankcase as per instructions in the Honda engine instruction manual, then start the Honda engine.
- 5) Run the engine/compressor for 15 minutes. Make sure there is no tank pressure build-up (tank pressure gauge at zero).
- 6) After 15 minutes, move load master valve lever (B) Fig.2 down (loaded position) and turn the regulator knob clockwise. The compressor will begin to pump air in the air tanks.
- 7) When maximum tank pressure is reached, the compressor automatically unloads, bringing the engine to idle speed. The engine will remain at idle speed until tank pressure drops below the cut-in pressure setting. The engine then accelerates and the compressor pumps additional air into the air tanks. The compressor is now ready for use.

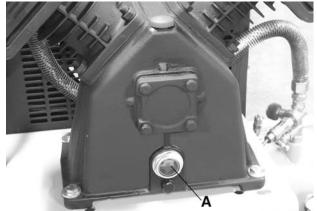


FIGURE 1

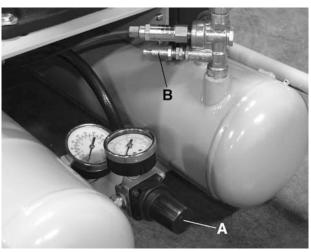


FIGURE 2



COMPRESSOR CONTROLS

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. Seperate air transformers which combine the function of air regulation, moisture and dirt removal should be used where applicable.

OPERATION CONTROLS

THROTTLE UNLOADER (A) FIG.3. The throttle unloader automatically slows down the engine to idle speed when the air tank pressure reaches the factory set "Cut-Out" pressure (maximum pressure). When the tank pressure drops below the factory set "Cut-In" pressure, the engine will automatically accelerate and the compressor will pump additional air into the air tanks.

TANK PRESSURE GAUGE (B) FIG. 3. The tank pressure gauge indicates the reserve air pressure in the air tanks.

OUTLET PRESSURE GAUGE (C) FIG.3. 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.

REGULATOR (D) FIG.3. The air pressure coming from the air tanks is controlled by the regulator. To unlock the regulator, pull it outwards then turn the regulator knob clockwise to increase pressure or counterclockwise to decrease pressure. To avoid minor readjustment after making a change in the pressure setting, always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting, first reduce the pressure less than that desired, then bring it up to the desired pressure. Depending on the air requirements of each particular accessory, the outlet regulated air pressure may have to be adjusted while operating the accessory.

ASME SAFETY VALVE (E) FIG. 3. The safety valve protect against overpressurization by "popping out" at its factory set pressure of 150 PSI.

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 an identical 150 PSI ASME approved safety valve.

CHECK VALVE (F) FIG.3. When the air compressor is operating, the check valve opens, allowing compressed air to enter the air tanks. When the air compressor reaches its "Cut-Out" pressure, the check valve closes, allowing air pressure to remain inside the air tanks.

DRAIN VALVES (A & B) FIG.4. The drain valves are located underneath each end of the air tanks and are used to drain condensation at the end of each use. Turn drain valve clockwise to open (no tank pressure build-up) or counterclockwise to close it (pressure build-up).

1/4" QUICK CONNECT COUPLERS (A & B) FIG.5. These 1/4" universal "one touch" quick connect couplers allow user to connect up to 2 air hoses to operate 2 air tools.

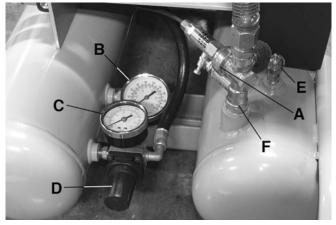


FIGURE 3

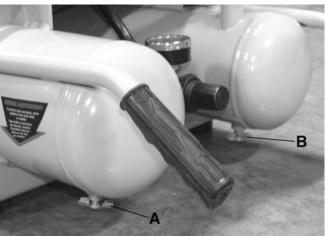


FIGURE 4

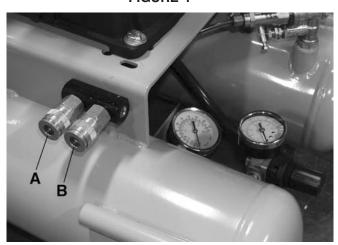


FIGURE 5

OPERATIONAL GUIDELINES & MAINTENANCE



OPERATIONAL GUIDELINES Factory Pressure Setting & Adjustment

This compressor comes with a factory operating pressure setting of 95-125 PSI (cut-in and cut-out), the cut-out pressure setting may be increased up to 150 PSI by making an adjustment to the load master valve assembly Fig.6.

Caution! We strongly recommend keeping the cut-out pressure setting between 125-135 PSI. Exceeding this pressure will put additional strain on the engine and pump and may cause the safety valve to occasionally "pop".

To increase the cut-out pressure setting, using a wrench, loosen the load master valve (A) Fig.6 by turning it counterclockwise. Then turn the load master valve fitting (B) clockwise. Make small adjustments at first and test the new setting until the desired cut-out pressure setting is obtained. Retighten the load master valve.

