KIPOR

KIPOR POWER

OPERATION MANUAL

PLEASE READ THIS MANUAL CAREFULLY.
IT CONTAINS IMPORTANT SAFETY INFORMATION.

WWW.KIPOR.COM

KIPOR

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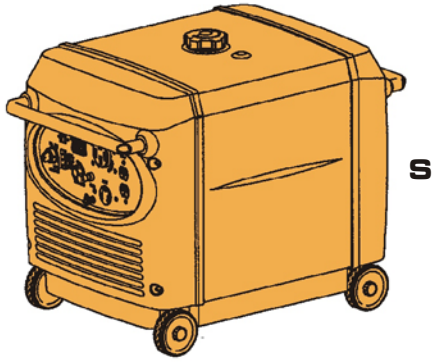


SINEMASTER
DIGITAL GENERATOR

IG6000
IG6000h

Version 5, Printing date 14/12/2006, Coast MADE IN CHINA

PREFACE

Thank you for purchasing a KIPOR generator.
This manual covers operation and maintenance of the IG6000, IG6000h generator.
All information in this publication is based on the latest product information available at the time of approval for printing.
We reserves the right to make changes at any time without notice and without incurring any obligation.
No part of this publication may be reproduced without written permission.
This manual should be considered a permanent part of the generator and should remain with it if it is resold.
Pay special attention to statements preceded by the following words;

⚠ WARNING Failure to properly follow these precautions can result in property damage, serious injury or DEATH!
Read all labels and the owner's manual before operating this generator.
Generators produce carbon monoxide, a poisonous, colorless, odorless gas that can cause death or serious injury.
Indoor use of a generator can kill quickly. Generators should be used outdoors only
Generators should be used outdoors only and away from garages and open windows and protected from rain and snow.
Check for spilled fuel or leaks. Clean and/or repair before use.
Always stop engine before refueling. wait 5 minutes before restarting.
Keep any source of ignition away from fuel tank, at all times.
The portable generator is not meant to be used as a permanent back-up power system for the home. A permanently installed stationary generator is designed to be safely used for this specific purpose.

⚠ WARNING Indicates a strong possibility of severe personal injury or death if instructions are not followed.

⚠ CAUTION Indicates a possibility of personal injury or equipment damage if instructions are not followed.

NOTE: Gives helpful information.
If a problem should arise, or if you have any questions about the generator, consult an authorized KIPOR dealer.

⚠ WARNING KIPOR generator is designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the generator. Failure to do so could result in personal injury or equipment damage.

CONTENTS

12. WARNING

Limited Warranty

Kipor Power Equipment

LENGTH OF WARRANTY:
Generators and/or batteries that are supplied with applicable products as standard, original equipment are covered by this warranty from the date of original retail purchase for a period of 2 years for residential use and 1 year for commercial applications. Units used in rental fleets or as demonstration models will be considered commercial usage. The warranty coverage is continual from the original date of purchase, and does not restart upon the replacement of any part or complete unit. Individual parts replaced at any point during the warranty period are only eligible for warranty coverage for the balance of the original warranty period.

ELIGIBILITY:
To be eligible for warranty service, the product must be purchased in North America from an authorized Kipor dealer. This warranty applies to the original retail purchaser only, and is not transferable. Proof of purchase is required. Goods exported from North America as well as goods sold at auction are excluded from warranty coverage.

COVERAGE:
Parts, labor and regular shipping costs will be covered by Coast Distribution for any failure that is proven to be a failure in material or workmanship under normal use during the applicable warranty time period. Coast Distribution reserves the right to repair or replace these parts at its option. Coast Distribution may request defective parts to be returned. Anything replaced under warranty becomes the property of Coast Distribution.

TO OBTAIN WARRANTY SERVICE:

Contact any authorized dealer or contact our national customer service center at:
Phone 1-877-544-4449
Fax 1-800-263-0280
E-mail: kiporcare@coastdist.com
If contacting us by fax or e-mail, be sure to include a description of the problem as well as all return contact info such as address, phone number, fax number, e-mail, etc. Engine serial number and proof of purchase is required.

EXCLUSIONS:

