

Models VI1000P, VI2000P & VI2600P Digital Inverter Generators



User's Manual

January 2015

VOLTMASTER

PREFACE

Thank you for purchasing a Voltmaster® inverter generator.

This manual covers operation and maintenance of the VI1000P, VI2000P and VI2600P generators.

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:

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 dealer.

Our generators are 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.

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1. SAFETY INSTRUCTIONS

 **WARNING**



- This 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.

 **WARNING**



- Exhaust gas contains poisonous carbon monoxide. Never run the generator in an enclosed area.

Be sure to provide adequate ventilation.

 **WARNING**



- The muffler becomes very hot during operation and remains hot for several minutes after stopping the engine.

Be careful not to touch the muffler while it is hot.

Let the engine cool before storing the generator indoors.

- The engine exhaust system will be heated during operation and remain hot immediately after stopping the engine.

To prevent scalding, pay attention to the warning marks attached to the generator.

 **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. Always refuel in a well-ventilated location.
- Wipe up spilled gasoline immediately.

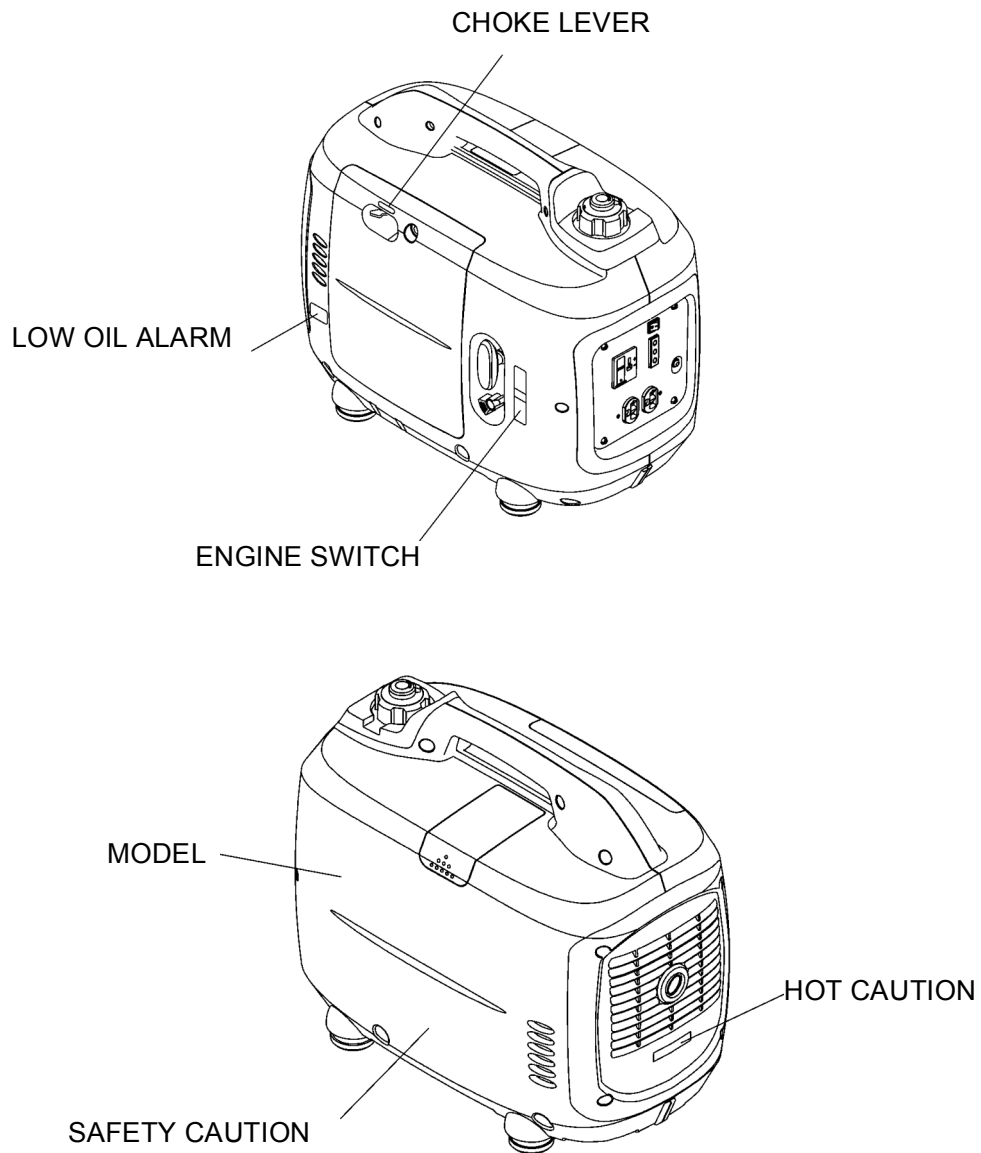
 **WARNING**

- Always make a pre-operation inspection before you start the engine. You may prevent an accident or equipment damage.
- 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 or oil starvation.
- Know how to stop the generator quickly and understand operation of all controls. Never permit anyone to operate the generator without proper instructions.
- Keep children and pets away from the generator when it is in operation.
- Keep away from rotating parts while the generator is running.
- The generator is a potential source of electrical shock when misused; do not operate with wet hands.
- Do not operate the generator in rain or snow and do not let it get wet.

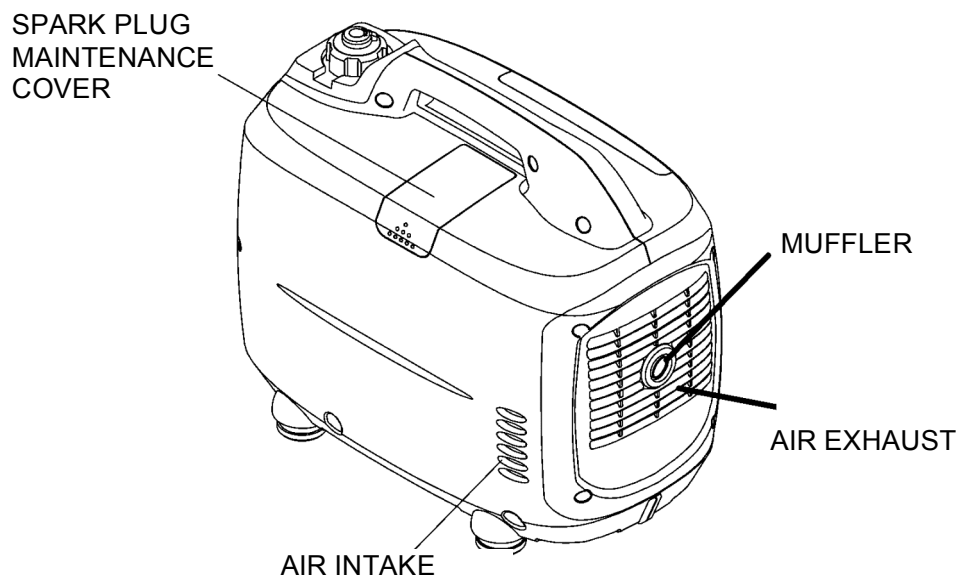
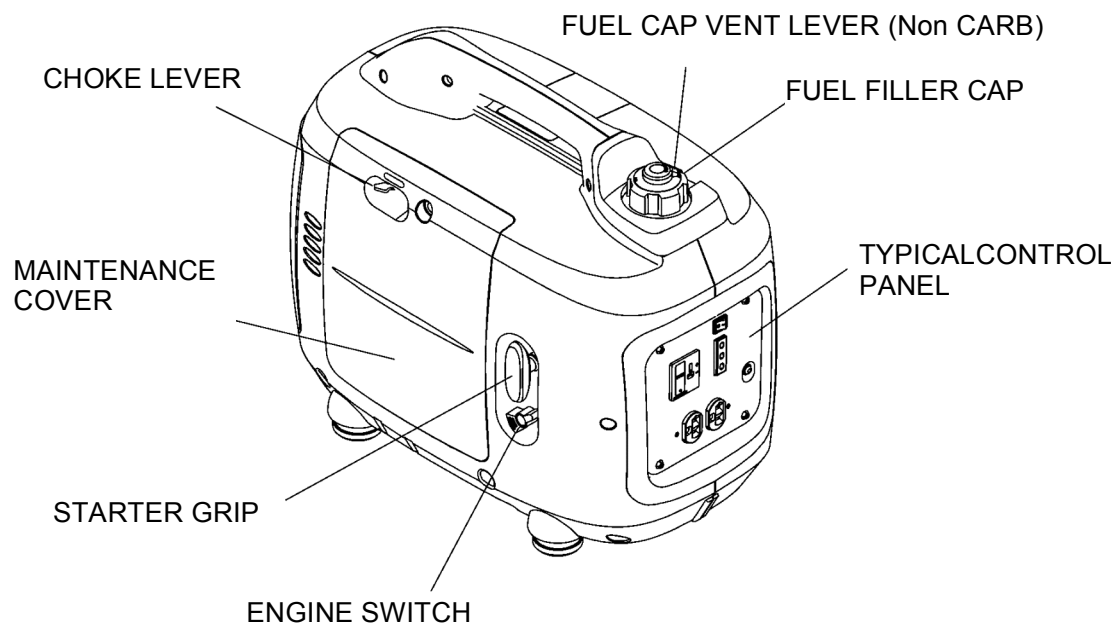
2. SAFETY LABEL LOCATIONS

These labels warn you potential hazards that can cause serious injury. Read the labels and safety notes and precautions described in manual carefully.

