HONDA

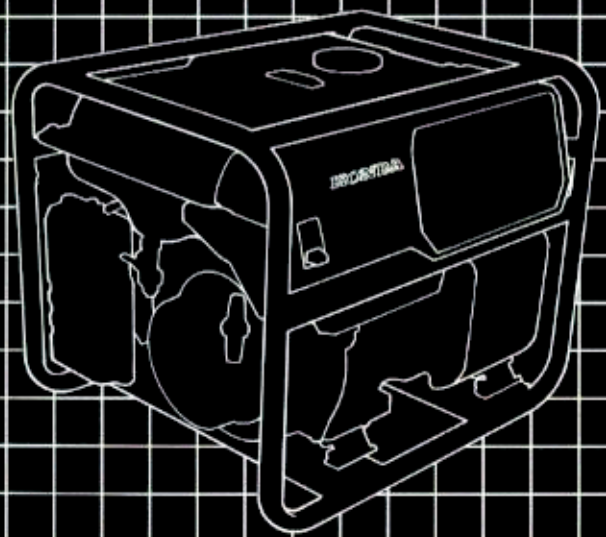
Power

Equipment

Owner's Manual

EB2500X

Click here to save this manual to your computer.



⚠WARNING

The generator is a potential source of electrical shock if misused. Do not expose the generator to moisture, rain or snow. Do not let the generator get wet, and do not operate it with wet hands.

⚠ WARNING: ⚠

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Thank you for purchasing a Honda generator.
We want to help you get the best results from your new generator and to operate it safely. This manual contains the information on how to do that; please read it carefully.

This owner's manual describes the operation and maintenance of the Honda Generator: **EB2500X**
All information in this publication is based on the latest product information available at the time of printing.
Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

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

Safety Messages
Your safety and the safety of others is very important. We have provided important safety messages in this manual and on the generator. Please read these messages carefully.

A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol ⚠ and one of three words: DANGER, WARNING, or CAUTION.

These mean:

⚠DANGER You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠WARNING You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠CAUTION You CAN be HURT if you don't follow instructions.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

Damage Prevention Messages
You will also see other important messages that are preceded by the word NOTICE.

This word means:

NOTICE Your generator or other property could be damaged if you don't follow instructions.

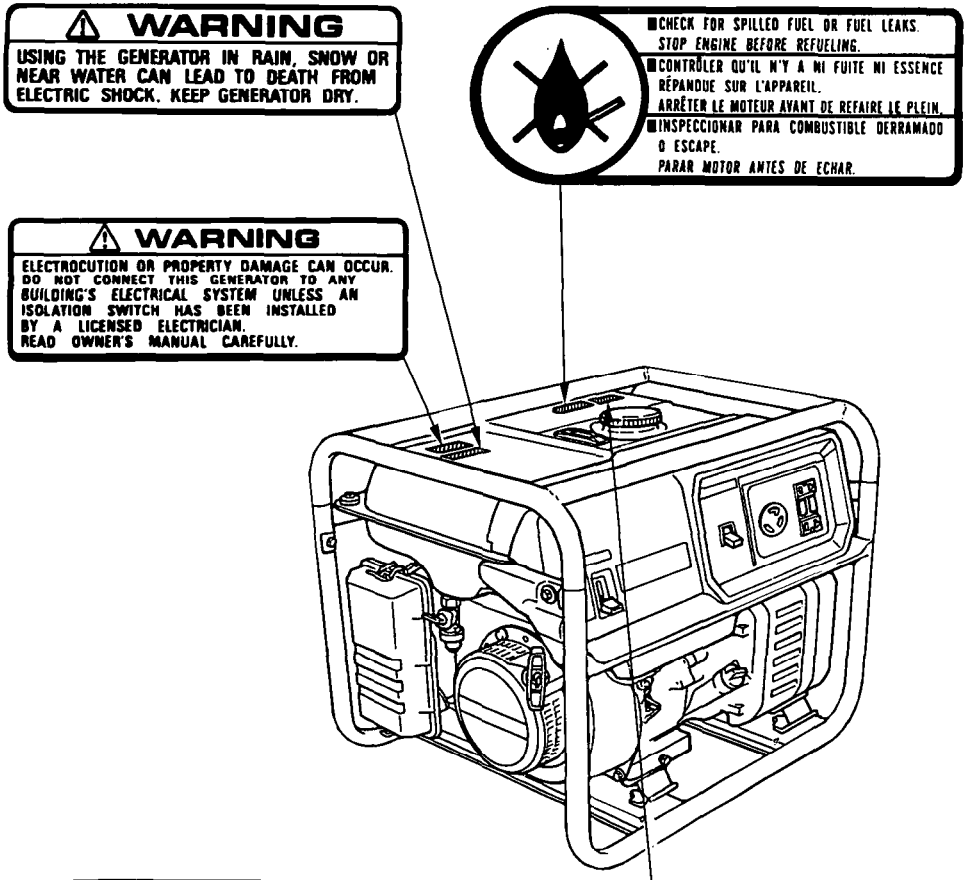
The purpose of these messages is to help prevent damage to your generator, other property, or the environment.

CONTENTS

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 Honda Generator dealer for a replacement.



WARNING	DO NOT USE INDOORS. EXHAUST GAS CONTAINS POISONOUS CARBON MONOXIDE.
ATTENTION	NE PAS UTILISER DANS UN ENDROIT FERME A CAUSE DU RISQUE D'EMPOISONNEMENT DU GAZ.
ATENCION	NO LO USE EN LUGARES CERRADOS PORQUE EL MONOXIDE DE CARBONO ES VENENOSO.

EB2500X HONDA MOTOR CO.,LTD. MADE IN JAPAN Ⓐ

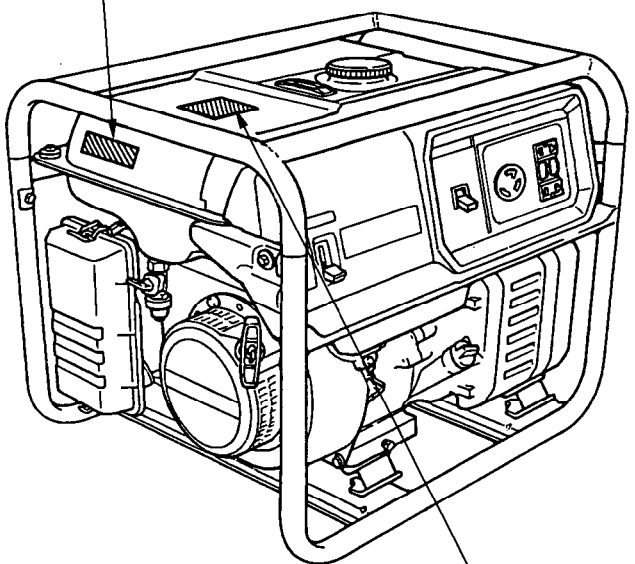
CAUTION

■ BE SURE TO FILL CRANKCASE WITH RECOMMENDED OIL BEFORE USING.
FOR DETAILED EXPLANATION, SEE THE OWNER'S MANUAL.

AC

VOLTAGE	120V
FREQUENCY	60Hz
RATED OUTPUT	2.3kVA
MAX.OUTPUT	2.5kVA
PHASE	1φ

FUEL GASOLINE (PETROL)



OCCUPANT'S TEST RECORD

SAFETY INFORMATION

Honda 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.

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.

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.

