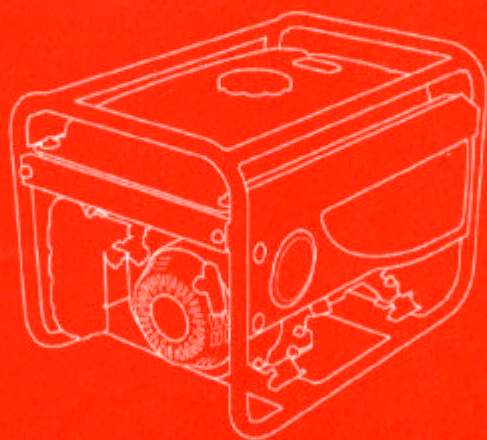


HONDA
POWER PRODUCTS

GENERATOR EP2200CX



OWNER'S MANUAL

Keep this owner's manual handy, so you can refer to it at any time. This owner's manual is considered a permanent part of the generator and should remain with the generator if resold.

The information and specifications included in this publication were in effect at the time of approval for printing. Honda Motor Co., Ltd. reserves the right, however, to discontinue or change specifications or design at any time without notice and without incurring any obligation whatever.

INTRODUCTION

Congratulations on your selection of a Honda generator. We are certain you will be pleased with your purchase of one of the finest generators on the market.

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

As you read this manual, you will find information preceded by a **NOTICE** symbol. That information is intended to help you avoid damage to your generator, other property, or the environment.

We suggest you read the warranty policy to fully understand its coverage and your responsibilities of ownership.

When your generator needs scheduled maintenance, keep in mind that your Honda servicing dealer is specially trained in servicing Honda generators. Your authorized Honda servicing dealer is dedicated to your satisfaction and will be pleased to answer your questions and concerns.

Best Wishes,
Honda Motor Co., Ltd.


A FEW WORDS ABOUT SAFETY

Your safety and the safety of others are very important. And using this generator safely is an important responsibility.

To help you make informed decisions about safety, we have provided operating procedures and other information on labels and in this manual. This information alerts you to potential hazards that could hurt you or others.

Of course, it is not practical or possible to warn you about all the hazards associated with operating or maintaining a generator. You must use your own good judgement.

You will find important safety information in a variety of forms, including:

- **Safety Labels** – on the generator.
- **Safety Messages** – preceded by a safety alert symbol  and one of three signal words, DANGER, WARNING, or CAUTION.

These signal words 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.

- **Safety Headings** – such as *IMPORTANT SAFETY INFORMATION*.
- **Safety Section** – such as *GENERATOR SAFETY*.
- **Instructions** – how to use this generator correctly and safely.

This entire book is filled with important safety information – please read it carefully.

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GENERATOR SAFETY

IMPORTANT SAFETY INFORMATION

Honda generators are designed for use with electrical equipment that has suitable power requirements. Other uses can result in injury to the operator or damage to the generator and other property.

Most accidents can be prevented if you follow all instructions in this manual and on the generator. The most common hazards are discussed below, along with the best way to protect yourself and others.

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, 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 partly enclosed, the air you breathe could contain a dangerous amount of exhaust gas.
- Never run your generator inside a garage, house or near open windows or doors.

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 all of the 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 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.

GENERATOR SAFETY

Refuel With Care

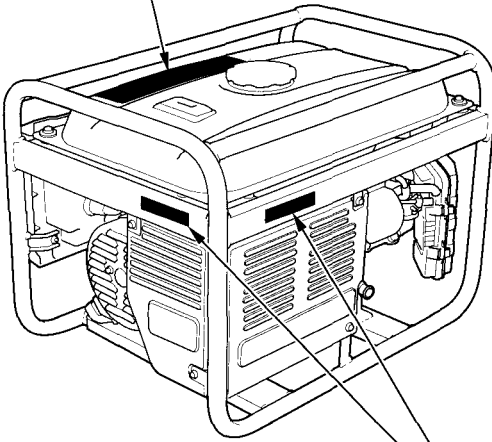
Gasoline is extremely flammable, and gasoline vapor can explode. Allow the engine to cool if the generator has been in operation. Refuel only outdoors in a well ventilated area with the engine OFF. Do not overfill the fuel tank. Never smoke near gasoline, and keep other flames and sparks away. Always store gasoline in an approved container. Make sure that any spilled fuel has been wiped up before starting the engine.