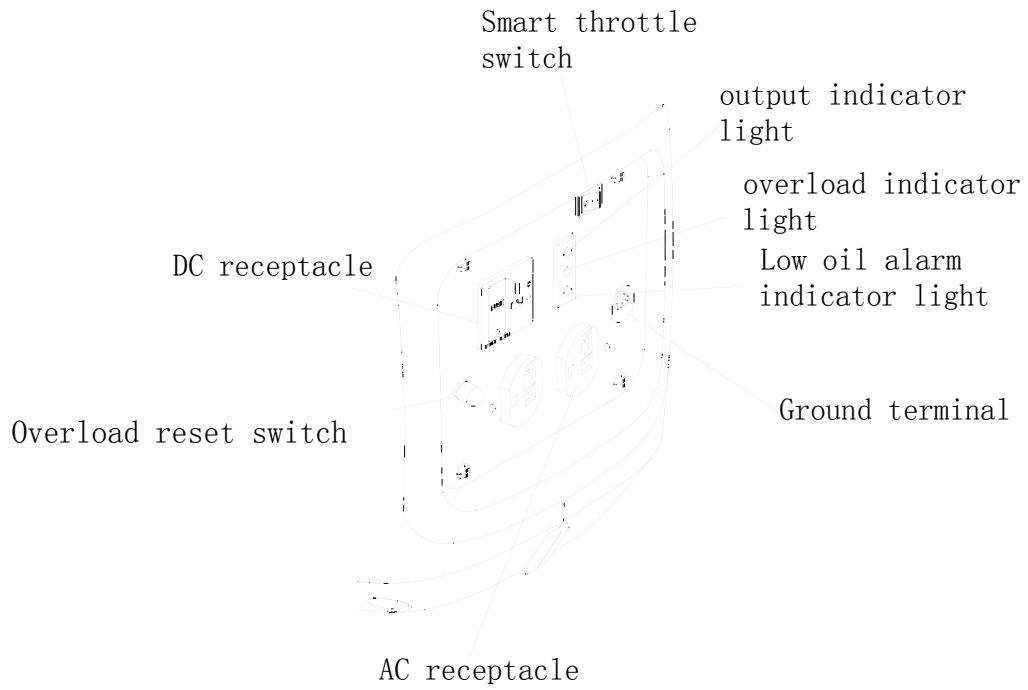
If a label comes off or becomes hard to read, contact your dealer for a replacement.



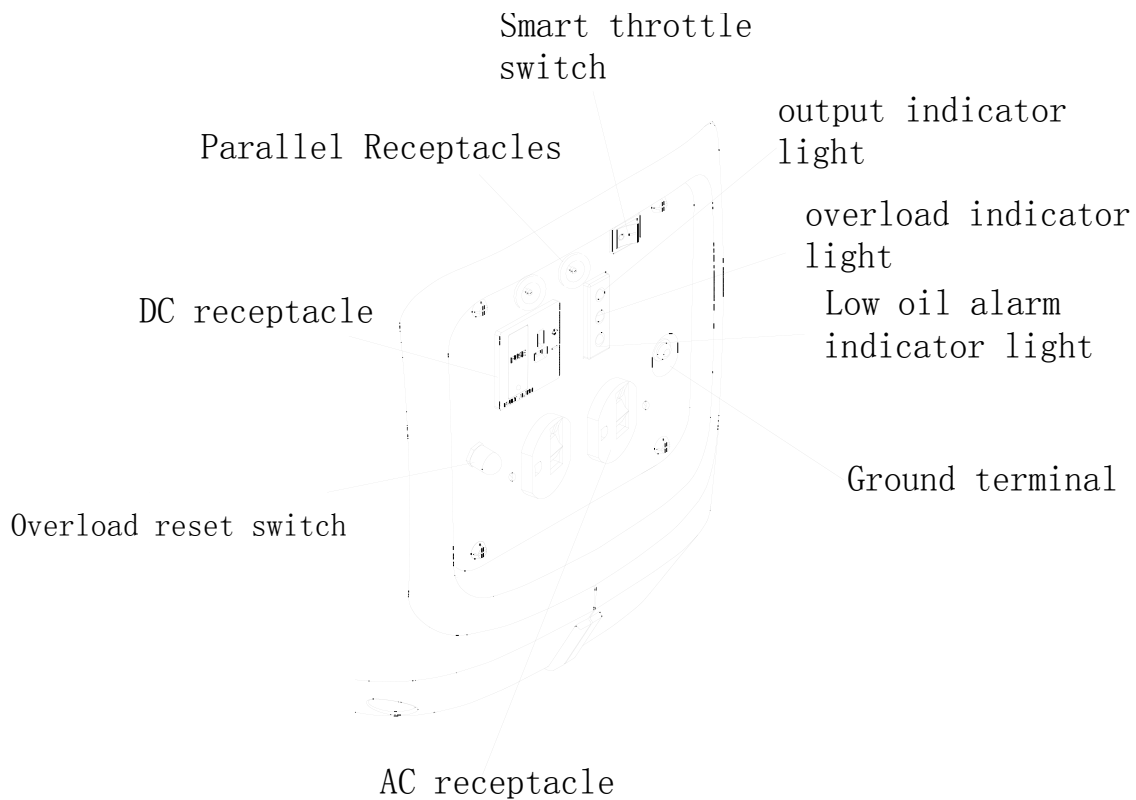
3. COMPONENT IDENTIFICATION



Control panel



Parallel Control Panel



Serial number identification and location

The generator serial number identifies your particular unit and is important when ordering parts and accessories. The number is found on a sticker on the carton and on the quality certificate in the carton along with the accessories and owner's manual. It is also stamped on the engine block visible when the service door is removed.



VI1000P: to the right of the engine oil dipstick

VI2000P: above right of the dipstick



VI2600P: to the left of the engine oil dipstick

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

Serial Number _____

Date and Place of Purchase _____

4. PRE-OPERATION CHECK

WARNING

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

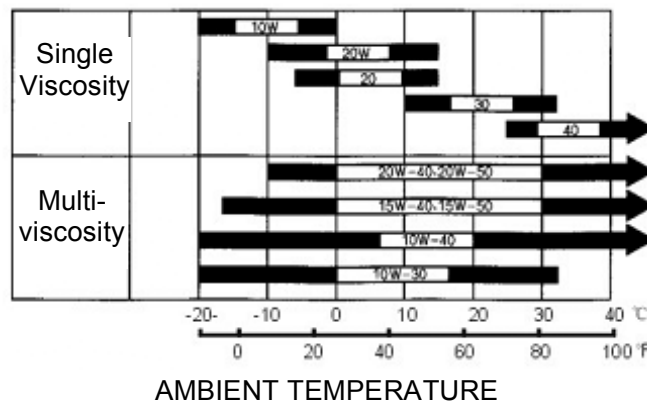
1. Check the engine oil level.

WARNING

- Using non detergent oil or 2 cycle engine oil could shorten the engine's service life.

Use a high-detergent, premium quality 4-stroke 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



Loosen the cover screw and remove the left side maintenance cover. 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.

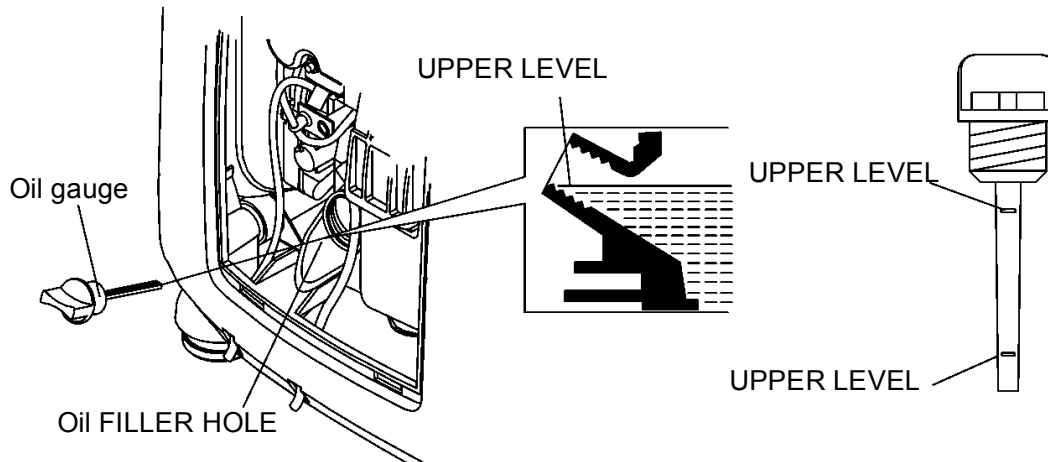
If the oil level is below the end of the dipstick, refill the recommended oil up to the top of the oil filler neck.

WARNING

- Running the engine with insufficient oil can cause serious engine damage.

NOTE: The Low Oil Alarm 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 regularly.

You must screw down the dipstick completely to measure the oil level.



2. Check the fuel level.

Use automotive unleaded regular gasoline only. A fuel preservative and stabilizer should be added to any container of stored fuel.

If the fuel level is low, refill the fuel tank until the level reaches the specified mark.

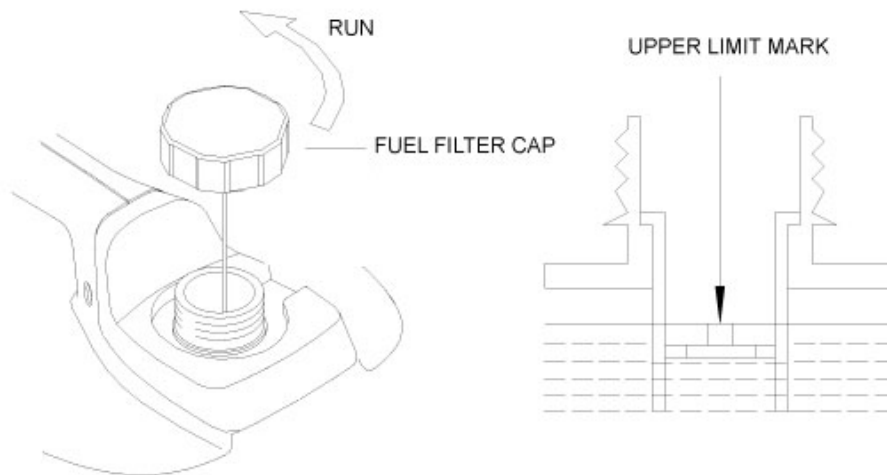
Never use an oil/gasoline mixture or dirty gasoline.

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. Keep all smoking materials, sparks, and any other source of combustion away from the generator during refueling.
- Do not overfill the fuel tank (there should be no fuel above the upper limit mark). After refueling, make sure the tank 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 vapor. **KEEP OUT OF REACH OF CHILDREN.**



Gasoline containing alternate fuels

If you decide to use a gasoline containing ethanol, be sure its octane rating is no lower than the specification. Do not use a blend that contains more than 10% ethanol. Do not use gasoline containing methanol.

