

Beside Jingyi Road

Third Stage Development Section of Wangzhuang Industry Area, Wuxi High & New Technology Industry Development Zone Wuxi, Jiangsu Province, PRC TEL: 0086-510-85200888 FAX: 0086-510-85200999 E-MAIL: kipor@kipor.com





SINEMASTER DIGITAL GENERATOR

IG6000 IG6000h owner's manual

Version 2, Printing date December 29 2008. Coast CARB

MADE IN CHINA

# PREFACE

Thank you for purchasing a KIPOR generator from the Coast Distribution System.

This manual covers operation and maintenance of the California Air Resources Board (CARB) approved IG6000 and IG6000h generator.

All information in this publication is based on the latest product information available at the time of approval for printing.

We reserve 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:

# 

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.

Do not operate this generator inside any enclosed compartment. This includes an RV generator compartment.

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



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

1. SAFETY INSTRUCTIONS 1
2. COMPONENT LOCATIONS
2.1 Outside View
2.2 Control Panel ····································
2.3 Serial Number and Bar Code Location ······ 4
3. PRE-OPERATION CHECK 5
3.1 Engine Oil
3.1 Fuel ······ 6
3.3 Air Cleaner ······7
4. STARTING THE ENGINE 8
4.1 Starting Procedure ······ 8
4.2 High Altitude Operation ······10
4.3 Ambient Temperature ······10
5. GENERATOR USE ········11
5.1 Warnings and Cautions 11
5.2 AC Power Applications ······12
5.3 Output and Overload Indicators ······12
5.4 AC Load Management ······13
5.5 Smart Throttle ······14
5.6 Air Conditioning Operation ······14
5.7 DC Power Operation 15
5.8 Low Oil Alarm System 16
6. STOPPING THE ENGINE 17
6.1 Normal Shutdown ······17
6.2 Emergency Stop ······17
7. MAINTENANCE
7.1 Emission Control System 18
7.2 Maintenance Schedule ······20
7.3 Changing Oil······21
7.4 Air Cleaner Service ·····21
7.5 Spark Plug Service 22
7.6 Spark Arrestor Maintenance ······23
8. TRANSPORTING/STORAGE ······25
8.1 Transporting ······25
8.2 Generator Exercise ·····25
8.3 Extended Storage ······25

9. TROUBLESHOOTING    26      9.1 No Start    26      9.2 No AC Power    27      9.3 No DC Power    27
10. SPECIFICATIONS ······28
11. WIRING DIAGRAM ······29
12. WHEEL KIT INSTALLATION
13. WARRANTY 32   13.1 Limited Warranty- Kipor Power Products 32   13.2 Emission Control Warranty 33
14. EMISSION CONTROL SYSTEM

# **1. SAFETY INSTRUCTIONS**

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.

# A 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.

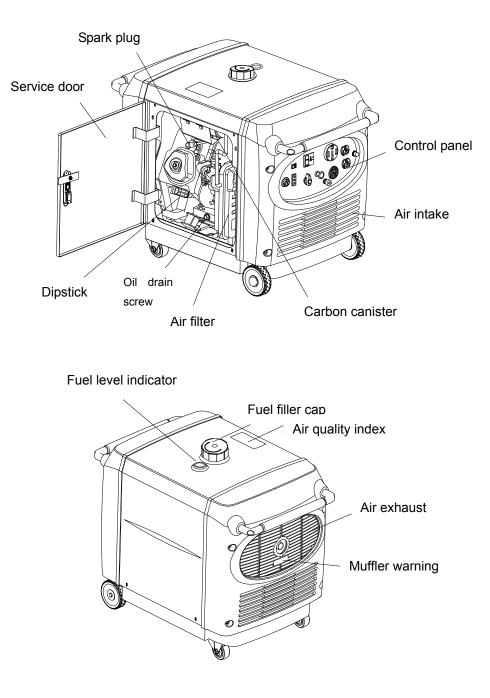
Keep children and pets away from the generator when it is in operating.

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

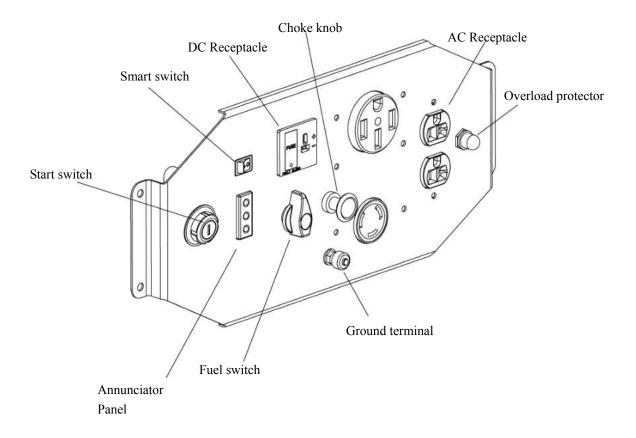
The generator is a potential source of electrical shocks when misused; do not operate with wet hands. Do not operate the generator in rain or snow or allow it to get wet.

