

OWNER'S MANUAL

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Thank you for purchasing our generator. .

This manual covers the operation and maintenance of our series generator. All the information in this publication is based on the latest product information provided at the time of printing.






Our generator reserves the right to make changes at any time without notice and without incurring any obligation.

No part of this publication may be reproduced without written permission.

This manual should be considered a permanent part of the engine and should remain with the engine if it is resold.

READ THIS OWNER'S MANUAL CAREFULLY. Pay special attention to these symbols and any instructions that follow:

NOTE: Gives helpful information.

 WARNING SYMBOLS	
 DANGER	Indicates serious injury or death will result if instructions are not followed.
 WARNING	Indicates a strong possibility that serious injury or death could result if instructions are not followed.
 CAUTION	Indicates a strong possibility that serious injury or death could result if instructions are not followed.
 NOTICE	Indicates that equipment or property damage can result if instructions are not followed.


If a problem should arise, or if you have any questions about your engine, consult your engine dealer.






ENGINE SAFETY

Safety Label Location

These labels warn you of potential hazards that can cause serious injury. Read them carefully.

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

 **WARNING**

 <p>Read the operator's instruction manual.</p>	 <p>Risk of fire. Do not refuel during operation.</p>
 <p>Generator is a potential source of electric shock. Do not expose to moisture, rain or snow. Do not operate with wet hands or feet.</p>	 <p>Exhaust gas is poisonous. Do not operate in an unventilated area.</p>
 <p>Failure to properly ground generator can result in electrocution, especially if the generator is equipped with a wheel kit.</p>	 <p>Do not expose to rain or use in damp locations.</p>

ENGINE SAFETY

Safety Information

Our generators are designed to give safe and dependable service if operated according to instructions. Read and understand this owner's manual before operating your generator. You can help prevent accidents by being familiar with your generator's controls, and by observing safe operating procedures.

1) Operator Responsibility

- Know how to stop the generator quickly in case of emergency.
- Understand the use of all generator controls, output receptacles, and connections.
- Be sure that anyone who operates the generator receives proper instruction. Do not let children operate the generator without parental supervision.

2. Carbon Monoxide Hazards

- Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death.
- If you run the generator in an area that is confined, or even partially enclosed, the air you breathe could contain a dangerous amount of exhaust gas. To keep exhaust gas from building up, provide adequate ventilation.

3. Electric Shock Hazards

- The generator produces enough electric power to cause a serious shock or electrocution if misused.
- Using a generator or electrical appliance in wet conditions, such as rain or snow, or near a pool or sprinkler system, or when your hands are wet, could result in electrocution. Keep the generator dry.
- Do not connect to a building's electrical system unless an isolation switch has been installed by a qualified electrician.

ENGINE SAFETY

Safety Information

4.Fire and Burn Hazards

- The exhaust system gets hot enough to ignite some materials.

Keep the generator at least 1 meter away from buildings and other equipment during operation.