NOTE

- Fuel system damage or engine performance problems resulting from the use of fuels that contain an improper alcohol blend are not covered under warranty.
- Before buying fuel from an unfamiliar station, Determine if the fuel contains ethanol and if it does, confirm the type and percentage of ethanol used. If you notice any undesirable operating symptoms while using a gasoline that contains ethanol, or one that you think contains ethanol, replace it by a gasoline that you know has the proper blend.

3. Check the air cleaner

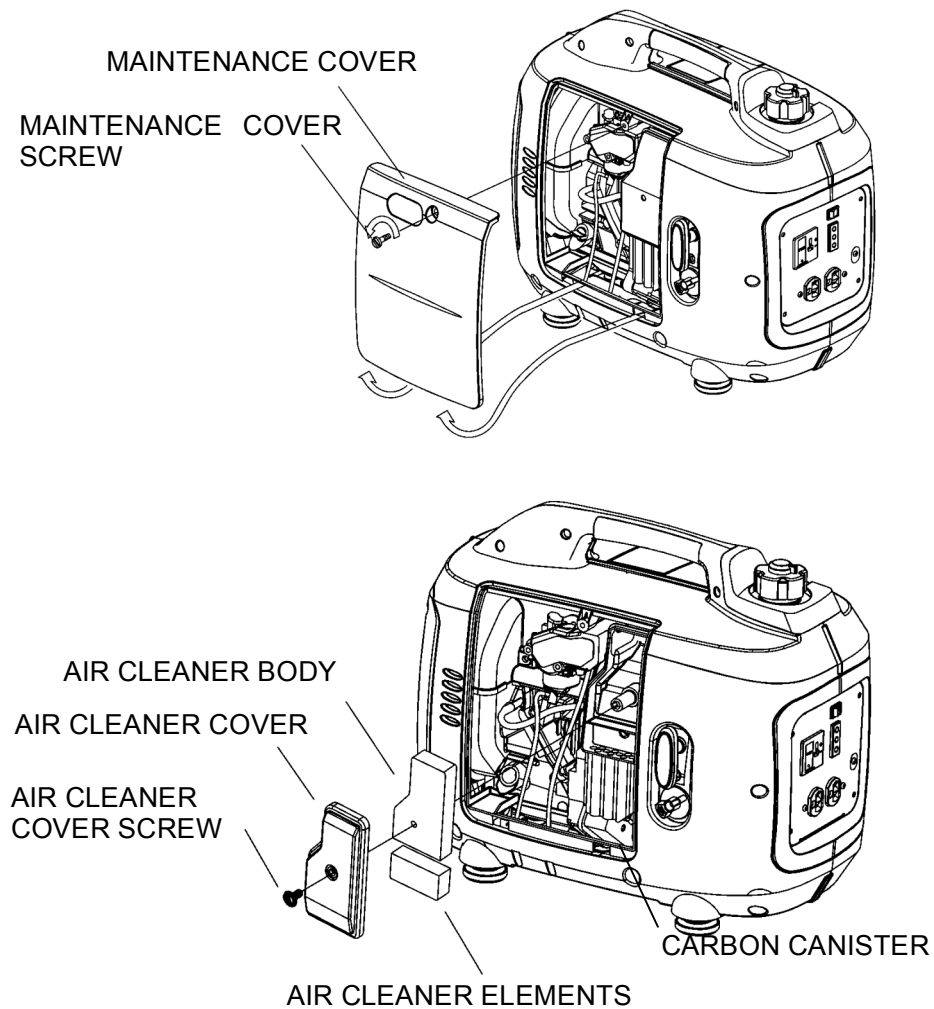
Check the air cleaner element to be sure it is clean and in good condition.

Loosen the cover screw and remove the left side maintenance cover.

Press the latch tab on the top of the air cleaner body, remove the air cleaner cover, check the element. Clean or replace the element if necessary.

CAUTION

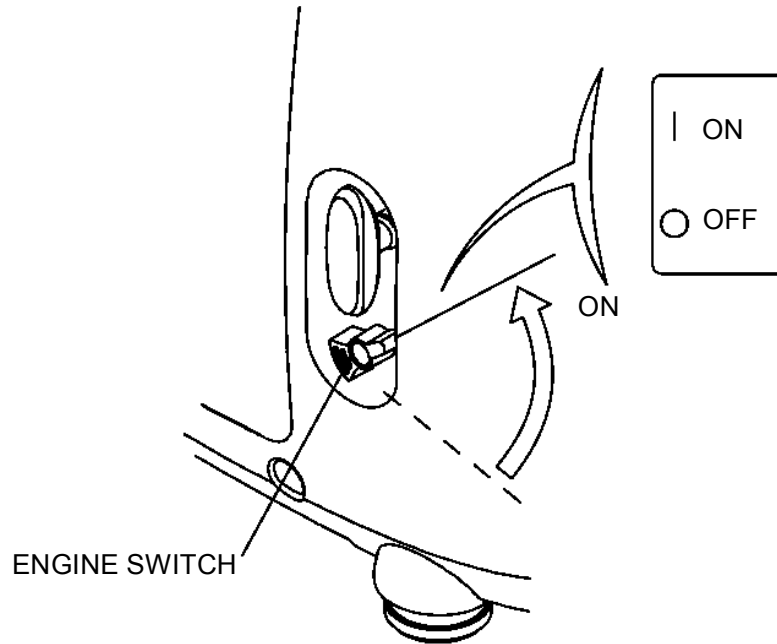
- Never run the engine without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.



5. STARTING THE ENGINE

Before starting the engine, disconnect any load from the AC receptacle.

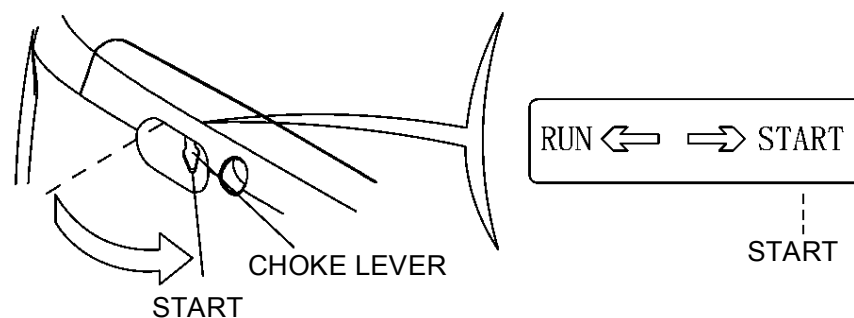
1. Turn the engine switch to the ON position.



2. Move the choke lever to the START position.

NOTE:

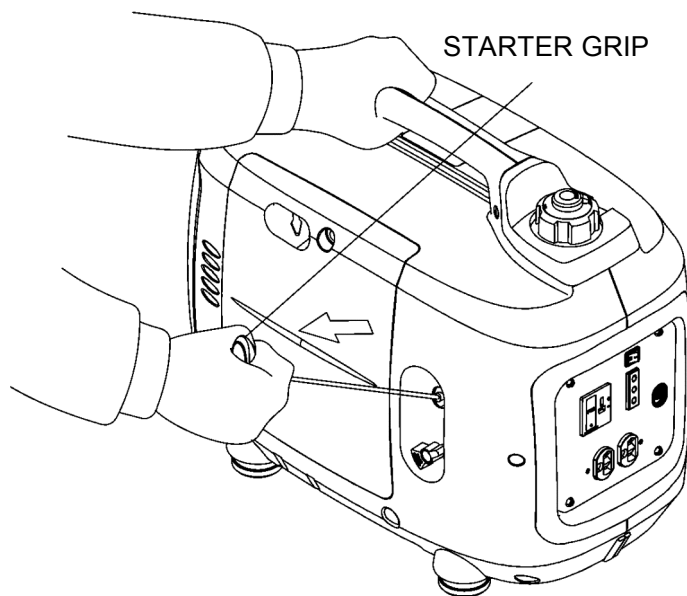
Do not use the choke when the engine is warm or the ambient air temperature is high.



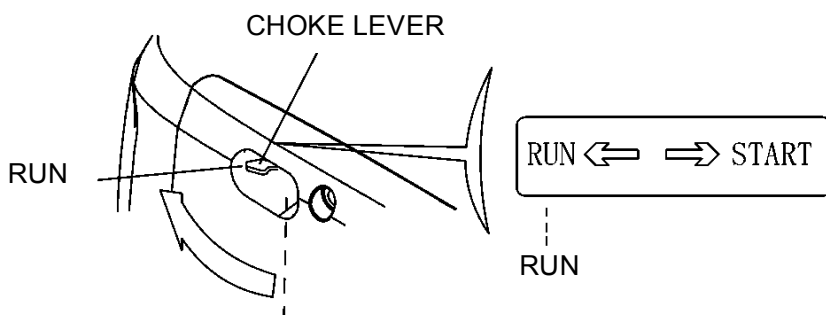
3. Pull the starter grip until resistance is felt then pull the starter grip briskly toward the arrow as shown below.

! CAUTION

- Do not allow the starter grip to snap back. Return it slowly by hand.



4. Move the choke lever to the RUN position after the engine warms up.



! NOTE

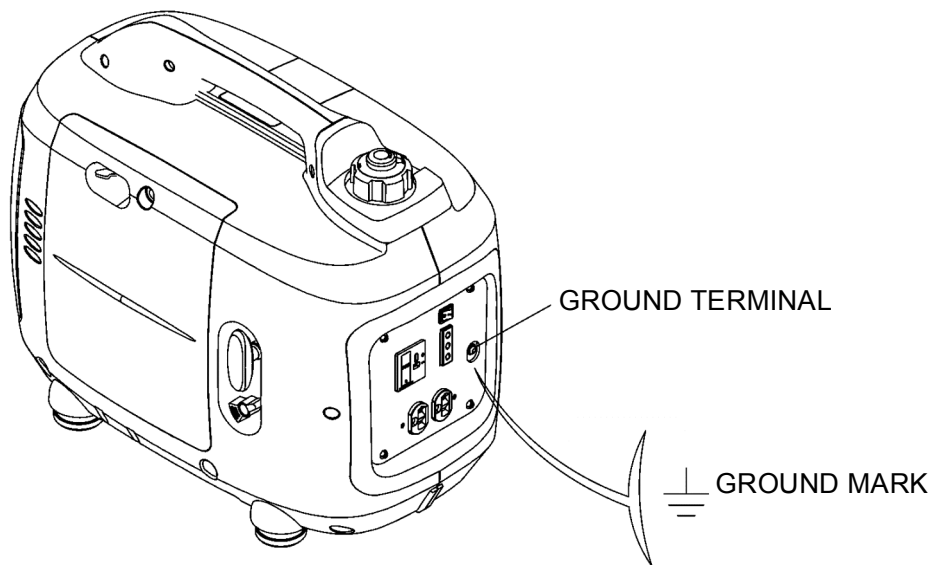
- If the engine stops and will not restart, check the engine oil level before further troubleshooting.