# 2. COMPONENT LOCATIONS

#### 2.1 Outside view



## 2.2 Control panel



#### 2.3 Serial Number and Bar Code Location

The engine serial number is stamped on the engine block to the left of the oil drain plug. In most cases the battery will have to be removed to view it clearly. Refer to this number when ordering parts or making technical inquiries.



The bar code label is found in three locations: on the generator chassis below the service door, on the packing carton, and on the owner's manual inside cover. The bar code identifies the production date and is used by your dealer and the customer service center for warranty administration.

Please record this information below and keep this manual in a safe place along with the bill of sale.

Serial Number \_\_\_\_\_

Bar Code Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

365625d

# **3. PRE-OPERATION CHECK**

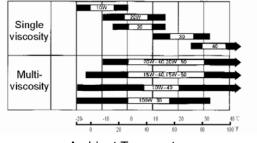
Be sure to check the generator on a level surface with the engine stopped.

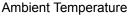
#### 3.1 Engine Oil

### A WARNING

- Using non detergent 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.

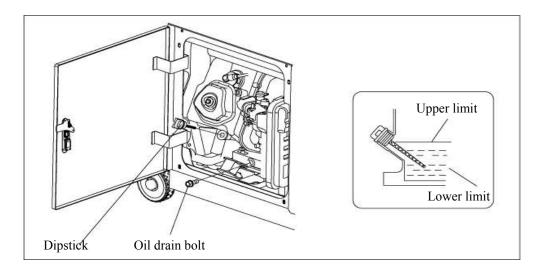
SAE Viscosity Grades





Open the service door. Remove the oil filler cap and wipe the dipstick with a clean rag. Engine oil capacity is 1.2 quarts or 1.1 liters.

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.



# A 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 Fuel

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.

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.

# A WARNING

Gasoline is extremely flammable and is explosive under certain conditions.

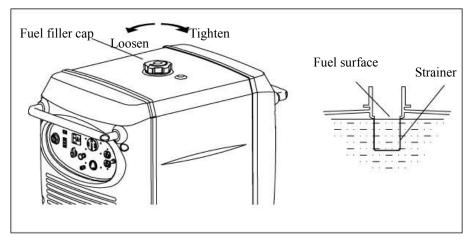
■ Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flame or sparks in the area where the engine is refueled or where gasoline is stored.

■ 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: 5.3 gallons or 20 liters



Fuel level

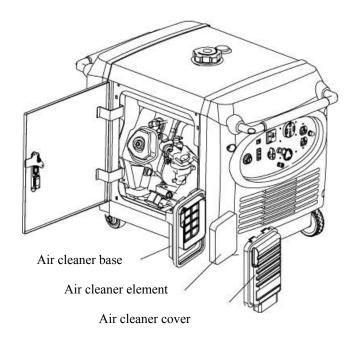
#### **GASOLINES CONTAINING ALTERNATE FUELS**

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. An ethanol blend will produce lower power and higher fuel consumption. Do not use gasoline containing methanol.

#### 3.3 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.



Air Cleaner Assembly

# A 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.

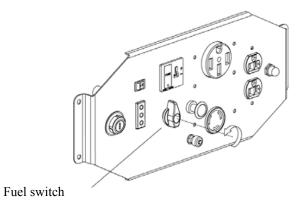
# 4. STARTING THE GENERATOR

# A 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" posit-ion and then wait for 10 to 20 seconds before starting the engine.

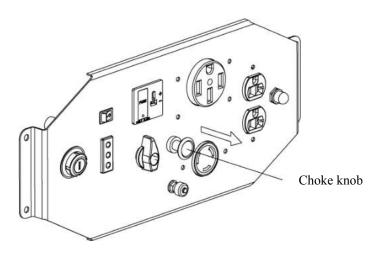
#### 4-1. Starting Procedure

A. Turn the fuel valve lever to the ON position.



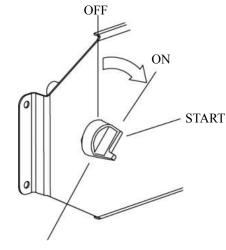
Fuel switch

B. **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.



**Closed Choke** 

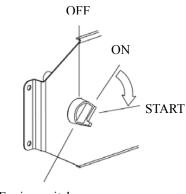
C. Insert the engine key, and turn the engine switch to on position.