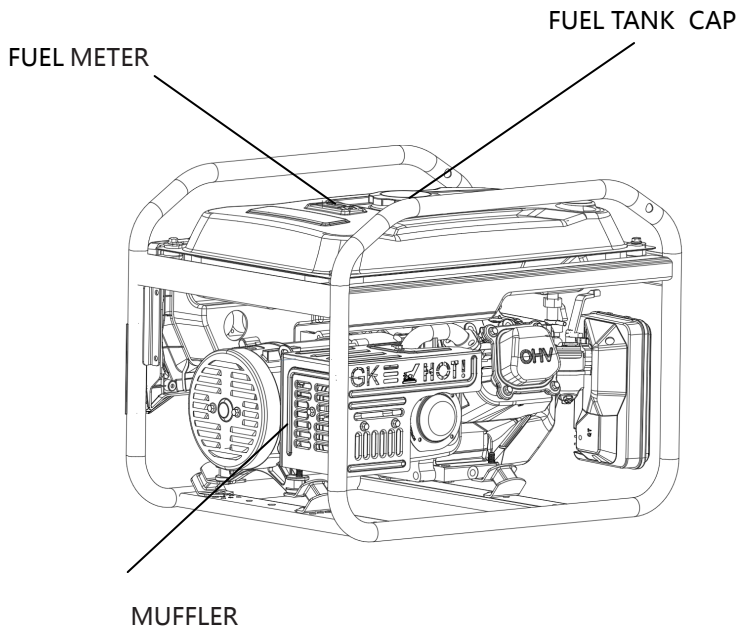
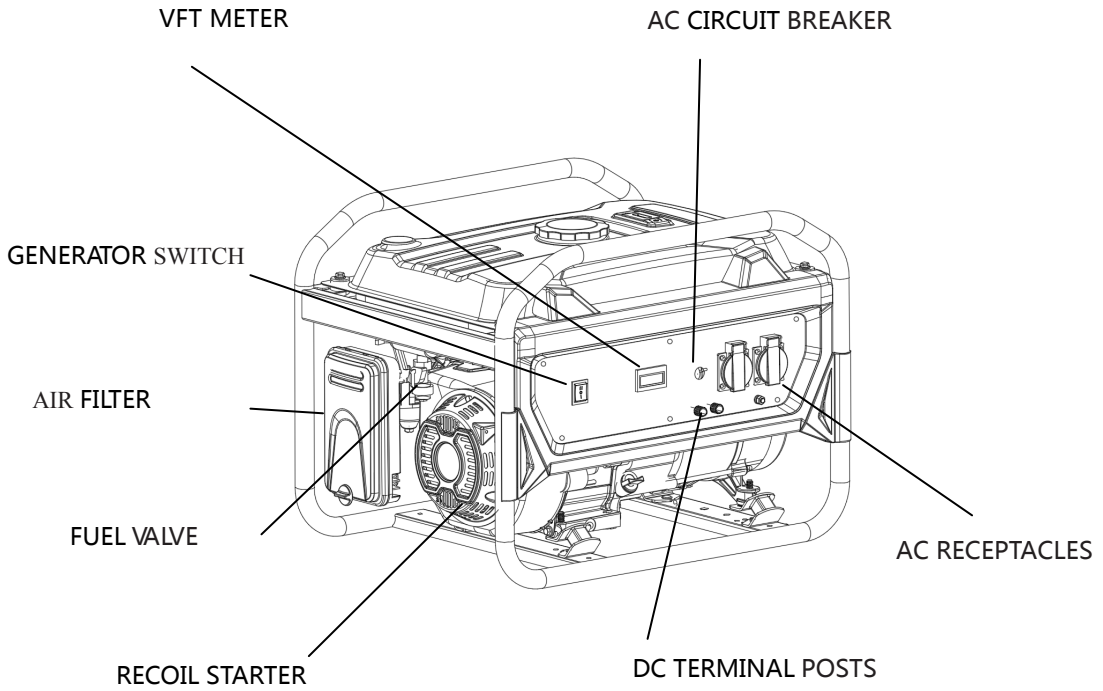
Do not enclose the generator in any structure.

Keep flammable materials away from the generator.

- The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the generator indoors.
- Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks where the generator is refueled or where gasoline is stored. Refuel in a well-ventilated area with the engine stopped.
- Fuel vapors are extremely flammable and may ignite after the engine has started. Make sure that any spilled fuel has been wiped up before starting the generator.

INTRODUCTION

Component Identification



INTRODUCTION

Specification

	2500(E)	3000(E)	3500(E)	3800(E)	4000(E)
Frequency(Hz)	50				
Rated Voltage(V)	220/230/240				
Rated Output(kW)	2.0	2.5	2.7	3.0	3.2
Max Output(kW)	2.2	2.7	3.0	3.3	3.5
Fuel tank Capacity(L)	15				
Running Time 50% Loading(H)	15	12	10	9	8
DC Output(V/A)	12 / 8.3				
Phase	Single				
Noise dB(7m)	≤75				
Engine type	Forced air-cool, 4-stroke, OHV				
Displacement(cc)	212			223	
Engine Oil capacity(L)	0.55				
Starting system	Recoil / Electric start				
Dimension(L×W×H mm)	595×430×470				

	2500(E)	3000(E)	3500(E)	3800(E)	4000(E)
Frequency(Hz)	60				
Rated Voltage(V)	110/120				
Rated Output(kW)	2.2	2.8	3.0	3.3	3.6
Max Output(kW)	2.5	3.0	3.2	3.5	4.0
Fuel tank Capacity(L)	15				
Running Time 50% Loading(H)	15	12	10	9	8
DC Output(V/A)	12 / 8.3				
Phase	Single				
Noise dB(7m)	≤75				
Engine type	Forced air-cool, 4-stroke, OHV				
Displacement(cc)	212			223	
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INTRODUCTION

Specification

	5000(E)	6000(E)	6500(E)	7000(E)	8000(E)	9000(E)
Frequency(Hz)	50					
Rated Voltage(V)	220/230/240					
Rated Output(kW)	4.0	5.0	5.5	6.0	7.0	8.0
Max Output(kW)	4.4	5.5	6.0	6.5	7.5	8.5
Fuel tank Capacity(L)	25					
Running Time 50% Loading(H)	12		10		8.5	
DC Output(V/A)	12 / 8.3					
Phase	Single / Three					
Noise dB(7m)	≤76				≤78	
Engine type	Forced air-cool, 4-stroke, OHV					
Displacement(cc)	301	389/420	420		456	
Engine Oil capacity(L)	0.95	1.1				
Starting system	Recoil / Electric start					
Dimension(L×W×H mm)	686×516×546					

	5000(E)	6000(E)	6500(E)	7000(E)	8000(E)	9000(E)
Frequency(Hz)	60					
Rated Voltage(V)	110/120					
Rated Output(kW)	4.5	5.5	6.0	7.0	8.0	8.5
Max Output(kW)	5.0	6.0	6.5	7.5	8.5	9
Fuel tank Capacity(L)	25					
Running Time 50% Loading(H)	12		10		8.5	
DC Output(V/A)	12 / 8.3					
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OPERATIONS

Generator Use

1. Before starting the engine:

- a. Follow the Instructions to prepare the Generator.
- b. Unplug all loads from the Generator.
- c. Inspect the Generator and engine.
- d. Fill the engine with the proper amount and type of both stabilizer-treated fuel and oil.