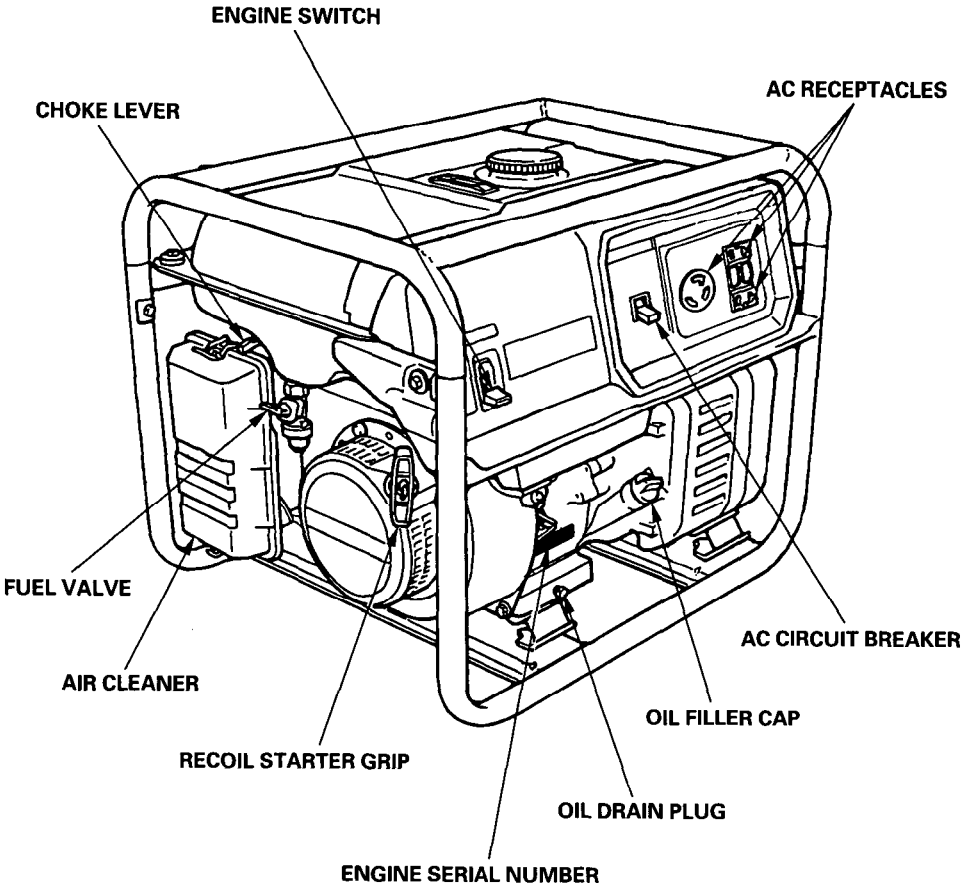
Electric Shock Hazards

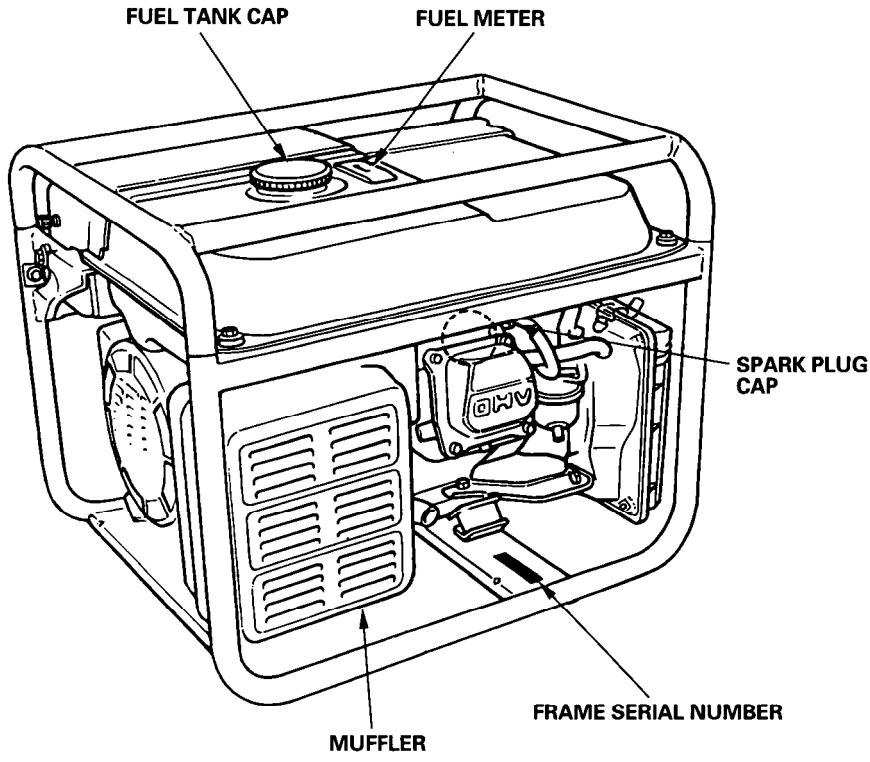
- The generator produces enough electric power to cause a serious shock or electrocution if misused.
- Using a generator or electrical appliance in wet conditions, such as rain or snow, or near a pool or sprinkler system, or when your hands are wet, could result in electrocution. Keep the generator dry.
- If the generator is stored outdoors, unprotected from the weather, check the Ground Fault Circuit Interrupter (GFCI) receptacle, and all other electrical components on the control panel, before each use. Moisture or ice can cause a malfunction or short circuit in electrical components which could result in electrocution.
- Do not connect to a building's electrical system unless an isolation switch has been installed by a qualified electrician.

Fire and Burn Hazards

- The exhaust system gets hot enough to ignite some materials.
  - Keep the generator at least 1 meter (3 feet) 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.

COMPONENT IDENTIFICATION



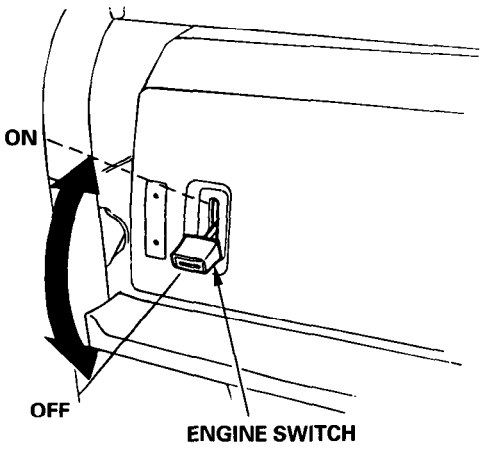


Record the engine and frame serial numbers for your future reference. Refer to these serial numbers when ordering parts, and when making technical or warranty inquiries (see page45).

Frame serial number:_____

Engine serial number:_____

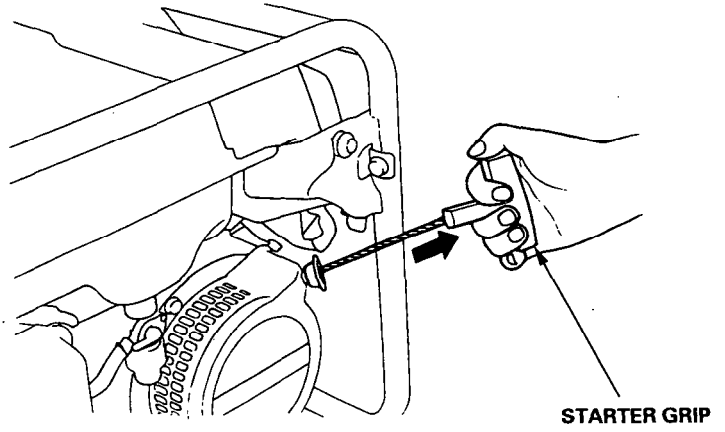
Engine Switch
To start and stop the engine.
Key position:
OFF: To Stop the engine.
ON: To run the engine.



Recoil Starter
To start the engine, pull the starter grip lightly until resistance is felt, then pull briskly.