Engine switch



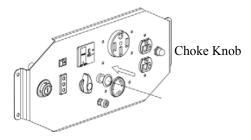
**D. Turn the engine switch to the START until the engine has started**. Do not engage the starter for more than 10 seconds.



Engine switch

Starting Position

E. Push the choke knob to the OPEN position as the engine warms up.



The choke is open

#### 4.2High 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.

# A 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.

#### 4.3 Ambient Temperature

Generator output generally derates 1% for every 10° F (5.5° C) above 85° F (29° C). The normal operating range of the generator is -20° to 113° F (-29° to 45° C).



- ■Do not operate the generator when the ambient temperature is below -20° F (-29°)
- Do not operate the generator when the ambient temperature is above 113° F (45° C)

# 5. GENERATOR USE

#### 5.1 Warnings and Cautions

# A 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.

# A 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

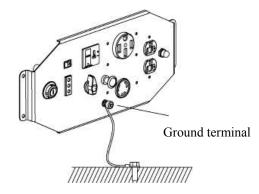
■When an extension cable is required, make sure you use the proper size and length.

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.

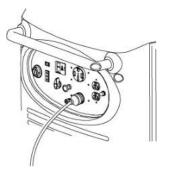
■Keep the generator away from other electric cables or wires such as commercial power supply lines.



Grounding the Generator

#### 5.2 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.



#### Applying Loads

# A 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.

#### 5.3 Output and Overload Indicators

The green output indicator light will remain on during normal operating conditions. If the generator is overloaded to the point that the max power rating of 25 amps is exceeded or if there is a short in the connected appliance the output indicator will go out and the overload indicator will go on and current to the connected appliance will be shut off. Stop the engine if the overload indicator light comes ON and investigate the overload source. The engine will continue to run even though it is not producing any AC power. The engine must be stopped and then the generator restarted to resume normal operation.

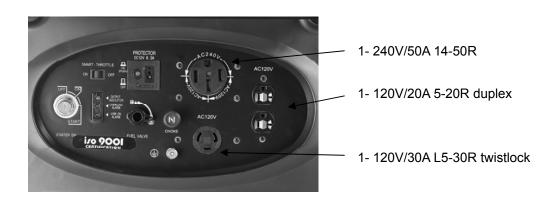
The 20A duplex receptacle is protected by a push button style circuit protector. If the current load exceeds 20 amps, the button will pop and current is shut off to the receptacle. Reduce the load and push the button back in to restore current.





#### 5.4 AC Load Management

The generator has the following receptacles:



Maximum load from the various receptacles is as follows:

- 240V AC at 25 amps is available from the 50A receptacle. Connecting this receptacle to a 50A service receptacle will allow 25 amps @ 120 volts to two separate legs.

- 25 amps from the L5-30R twist lock receptacle
- 25 amps from the duplex receptacle.

Simultaneous operation of 120 and 240 volt appliances is possible but the total amperage of the applied loads cannot exceed the generator receptacle rating.

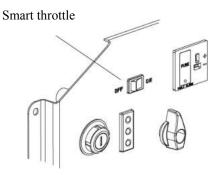
Under no circumstances will the generator permit any AC load greater than 25 amps to any one receptacle.

# A 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.

#### 5.5 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





#### 🛕 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.

#### 5.6 Air Conditioning Operation

For best results, the SMART throttle switch should be in the off position. Bring the generator to a normal operating temperature before applying the air conditioning load. Always allow a 2 minute wait period when manually cycling an air conditioner off and on. A longer wait period may be required under unusually hot weather conditions. Additionally, all other loads should be turned off until the air conditioner has started and is performing normally. It is also important to follow the air conditioner manufacturer's instructions for starting and restarting for proper operation. Some air conditioner manufacturers offer a start capacitor as an extra cost option. The lack of a start capacitor can cause the air conditioner to draw too high a starting current and overload the generator. Contact your air conditioner dealer if you consistently have problems starting your air conditioner with the generator. This generator is not recommended for air conditioners exceeding 13,500 BTUs.

#### 5.7 DC application

The DC receptacle may be used for charging 12 volt automotive-type batteries only. It is not designed to operate DC motors. Output voltage is 15-30V. DC output will vary according to the position of the Smart throttle switch.

Connect the charging cable to the DC receptacle of the generator and then to the battery terminals.
 Use only the charging cable supplied with the generator.

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

# 

CAUTION

- 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.

If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.

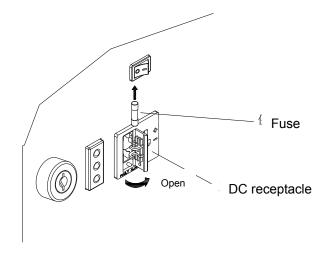
■ Keep out of reach of children.