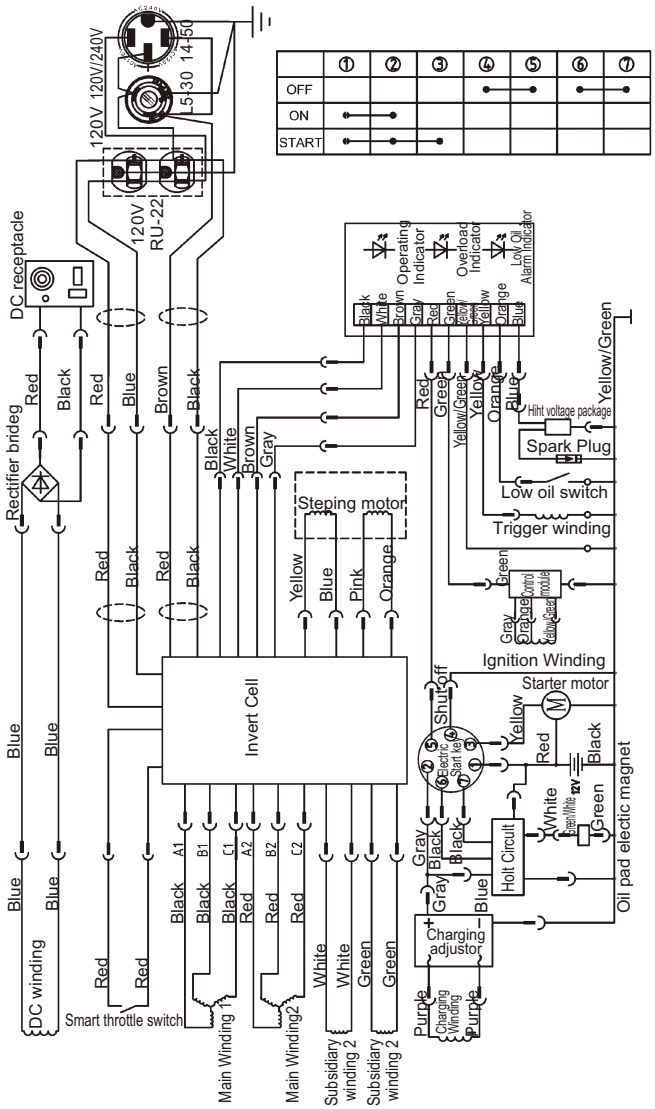
THIS WARRANTY DOES NOT EXTEND TO PARTS AFFECTED OR DAMAGED BY ACCIDENT AND/OR COLLISION, NORMAL WEAR, FUEL CONTAMINATION, USE IN AN APPLICATION FOR WHICH THE PRODUCT WAS NOT DESIGNED OR ANY OTHER MISUSE, NEGLECT, INCORPORATION OR USE OF UNSUITABLE ATTACHMENTS OR PARTS, UNAUTHORIZED ALTERATION, OR ANY CAUSES OTHER THAN DEFECTS IN MATERIAL OR WORKMANSHIP OF THE PRODUCT. THIS WARRANTY DOES NOT EXTEND TO NORMAL MAINTENANCE ITEMS SUCH AS SPARK PLUGS AND FILTERS.

DISCLAIMER OF CONSEQUENTIAL DAMAGE AND LIMITATION OF IMPLIED WARRANTIES:

COAST DISTRIBUTION DENIES ANY RESPONSIBILITY FOR LOSS OF TIME OR USE OF THE PRODUCT, TRANSPORTATION, COMMERCIAL LOSS, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGE. ANY IMPLIED WARRANTIES ARE LIMITED TO THE DURATION OF THIS WRITTEN LIMITED WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages. Therefore, the above exclusions and limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

11. WIRING DIAGRAM



	①	②	③	④	⑤	⑥	⑦
OFF							
ON							
START							

1. SAFETY INSTRUCTIONS

⚠ WARNING

■The generators are designed to give safe and dependable service if operated according to the instructions.
Read and understand the Owner's Manual before operating the generator.
Failure to do so could result in personal injury or equipment damage.

⚠ WARNING

■ Exhaust gas contains poisonous carbon monoxide a colorless, odorless, poisonous gas. Never fun the generator in an enclosed area. Be sure to provide adequate ventilation.

⚠ WARNING

■The muffler becomes very hot during operation and remains after the engine has stopped.
Be careful not to touch the muffler while it is hot.
Let the engine cool before storing the generator indoors.

⚠ WARNING

■ Gasoline is extremely flammable and explosive under certain conditions. Refuel in a well ventilated area with the engine stopped.
Keep away from smoking materials, sparks and other sources of combustion when refueling the generator.
■Wipe up spilled gasoline immediately.

⚠ WARNING

■ Connections for standby power to a building electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored, the generator may explode, burn, or cause fires in the building electrical system.

⚠ WARNING

■Always make a pre-operation inspection before you start the engine.

■Place the generator at least three feet or one meter away from buildings or other equipment during operation.

■ Operate the generator on a level surface to prevent fuel spillage and oil starvation.

■Know how to stop the generator quickly and understand the operation of all the controls. Never permit anyone to operate the generator without proper instruction.

■Keep children and pets away from the generator when it is in operating.

■Keep away from rotating parts while the generator is running.

■ The generator is a potential source of electrical shocks when misused; do not operate with wet hands. Do not operate the generator in rain or snow or allow it to get wet.

10. SPECIFICATIONS

SPECIFICATIONS

Model	IG6000/IG6000h
Rated frequency (Hz)	60
Rated voltage (V)	120/240
Rated current (A)	45.8/22.9
Rated output (Watts)	5500
Max output (Watts)	6000

DC output

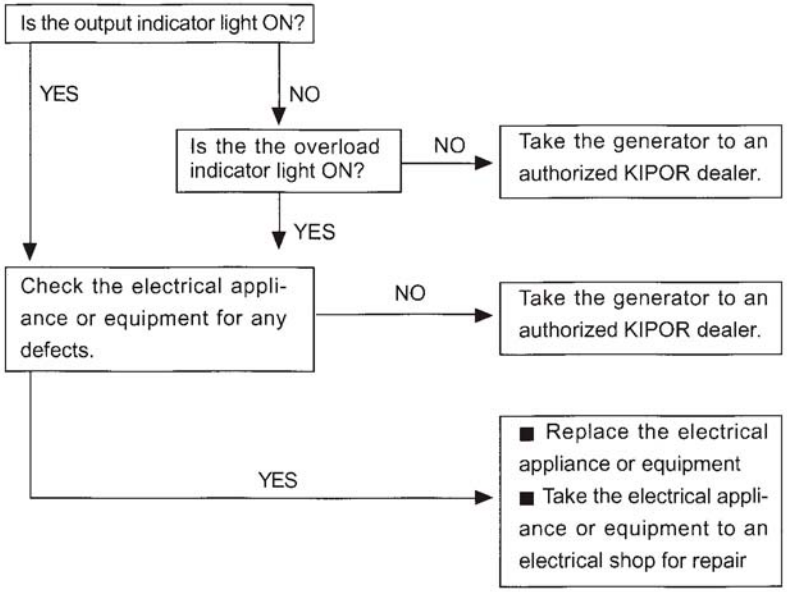
DC voltage	12V-8.3A
Electric circuit breaker	Without
Phase number	Single