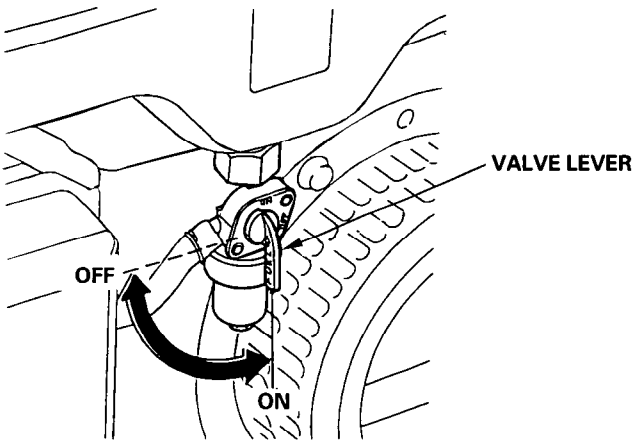
NOTICE

Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.



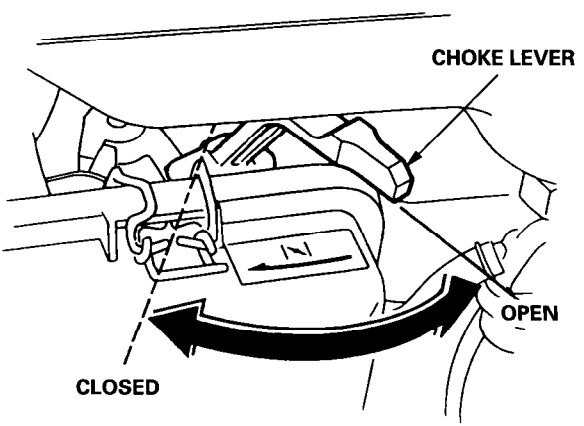
Fuel Valve

The fuel valve is located between the fuel tank and carburetor. When the valve lever is in the ON position, fuel is allowed to flow from the fuel tank to the carburetor. Be sure to return the lever to the OFF position after stopping the engine.



Choke Lever

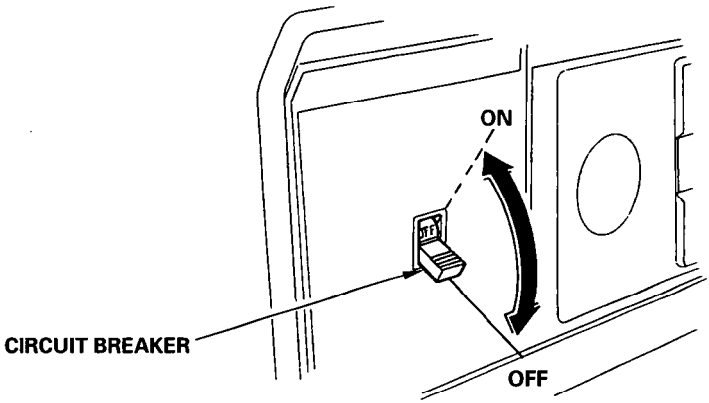
The choke is used to provide an enriched fuel mixture when starting a cold engine. It can be opened and closed by operating the choke lever manually. Move the lever to the CLOSE position to enrich the mixture for cold starting.



Circuit Breaker

The circuit breaker will automatically switch OFF if there is a short circuit or a significant overload of the generator at the receptacle. If the circuit breaker is switched OFF automatically, check that the appliance is working properly and does not exceed the rated load capacity of the circuit before switching the circuit breaker ON again.

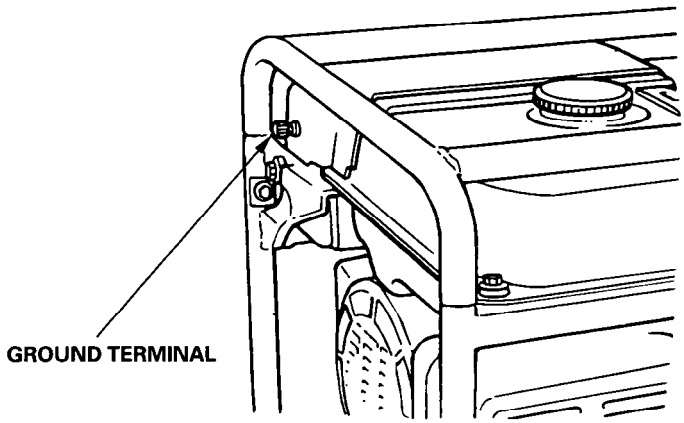
The circuit breaker may be used to switch the generator power on or off.



Ground Terminal

The generator ground terminal is connected to the frame of the generator, the metal non-current-carrying parts of the generator, and the ground terminals of each receptacle.

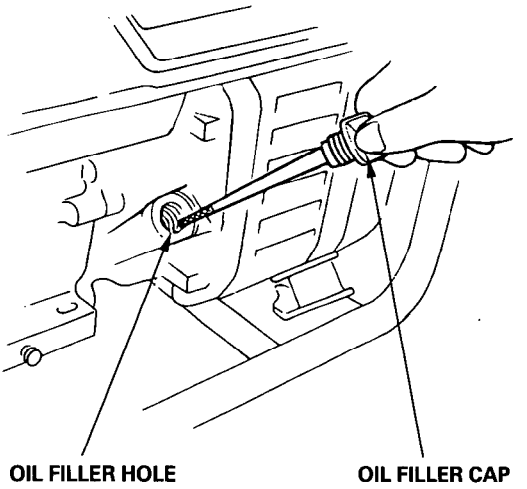
Before using the ground terminal, consult a qualified electrician, electrical inspector or local agency having jurisdiction for local codes or ordinances that apply to the intended use of the generator.

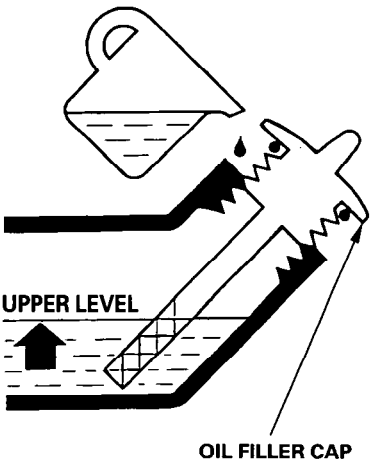


Oil Alert System

The Oil Alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit, the Oil Alert system will automatically stop the engine (the engine switch will remain in the ON position).

If the engine stops and will not restart, check the engine oil level (see page 21) before troubleshooting in other areas.





Ground Fault Circuit Interrupter (GFCI) Receptacle

⚠WARNING

Using the generator in rain, snow or near water can lead to death from electric shock. Keep the generator dry.

The 20-ampere, 120-volt duplex receptacle that has TEST and RESET buttons is protected by a Ground Fault Circuit Interrupter (GFCI) for protection against the hazards of ground fault currents. Examples of ground fault current is the current which would flow through a person who is using an appliance with faulty insulation and, at the same time, is in contact with an electrical ground such as a plumbing fixture, wet floor, or earth.

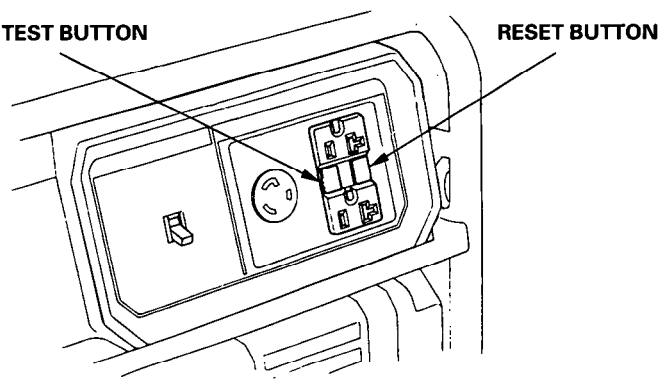
The ground fault circuit interrupter will not protect against short circuits or overloads. The circuit breaker in the control panel which supplies power to the circuit provides that protection (refer to circuit breaker on page 12).