# 

The DC output is to be used to charge batteries only. Serious damage to the stator windings can occur if connected to a DC motor or transformer.

- 2. Start the generator.
- The DC receptacle may be used while the AC power is in use.

■ The DC receptacle is protected from an overload with a fuse. If the DC circuit is overloaded, the 5 amp fuse will blow and power to the DC receptacle will cease. The red light on the DC panel will illuminate. The fuse is located in the receptacle and is accessed by snapping open the fuse panel. Replace the fuse with one of the same capacity. Using a higher rated fuse may cause damage to the generator alternator.



#### 5.8 Low oil alarm system

The low oil alarm 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 low oil alarm system will automatically shut down the engine (the engine switch will remain in the ON position). If the low oil alarm system shuts down the engine the red low oil alarm indictor light will come on when you operate the starter, and the engine will not run. If this occurs, search for any oil leaks. Add engine oil to resume normal operation.



# 6. STOPPING THE GENERATOR

### 6.1 Normal Shutdown

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.

#### 6.2 Emergency Shutdown

To stop the generator in an emergency, turn the engine switch to the OFF position.

# A CAUTION

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

# 7. MAINTENANCE

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



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.

#### 7.1 Emission Control System

#### **Emission source**

Exhaust gas contains carbon monoxide, nitrous oxide (NOx), and hydrocarbons. It is very important to control the emissions of  $NO_X$  and hydrocarbons as they are a major contributor to air pollution. Carbon monoxide is a poisonous gas. The emission of fuel vapors is a source of pollution as well. The Kipor generator engine utilizes a precise air-fuel ratio and emission control system to reduce the emissions of carbon monoxide,  $NO_X$ , hydrocarbons, and evaporative fuel emissions.

#### Regulation

Your engine has been designed to meet current Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) clean air standards. The regulations dictate that the manufacturer provide operation and maintenance standards regarding the emission control system. Tune up specifications are provided in the Specifications section and a description of the emission control system may be found in the appendix to this manual, Adherence to the following instructions will ensure your engine meets the emission control standards.

#### Modification

Modification of the emission control system may lead to increased emissions. Modification is defined as the following:

- Disassembling or modifying the function or parts of the intake, fuel or exhaust system.
- Modifying or destroying the speed governing function of the generator.

#### Engine faults that may affect emission

Any of the following faults must be repaired immediately. Consult with your authorized Kipor service center for diagnosis and repair:

- Hard starting or shut down after starting
- Unstable idle speed
- Shut down or backfire after applying an electrical load
- Backfire or afterfire.
- Black smoke and/or excessive fuel consumption

#### **Replacement parts and accessories**

The parts making up the emission control system applied to Kipor engine have been specifically approved and certified by the regulatory agencies. You can trust the replacement parts supplied by Kipor have been manufactured to the same production standard as the original parts. The use of replacement parts or accessories which are not designed by Kipor may affect the engine emission performance. The manufacturers of replacement parts and accessories have the responsibility to guarantee that their replacement products will not adversely affect emission performance.

#### Maintenance

Maintain the generator according to the maintenance schedule in this section. Service items more frequently when used in dusty areas, or under conditions of high load, temperature, and humidity.

#### Air Quality Index (California certified models)

CARB requires that an air quality index label be attached to every certified engine showing the engine emission information for the emission duration period. The label is provided for the user to compare the emission performance of different engines. The lower the air index, the better the engine emission performance. The description of durability is helpful for the user to learn the engine emission duration period and the service life of emission control system. Refer to the warranty section of this owner's manual for more information.

Description	Emission duration period	
Short-term	50 hrs(0-80CC), 125 hrs(>80CC)	
Medium-term	125 hrs (0-80CC) , 250 hrs (>80CC)	
Long-term	300 hrs(0-80CC), 500 hrs(>80CC), 1000 hrs(≥225CC)	



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

### 7.2Maintenance 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 100HRS	EVERY MONTHS OR 300HRS
Engine oil	Check	0				
	Change		0		0	
Air cleaner	Check	0				
	Clean			O(2)		
Spark plug	Clean-adjust				0	
Spark arrester	Clean				0	
Fuel sediment cup	Clean				0	
Valve clearance	Clean-adjust					O(3)
Fuel tank and strainer	Clean					O <b>(3)</b>
Fuel line	Check	E١	/ery 2 yea	rs (Replace	if necessary	() (3)

NOTE: (1) Log hours of operation to determine proper maintenance.