6. GENERATOR USE

Be sure to ground the generator when loads are connected.

! WARNING

- To prevent electrical shock from faulty appliances, the generator should be grounded. Connect a length of heavy cable between the generator's ground terminal and an external ground source.
- Connections for standby power to a building's 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. When utility power is restored the generator may explode, burn, or cause fires in the building's electrical system.
- Do not connect the generator to an automatic transfer device. Severe damage to the inverter module may result.



CAUTION

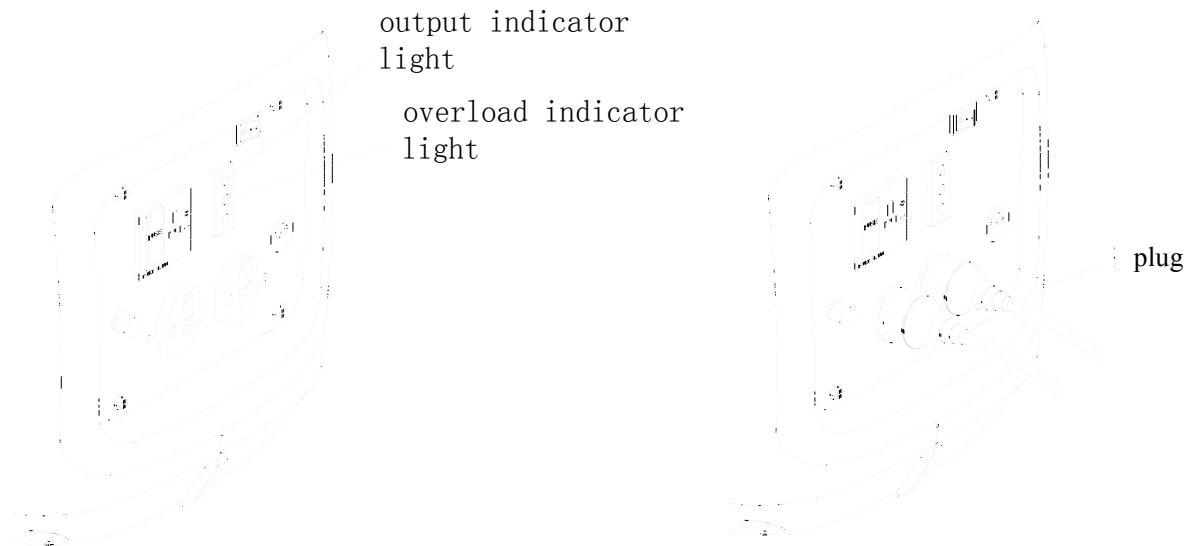
- The total wattage of all appliances connected must be considered.
 - Do not exceed the current limit specified for any one receptacle.
 - Do not connect the generator to a household circuit. This could cause the damage to the generator or to electrical appliances in the house.
 - Do not modify or use the generator for other purpose than it is intended for. Also observe the following when using the generator.
-
- Do not connect an extension to exhaust pipe.
 - When an extension cable is required, be sure to use a rubber sheathed flexible cable (IEC 245 or equivalent).
 - Limit length of extension cables to 195 ft (60 m) for cables of 1.5mm² and 325 feet (100 m) for cables of 2.5mm² . Long extension cables will reduce usable power due to resistance in the extension cable.
 - Keep the generator away from other electric cables or wires such as commercial power supply lines.

NOTE

- The DC receptacle can 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.
- Most appliance motors require more than their rated wattage for start-up.

AC application

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



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. Disconnect the appliance and examine it for signs of malfunction.

3. In order to insure the optimum output and the maximum service life of the generator, the generator should run at a 50% load for the first 20 hours.

Output and Overload Indicators

The output indicator light (green) will remain on during normal operating conditions.

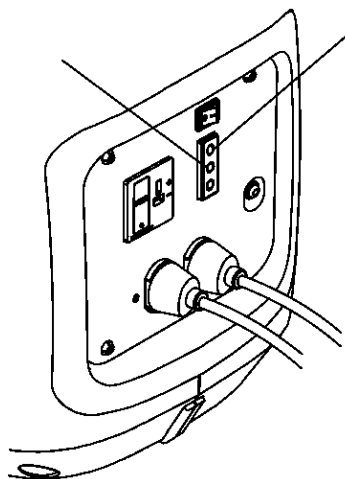
If the generator is overloaded or if there is a short in the connected appliance, the output indicator light (green) will go out, the overload indicator light (red) will illuminate and current to the connected appliance will be shut off.

Stop the engine if the overload indicator light (red) comes on and investigate the overload source

- 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. Connect the power cord of the appliance and start the engine.

OVERLOAD INDICATOR LIGHT (RED)

OUTPUT INDICATOR LIGHT (GREEN)

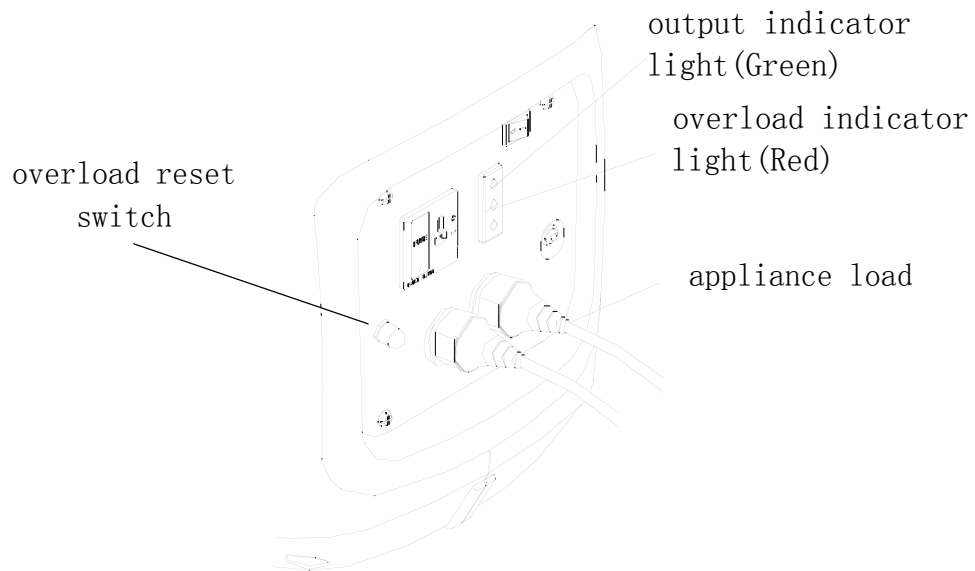


NOTE

- When an electric motor is started, both the overload indicator light (red) and the output indicator light (green) 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 your generator dealer.

Overload Reset Switch

Should the generator overload, AC power will be cut off but the engine will stay running. Correct the overload condition and then press the overload reset switch on the front panel. AC power will be restored immediately.



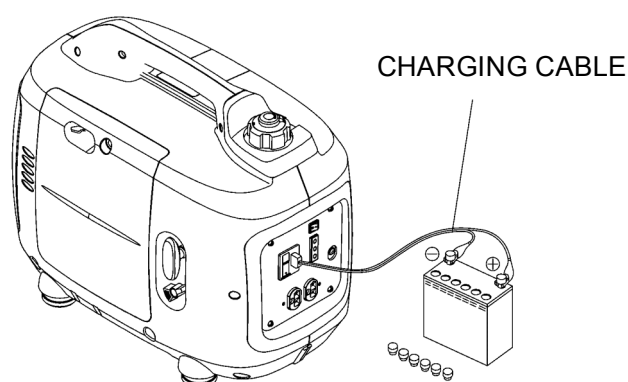
DC Operation

The DC receptacle may be used for charging 12 volt automotive style batteries only, the no load voltage is 15V-30V.

NOTE

- In DC operation, turn the Smart-throttle switch to the OFF position.

1. Connect the charging cables 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 the charging cable first to the generator then to the battery. Disconnect the cable first at the battery.
- Before connecting charging cables to a battery that is installed in a vehicle, disconnect the vehicle's ground battery cable. Reconnect the vehicle's ground 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.

CAUTION

- Do not attempt to start an automobile engine with the generator still connected to the 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 spark, 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.
-If electrolyte gets on your skin, flush with water.
-If electrolyte 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.

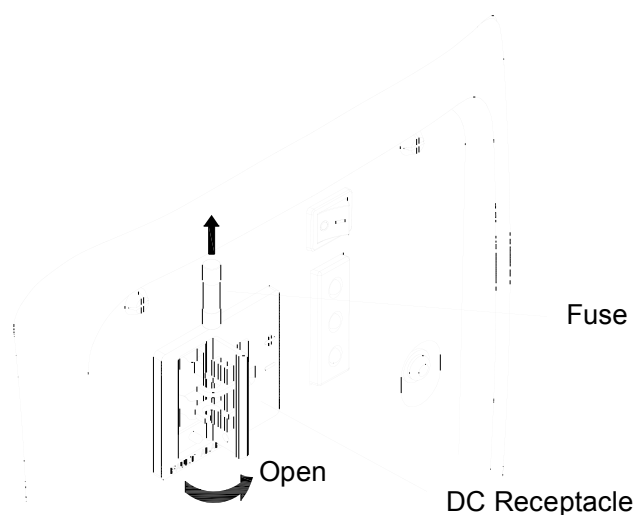
2. Start the engine

! NOTE

- The DC receptacle may be used while the AC power is in use.
- An overloaded DC circuit will trip the DC circuit fuse. The fuse must be replaced before the DC receptacle is operative.