Engine

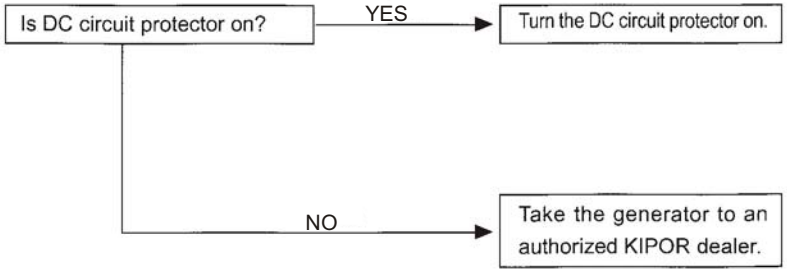
Model Type	KG390Gi
Type	Single cylinder, 4 stroke, vertical, air-cooled, OHV, gasoline engine
Displacement (Bore×Stroke)	23.7 cu. In. (389 cc)
Compression ratio	8.5:1
Rated power [kW(hp)/(r/min))]	7.7/3600
Rated rotation speed (rpm)	3600
Ignition system	T. C. I
Spark plug	WR7DC
Starting system	Electric starter/manual recoil
Fuel	Automotive unleaded gasoline, 87 octgane
Lube oil	SAE 10W30 (above CC grade)
Lube oil capacity	1.2 qt. (1.1L)

Fuel tank capacity (L)	5.8gal.(22L)
Continuous running time at rated output	7.5 Hours
Noise level(zero load~ full load) @ 23' (7M)	64-65 decibels
Overall dimension (L×W×H) in. (mm)	IG6000: 31.6×19.5×24.6(802×495×624) IG6000h: 49.3×19.9×30.3(235×650×770)
Dry weight -lbs(kg)	IG6000: 95 (209) IG6000h: 115(263)

Appliance does not operate:



No electricity at the DC receptacle:



2. SAFETY LABEL LOCATIONS

2.1 Outside view (See Fig.1)

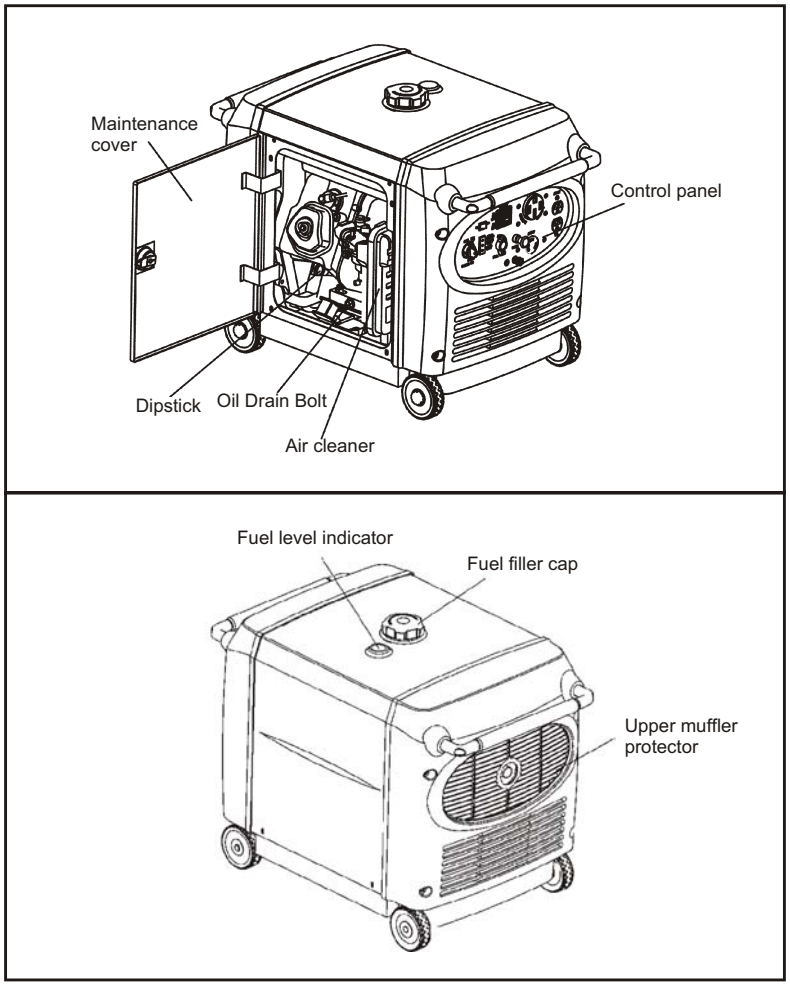


Fig.1 Outside view

2.2 Control panel (See Fig.2)

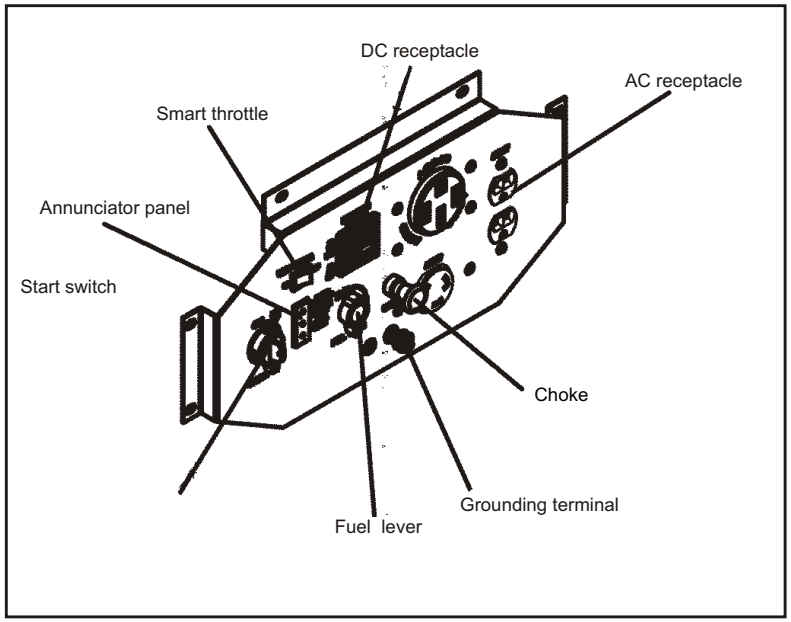


Fig.2 Control panel

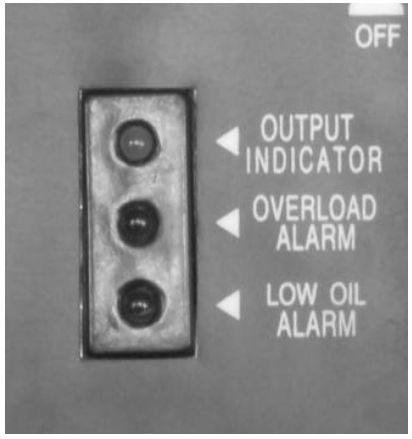
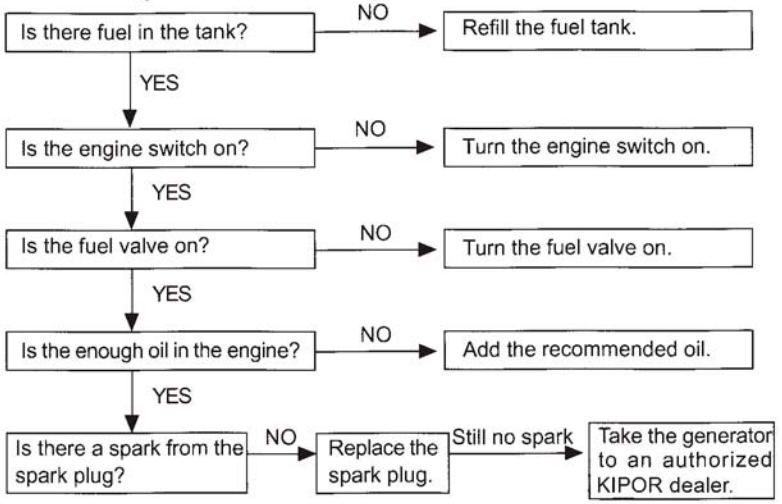


Fig. 3 Annunciator Panel

9. TROUBLESHOOTING

When the engine will not start:



⚠WARNING

■ Be sure there is no spilled fuel around the spark plug. Spilled fuel may ignite.

To check:
1) Remove the spark plug cap and clean any dirt from around the spark plug.
2) Remove the spark plug and install the spark plug in the plug cap.
3) Set the plug side electrode on the cylinder head to ground.
4) Crank the engine , sparks should jump across the gap.

Is the fuel reaching the carburetor? — NO → Clean the fuel filter cup.

To check:
1) Turn off the fuel valve and lossen the drain screw.
2) Fuel should flow from the drain when the fuel valve is turned on.

If the engine still does not start, tak the generator to an authorized KIPOR dealer.

8. TRANSPORTING/STORAGE

8.1 When transporting the generator, turn the fuel valve lever OFF and keep the generator level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

8.2 Exercising the generator
It is essential that the generator be exercised on a regular basis. This will prevent the accumulation of varnish or sludge in the fuel system and also remove moisture from the generator windings.
Exercise the generator by running it with at least a 1/2 load (1500W) for 60 minutes per month. Gasoline fuel treatments to prevent contamination of your fuel supply are available from your dealer. Fuel varnishing necessitating replacement of the carburetor is not a warrantable failure.

8.3 Before storing the unit for an extended period:
1. Ensure the storage area is free of excessive humidity and dust.
2. Drain the fuel
A. Open the left side maintenance cover.
B. Turn fuel valve lever to ON and then loosen the carburetor drain screw. Drain the gasoline from the carburetor and fuel tank into a suitable container.

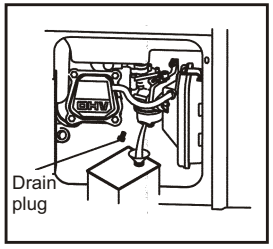


Fig. 20 Drain the fuel

3. Once a month, recharge the battery.
4. Change the engine oil.
5. Remove the spark plug and pour one tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil and then reinstall the spark plug.

3. PRE-OPERATION CHECK

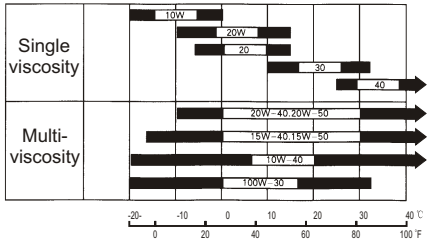
Be sure to check the generator on a level surface with the engine stopped.

3.1 Check the engine oil level.

⚠ WARNING

- Using nondetergent or 2-stroke engine oil could shorten the engine's service life.
- Use a high-detergent, premium quality four cycle engine oil, certified to meet or exceed U.S. Automobile manufacturer's requirements for API Service Classification SG/SF.
- Select the appropriate viscosity for the average temperature in your area.