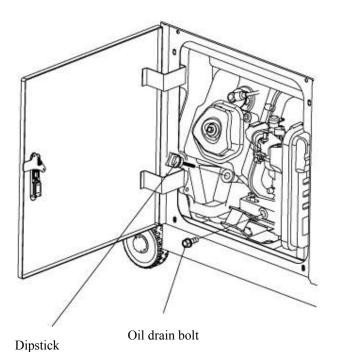
- (2) Service more frequently when used in dusty areas.
- (3) These items should be serviced by an authorized dealer, unless the owner has the proper tools and is mechanically proficient. See the Service Manual.

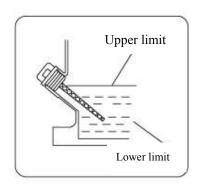
Part Description	Coast Distribution Number
Spark Plug	66164
Air Filter Element	66191
Fuel Strainer	66262
Spark Arrestor	66242

To locate a parts dealer in North America, visit the website www.kipornorthamerica.com.

#### 7.3 Changing oil

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





- 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.

#### A WARNING

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

### A CAUTION

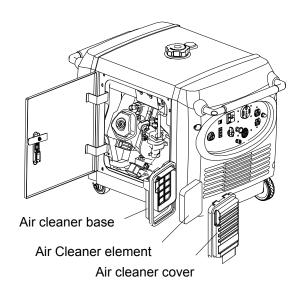
■Never run the generator without the air cleaner. Rapid engine wear may result.

1. Open the left side maintenance 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.

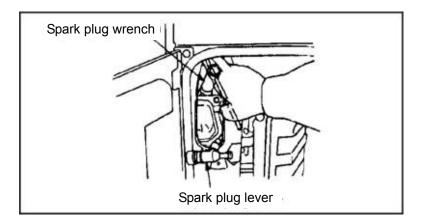
- 4. Reinstall the air cleaner cover.
- 5. Close and latch the service door.



#### 7.4 Spark plug service

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.



- 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.

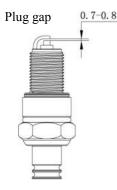


Fig. 17 Spark Plug Gap

# A 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

### A WARNING

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

# A CAUTION

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

1. Remove the two bolts securing the handle.

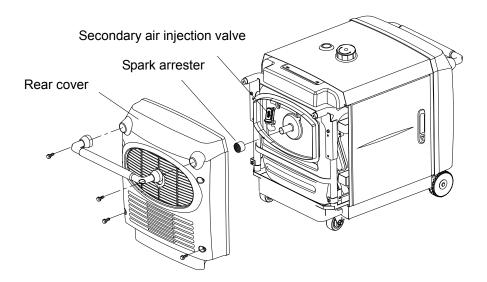
- 2. Remove the rear cover bolts and carefully remove the rear cover.
- 3. Unscrew the clamp on the spark arrestor and remove it from the exhaust pipe.
- 4. Use a brush to remove carbon deposits from the spark arrester screen.

# A NOTE

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

5. Reinstall the spark arrester and tighten securely.

6. Reinstall the rear cover.



# 8. TRANSPORTING/STORAGE

#### 8.1 Transporting.

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. Do not transport the generator in a vehicle with fuel in the tank.

#### 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. Additionally, seals and other moving engine parts are kept lubricated and the battery is recharged.

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.

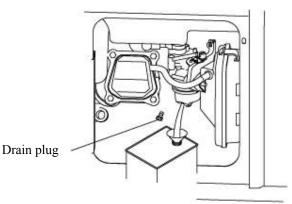
#### 8.3 Extended storage

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.

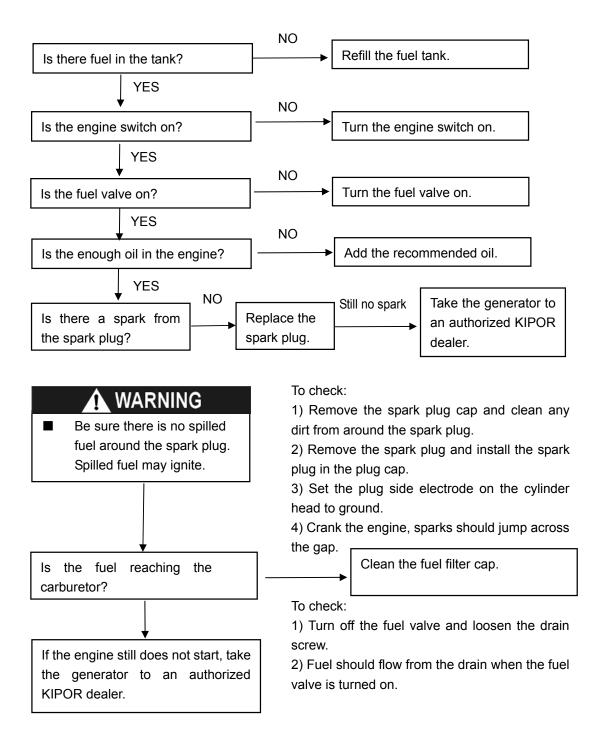


- 3. Once a month, recharge the battery.
- 4. Change the engine oil.