The ground fault circuit interrupter can be identified by the TEST and RESET buttons. The duplex receptacle on the GFCI can be tested with the TEST and RESET buttons.

TEST BUTTON: To test, depress the "TEST" button (see page 15).

RESET BUTTON: To restore power, depress the "RESET" button (see page 16).

Perform this test monthly to ensure proper operation of the GFCI. If the generator is stored outdoors, unprotected from the weather, test the GFCI receptacle before each use. Record your test on the GFCI test card provided on the fuel tank.



INSPECTION

Perform the tests below to ensure proper operation of the GFCI. Record your test on the GFCI test card provided on the generator.

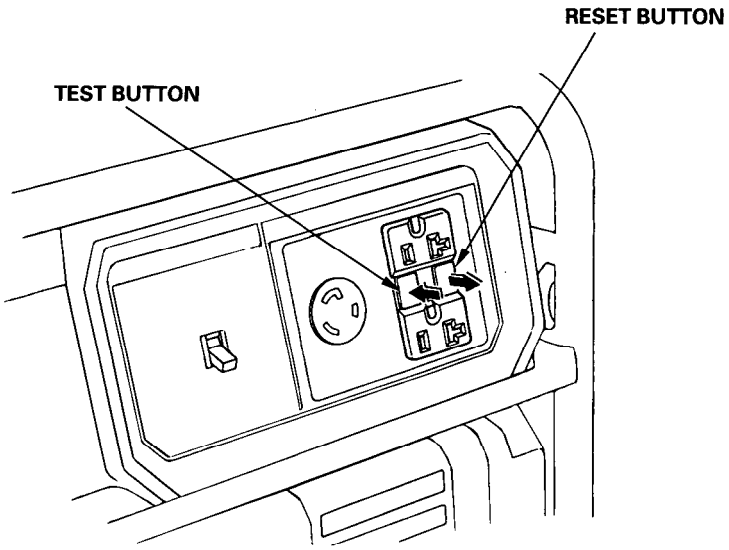
Before each use:

If the generator is stored outdoors, unprotected from the weather, test the GFCI receptacle before each use as described in the monthly inspection.

Monthly:

Under normal operating conditions, perform the GFCI test monthly.

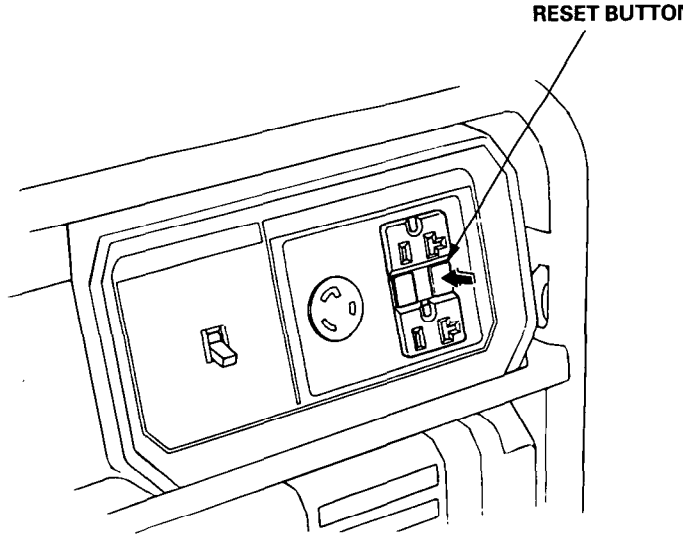
1. Unplug all appliances from the generator.
2. Start the engine.
3. Turn the circuit breaker ON.
4. Press the TEST BUTTON
   - —The RESET BUTTON shouldextend with a click.
   - —If the RESET BUTTON does not extend, contact an authorized Honda generator dealer.



5. Press the RESET BUTTON
   – The RESET BUTTON should be flush with the base.
   – If the RESET BUTTON is not flush with the TEST BUTTON, contact an authorized Honda generator dealer.
6. When the RESET BUTTON extends during operation:
   – Unplug all appliances from the GFCI protected receptacle.
   – Press the RESET BUTTON:

IF THE GFCI CANNOT BE RESET: The GFCI is faulty. Contact an authorized Honda generator dealer.

IF THE GFCI RESETS PROPERLY: Check the appliance or the power cord.



Connections to a Building's Electrical System

Connections for standby power to a building's electrical system must be made by a qualified electrician. The connection must isolate the generator power from utility power, and must comply with all applicable laws and electrical codes.

⚠WARNING

Improper connections to a building's electrical system can allow electrical current from the generator to backfeed into the utility lines. Such backfeed may electrocute utility company workers or others who contact the lines during a power outage. Consult the utility company or a qualified electrician.

NOTICE

Improper connections to a building's electrical system can allow electrical current from the utility company to backfeed into the generator. When utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system.

Ground System

Honda portable generators have a system ground that connects generator frame components to the ground terminals in the AC output receptacles. The system ground is not connected to the AC neutral wire. If the generator is tested by a receptacle tester, it will not show the same ground circuit condition as for a home receptacle.

Special Requirements

There may be Federal or State Occupational Safety and Health Administration (OSHA) regulations, local codes, or ordinances that apply to the intended use of the generator. Please consult a qualified electrician, electrical inspector, or the local agency having jurisdiction.

- In some areas, generators are required to be registered with local utility companies.
- If the generator is used at a construction site, there may be additional regulations which must be observed.

AC Applications
Before connecting an appliance or power cord to the generator:

- Make sure that it is in good working order. Faulty appliances or power cords can create a potential for electrical shock.

- If an appliance begins to operate abnormally, becomes sluggish or stops suddenly, turn it off immediately. Disconnect the appliance, and determine whether the problem is the appliance, or if the rated load capacity of the generator has been exceeded.

- Make sure that the electrical rating of the tool or appliance does not exceed that of the generator. Never exceed the maximum power rating of the generator. Power levels between rated and maximum may be used for no more than 30 minutes.

NOTICE

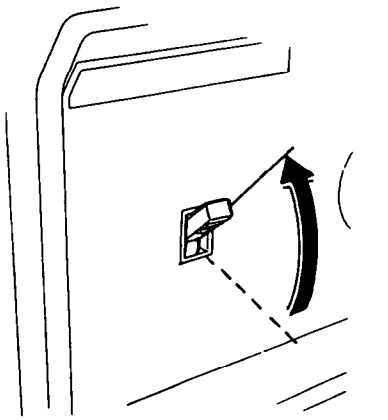
Substantial overloading will open the circuit breaker. Exceeding the time limit for maximum power operation or slightly overloading the generator may not switch the circuit breaker OFF, but will shorten the service life of the generator.

Limit operation requiring maximum power to 30 minutes.
Maximum power is:
2.5 kVA
For continuous operation, do not exceed the rated power.
Rated power is:
2.3 kVA
In either case, the total power requirements (VA) of all appliances connected must be considered. Appliance and power tool manufacturers usually list rating information near the model number or serial number.

AC Operation

1. Start the engine (see page 25).
2. Switch ON the AC circuit breaker.
3. Plug in the appliance.

Most motorized appliances require more than their rated wattage for startup.



Do not exceed the current limit specified for any one receptacle. If an overloaded circuit causes the AC circuit breaker or circuit protector to switch OFF, reduce the electrical load on the circuit, wait a few minutes and then reset the circuit breaker.

- **High Altitude Operation**

At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your engine at altitudes above 1,800 meters (6,000 feet), have your dealer perform this carburetor modification.