GENERATOR SAFETY

SAFETY LABEL LOCATIONS

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 servicing dealer for a replacement.

<p>⚠ WARNING</p> <p>Gasoline is highly flammable and explosive. You could be burned or seriously injured if the gasoline is ignited.</p> <ul style="list-style-type: none">■ Before refueling, stop the engine and keep heat, sparks, and flame away.■ Handle fuel only outdoors. ■ Do not fill the fuel tank above the upper limit line.■ Wipe up spills immediately. <p>Exhaust contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas. Breathing carbon monoxide can cause unconsciousness or death.</p> <ul style="list-style-type: none">■ Never run the generator in a closed, or even partly closed area where people may be present.	<p>⚠ WARNING</p> <p>Improper connections to a building can allow electrical current to backfeed into utility lines, creating an electrocution hazard.</p> <ul style="list-style-type: none">■ Connections to a building must isolate generator power from utility power and comply with all applicable laws and electrical codes. <p>The generator is a potential source of electrical shock if not kept dry.</p> <ul style="list-style-type: none">■ Do not expose the generator to moisture, rain or snow.■ Do not operate the generator with wet hands. <p>Read owner's manual carefully before operation.</p>
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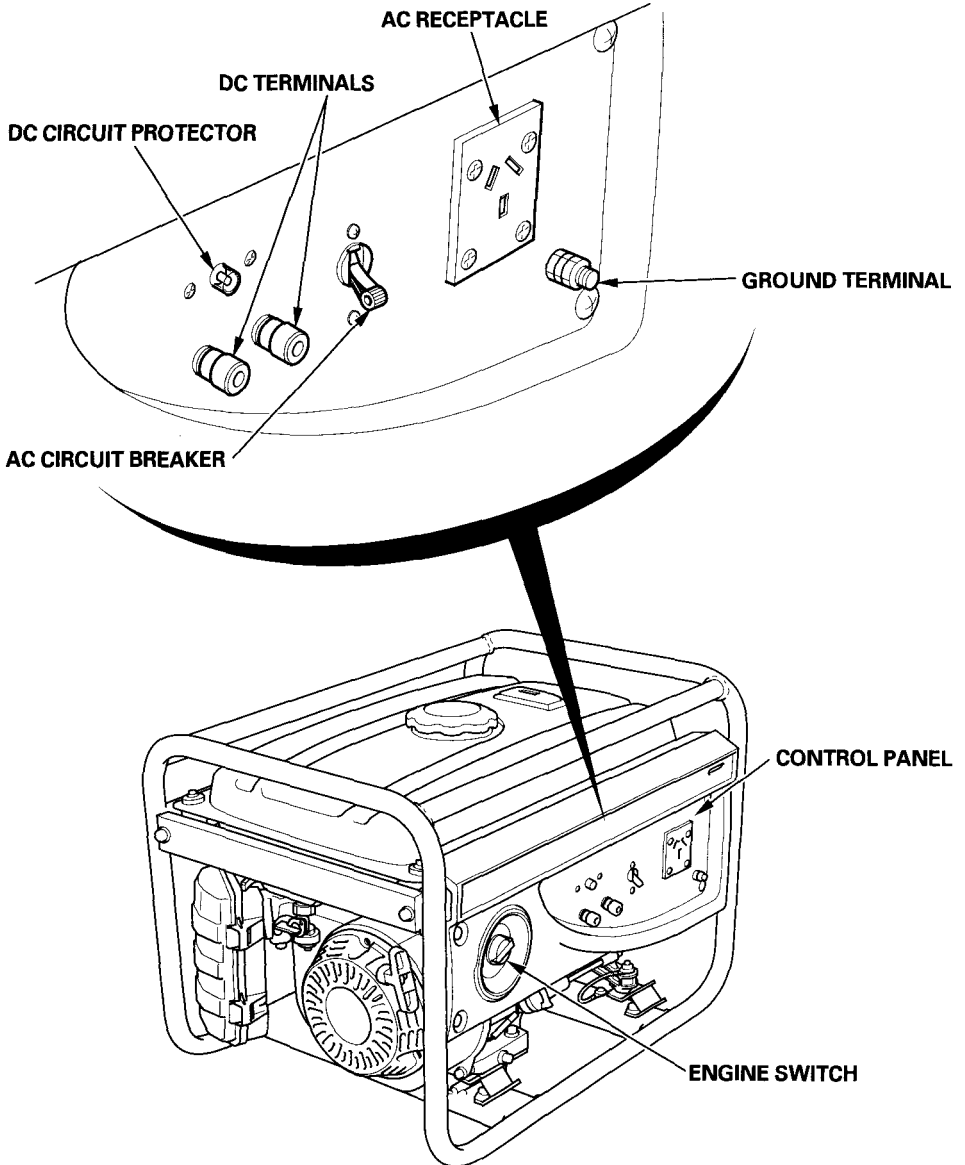