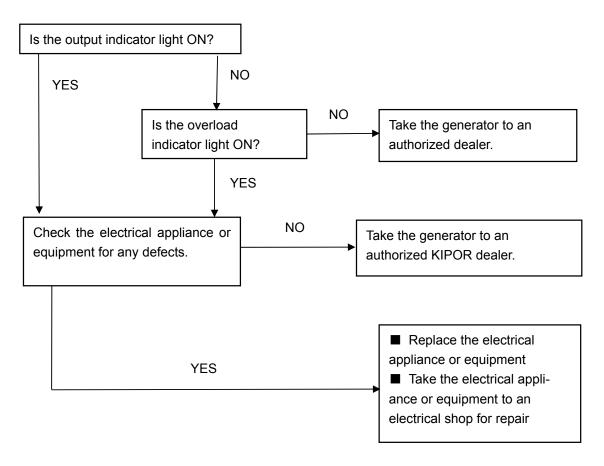
5. Remove the spark plug and pour one tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil and then reinstall the spark plug.

# 9. TROUBLESHOOTING

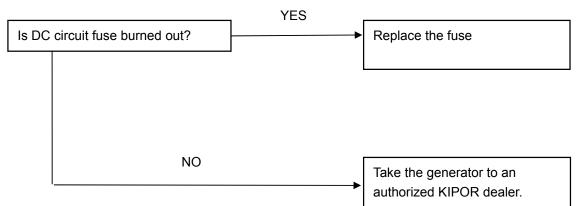
#### 9.1 No Start



#### 9.2 No AC Power-Appliance does not operate



#### 9.3 No electricity at the DC receptacle:



# **10. SPECIFICATIONS**

#### Generator

Model	IG6000/IG6000h
Rated frequency (Hz)	60
Rated voltage (V)	120/240
Rated current (A)	45.8/22.9
Rated output (Watts)	5500
Max current (A)	50
Max output (Watts)	6000
DC voltage	12V@5.0A
Phase	Single

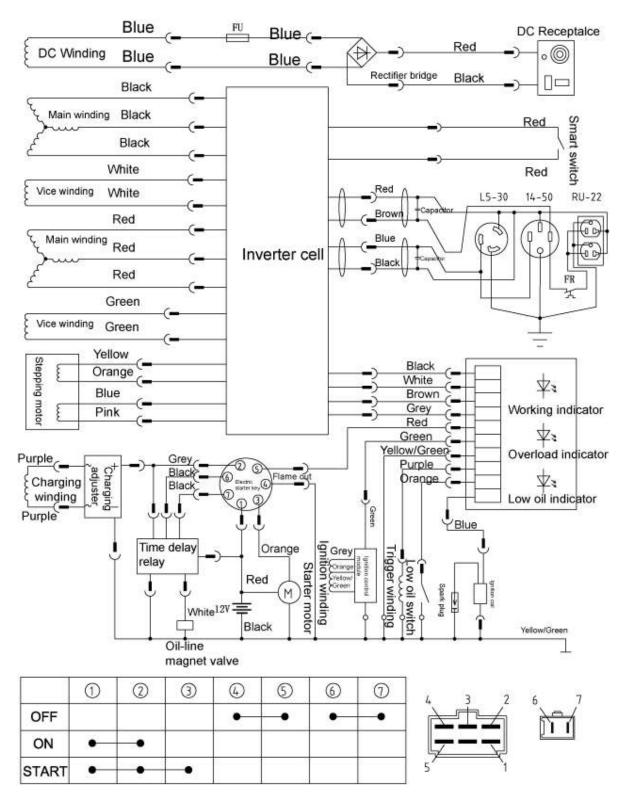
### Engine

Eligine	
Model	KG390GTi
Туре	Single cylinder, 4 stroke, vertical, air-cooled, OHV, gasoline engine
Displacement (Bore × Stroke)	23.7 cu. ln. (389 cc)
Compression ration	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
Fuel	Automotive unleaded gasoline, 87 octane
Lube oil	SAE 10W30 (see viscosity chart)
Lube oil capacity	1.2 qt. (1.1L)
Fuel tank capacity (L)	5.3gal. (20L)
Continuous running time at rated	6.8 Hours
output	
Noise level(zero load~ full load)	64-65 decibels
@ 23' (7M)	