! CAUTION

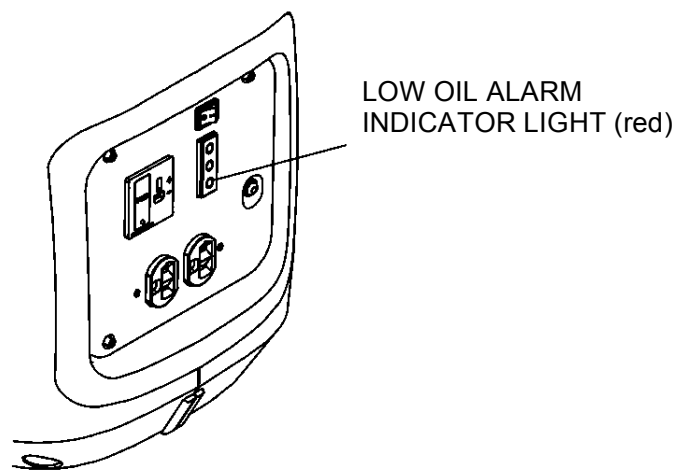
Replace the fuse with one of the same size and rating (5A).
Exceeding the current rating may lead to alternator damage.



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 low oil alarm indicator light (red) will come on when you operate the starter and the engine will not run. If this occurs add engine oil.



Air Conditioning Operation

When running in parallel (see section 8) the combination of a VI1000P and either a VI2000P or VI2600P model can start and run most 13,500 BTU Air conditioners. A VI2000P and a VI2600P or two VI2600P models will start and run most 15000 BTU units. For best results, the SMART throttle switches should be in the off position. Bring the generators to normal operating temperatures 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 or rapid start kit 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 generators. Contact your air conditioner dealer if you consistently have problems starting your air conditioner with the generators in parallel.

Smart Throttle System

When the smart throttle switch is placed in the on position, engine speed is kept at idle automatically when the electrical load is disconnected and returns to the proper speed to match the power of the electrical load when the load is reconnected. This position is recommended to minimize fuel consumption while in operation.

WARNING

- The Smart throttle system does not operate effectively if the electrical appliance requires constant fluctuations in power.
- When high electrical loads are connected simultaneously, turn the Smart throttle switch to the OFF position to reduce voltage fluctuation or shutdown.
- In DC operation, turn the Smart throttle switch to the OFF position.

OFF:

Smart throttle system does not operate. Engine speed varies with the load.



High altitude operation

At higher altitudes, the standard carburetor air-fuel mixture will be excessively rich. Performance will decrease, and fuel consumption will increase. Power output will decrease 3.5% for each 1000 feet (305 meters) above sea level.

High altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor. If you always operate the generator at altitudes higher than 5000 feet or 1500 meters above sea level, have your authorized dealer install a high altitude main jet.

Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 1000 feet or 305 meter increase in altitude. The affect of altitude on the horsepower will be greater than this if no carburetor modification is made.

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.
- Be sure to have any modification reversed at lower altitudes.

Temperature

High temperature adversely affects generator operation. Generator performance will decrease 1% for each 10°F (5.5°C) increase in temperature above 85°F (29°C) The normal operating range of this generator is -20° to 113° F (-29° to 45°C)

WARNING

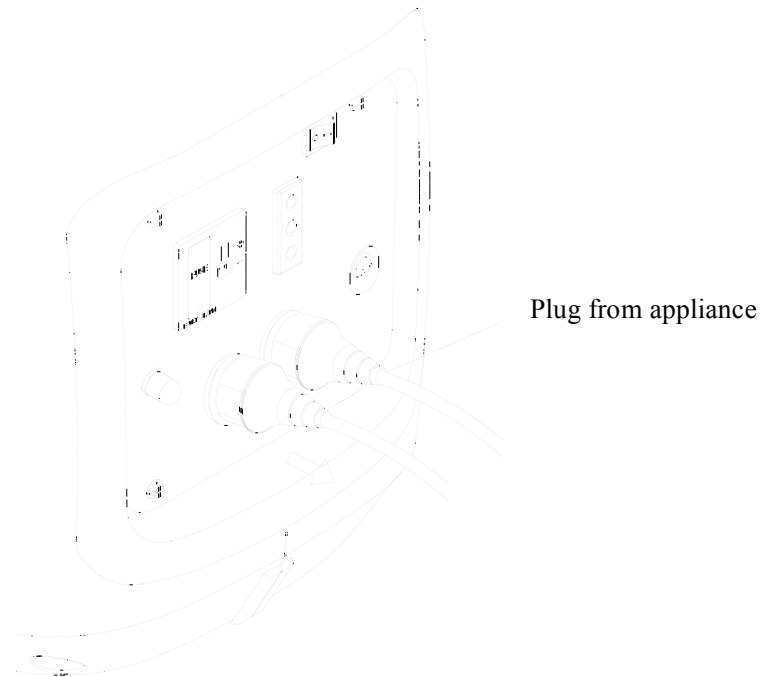
- Do not operate the generator when the ambient temperature is below -20°F (-29°C)
- Do not operate the generator when the ambient temperature exceeds 113°F (45°C)

7. STOPPING THE ENGINE

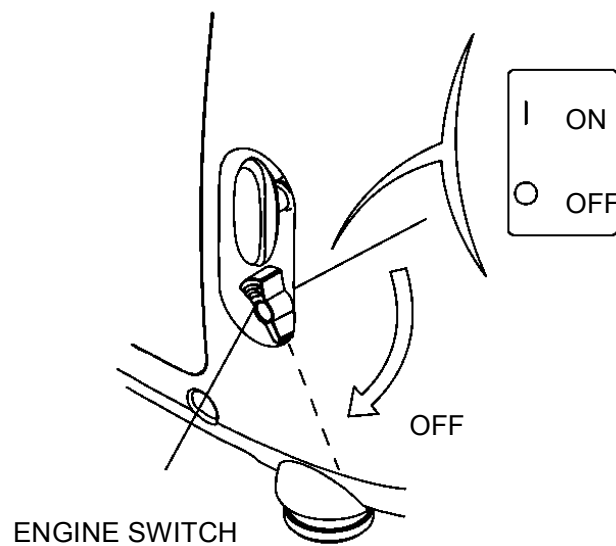
To stop the engine in an emergency, turn the engine switch to the OFF position.

IN NORMAL USE:

1. Switch off the connected equipment and pull the inserted plug out.



2. Turn the engine switch to the OFF position



8. PARALLEL GENERATOR OPERATION

Parallel operation features:

Two Voltmaster parallel-ready generators can be connected together to increase the total power available to a load. The system seamlessly matches frequency and automatically evenly distributes the load to each generator so one is not overloaded.

Any combination of two Voltmaster parallel-ready generators can be connected, such as a VI2600P and a VI1000P, two VI2000P models, etc. There are two different parallel connection kits. One kit has a 30A receptacle ideal for connecting two VI2000P models or a VI2000P and a VI1000P. The other kit has a larger capacity with one 30A and one 20A receptacle. This is designed for connecting one VI2000P and one VI2600P or two VI2600P models. Contact your dealer for the proper kit for your particular application.



Parallel operation procedure:

1. Prepare two parallel ready generators for operation. Place them on a hard and level surface.
Note: Turn off both generators and disconnect all the electrical devices from the generators
2. Connect the parallel kit to each generator by inserting one pair of leads from the parallel box to the parallel receptacles on the panel.

Parallel output receptacles



Ground connection



3. Ground the generators.
4. Start both generators and confirm that both green "RUN" lights are illuminated. The Smart throttle system may be used as long as the Smart throttle setting of both generators is the same.
5. Securely plug the electrical appliance plug into parallel cable receptacle and switch on the electrical appliance power supply.
6. While operating in parallel, the only AC output is through the receptacle on the parallel cable box. Don't use the receptacle on the control panel of the generator.

Note:

The required output of the electrical appliance cannot exceed the rated output of parallel generators.

Shutting off the generators:

1. Turn off the power of electrical appliance then, pull out the receptacle plug.
2. Turn off the two generators.
3. Disconnect the parallel kits from the generators.

 **CAUTION**

- The parallel cable connectors can only be used with Voltmaster parallel-ready generators.
- While connecting the generator and electrical appliance with the parallel output cable, do so carefully and safely insert the plug into the receptacle.
- While operating in parallel, the only AC output is through the receptacle on the parallel cable box. Don't use the receptacles on the control panel of either generator.
- Don't disconnect the parallel cables during operation.

9. MAINTENANCE

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

Inspect or service as scheduled in the table below.

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 our parts or their equivalent. The use of replacement parts which are not of equivalent quality may damage the generator.
- When repairing or replacing the accessories of emission control system, make sure to use the EPA standard accessories.

Emission control system

Emission source

Exhaust gas contains carbon monoxide, nitrous oxide (NO_x), 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 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 if so equipped and designated. 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 an 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:

- Disassemble or modify the function or parts of the intake, fuel or exhaust system.
- Modify or destroy the speed governing function of the generator.

Engine faults that may affect emissions

Any of the following faults must be repaired immediately. Consult an authorized Voltmaster 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

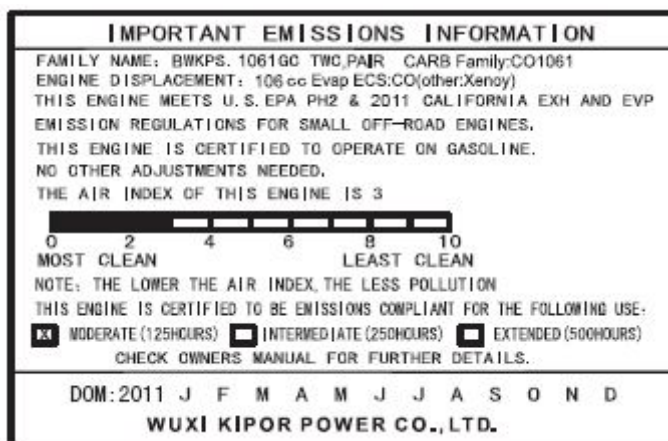
The parts making up the emission control system applied to the engine have been specifically approved and certified by the regulatory agencies. You can trust that Voltmaster replacement parts have been manufactured to the same production standard as the original parts. The use of replacement parts or accessories which are not supplied by Voltmaster 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 (only for 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.



The air quality index label is designed to be permanently affixed to the generator and removal should not be attempted.