2. Basic Generator Use Procedure - See following pages for specific instructions

1. Check that the Generator can handle the wattage needed to power your products.
2. Start the Engine, and allow the Engine and Generator to run and warm up for five minutes after starting with no electrical load.
3. Plug in products.
4. When finished using the Generator, disconnect all electrical loads.

Note: Do not allow Generator to run out of fuel with loads attached.

6. Turn off the Engine.
7. Allow the Generator and its Engine to completely cool. Then store the unit in a clean, dry, safe location out of reach of children and other unauthorized people.



NOTICE

After starting the engine, allow it to run at no load for five minutes with no load after each start-up so that the engine can stabilize.

3. Break-in Period :

A. Breaking-in the engine will help to ensure proper equipment and engine operation.

B. The operational break-in period will last about 3 hours of use . During this period:

- Do not apply a heavy load to the equipment .

C. The maintenance break-in period will last about 20 hours of use. After this period:

Under normal operating conditions subsequent maintenance follows the schedule explained in the SERVICE section .

OPERATIONS

Pre-operation Check

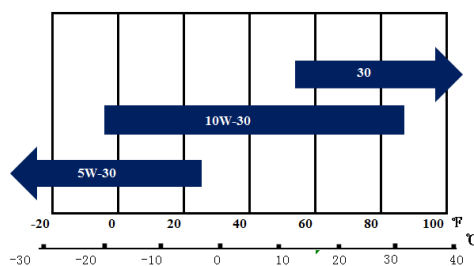
1. Engine Oil



NOTICE

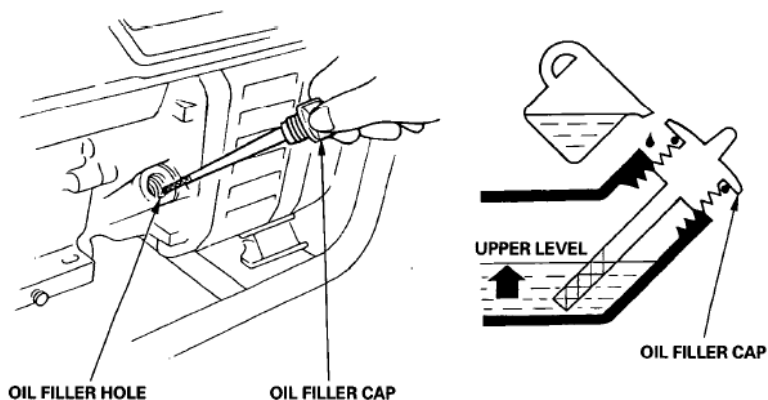
Engine oil is a major factor affecting engine performance and service life. Non-detergent and 2-stroke engine oils will damage the engine and are not recommended.

Check the oil level **BEFORE EACH USE** with the generator on a level surface and the engine stopped. Use 4-stroke motor oil that meets or exceeds the requirements for API service classification SF or SG. Always check the API SERVICE label on the oil container to be sure it includes the letters SF or SG.



SAE 10W-30 is recommended for general, all-temperature use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

1. Remove the oil filler cap and wipe the dipstick clean.
2. Check the oil level by inserting the dipstick into the filler neck without screwing it in.
3. If the level is low, add the recommended oil to the upper mark on the dipstick.



OPERATIONS

2. Fuel

1. Check the fuel level gauge.

2. Refill the tank if the fuel level is low. Do not fill above the shoulder of the fuel strainer.

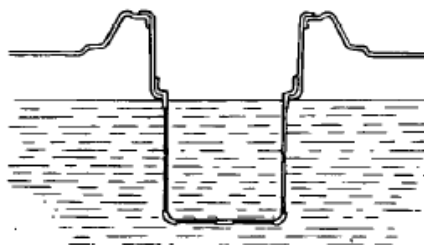
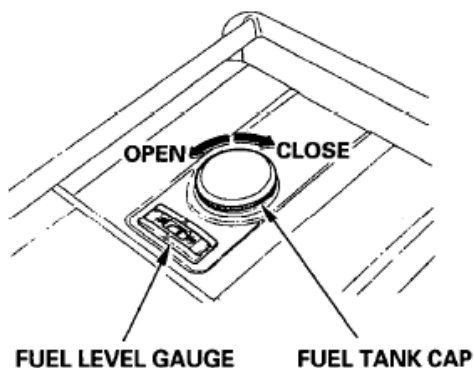


WARNING

- 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 flames 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 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.