#### **Tune Up Specifications**

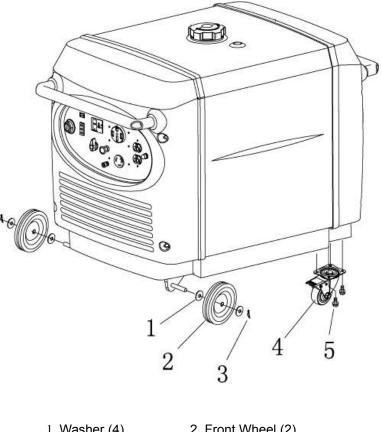
Spark Plug Gap		0.024-0.028 in (0.6-0.7 mm)
Valve Clearance- cold (Intake)		0.0039 ±.0008 in (0.10 ± 0.02 mm)
Valve Clearance- cold (Exhaust)		0.0059 ± .0008 in (0.15 ± 0.02 mm)
Dimensions		
Overall dimension (L×W×H) in. (mm)	IG6	000: 31.6×19.5×24.6 (802×495×624)
	IG6	000h: 48.6×25.59×30.3 (1235×650×770)
Dry weight –lbs (kg)	IG6	000: 95 (209) IG6000h: 115 (263)

### 11. WIRING DIAGRAM



# 12. WHEEL INSTALLATION

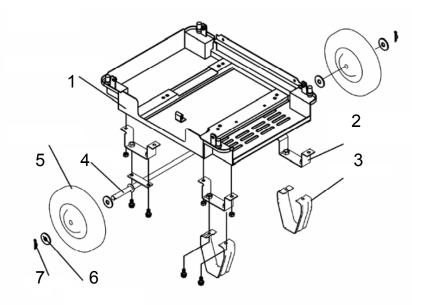
### 12.1 IG6000



	2.110111 wheel (2)
3. Wheel Clip (2)	4. Locking Swivel Wheel (2)
5. Bolt M6X16 (8)	

To install the front wheels, install a washer on the axle, then the wheel, another washer and secure with a wheel clip.

To install the locking swivel wheels, line up the bolt holes in the chassis with the holes in the wheel attaching plate. Secure with the 4 bolts.



- 1. IG6000H Chassis- installed
- 2. Support Bracket- (4)
- 3. Front Stabilizer (2)
- 4. Axle Assembly

- 5. 10" Wheel
- 6. Wheel Washer (4)
- Wheel Clip

#### Assembly:

- 1. Install the four support brackets and secure with bolts.
- 2. Attach the front stabilizers to the chassis (below the handles)
- 3. Attach the axle assembly.
- 4. Install one washer on the axle against each welded stop.
- 5. Install the two wheels.
- 6. Install the two remaining washers and secure with the wheel clips.

The handles are preassembled before packaging. To raise the handles, simply raise the handle assembly to a horizontal position. To retract the handles, slide the chrome collars toward you to clear the sleeve and lower them to the starting position.

### **13. WARRANTY**

#### 13.1 Limited Warranty-Kipor Power Equipment

#### LENGTH OF WARRANTY

Generators are covered by this warranty from the date of original retail purchase for a period of two years for residential use and one year for commercial applications. Units used in rental fleets or as demonstration models will be considered commercial usage. Starting batteries included with a generator are warranted for a period or one year. Kipor must warrant the emission control system for a period of two years provided there has been no improper maintenance, abuse or neglect. See the emission control warranty in the section immediately following the limited warranty description. 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 the United States or Canada from an authorized Coast Distribution 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. Warranty coverage will only be provided by authorized Coast Distribution dealers in the United States and Canada.

#### COVERAGE

Parts, labor and regular shipping costs will be covered by Coast Distribution for any failure that is proven to be a failure of material or workmanship under normal use during the applicable warranty time period. It is the responsibility of the end user to return the product to the nearest authorized repair center as directed by the warranty administration center. In the event that the generator is deemed not repairable or the necessary repair would be economically unfeasible, Coast will pay for shipping of the unit from the repair center to the designated Coast facility and the shipping of a replacement unit. 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, bar code number and proof of purchase are required.

#### **EXCLUSIONS**

This warranty does not extend to parts affected or damaged by accident and/or collision, normal wear, fuel contamination or degradation, 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. This warranty does not extend to normal maintenance items such as belts, hoses, spark plugs and filters past the first scheduled replacement or service interval for these items, whichever comes first. Coast will pay for minor adjustments for a period of ninety days from the purchase date of the generator.

#### 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.

#### 13.2 Emission Control System Warranty

Your Kipor generator engine complies with U.S. Environmental Protection Agency, Environment of Canada, and the state of California.. The following systems and/or parts are covered by this warranty. Failures or improper operation of the following systems and components will be diagnosed and repaired with no charge for labor or parts.