SAE Viscosity Grades



Ambient Temperature

Open the service door. Remove the oil filler cap and wipe the dipstick with a clean rag.
Check the oil level by inserting the dipstick in the filler hole without screwing it in. If the oil level is below the end of the dipstick, refill with recommended oil up to the top of the oil filler neck. (See Fig.3)

(See Fig.3)

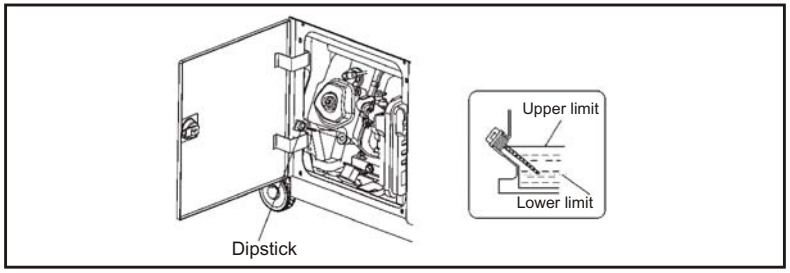


Fig.4 Oil level

⚠ CAUTION

- Running the engine with insufficient oil can cause serious engine damage.
- The oil Alert System will automatically stop the engine before the oil level falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, it is still advisable to visually inspect the oil level before each use.

3.2 Check the fuel level

Use unleaded 87 octane regular gasoline Do not use premium or high octane fuels.
The engine is tuned to run on regular gasoline and engine damage and poor performance may result from using higher octane fuels.
If the fuel level is low, refill to the shoulder of the fuel strainer, see fig.5.
Never use an oil/gasoline mixture or dirty gasoline.
Avoid getting dirt, dust or water in the fuel tank.
After refueling, tighten the fuel filler cap securely.

⚠ WARNING

- Gasoline is extremely flammable and is explosive under certain conditions.
- Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flame or sparks in the area where the engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the fuel filler cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapors. KEEP OUT OF REACH OF CHILDREN.

Fuel tank capacity: 5.8 gallons or 22 liters

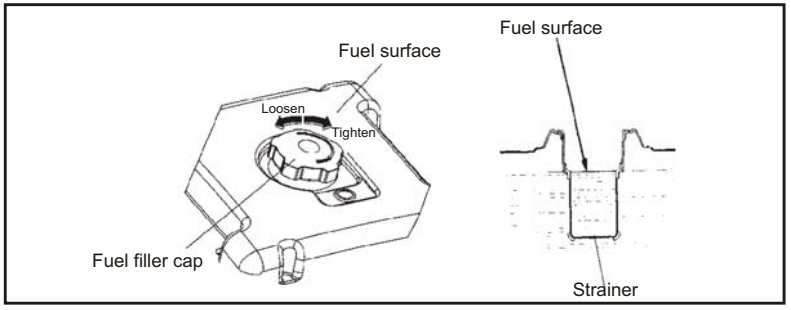


Fig.5 Fuel level scheme

⚠ CAUTION

- The spark arrester must be serviced every 100 hours to maintain its efficiency.

1.Remove the back cover.
2.Remove the exhaust tail pipe and spark arrester.
3. Use a brush to remove carbon deposits from the spark arrester screen.

⚠ NOTE

- Inspect the spark arrester screen for holes or tears. Replace if necessary.

4. Reinstall the spark arrester.
5. Reinstall the upper muffler protector.

⚠ CAUTION

■ The spark plug must be securely tightened. An improperly tightened plug
■ can become very hot and possibly damage the generator.
Never use a spark plug with an improper heat range.

7. Install the spark plug carefully, by hand, to avoid cross-threading.
8. After a new spark plug has been seated by hand, it should be tightened 1/2 turn with a wrench to compress its washer.
If a used plug is being reinstalled, it should only require 1/8 to 1/4 turn after being seated.
9. Reinstall the spark plug inspection cover and tighten the cover screw.
10. Close and latch the left side maintenance cover.

7.5 Spark arrester maintenance (See Fig.19)

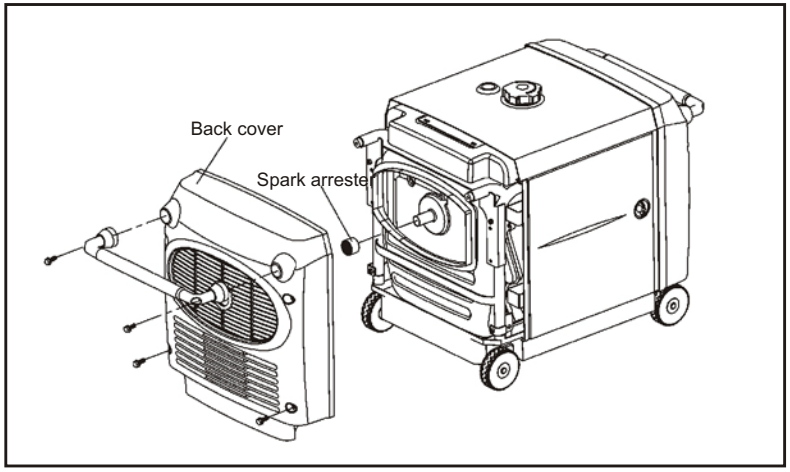


Fig. 19 Spark Arrestor Maintenance

⚠ WARNING

■ If the generator has been running, the muffler will be very hot. Allow it to cool before proceeding.