	<p>⚠ CAUTION</p> <p>A hot exhaust system can cause serious burns.</p> <ul style="list-style-type: none">■ Avoid contact if the engine has been running.
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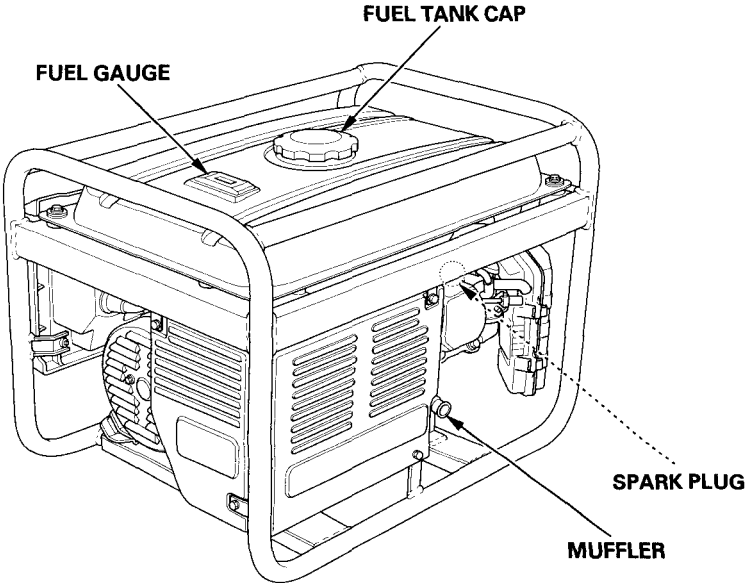
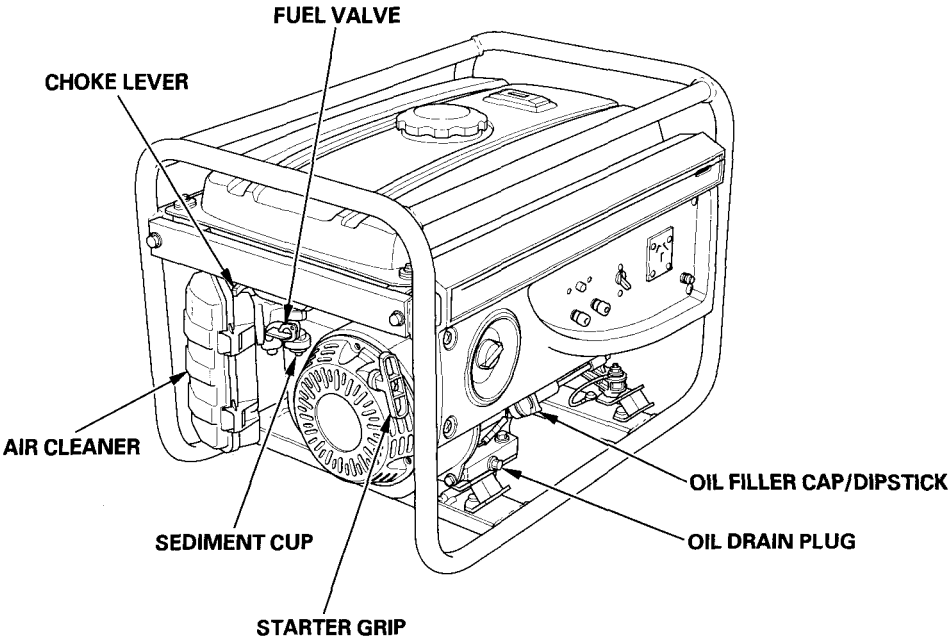
CONTROLS & FEATURES