Maintenance Schedule

REGULAR SERVICE PERIOD(1)		EACH USE	FIRST MONTH OR 20HRS	EVERY 3 MONTHS OR 50HRS	EVERY 6 MONTHS OR 100 HRS	EVERY YEAR OR 200 HRS
ITEM	Perform at every indicated month or operating hour interval, whichever comes first.					
Engine oil	Check level	○				
	Change		○		○	
Air cleaner	Check	○				
	Clean			○(1)		
Spark plug	Clean-adjust				○	
	Replace					○
Combustion chamber	Clean	○ Every 300Hrs. (2)				
Valve clearance	Clean-adjust					○(2)
Fuel tank and filter	Clean				○(2)	
Fuel lines	Check	Every 2 years (Replace if necessary) (2)				

- NOTE: (1) Service more frequently when used in dusty areas.
(2) These items should be serviced by your servicing dealer unless you have the proper tools and are mechanically proficient. Refer to the shop manual for service procedures.
(3) For commercial use, log hours of operation to determine proper maintenance intervals.

1. CHANGING OIL

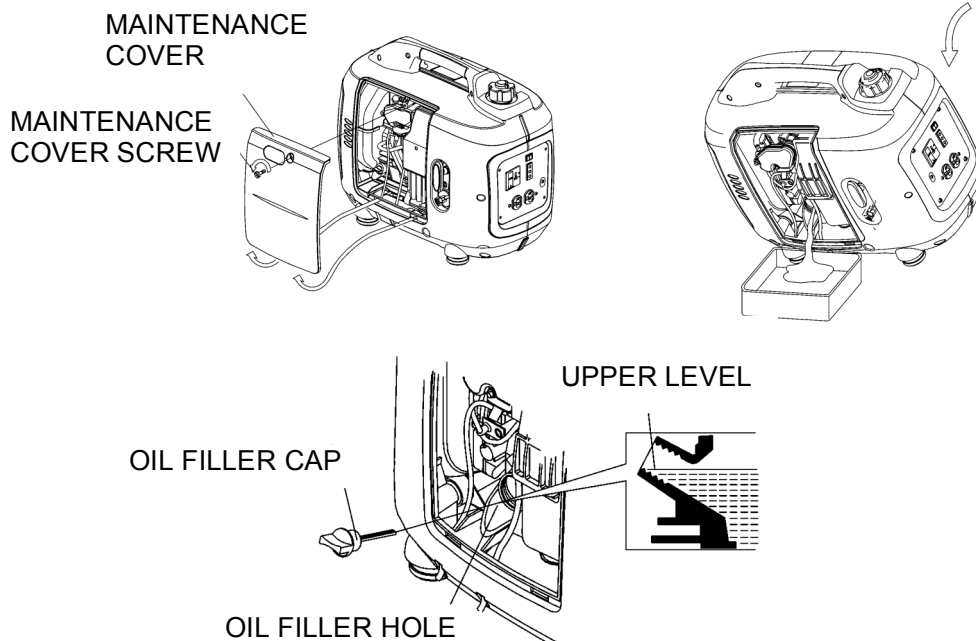
Drain the oil while the engine is still warm to assure rapid and complete draining.

CAUTION

- Make sure to turn the engine switch and the fuel cap vent lever OFF before draining.

1. Loosen the cover screw and remove the left side maintenance cover.
2. Remove the oil filler cap.
3. Drain dirty oil into a container thoroughly.
4. Refill with the recommended oil, and check the oil level.
5. Reinstall the left side maintenance cover and tighten the cover screw securely.

Engine oil capacity: 0.42 qt. (0.4L)



NOTE

- Please dispose of used motor oil in a manner that is compatible with the environment and local disposal regulations. Do not throw it in the trash or pour it on the ground.

2a. AIR CLEANER SERVICE VI2000P and VI2600P

A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the generator in extremely dirty areas.

WARNING

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

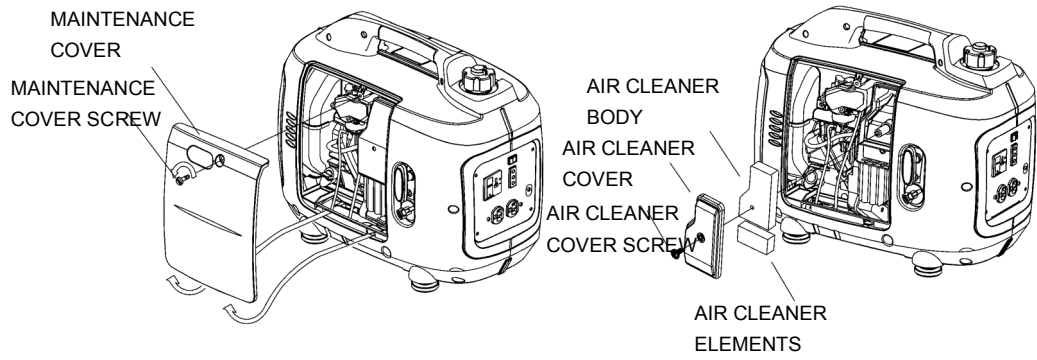
CAUTION

■ Never run the generator without the air cleaner, otherwise rapid engine wear may result.

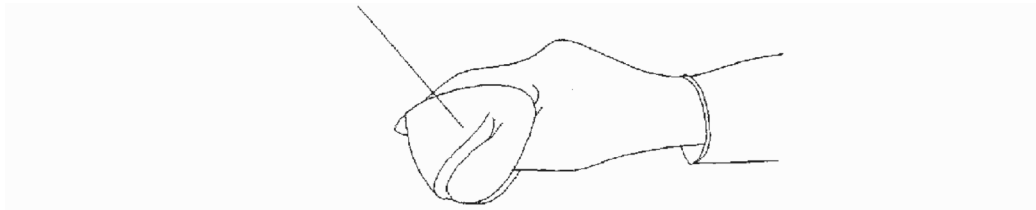
1. Loosen the cover screw and remove the left side maintenance cover.
2. Remove the air cleaner cover and remove the fine and coarse elements.
3. Wash the elements in a non-flammable or high flash point solvent and dry it thoroughly.
4. Soak the elements in clean engine oil and squeeze out the excess oil.
5. Reinstall the coarse and fine air cleaner elements and the air cleaner cover. Tighten the cover screw securely.
6. Reinstall the maintenance cover and tighten the cover screw securely.

2b. AIR CLEANER SERVICE VI1000P

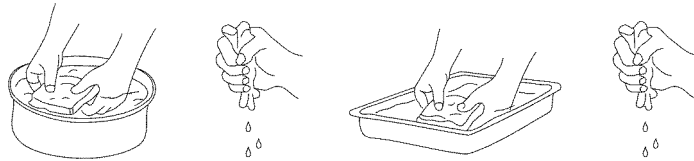
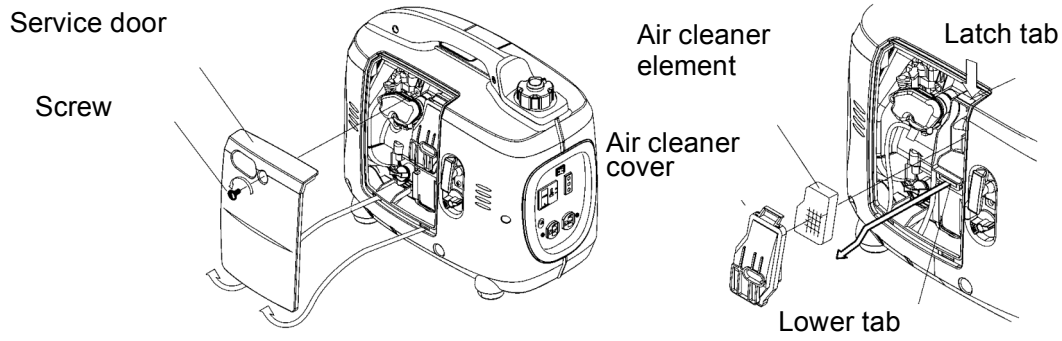
The VI1000P has a single foam element. The maintenance procedure is the same as for the other generators



ELEMENT



VI2000P, VI2600P

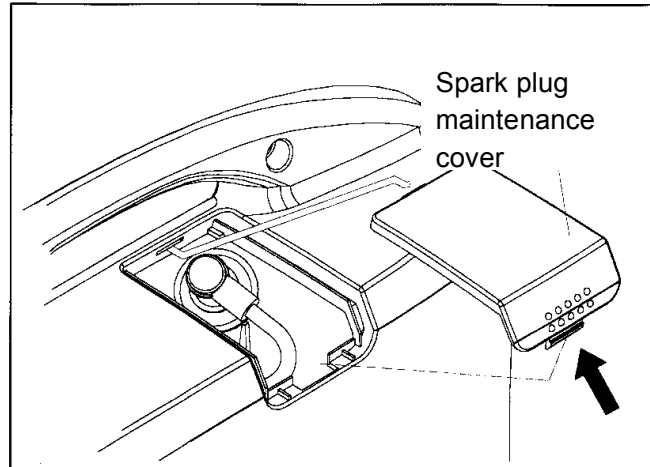


VI1000P

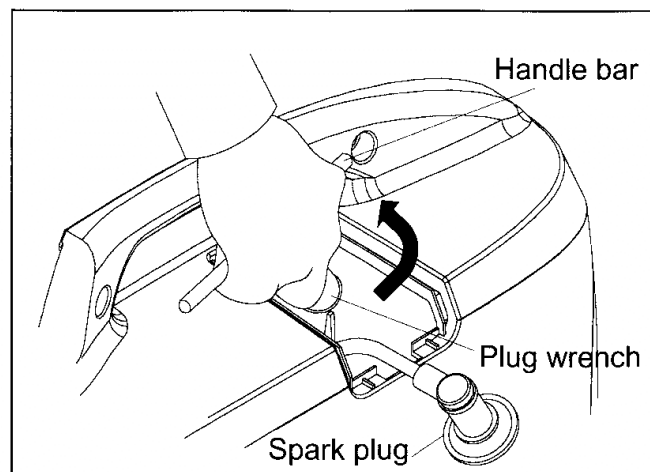
3. SPARK PLUG MAINTENANCE

To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

1. Remove the spark plug maintenance cover.



2. Remove the spark plug cap.
3. Clean any dirt from around the spark plug base.
4. Use the wrench provided to remove the spark plug.