Even with carburetor modification, engine horsepower will decrease about 3.5% for each 300 meter (1,000 foot) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

NOTICE

When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 1,800 meters (6,000 feet) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your dealer return the carburetor to original factory specifications.

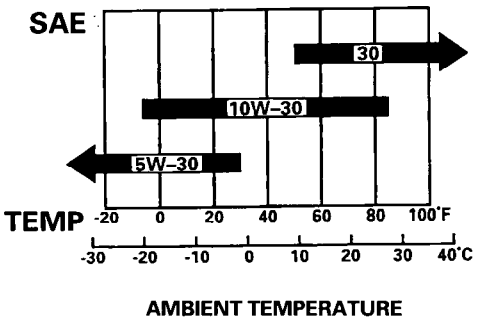
Engine Oil

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.

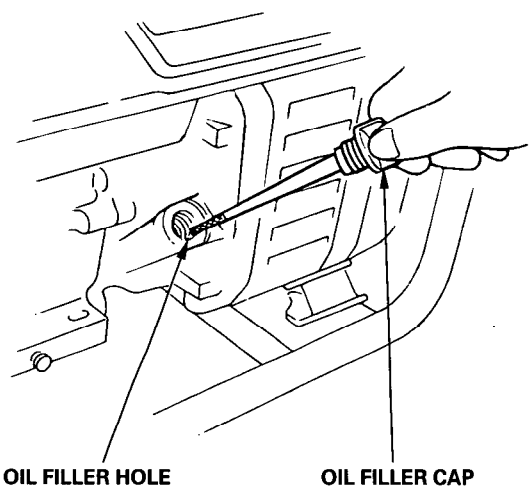
Check the oil level BEFORE EACH USE with the generator on a level surface and the engine stopped.

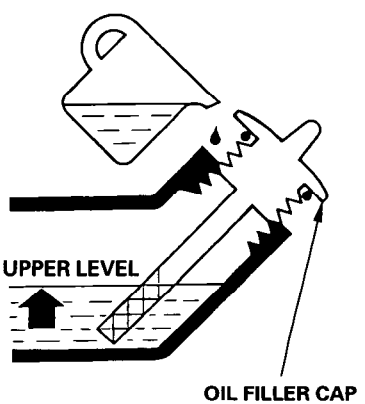
Use 4-stroke motor oil that meets or exceeds the requirements for API service classification SF or SG. Always check the API SERVICE label on the oil container to be sure it includes the letters SF or SG.



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.





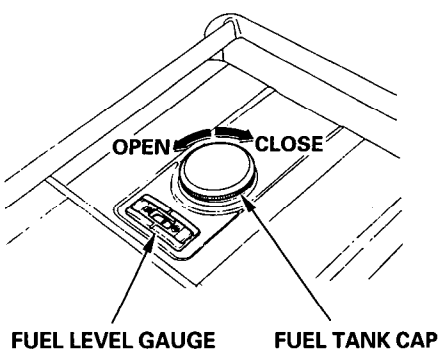
Fuel Recommendation

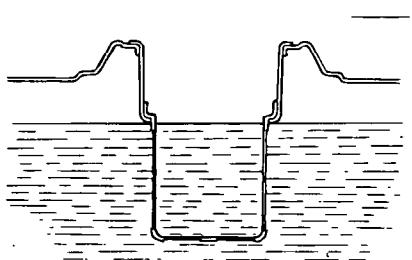
1. Check the fuel level gauge.
2. Refill the tank if the fuel level is low. Do not fill above the shoulder of the fuel strainer.

⚠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.**

Fuel tank capacity:
11.0 ℓ (2.91 US gal , 2.42 Imp gal)





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 Honda generator dealer.

NOTICE

Running the engine with persistent spark knock or pinging can cause engine damage.

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

Oxygenated Fuels

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions.

If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

Before using an oxygenated fuel, try to confirm the fuel's contents. Some states/provinces require this information to be posted on the pump.

The following are the EPA approved percentages of oxygenates:

ETHANOL – (ethyl or grain alcohol) 10% by volume
You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name "Gasohol".

MTBE – (methyl tertiary butyl ether) 15% by volume
You may use gasoline containing up to 15% MTBE by volume.

METHANOL – (methyl or wood alcohol) 5% by volume
You may use gasoline containing up to 5% methanol by volume as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

If you notice any undesirable operating symptoms, try another service station or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under warranty.

STARTING THE ENGINE/STOPPING THE ENGINE

Starting the engine

1. Make sure that the AC circuit breaker is in the OFF position. The generator may be hard to start if a load is connected.
2. Turn the fuel valve to the ON position.
3. Turn the choke lever to the CLOSE position.
4. Turn the engine switch to the ON position.
5. 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.

6. Turn the choke lever to the OPEN position as the engine warms up.

Stopping the engine

In an emergency:

1. 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.

MAINTENANCE

The Importance of Maintenance

Good maintenance is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution.

⚠WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

To help you properly care for your generator, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a Honda technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your generator under severe conditions, such as sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any engine repair establishment or individual, using parts that are "certified" to EPA standards.

Maintenance Safety

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

⚠WARNING

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed.

Always follow the procedures and precautions in the owner's manual.

Safety precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:

  —**Carbon monoxide poisoning from engine exhaust.**
  Be sure there is adequate ventilation whenever you operate the engine.

  —**Burns from hot parts.**
  Let the engine and exhaust system cool before touching.

  —**Injury from moving parts.**
  Do not run the engine unless instructed to do so.

- Read the instructions before you begin, and make sure you have the tools and skills required.

- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

Remember that your servicing dealer knows your generator best and is fully equipped to maintain and repair it.

To ensure the best quality and reliability, use only new, genuine Honda parts or their equivalents for repair or replacement.

Emission Control System

Source of Emissions

The combustion process produces carbon monoxide, oxides of nitrogen, and hydrocarbons. Control of hydrocarbons and oxides of nitrogen is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.

Honda utilizes lean carburetor settings and other systems to reduce the emissions of carbon monoxide, oxides of nitrogen, and hydrocarbons.

The U.S. and California Clean Air Acts

EPA and California regulations require all manufacturers to furnish written instructions describing the operation and maintenance of emission control systems.

The following instructions and procedures must be followed in order to keep the emissions from your Honda engine within the emission standards.

Tampering and Altering

Tampering with or altering the emission control system may increase emissions beyond the legal limit. Among those acts that constitute tampering are:

- Removal or alteration of any part of the intake, fuel, or exhaust systems.
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters.

Problems That May Affect Emissions

If you are aware of any of the following symptoms, have your engine inspected and repaired by your servicing dealer.

- Hard starting or stalling after starting.
- Rough idle.
- Misfiring or backfiring under load.
- Afterburning (backfiring).
- Black exhaust smoke or high fuel consumption.

Replacement Parts

The emission control systems on your Honda engine were designed, built, and certified to conform with EPA and California emission regulations. We recommend the use of genuine Honda parts whenever you have maintenance done. These original-design replacement parts are manufactured to the same standards as the original parts, so you can be confident of their performance. The use of replacement parts that are not of the original design and quality may impair the effectiveness of your emission control system.

A manufacturer of an aftermarket part assumes the responsibility that the part will not adversely affect emission performance. The manufacturer or rebuilder of the part must certify that use of the part will not result in a failure of the engine to comply with emission regulations.

Maintenance

Follow the maintenance schedule on page 31. 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 / REGULAR SERVICE PERIOD (3) — Performed at every indicated month or operating hour interval, whichever comes first.		Each use ○	First month or 20 Hrs.	Every 3 months or 50 Hrs.	Every 6 months or 100 Hrs.	Every year or 300 Hrs.
• Engine oil	Check level	○				
	Change		○		○	
• Air cleaner	Check	○(4)				
	Clean			○(1)		
GFCI receptacle	Check		○(5)			
• Sediment cup	Clean				○	
• Spark plug	Clean-Readjust				○	
	Replace					○
Spark arrester	Clean				○	
• Valve clearance	Check-Readjust					○(2)
• Fuel tank and filter	Clean					○(2)
• Fuel line	Check	Every 2 years (Replace if necessary)(2)				

NOTE: • Emission related items.