OPERATIONS

Use unleaded gasoline with a pump octane rating of 86 or higher. This engine is certified to operate on unleaded gasoline.

Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

Never use stale or contaminated gasoline or oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

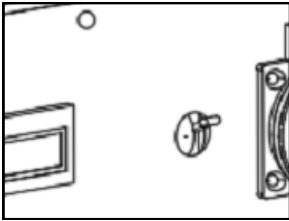
Occasionally you may hear light "spark knock" or "pinging" (metallic rapping noise) while operating under heavy loads. This is no cause for concern.

If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of gasoline. If spark knock or pinging persists, see an authorized generator dealer.

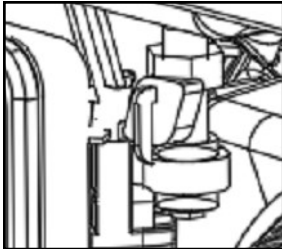
Running the engine with persistent spark knock or pinging is misuse, and the Distributor's Limited Warranty does not cover parts damaged by misuse.

OPERATIONS

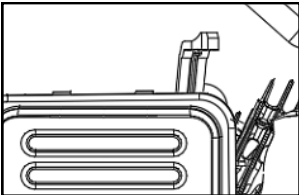
Start The Engine



⇒ Make sure that the AC circuit breaker is in the OFF position. The generator may be hard to start if a load is connected.



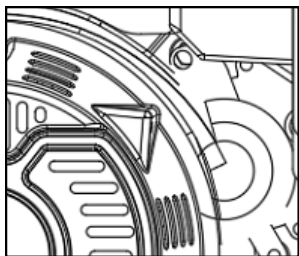
⇒ Turn the fuel valve to the ON position.



⇒ Turn the choke lever to the CLOSE position.



⇒ Turn the engine switch to the ON position.



⇒ Pull the starter grip lightly until resistance is felt, then pull briskly.



NOTICE

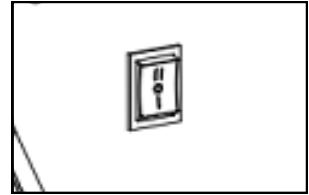
Do not allow the starter grip to snap back. Return it slowly by hand.

OPERATIONS

Stop The Engine

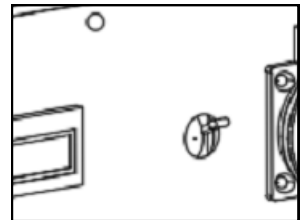
⇒ In an emergency:

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



⇒ In normal use:

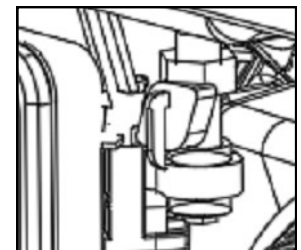
1. Turn the AC circuit breaker to the OFF position.



2. Move the engine switch to the OFF position.



3. Turn the fuel valve to the OFF position.



TRANSPORTING&STORAGE

When the equipment is to remain idle for longer than 20 days, prepare the Engine for storage as follows:

When the equipment is to remain idle for longer than 20 days, prepare the Engine for storage as follows:



WARNING

During extended storage periods the Engine must be started every 3 months and allowed to run for 15 – 20 minutes or the Warranty is VOID.

1. CLEANING:

Wait for Engine to cool, and then clean Engine with dry cloth. NOTICE: Do not clean using water. The water will gradually enter the Engine and cause rust damage. Apply a thin coat of rust preventive oil to all metal parts.

2. FUEL:

To protect the fuel tank during storage, fill the tank with gasoline that has been treated with a fuel stabilizer additive. Follow fuel stabilizer manufacturer' s recommendations for use.

Fill tank in a well-ventilated area away from ignition sources. If the engine is hot from use, shut the engine off and wait for it to cool before adding fuel. Do not smoke.

3. LUBRICATION:

A. Change engine oil.

b. Clean out area around spark plug. Remove spark plug and pour one tablespoon of engine oil into cylinder through spark plug hole.

C. Replace spark plug, but leave spark plug cap disconnected.

D. Pull Starter Handle to distribute oil in cylinder. Stop after one or two revolutions when you feel the piston start the compression stroke (when you start to feel resistance).

4. STORAGE AREA:

Cover and store in a dry, level, well-ventilated area out of reach of children. Storage area should also be away from ignition sources, such as water heaters, clothes dryers, and furnaces

5. AFTER STORAGE:

Before starting the Engine during or after storage, keep in mind that untreated gasoline will deteriorate quickly. Drain the fuel tank and change to fresh fuel if untreated gasoline has been sitting for a month, if treated gasoline has been sitting beyond the fuel stabilizer' s recommended time period, or if the Engine does not start.

SERVICE

Maintenance

1) Maintenance schedule

Follow the maintenance schedule. Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, will require more frequent service.