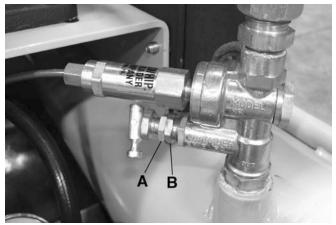


FIGURE 6

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 tanks. 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. An optional air control unit with dirt and moisture removal should be used to prevent these undesireable results.

MAINTENANCE

Before doing any maintenance or adjustments to your air compressor, the following safety precautions should be taken:

- Turn engine off and drain air tanks of pressure.

After Use:

- 1) Turn Honda engine off.
- 2) Pull ring on safety valve (E) Fig.3, allowing air to bleed from the tank until tank pressure is approximately 20 PSI. Release safety valve ring.
- 3) Drain moisture/water from air tanks. Open drain valves (A & B) Fig.4, turn them clockwise to open.

WARNING!: Water will condense in the air tanks. If not drained water will corrode and weaken the air tanks causing a risk of air tank rupture. **NOTE:** If a drain valve is plugged, pull ring on safety valve (E) Fig.3, and hold until all air pressure has been released. The valve can then be removed, cleaned, and reinstalled.

4) After the water has been completely drained, turn drain valves counterclockwise to close.

Daily or before each use

- Check pump oil level. Oil level must be in the centre of the red dot of oil sight glass.
- 2) Drain condensation from tank.
- 3) Check for any unusual noise or vibration.
- 4) Be sure all nuts and bolts are tight.

Monthly

1) Inspect air system for leaks by applying soapy water to all joints. Tighten those joints if leakage is observed.

Initial pump oil change must be done after the first 100 hours

- 1) Once initial pump oil change is done after 100 hours of operation, change pump oil every 300 hours or 3 months, which ever comes first. See changing oil instructions.
- Replace oil more often if used near paint spraying operations or in dusty environments.

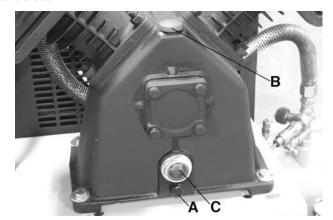


FIGURE 7

CHANGING OIL

To change oil, oil must be drained from the crankcase by removing oil drain bolt (A) Fig.7. Drain oil and replace oil drain bolt. To fill the crankcase with oil, first unscrew and remove oil fill cap (B), pour air compressor oil (approx. 900ml of SAE 30 weight non-detergent oil) into oil opening until the oil level reaches the red dot at the centre of the oil sight glass (C). Reinstall the fill cap (B).

KEEP COMPRESSOR CLEAN

Periodically blow out all air passages with dry compressed air. Clean all parts with a soft damp cloth. **CAUTION**: Wear safety glasses while using compressed air.

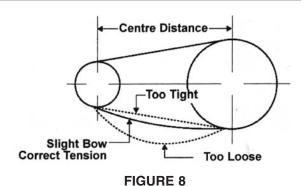


MAINTENANCE & TROUBLESHOOTING

REPLACING/TENSIONING DRIVE BELT

If the drive belt needs tensioning, the belt should be adjusted so when pressure is applied in the centre, there is approximately 1/2" slack. See Fig.8.

- 1) To install a new belt, remove belt guard. Loosen engine mount bolts and slide engine towards the pump, remove belt.
- 2) Install proper replacement belt, slide engine away from pump to provide recommended tension, align pulleys and fasten engine mount bolts.
- Reinstall belt guard. Belt tension should be checked after 20 hours of operation. Check belt tension monthly thereafter.



TROUBLE	POSSIBLE CAUSE	CORRECTIVE ACTION
Low pressure	Air leak in safety valve Drain cock open Restricted air filter Defective throttle uploader	Check valve manually by pulling. If condition persists, replace. Close drain cock Clean or replace as necessary Replace throttle uploader
Oil discharge in air	Improper oil viscosity Too much oil in crankcase Compressor overheated Restricted air filter	Replace oil with SAE 30 non-detergent oil Drain crankcase and fill to proper level Air pressure regulated too high Replace filter
Insufficient output, low discharge pressure	Restricted air filter Leaks in air lines, air valves, fittings Drive belt slipping Drain valve open Defective pressure gauge Leaking head gasket Worn piston, worn out rings Defective check valve	Replace filter Replace worn components Tension V-belt Close drain valve Replace pressure gauge Replace head gasket Replace worn parts Clean check valve or replace
Excessive vibration/ compressor knocks	Loose compressor, motor or guard Compressor not level Wrong oil being used Compressor valves loose or broken Check valve knocks at low pressure	Tighten components Level compressor Drain and replace with proper oil Check and replace worn or damaged valves Remove and clean check valve
Compressor uses too much oil	Restricted air filter Wrong oil viscosity Oil level too high Crankcase breather valve malfunction Worn piston rings Piston rings not seated.	Replace filter Drain and replace oil Fill with oil to proper level Replace crankcase breather Replace piston rings Allow 100 hours of normal operation for new rings to seat

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