COMPONENT & CONTROL LOCATIONS

Use the two illustrations on these pages to locate and identify the most frequently used controls.



CONTROLS & FEATURES



CONTROLS & FEATURES

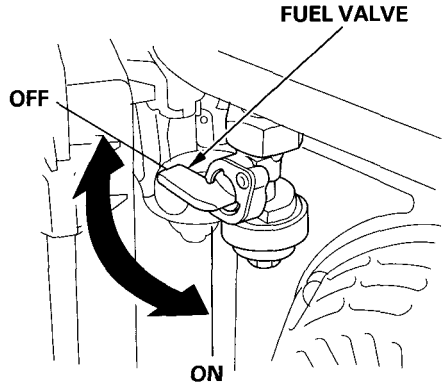
CONTROLS

Fuel Valve

The fuel valve is located between the fuel tank and carburetor.

The fuel valve must be in the ON position for the engine to run.

After stopping the engine, turn the fuel valve to the OFF position.

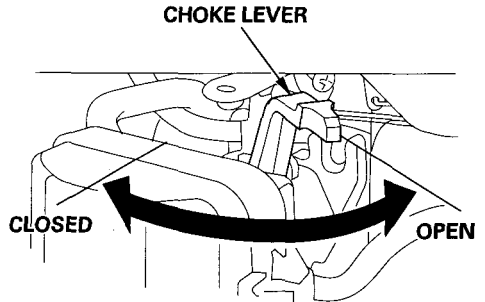


Choke Lever

The choke lever opens and closes the choke valve in the carburetor.

The CLOSED position enriches the fuel mixture for starting a cold engine.

The OPEN position provides the correct fuel mixture for operation after starting, and for restarting a warm engine.

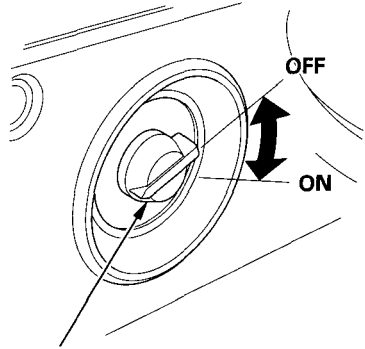


Engine Switch

The engine switch controls the ignition system.

OFF — Stops the engine.

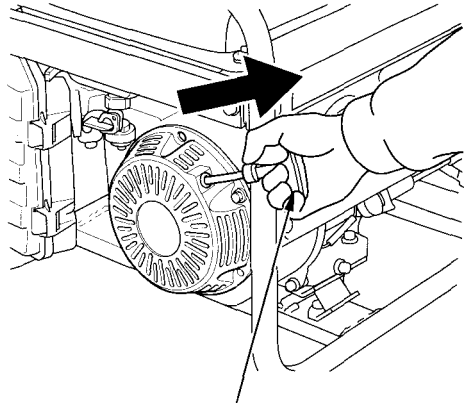
ON — Running position, and for starting.



ENGINE SWITCH

Starter Grip

Pulling the starter grip operates the recoil starter to crank the engine for starting.