Maintenance Schedule						
ITEM	PERIOD	Each use	20Hours	50Hours	100Hours	300Hours
Engine oil	Check level	●				
	Change		●		●	
Air cleaner	Check	●				
	Clean			●		
Sediment cup	Clean				●	
Spark plug	Clean-Readjust				●	
	Replace					●
Spark arrester	Clean				●	
Valve clearance	Check-Readjust					●
Fuel tank and filter	Clean					●
Fuel line	Check					●
						Every 2 years

2) Engine oil change

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

Step 1: Remove the drain plug and sealing washer, remove the oil filler cap, and drain the oil.

Step 2: Reinstall the drain plug and sealing washer. Tighten the plug securely.

Step 3: Refill with the recommended oil and check the oil level.

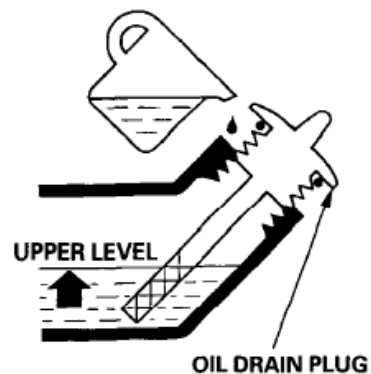
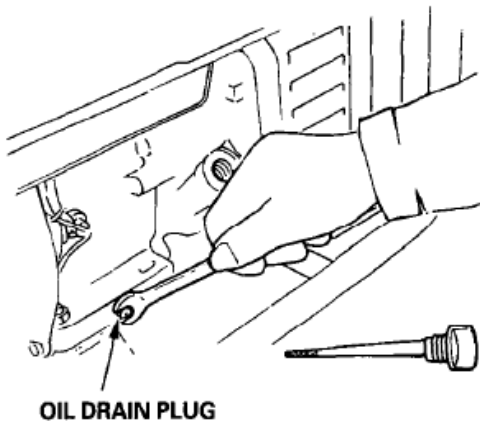
SERVICE

Engine Oil



NOTICE

Used motor oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely, unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.



Please dispose of used motor oil and containers in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station or recycling center for reclamation. Do not throw it in the trash, pour it on the ground or down a drain.

3).Air Filter Element Maintenance

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 engine in extremely dusty areas.

SERVICE



WARNING

Using gasoline or flammable solvent to clean the filter element can cause a fire or explosion. Use only soapy water or nonflammable solvent.

1. Unsnap the air cleaner cover clips, remove the air cleaner cover, and remove the element.

2. Wash the element in a solution of household detergent and warm water, then rinse thoroughly, or

wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly.

3. Soak the element in clean engine oil and squeeze out the excess oil. The engine will smoke

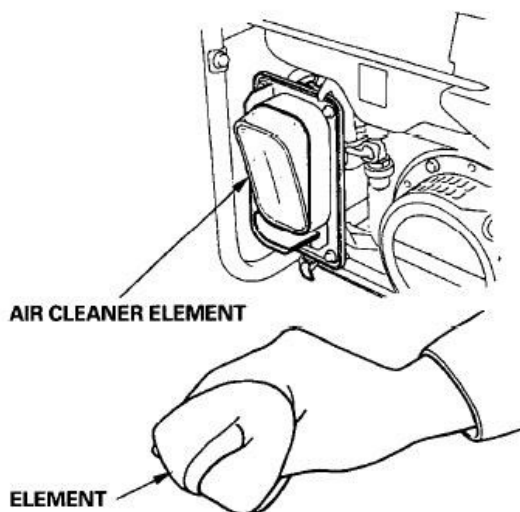
during initial start up if too much oil is left in the element.

4. Reinstall the air cleaner element and the cover.

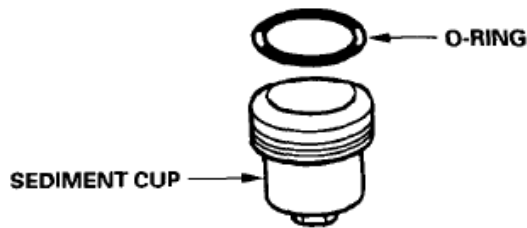
4).Sediment Cup Cleaning

The sediment cup prevents dirt or water which may be in the fuel tank from entering the carburetor. If the engine has not been run for a long time, the sediment cup should be cleaned.

- Turn the fuel valve to OFF. Remove the sediment cup and O-ring.
- Clean the sediment cup and O-ring in nonflammable or high flash point solvent.
- Reinstall the O-ring and sediment cup.
- Turn the fuel valve ON and check for leaks.



SERVICE



5).Spark plug service

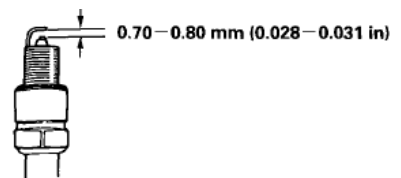
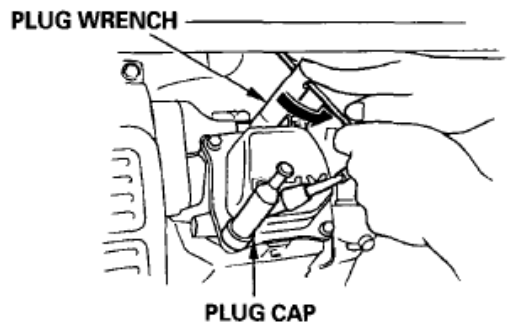
In order to service the spark plug, you will need a spark plug wrench (commercially available).