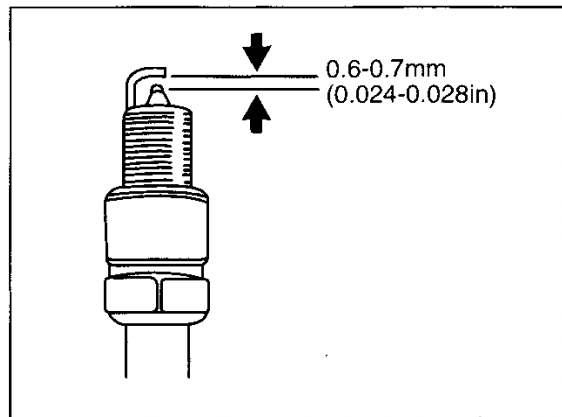


5. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped.

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 0.024-0.028in (0.6-0.7mm). Correct as necessary by carefully bending the side electrode.



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 cap on the spark plug securely.

10. Reinstall the spark plug maintenance cover.

! 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.
- Never use a spark plug without damping resistance or it will cause no AC output.

10. TRANSPORTING and STORAGE

To prevent fuel spillage when transporting or during temporary storage, the generator should be secured upright in its normal operating position with the engine switch OFF.

When transporting the generator:

WARNING

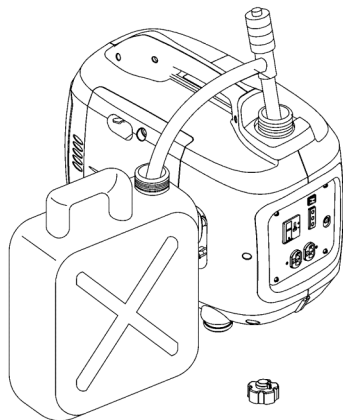
- If you must transport the generator in a vehicle, drain all fuel from the generator.
- Do not operate the generator while it is on or in a vehicle. Take the generator out of the vehicle and use it in a well ventilated area.
- Avoid a storage area exposed to direct sunlight when putting the generator on a vehicle. If the generator is left in an enclosed vehicle for many hours, high temperature inside the vehicle could cause residual fuel to vaporize resulting in a possible explosion.
- Do not drive on a rough road for an extended period with the generator on board.

Before storing the unit for an extended period:

1. Be sure the storage area is free of excessive humidity and dust.
2. Drain the fuel.

WARNING

- Gasoline is extremely flammable and explosive under certain conditions.
- Do not smoke or allow flames or sparks in the area.

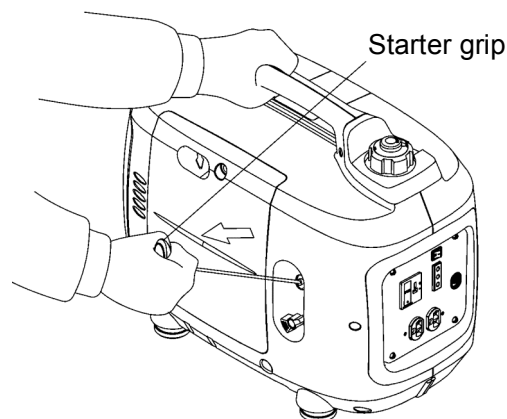


Exercising the Generator

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 the engine seals and moving components are lubricated. Exercise the generator by running it with at least a 1/2 load for 60 minutes each 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.

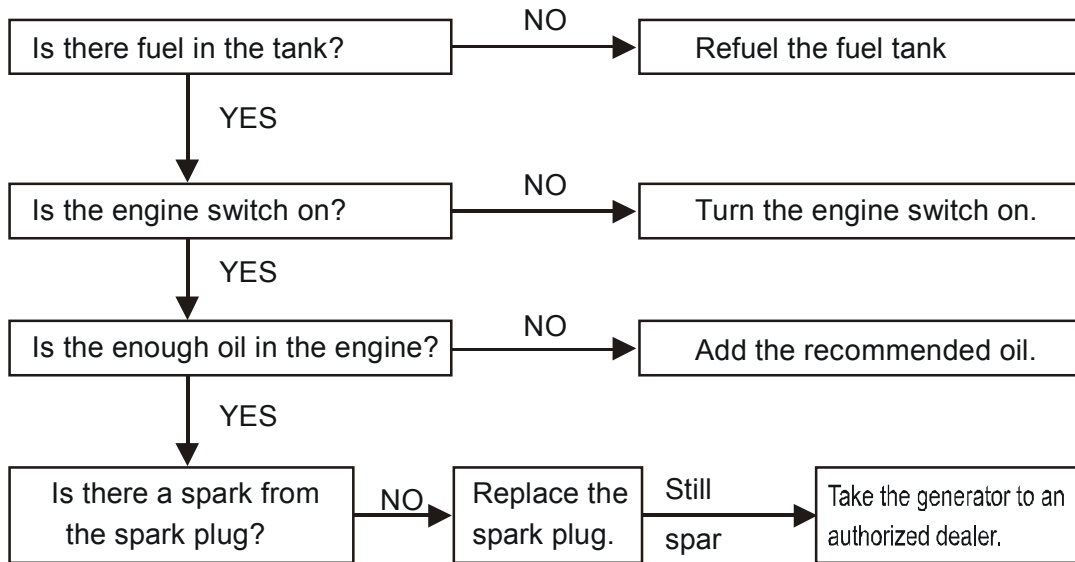
Storage

- a. Drain all gasoline from the fuel tank into an approved gasoline container.
 - b. Turn the engine switch ON, and loosen the carburetor drain screw and drain the gasoline from the carburetor into a suitable container.
 - c. With the drain screw loosened remove the spark plug cap and pull the starter grip 3 to 4 times to drain the gasoline from the fuel pump.
 - d. Turn the engine switch to the OFF position, and tighten the drain screw securely.
 - e. Reinstall the spark plug cap on the spark plug securely.
3. Change the engine oil.
 4. Remove the spark plug and pour about a tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil and then reinstall the spark plug.
 5. Slowly pull the starter grip until resistance is felt. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed. Storing the engine in this position will help to protect it from internal corrosion.



11. TROUBLESHOOTING

Engine will not start:



⚠️ WARNIN

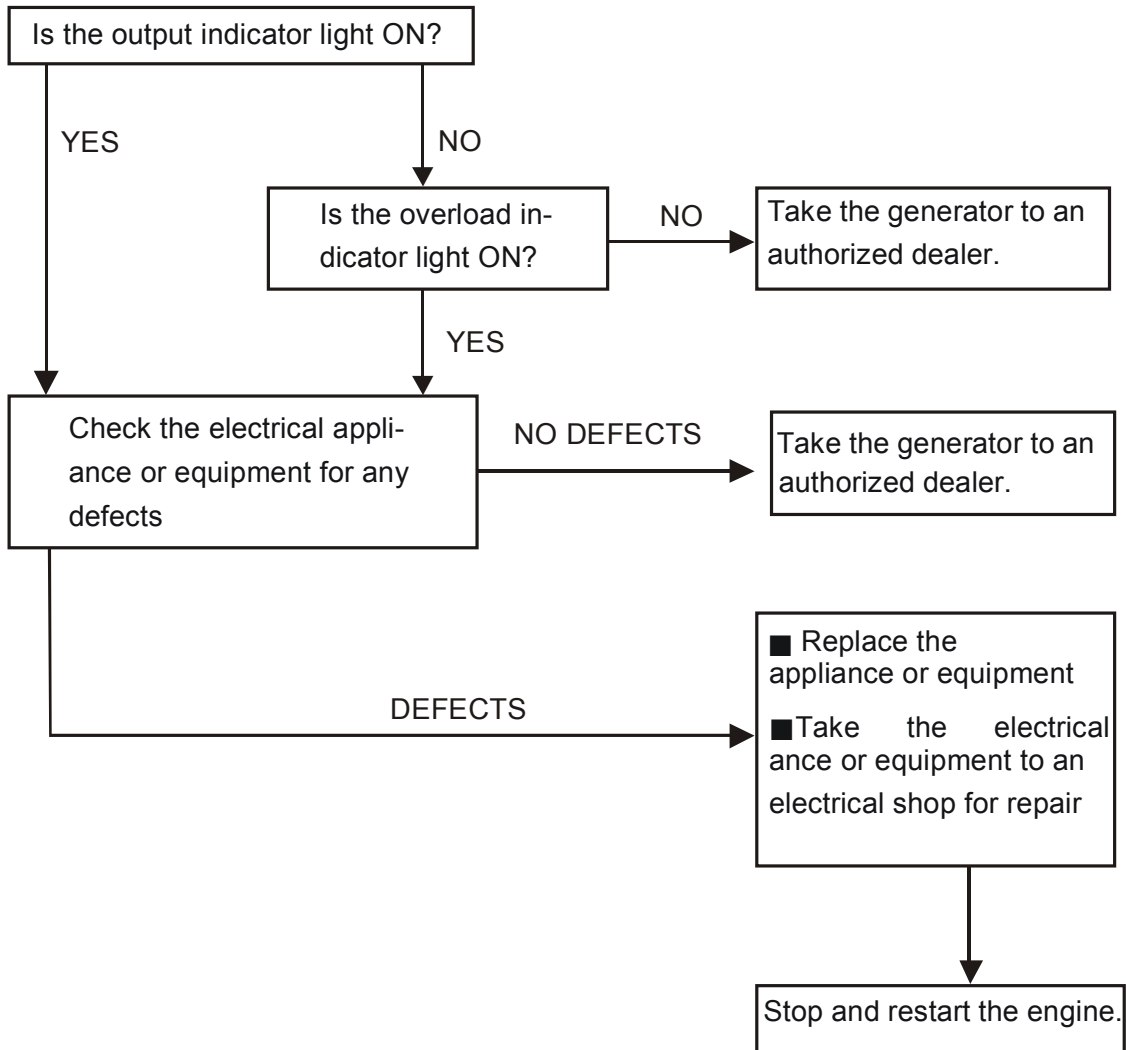
- Be sure there is no spilled fuel around the spark plug. Spilled fuel may ignite.