GASOLINES CONTAINING ALTERNATE FUELS

If you decide to use a gasoline containing ethanol or methanol, be sure its octane rating is no lower than the specification. Do not use a blend that contains more than 15% ethanol. Do not use gasoline containing methanol that does not also contain co-solvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if with co-solvents and corrosion inhibitors.

3.3 Check the air cleaner

Check the air cleaner elements to be sure they are clean and in good condition. Open the service cover. Remove the air cleaner cover and remove the paper air cleaner element. Replace the element if dirty or damaged. see fig. 6.

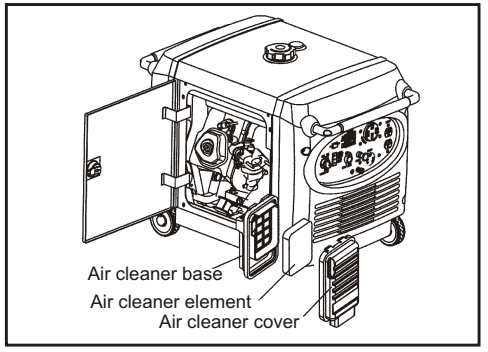


Fig.5 The structure of air cleaner

⚠ CAUTION

■ Never run the engine without the air cleaner. Rapid engine wear will result from contaminants such as dust and dirt, being drawn through the carburetor, into the engine.

4. STARTING THE ENGINE

⚠ CAUTION

■ When starting the generator after adding fuel for the first time, after long-term storage, or after running out of fuel, turn the fuel valve lever to the "ON" position and then wait for 10 to 20 seconds before starting the engine.

4.1 Turn the fuel valve lever to the ON position, see fig. 7.

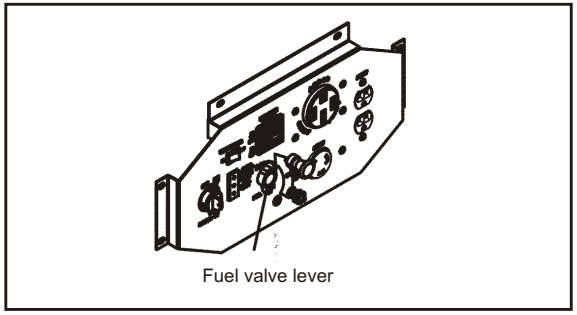


Fig.7 Fuel valve lever opening view

4.2 Pull the choke knob out to the CLOSED position
Do not use the choke when the engine is warm or the air temperature is high, see fig. 8.

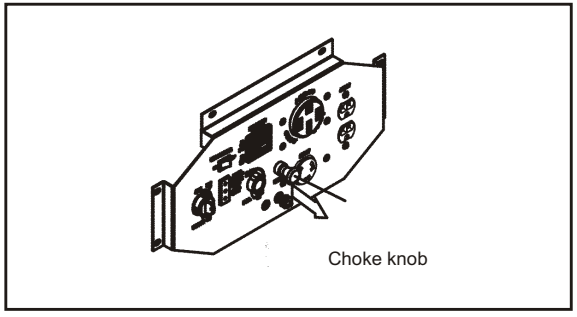


Fig.8 Choke knob off position view

1. Open the service door.
2. Unsnap the clips and remove the air cleaner cover.
3. Remove the air cleaner element and examine for dirt or damage. Replace it with a new one if necessary. Do not attempt to clean the paper element.
4. Reinstall the air cleaner cover.
5. Close and latch the service door.

7.4 Spark plug service

Recommended spark plug: WR7DC
To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.
1. Open the left side maintenance cover.
2. Remove the spark plug cap.

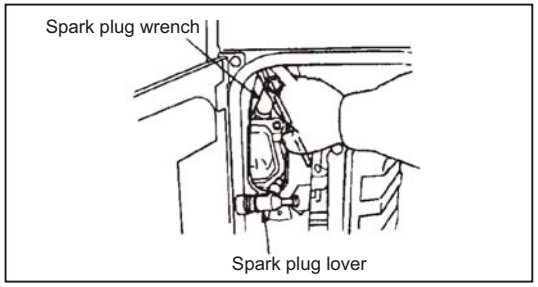


Fig.17 Spark Plug Access

3. Clean any dirt from around the spark plug base.
4. Use the wrench to remove the spark plug.
5.Visually inspect the spark plug. Discard it if the porcelain insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
6.Measure the plug gap with a feeler gauge. The gap should be 0.028-0.031 in (0.7-0.8 mm).Correct as necessary by carefully bending the side electrode.

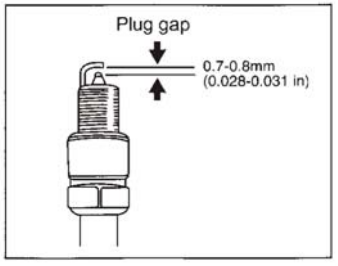


Fig. 18 Spark Plug Gap

7.2 Changing oil

Drain the oil while the engine is still warm to assure rapid and complete draining. See Fig.15.

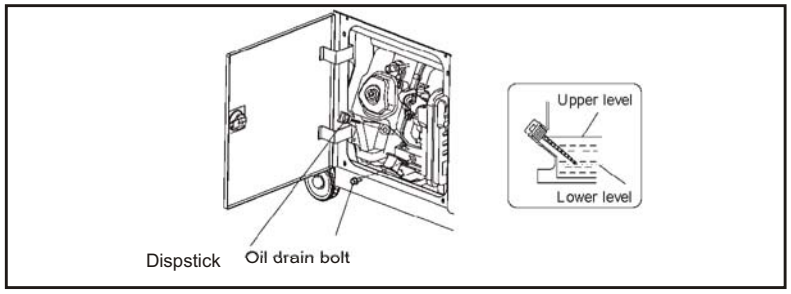


Fig.15 Change oil view

1. Open the service door.
2. Take out the oil outlet plug.
3. Remove the drain bolt, and drain the oil. Retighten the bolt securely.
4. Refill with the recommended oil and check the level.
5. Close the service door.