Recommended spark plugs: F6(R)TC、F7(R)TC

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

If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.

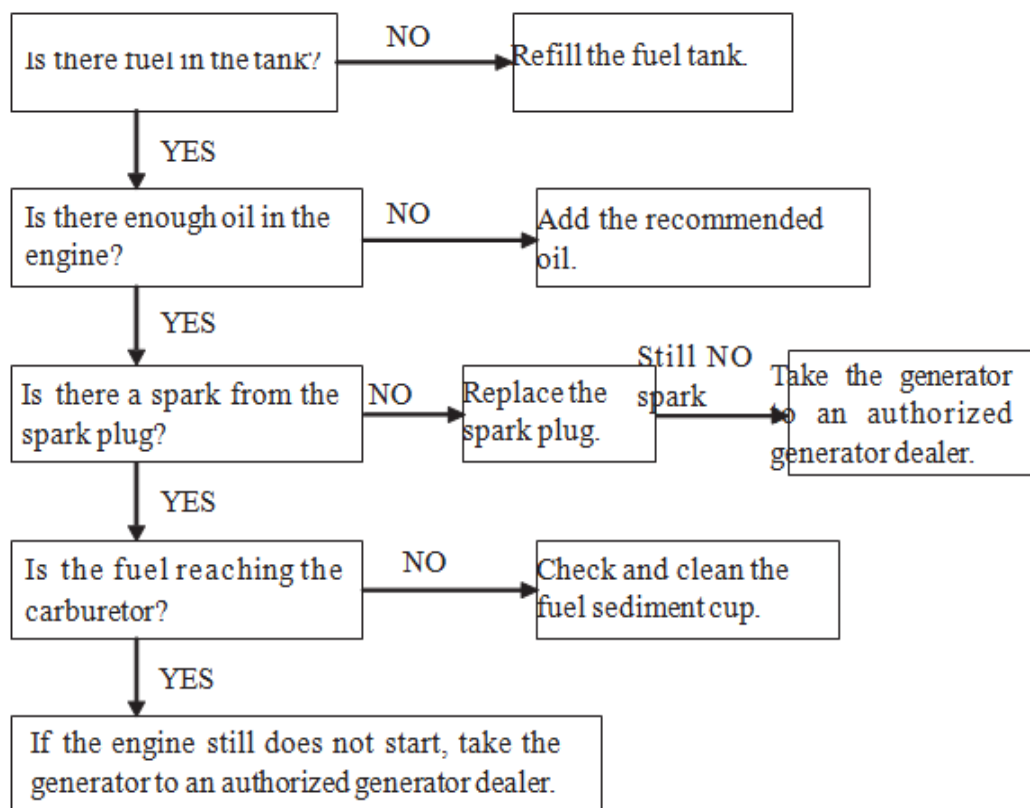
1. Remove the spark plug cap.
 2. Clean any dirt from around the spark plug base.
 3. Use the wrench supplied in the tool kit to remove the spark plug.
 4. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be re-used.
 5. Measure the plug gap with a feeler gauge. Correct as necessary by carefully bending the side electrode .
- The gap should be: 0.70 -0.80 mm (0.028 -0.031 in)



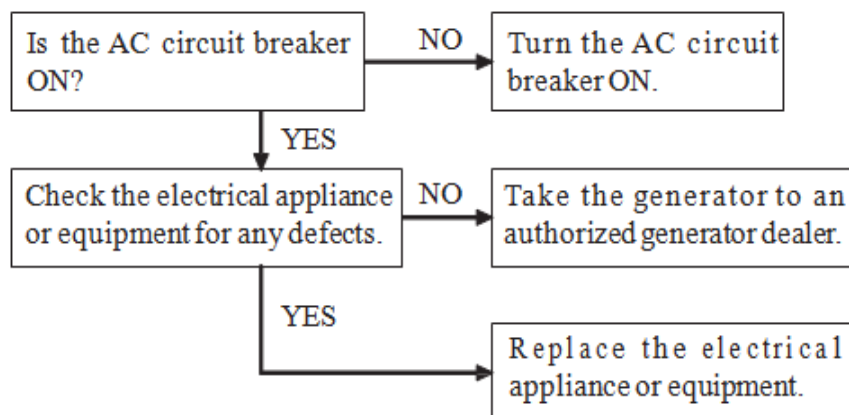
SERVICE

Trouble Shooting

Engine not to start:



No power supply:



SERVICE

Warranty Service

Owner Satisfaction

Your satisfaction and goodwill are important to your dealer and to us. All warranty details are explained in the Distributor's Limited Warranty.