(1)Service more frequently when used in dusty areas.

(2)These items should be serviced by an authorized Honda generator dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.

(3)For professional commercial use, log hours of operation to determine proper maintenance intervals.

(4)Check the GFCI before each use if the generator is stored outside unprotected; otherwise, test the GFCI monthly and record the test results on the control panel card.

(5)Once each month.

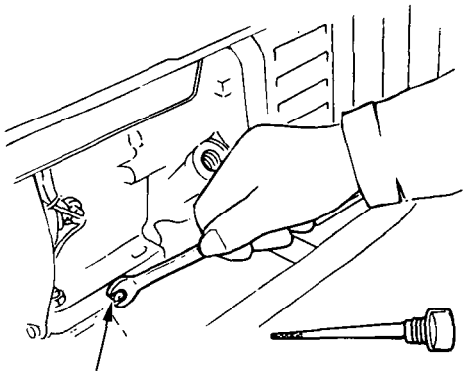
Engine Oil Change

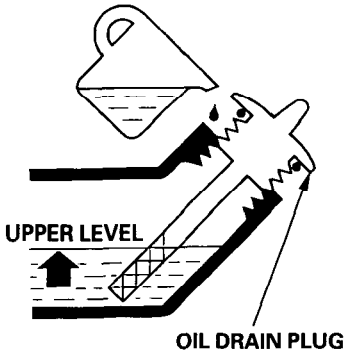
Drain the oil while the engine is warm to assure rapid and complete draining.

1. Remove the drain plug and sealing washer, remove the oil filler cap, and drain the oil.
2. Reinstall the drain plug and sealing washer. Tighten the plug securely.
3. Refill with the recommended oil (see page 21) and check the oil level.

Oil capacity:

0.6 ℓ (0.6 US qt , 0.5 Imp qt)





⚠CAUTION

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.

Air Cleaner Service

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 dusty areas.

⚠WARNING

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

NOTICE

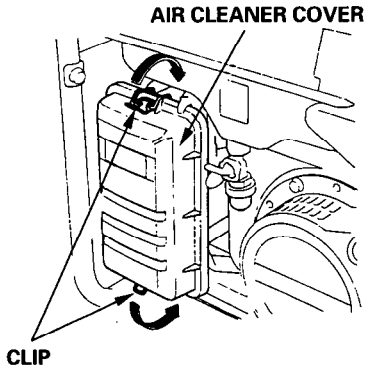
Never run the generator without the air cleaner. Rapid engine wear will result.

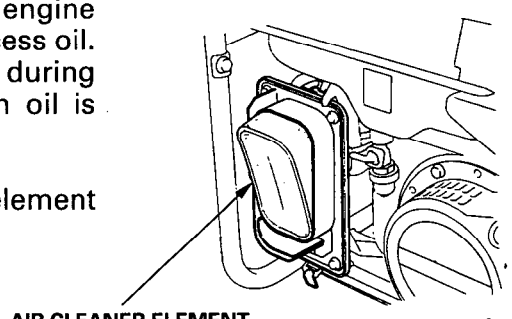
1. Unsnap the air cleaner cover clips, remove the air cleaner cover, and remove the element.

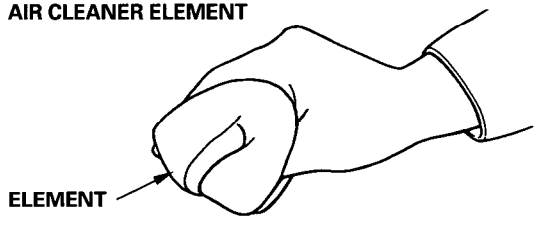
2. Wash the element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly.

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.



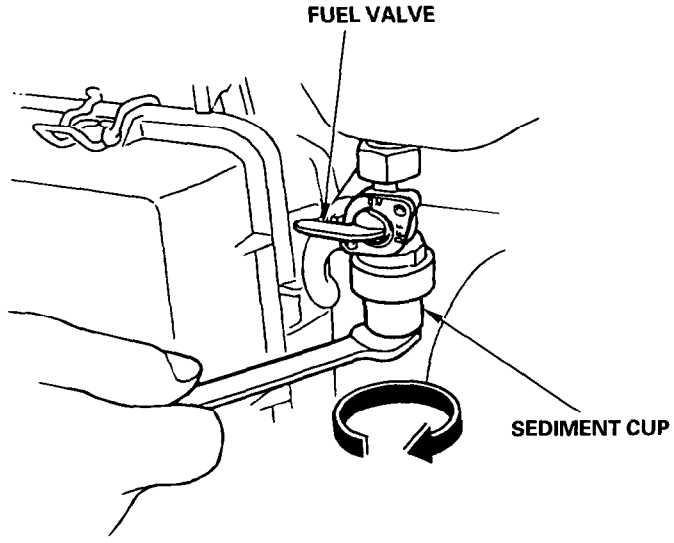


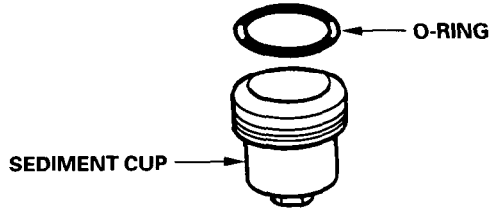


Fuel Sediment Cup Cleaning

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.

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





SPARK PLUG SERVICE

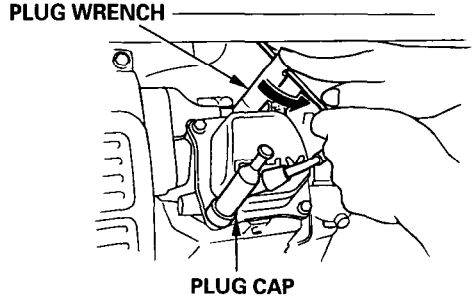
In order to service the spark plug, you will need a spark plug wrench (commercially available).

Recommended spark plugs: BPR6ES (NGK)
W20EPR-U (DENSO)

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

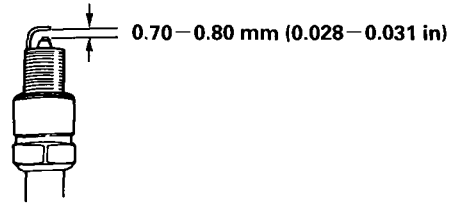
If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.

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 reused.
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)



6. Check that the spark plug washer is in good condition, and thread the spark plug in by hand to prevent cross-threading.
7. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

   – If installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer. If reinstalling a used spark plug, tighten 1/8 – 1/4 turn after the spark plug seats to compress the washer.

NOTICE

The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and could damage the engine.
Never use spark plugs which have an improper heat range. Use only the recommended spark plugs or equivalent.