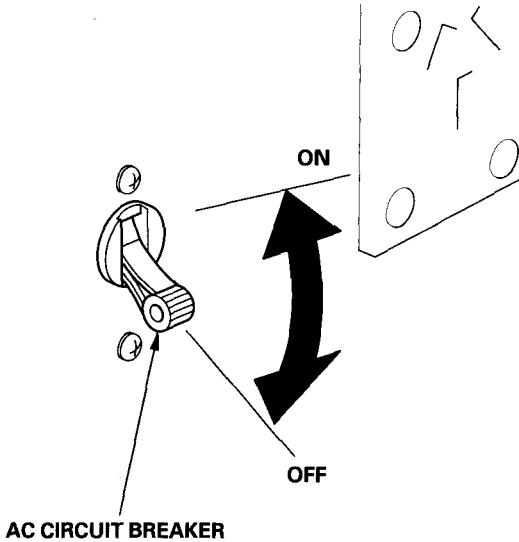
STARTER GRIP

CONTROLS & FEATURES

AC Circuit Breaker

The circuit breaker will automatically switch OFF, if there is a short circuit or a significant overload at the receptacles.

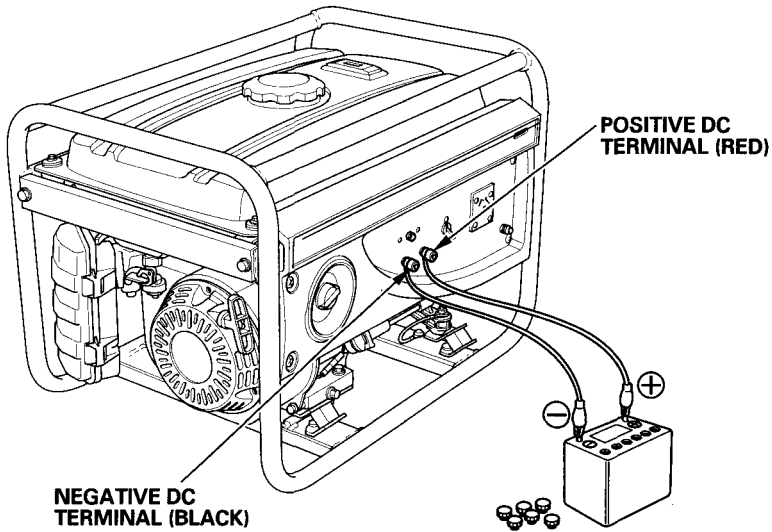
The circuit breaker may be used to switch the generator power ON or OFF.



DC Terminals

The DC terminals may **ONLY** be used for charging 12 volt automotive type batteries.

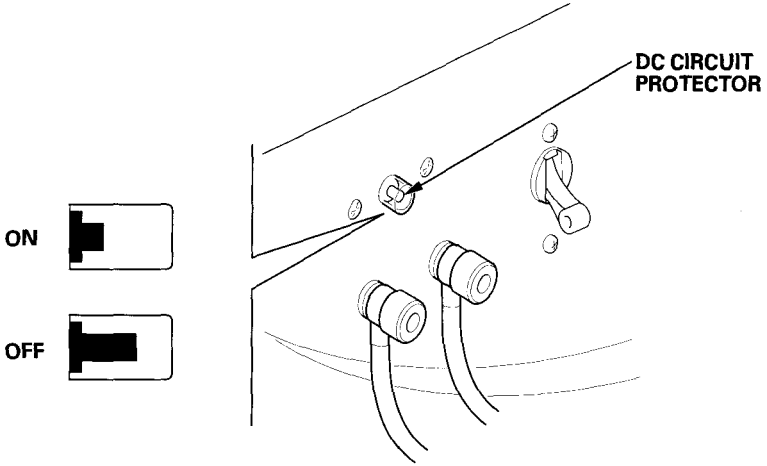
The terminals are colored red to identify the positive (+) terminal and black to identify the negative (-) terminal. The battery must be connected to the generator DC terminals with the proper polarity (battery positive to generator red terminal and battery negative to the generator black terminal).



CONTROLS & FEATURES

DC Circuit Protector

The DC circuit protector automatically shuts off the DC battery charging circuit when the generator is overloaded, when there is a problem with the battery; or the connections between the battery and the generator are improper.