Engine oil capacity: 1.29t, 1.1 liter

7.3 Air cleaner service

A dirty air cleaner will restrict air flow to the carburetor and allow dirt to enter the combustion chamber.

Service the air cleaner regularly. Service more frequently when operating the generator in extremely dusty areas.

⚠ WARNING

■ Do not use gasoline or low flash point solvents for cleaning. they are flammable and explosive under certain conditions.

⚠ CAUTION

■ Never run the generator without the air cleaner. Rapid engine wear may result.

4.3 Insert the engine key, and turn the engine switch to on position, see Fig.9.

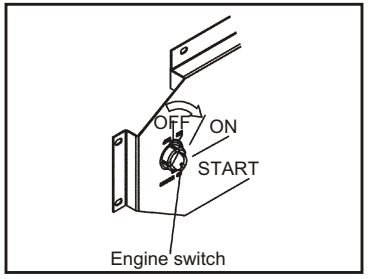


Fig.9 On Position

4.4 Turn the engine switch to the START until the engine has started, Do not engage the starter for more than 10 seconds. See Fig 10.

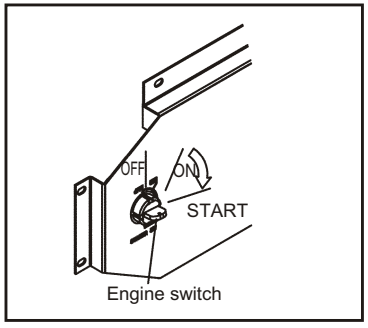


Fig.10 Starting Position

4.5 Push the choke knob to the OPEN position as the engine warms up, see Fig.11.

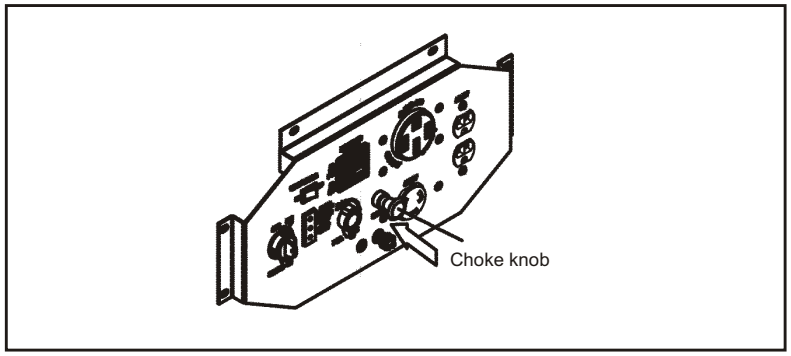


Fig.11 Choke knob opening view

High altitude operation

At high altitude, the standard carburetor air-fuel mixture will be excessively rich. Performance will decrease, and fuel consumption will increase.

High altitude performance can be improved by installing a smaller diameter main jet in the carburetor. If you continuously operate the generator at altitudes higher than 5000 feet or 1500 meters above sea level, have your authorized dealer install the high altitude main jet kit. No other adjustments to the carburetor are necessary

Even with suitable carburetor re-jetting, engine horsepower will decrease approximately 3.5% for each 1000 feet or 305 meter increase in altitude. The effect of altitude on the horsepower will be greater than this if no carburetor modification is made. For use at lower altitudes, be sure to have your dealer return your generator to the original specification.

⚠ CAUTION

■ Operation of the generator at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture.

7. MAINTENANCE

The purpose of the maintenance and adjustment schedule is to keep the generator in the best operating condition.

⚠ WARNING

■ Shut off the engine before performing any maintenance. If the engine must be run, make sure the area is well ventilated. The exhaust contains poisonous carbon monoxide gas.

⚠ CAUTION

■ Use genuine Kipor parts or the equivalent. The use of replacement parts which are not of equivalent quality may damage the generator and void the warranty.

Maintenance Schedule

REGULAR SERVICE PERIOD(1) Perform at every indicated month or operating hour interval,whichever occurs first. ITEM		EACH USE	FIRST MONTH OR 20HRS	EVERY 3 MONTHS OR 50HRS	EVERY 6 MONTHS OR 100 HRS	EVERY YEAR OR 300 HRS
Engine oil	Check	○				
	Change		○		○	
Air cleaner	Check	○				
	Clean			○ (2)		
Spark plug	Clean-adjust				○	
Spark arrester	Clean				○	
Fuel sediment cup	Clean				○	
Valve clearance	Check-adjust					○ (3)
Fuel tank and strainer	Clean					○ (3)
Fuel line	Check	Every 2 years (Replace if necessary)(3)				

NOTE: (1) Log hours of operation to determine proper maintenance.
(2) Service more frequently when used in dusty areas.
(3) These items should be serviced by an authorized dealer, unless the owner has the proper tools and is mechanically proficient. See the Service Manual.

⚠ CAUTION

- Do not attempt to start an automobile engine with the generator still connected to battery. The generator may be damaged.
- Connect the positive battery terminal to the positive charging cord. Do not reverse the charging cables, or serious damage to the generator and/or battery may occur.

⚠ WARNING

- The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging.
- The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
  A. If electrolyte gets on your skin, flush with water.
  B. If electrolytes gets in your eyes, flush with water for at least 15 minutes and call a physician.
- Electrolyte is poisonous.
- Keep out of reach of children.