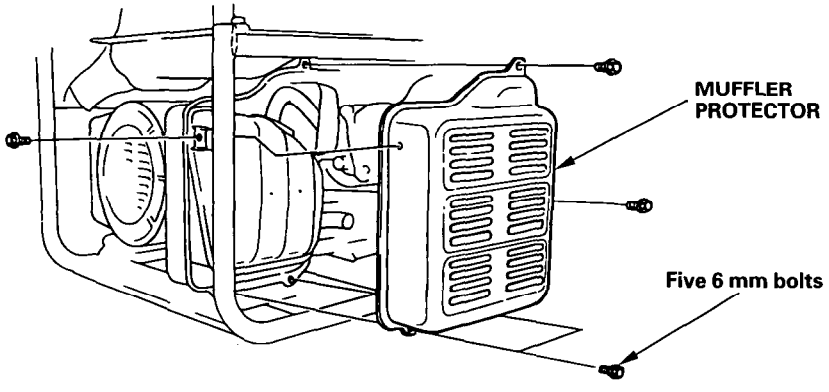
Spark Arrester Maintenance

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

NOTICE

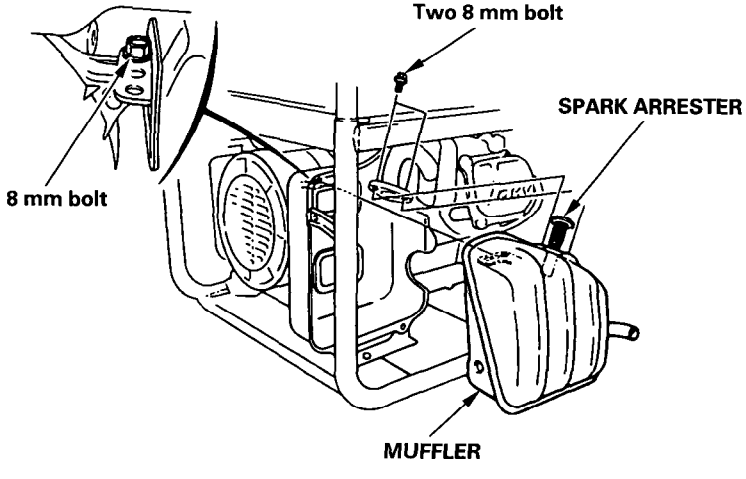
The spark arrester must be serviced every 100 hours to maintain its efficiency.

1. Remove the five 6 mm bolts to remove the muffler protector.

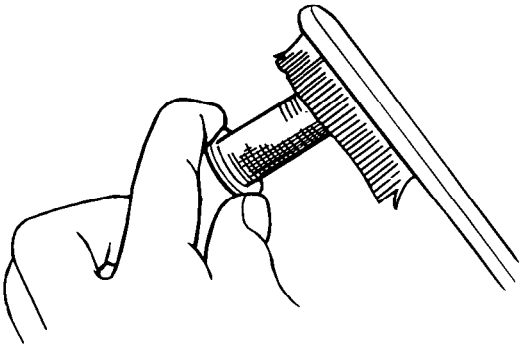


2. Remove the two 8 mm bolts at the exhaust pipe and 8 mm bolt at the muffler stay.

Remove the muffler and spark arrester.



3. Use a brush to remove carbon deposits from the spark arrester screen.
   Inspect the spark arrester screen for holes or tears. Replace if necessary.



4. Check the exhaust pipe gasket and replace if damaged. Reinstall the muffler and the protector.

When transporting the generator, turn the engine switch and the fuel valve OFF. Keep the generator level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

⚠WARNING

Contact with a hot engine or exhaust system can cause serious burns or fires. Let the engine cool before transporting or storing the generator.

Take care not to drop or strike the generator when transporting. Do not place heavy objects on the generator.

Before storing the unit for an extended period:

1. Be sure the storage area is free of excessive humidity and dust.
2. Service according to the table below:

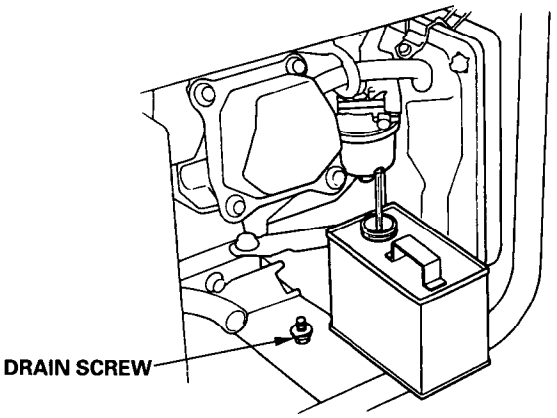
STORAGE TIME	RECOMMENDED SERVICE PROCEDURE TO PREVENT HARD STARTING
Less than 1 month	No preparation required
1 to 2 months	Fill with fresh gasoline and add gasoline conditioner*.
2 months to 1 year	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl. (page 40). Drain the fuel sediment cup. (page 34).
1 year or more	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl. (page 40). Drain the fuel sediment cup. (page 34). Remove the spark plug. Put a tablespoon of engine oil into the cylinder. Turn the engine slowly with the pull rope to distribute the oil. Reinstall the spark plug. Change the engine oil. (page 32). After removal from storage, drain the stored gasoline into a suitable container, and fill with fresh gasoline before starting.

* Use gasoline conditioners that are formulated to extend storage life.
Contact your authorized Honda generator dealer for conditioner recommendations.

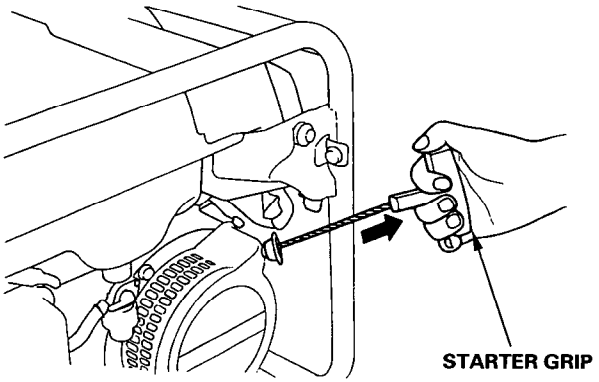
1. Drain the carburetor by loosening the drain screw. Drain the gasoline into a suitable container.

⚠WARNING

Gasoline is extremely flammable and is explosive under certain conditions. Perform this task in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area during this procedure.



2. Change the engine oil (Page 32).
3. 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, then reinstall the spark plug.
4. 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.



When the engine will not start:

Is there fuel in the tank? NO → Refill the fuel tank.

YES

Is there enough oil in the engine? NO → Add the recommended oil.

YES

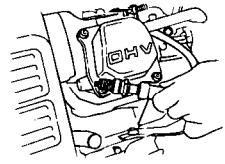
Is there a spark from the spark plug? NO → Replace the spark plug. Still NO spark → Take the generator to an authorized Honda generator dealer.

⚠WARNING

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

To check:

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



YES

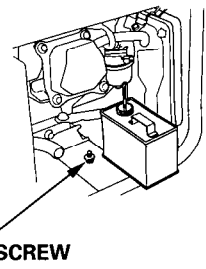
Is the fuel reaching the carburetor? NO → Clean the fuel sediment cup.

YES

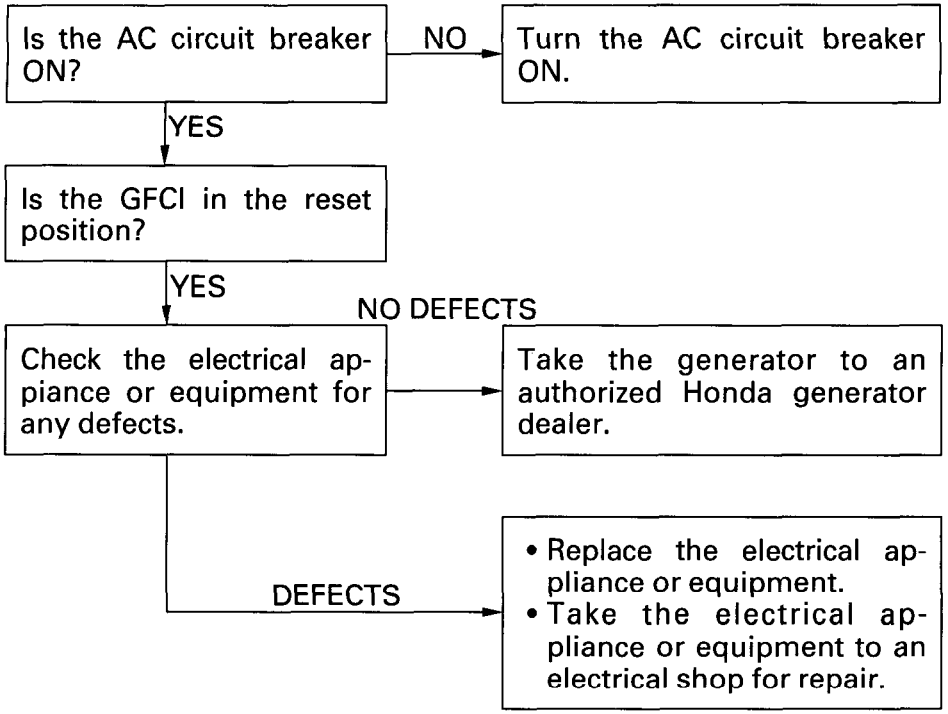
If the engine still does not start, take the generator to an authorized Honda generator dealer.