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

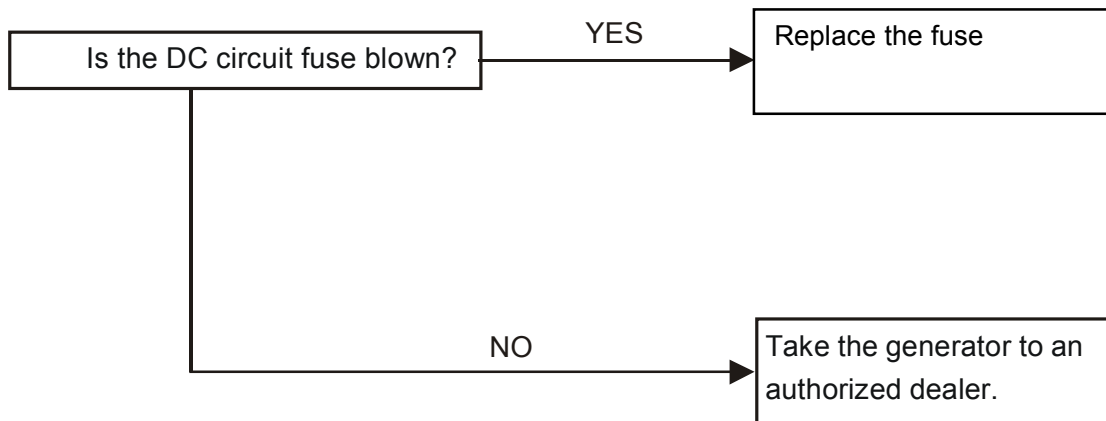
To

- 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) Pull the recoil starter, sparks should jump across the gap.

Appliance does not operate:



No electricity at the DC receptacle:



12. SPECIFICATIONS

Generator

Model	VI1000P	VI2000P	VI2600P
Rated frequency (Hz)	60		
Rated voltage (V)	120		
Rated current (A)	7.5	13.3	19.2
Max current (A)	8.3	16.6	21.7
Rated output (W)	900	1600	2300
Max output (W)	1000	2000	2600
DC Output	12 V, 5.0 A		
Phase	Single		

Engine

Model	KG144	KG158	KG166
Type	Single cylinder, 4 stroke, vertical shaft, air-cooled, OHV		
Displacement- CC	58	106	171
Compression Ratio	8.5:1		
Rated Power- HP@RPM	1.3@5500		3.3@3600
Ignition System	T.C.I.		
Starting System	Recoil Starter		
Spark Plug	UR5	UR5	F6RTC
Fuel	Automotive Unleaded Gasoline		
Lube Oil	SAE 10W30 (see viscosity chart)		
Oil Capacity- qt (L)	(.2)	.42 (.4)	.63 (.6)
Fuel Tank Capacity- gal (L)	.7 (2.6)	1 (3.8)	1.3 (4.9)
Rated Load Run Time	4 Hrs	3.5 Hrs	3.25 Hrs
Noise level- dB@23' (7m) no load-full load	54-59	57-61	58-65

Tune Up Specifications- all models

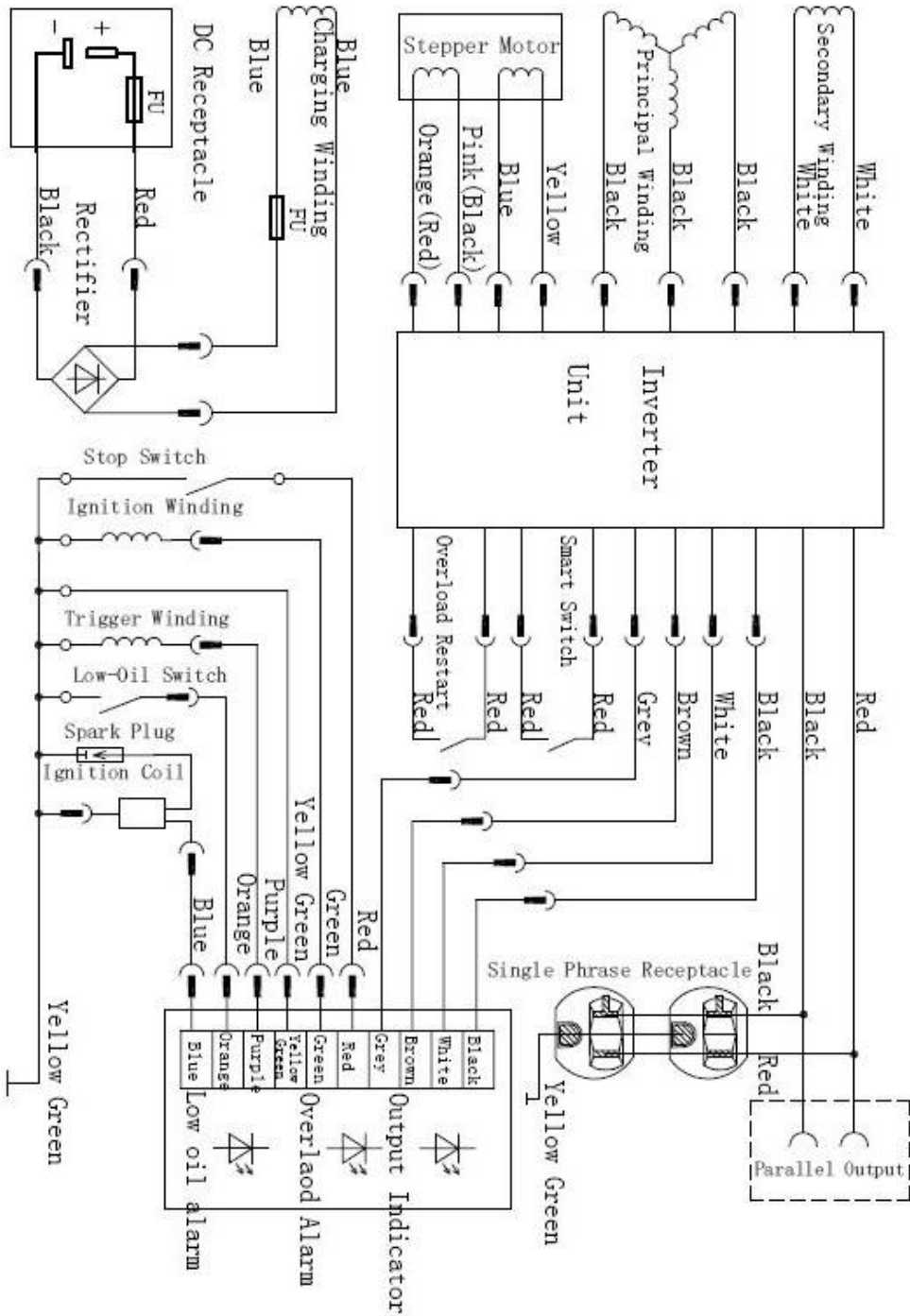
Spark Plug Gap	0.024-0.028 in (0.6-0.7 mm)
Valve Clearance (Intake)	0.0031-0.0039 in (0.18-0.10 mm)
Valve Clearance (Exhaust)	0.0039-0.0059 in (0.10-0.15 mm)

Dimensions

Model	VI1000P	VI2000P	VI2600P
LxWxH in (mm)	17.5x9.5x15 (444x241x301)	20x11x16.75 (508x279x425)	23.3x13x18.9 (592x330x480)
Dry weight	30.8	48.5	68.2

13. WIRING DIAGRAMS

• • • • •

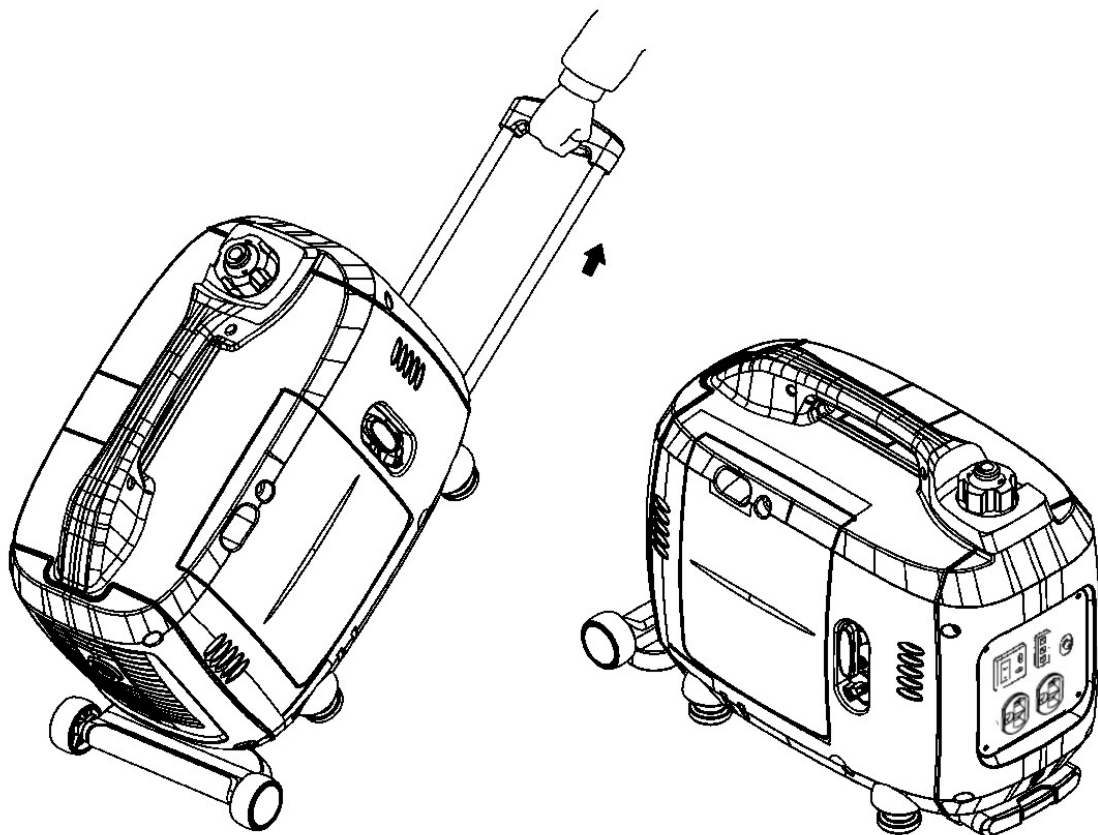


APPENDIX A- J-2600D Handle

A retractable handle assembly has been designed to facilitate transport of the generator.

From the stowed position, simply depress the two yellow buttons on the end of the handle and extend the handle. To retract the handle, simply depress the same buttons and push the handle to the completely stowed position.

The handle should be retracted while the unit is running. After the generator has been running for an extended period, allow it to cool down for five minutes before extending the handle and transporting.



Handle Extended for
Transport

Handle Retracted for
Operation and
Storage

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