Fuel System

- Carburetor including the choke system and replaceable high altitude main jets
- Engine speed control system (Smart Throttle)
- Intake manifold
- Engine control module (Engine control function only)

Evaporative Control System

- Fuel tank
- Fuel cap
- Fuel strainer
- Fuel valve
- Fuel lines
- Carbon canister (including brackets and connectors)

Air Induction System

- Air filter element\*
- Air filter housing

Ignition system

- Ignition module
- Ignition coil
- Ignition winding
- Ignition trigger
- Spark plug\*
- Spark plug cap and wire

Exhaust system

- Catalyst
- Exhaust manifold
- Secondary air injection assembly

#### Miscellaneous

• Pipes, tubes, hoses and clamps, o-rings, seals, and gaskets associated with the above systems.

\* Covered up to the first scheduled replacement only. See the maintenance schedule.

# **14. EMISSION CONTROL SYSTEM**

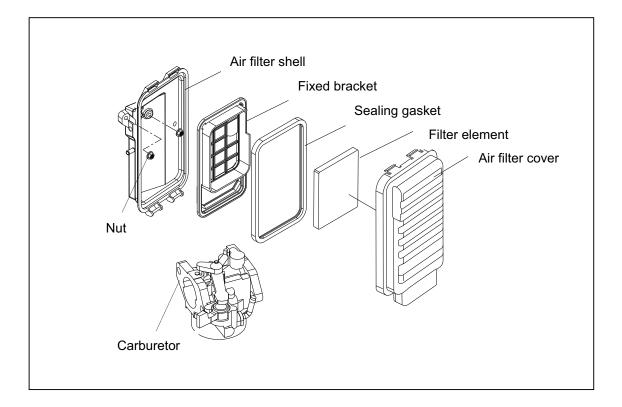
Your generator has an engine that has been approved by the California Air Resources Board. Other than the tune up procedures specified in the maintenance section, no additional maintenance is required.

The emission control system has the following components:

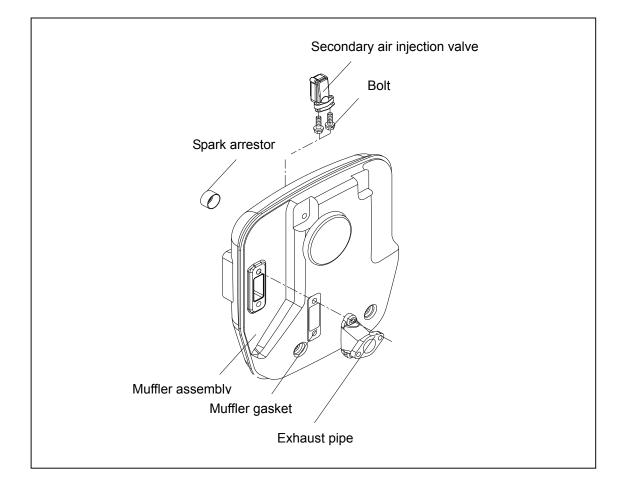
- 1. Fuel System: The fuel tank, cap, indicator and hoses are specially designed and constructed to not allow fuel vapors to permeate and be released to the atmosphere.
- 2. A carbon activated canister collects gasoline vapors from the fuel tank and returns them to the combustion chamber for burning.
- 3. A catalyst is built into the muffler to further treat the engine exhaust.
- 4. A secondary air injection valve adds combustion air to ignite unburned fuel in the exhaust.

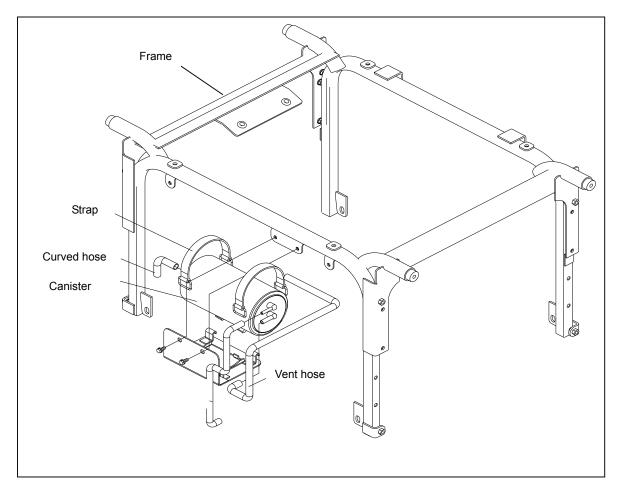
Contact your authorized Kipor service center to obtain the correct replacement parts and service on this system.

#### Intake System



# Exhaust system





Carbon Canister Installation

# Fuel System