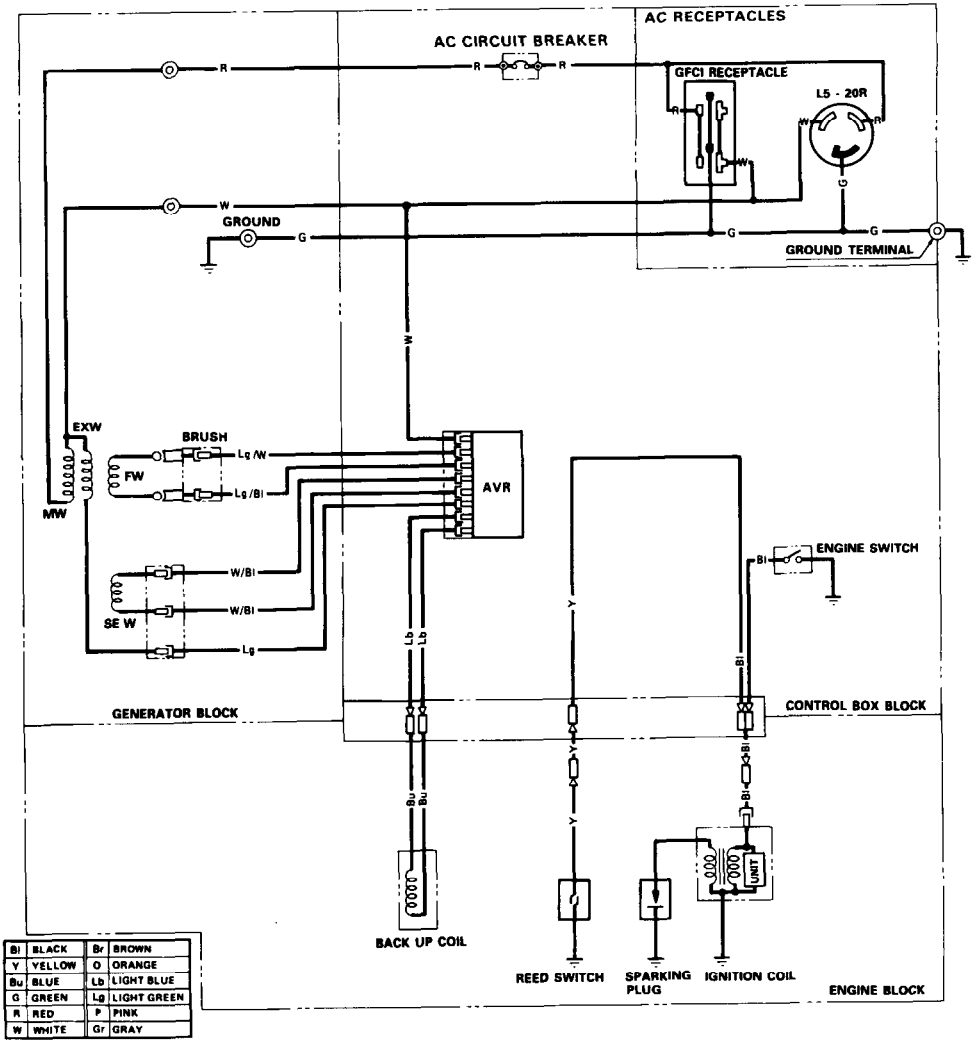
To check:

1) Turn off the engine switch and loosen the drain screw.
2) Turn the fuel valve to ON. Fuel should flow from the drain when the fuel valve is turned ON.



No electricity at the AC receptacles:




AC RECEPTACLES
AC CIRCUIT BREAKER
GFCI RECEPTACLE
L5 - 20R
GROUND
GROUND TERMINAL
EXW
BRUSH
FW
MW
Lg /W
Lg /Bl
AVR
W/Bl
W/Bl
SE W
Lg
ENGINE SWITCH
GENERATOR BLOCK
CONTROL BOX BLOCK
BACK UP COIL
REED SWITCH
SPARKING PLUG
IGNITION COIL
UNIT
ENGINE BLOCK
Bl BLACK
Y YELLOW
Bu BLUE
G GREEN
R RED
W WHITE
Br BROWN
O ORANGE
Lb LIGHT BLUE
Lg LIGHT GREEN
P PINK
Gr GRAY

SPECIFICATIONS

Dimensions

Model	EB2500X
Power product description code	EZCP
Length	505 mm (19.9 in)
Width	420 mm (16.5 in)
Height	420 mm (16.5 in)
Dry weight	44.5 kg (98.1 lbs)

Engine

Model	GX160K1
Engine type	4-stroke, overhead valve, single cylinder
Displacement 〔Bore x Stroke〕	163 cm^3 (9.9 cu-in) [68 × 45 mm (2.7 × 1.8 in)]
Compression ratio	8.5 : 1
Engine speed	3,600 r.p.m.
Cooling system	Forced air
Ignition system	Transistorized magneto
Oil capacity	0.6 ℓ (0.6 US qt , 0.5 Imp qt)
Fuel tank capacity	11.0 ℓ (2.91 US gal , 2.42 Imp gal)
Spark plug	BPR6ES (NGK) W20EPR-U (DENSO)

Generator

Model		EB2500X
Type		AG
AC output	Rated voltage	120 V
	Rated frequency	60 Hz
	Rated ampere	19.2 A
	Rated output	2.3 kVA
	Maximum output	2.5 kVA

Tune-up Specifications

ITEM	SPECIFICATION	MAINTENANCE
Spark plug gap	0.7−0.8mm(0.028−0.31in)	Refer to page: 35
Valve clearance	IN: 0.15±0.02 mm (cold) EX: 0.20±0.02 mm (cold)	See your authorized Honda dealer
Other specifications	No other adjustments needed.	

NOTE:
Specifications may vary according to the types, and are subject to change without notice.

WARRANTY SERVICE INFORMATION

Honda power equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Relations Office. You can write to:

American Honda Motor Co., Inc.
Power Equipment Division
Customer Relations Office
4475 River Green Parkway
Duluth, Georgia 30136-2565

Or telephone: (770) 497-6400

When you write or call, please give us this information:

- Model and serial number (see pages 8 and 9)
- Name of dealer who sold the generator to you
- Name and address of dealer who services your generator
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

Current customer service contact information:

United States, Puerto Rico, and U.S. Virgin Islands:

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American Honda Motor Co., Inc.
Power Equipment Division
Customer Relations Office
4900 Marconi Drive
Alpharetta, GA 30005-8847

Or telephone: (770) 497-6400 M-F, 8:30 am - 7:00 pm EST

When you write or call, please provide the following information:

- Model and serial numbers
- Name of the dealer who sold the Honda power equipment to you
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MEMO

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HONDA

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