FEATURES

Oil Alert System

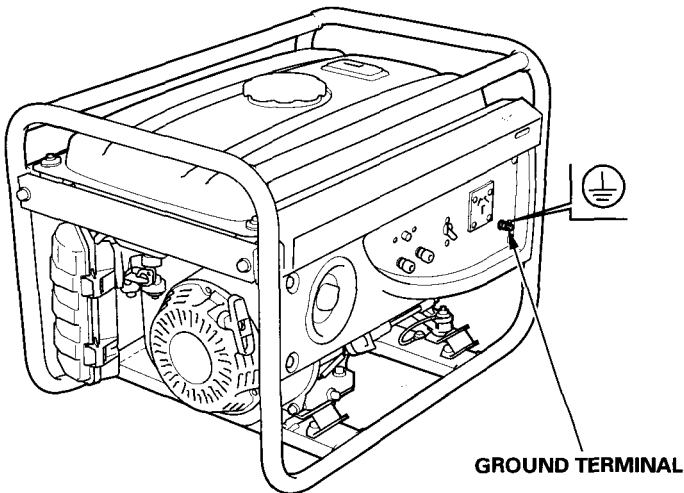
The Oil Alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit, the Oil Alert system will automatically stop the engine (the engine switch will remain in the ON position).

If the engine stops and will not restart, check the engine oil level (see page 36) before troubleshooting in other areas.

Ground Terminal

The 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.

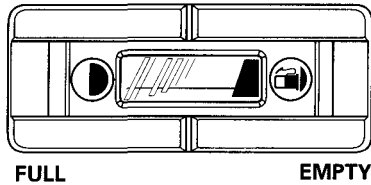
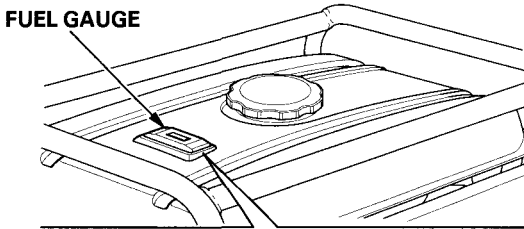
Before using the ground terminal, consult a qualified electrician, electrical inspector or local agency having jurisdiction for local codes or ordinances that apply to the intended use of the generator.



CONTROL & FEATURES

Fuel Gauge

The fuel gauge is a mechanical device that measures the fuel level in the tank. The red indicator in the window will reference the level in relation to full or empty. To provide increased operating time, start with a full tank before beginning operation. Check the fuel level with the generator on a level surface. Always refuel with the engine OFF and cool.



BEFORE OPERATION

ARE YOU READY TO GET STARTED?

Your safety is your responsibility. A little time spent in preparation will significantly reduce your risk of injury.

Knowledge

Read and understand this manual. Know what the controls do and how to operate them.

Familiarize yourself with the generator and its operation before you begin using it. Know how to quickly shut off the generator in case of an emergency.

If the generator is being used to power appliances, be sure that they do not exceed the generator's load rating (see page 26).

IS YOUR GENERATOR READY TO GO?

For your safety, and to maximize the service life of your equipment, it is very important to take a few moments before you operate the generator to check its condition. Be sure to take care of any problem you find, or have your servicing dealer correct it, before you operate the generator.

▲ WARNING

Improperly maintaining this generator, or failing to correct a problem before operation, could cause a malfunction in which you could be seriously injured.

Always perform a preoperation inspection before each operation, and correct any problem.

To prevent a possible fire, keep the generator at least 1 meter (3 feet) away from building walls and other equipment during operation. Do not place flammable objects close to the engine.

BEFORE OPERATION

Before beginning your preoperation checks, be sure the generator is on a level surface and the engine switch is in the OFF position.

Check the Engine

Check the oil level (see page 36). A low oil level will cause the Oil Alert system to shut down the engine.

Check the air cleaner element (see page 39). A dirty air cleaner element will restrict air flow to the carburetor, reducing engine and generator performance.

Check the fuel level (see page 34). Starting with a full tank will help to eliminate or reduce operating interruptions for refueling.