2. Start the engine

- The DC receptacle may be used while the AC power is in use.
- An overloaded DC circuit will trip the DC circuit protector (push button pops out).

If this happens, wait a few minutes before pushing in the circuit protector to resume operation.

5.6 Oil alert system

The oil alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase falls below a safe limit, the oil alert system will automatically shut down the engine (the engine switch will remain in the ON position).
If the oil alert system shuts down the engine, the oil alert indictor light (red) will come on when you operate the starter, and the engine will not run. If this occurs, add engine oil to the prescribed level.

6. STOPPING THE ENGINE

To stop the engine in an emergency, turn the engine switch OFF.
In normal use:
1. Switch off the connected equipment and pull the plug from the receptacle.
2. Turn off the engine switch.
3. Turn the fuel valve lever to the OFF position.

⚠ CAUTION

- Continually stopping the generator with a load applied can lead to eventual damage of the inverter module.

5. GENERATOR USE

⚠ WARNING

- To prevent electrical shock from faulty appliances, the generator should be grounded. The ground terminal is connected to the generator frame and the ground terminal of each receptacle. Connect a length of heavy gauge wire between the generator's ground terminal and an external ground source if required by local code.

⚠ CAUTION

- Limit operation requiring a maximum power rating of 6000 watts to 30 minutes. For continuous operation, do not exceed the rated power of 5500 watts. In either case, the total wattage of all appliances connected must be considered.
- Do not exceed the current limit specified for any one receptacle.
- Do not connect the generator to a household circuit. This could cause the damage to the generator or to electrical appliances in the house.
- Do not modify or use the generator for other purposes than it is intended for. Also observe the following when using the generator.
  A.Do not connect generators in parallel.
  B.Do not connect an extension to the exhaust pipe.
  C.Do not operate the generator with any covers removed or in a closed compartment
- When an extension cable is required, make sure you use the proper size and length.
  16 Gauge Cords- Any 16 gauge cord between 0 and 100 feet long will adequately handle tool and appliance loads up to 10 amps
  14 Gauge Cords- a 14 gauge cord between 0 and 50 feet long will adequately handle loads between 10 and 15 amps.
  12 Gauge Cords- If your load is between 10 and 15 amps and the length of the cord is 50 to 100 feet, you need a 12 gauge cord to safely power any tool.
- Keep the generator away from other electric cables or wires such as commercial power supply lines.

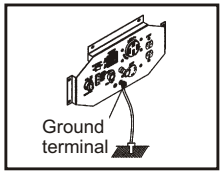


Fig.12 Starter motor ground terminal view

⚠ CAUTION

- The DC receptacle may be used while the AC power is in use.
- If you use both at the same time, be sure not to exceed the total power for AC and DC.

5.1 AC applications

1. Start the engine and make sure the output indicator light (green) comes on.
2. Confirm that the appliance to be used is switched off, and plug in the appliance. See Fig.13.

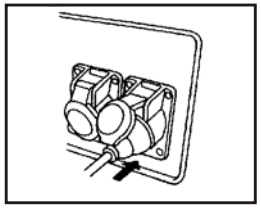


Fig.13. Connecting the lode

⚠ CAUTION

- Substantial overloading that continuously lights the overload indicator light (red) may damage the generator. Marginal overloading that temporarily lights the overload indicator light (red) may shorten the service life of the generator.
- Be sure that all appliances are in good working order before connecting them to the generator. If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn off the generator engine switch immediately. Then disconnect the appliance and examine it for signs of malfunction.

5.2 AC Load Management

The generator has the following receptacles:
1- 120V/20A 5-20R duplex
1- 120V/30A L5-30R
1- 240V/50A 14-50R
Simultaneous operation of 120 and 240 volt appliances are possible but the total amperage of the applied loads cannot exceed the generator rating.

5.3 Output and Overload Indicators

Before connecting an appliance to the generator, check that it is in good order, and that its electrical rating does not exceed that of the generator. Then connect the power cord of the appliance, and start the engine.

⚠ NOTE

- Before connecting an appliance to the generator, check that it is in good order, and that its electrical rating does not exceed that of the generator. Then connect the power cord of the appliance, and start the engine.

⚠ NOTE

- When an electric motor is started, both the overload indicator light (red) and the output indicator light (green) lights may go on simultaneously. This is normal if the overload indicator light (red) goes off after about four(4) seconds. If the overload indicator light (red) stays on, consult you dealer.

5.4 Smart Throttle

Engine speed is kept at idle automatically when the electrical load is disconnected and it returns to the proper speed when the load is reconnected. This position is recommended to minimize fuel consumption while in operation. See Fig. 14

Fig. 14 Smart Throttle Switch

⚠ NOTE

- When high electrical load appliances are connected simultaneously. turn the smart throttle switch to the OFF position to reduce voltage changes.
- Smart throttle system does not operate sufficiently if the electrical appliance requires the much electric power.

OFF:
Smart throttle system does not operate.

5.5 DC application

The DC receptacle may be used for charging 12 volt automotive-type batteries only.
Do not use to power any DC appliance or motor.
Output voltage is 15-30V, current is 8.3A, when current receptacle on load.

1. Connect the charging cable to the DC receptacle of the generator and then to the battery terminals.

⚠ WARNING

- To prevent the possibility of creating a spark near the battery, connect charging cable first to the generator, then to the battery. Disconnect cable first at the battery.
- Before connecting the charging cable to a battery that is installed in a vehicle, disconnect the vehicles grounded battery cable. Reconnect the vehicle's grounded battery cable after the charging cables are removed. This procedure will prevent the possibility of a short circuit and sparks if you make accidental contact between a battery terminal and the vehicle's frame or body.