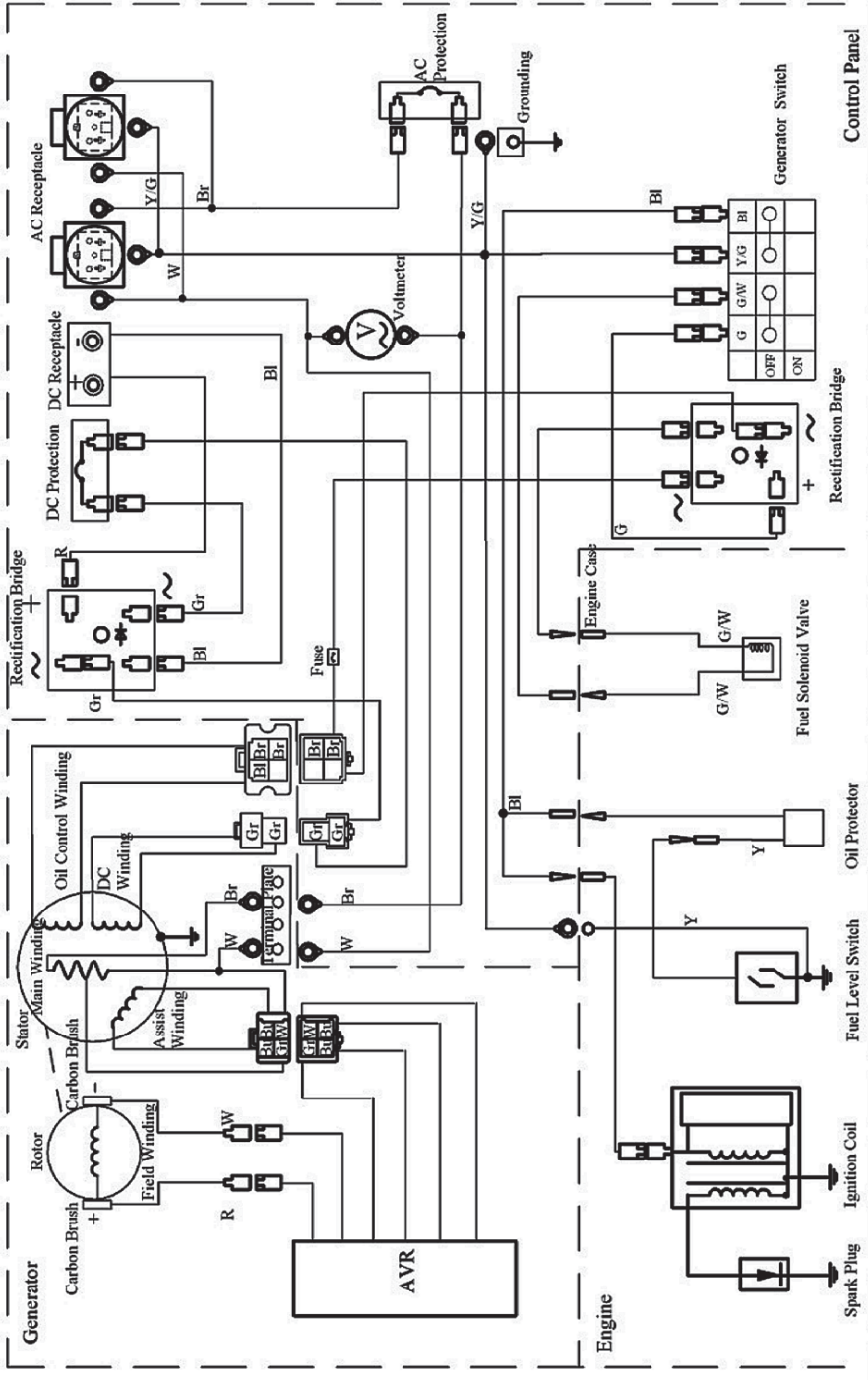
Warranty service is available at any dealership displaying our Engines sign.

Normally, any problem concerning the engine will be handled by the dealer's service department. If you have a warranty problem that has not been handled to your satisfaction, we suggest you take the following action:

- Discuss your problem with a member of dealership management. Often complaints can be quickly resolved at that level. If the problem has already been reviewed with the Service Manager, contact the owner of the dealership or the General Manager.
- If your problem still has not been resolved to your satisfaction, contact:

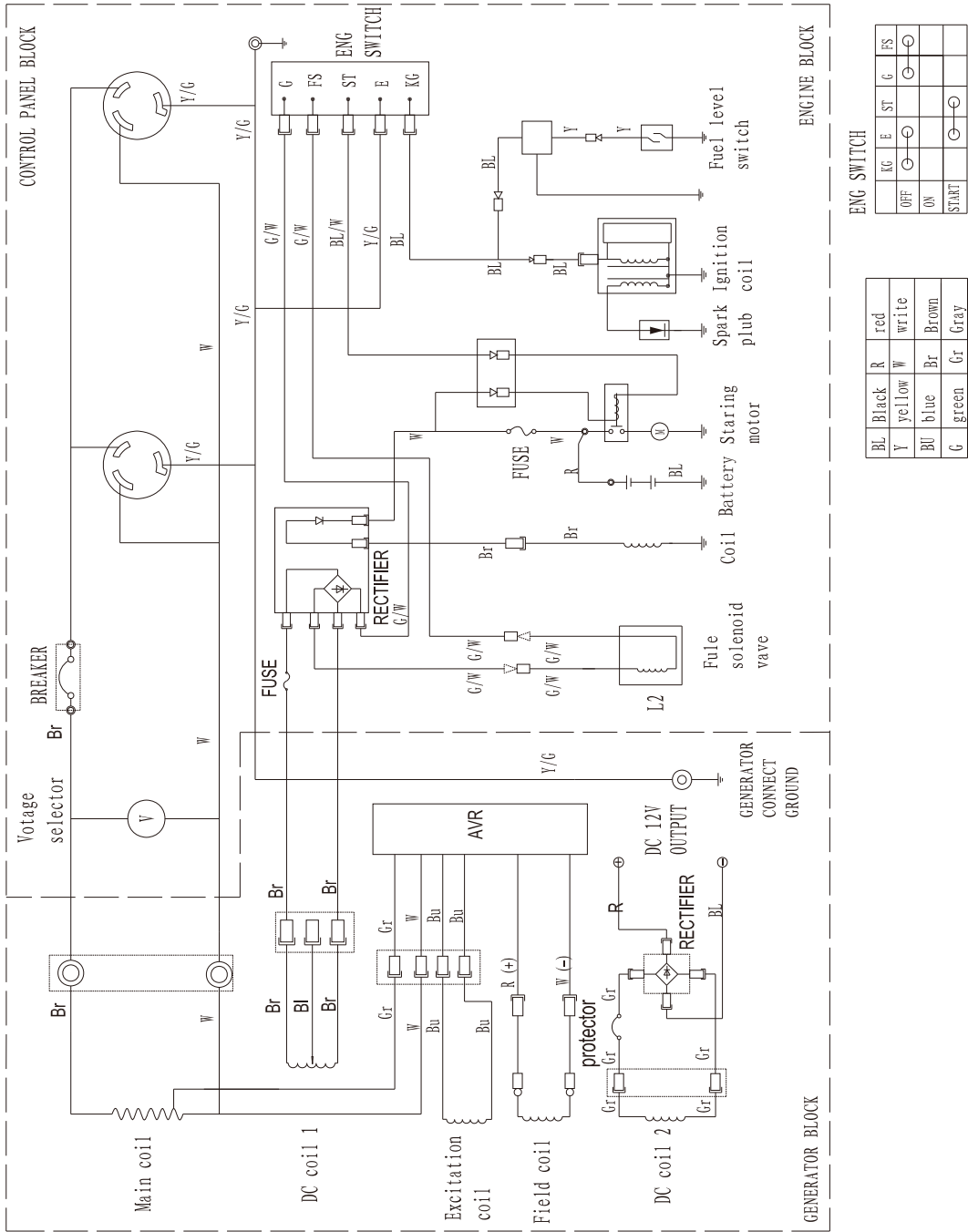
Name	
Address	
Telephone number	
Engine model	
Serial number	
Date of purchase	
Dealer name and address	
Nature of the problem	

SERVICE -WIRING DIAGRAM



BI	Black	R	Red
Y	Yellow	W	White
Bl	Blue	Br	Brown
G	Green	Gr	Grey

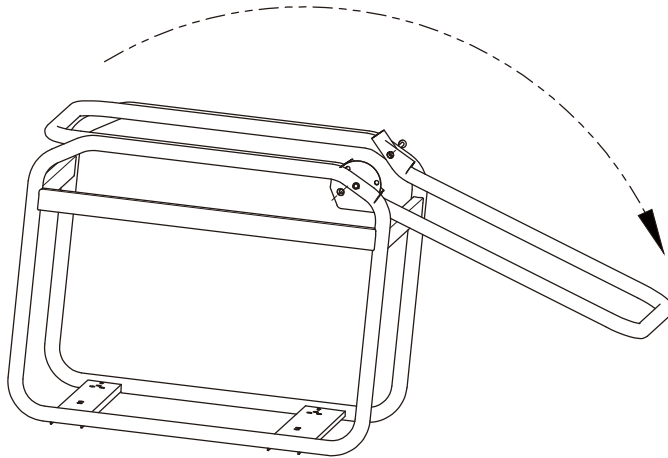
SERVICE-WIRING DIAGRAM



This figure is for reference only.

Hand tube installation diagram

Step 1: Turn the handle back.



Step 2: Fix the quick release latch to the stop plate with the nut. After loading, hold the quick release latch handle and put the handle back in place.