OPERATION

SAFE OPERATING PRECAUTIONS

Before operating the generator for the first time, please review the *GENERATOR SAFETY* section and the chapter titled *BEFORE OPERATION*.

For your safety, do not operate the generator in an enclosed area such as a garage. Your generator's exhaust contains poisonous carbon monoxide gas that can collect rapidly in an enclosed area and cause illness or death.

⚠ WARNING

Exhaust contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas. Breathing carbon monoxide can cause unconsciousness or death.

Never run the generator in a closed, or even partly closed area where people may be present.

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

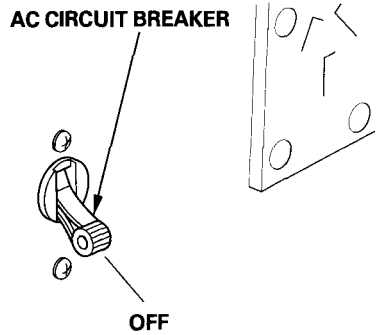
- Use grounded 3 prong extension cords, tools, and appliances, or double insulated tools and appliances.
- Inspect cords and plugs, and replace if damaged.
- Make sure that the appliance is in good working order. Faulty appliances or power cords can create a potential for electric shock.
- Make sure 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.
- Operate the generator at least 1 meter (3 feet) away from buildings and other equipment.
- Do not operate the generator in an enclosed structure.

OPERATION

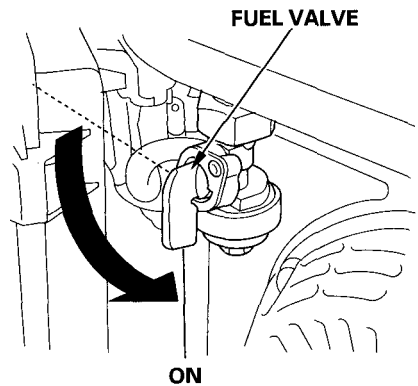
STARTING THE ENGINE

Refer to *SAFE OPERATING PRECAUTIONS* on page 21.

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.

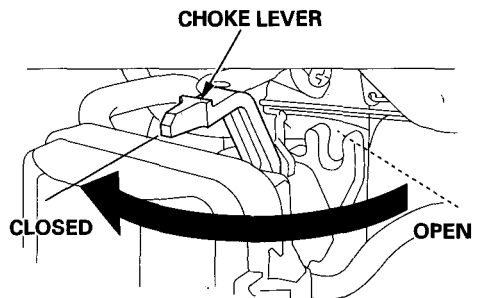


2. Turn the fuel valve to the ON position.

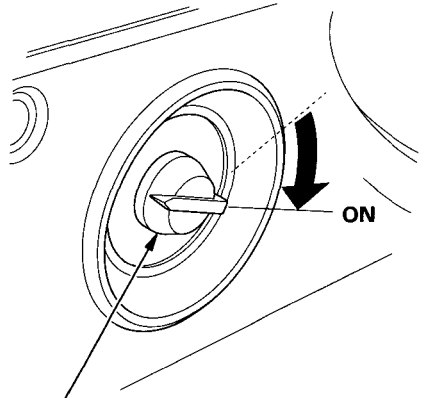


3. Move the choke lever to the CLOSED position to start a cold engine.

Leave the choke lever in the OPEN position to restart a warm engine.



4. Turn the engine switch to the ON position.

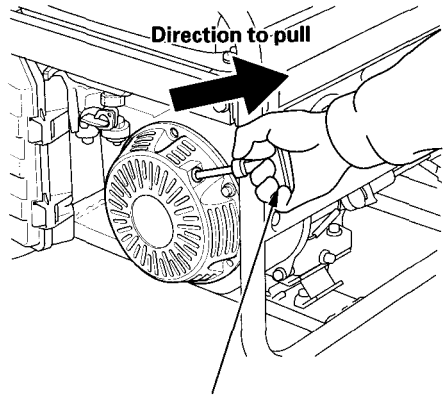


ENGINE SWITCH

5. Pull the starter grip lightly until you feel resistance, then pull briskly in the direction of the arrow as shown.

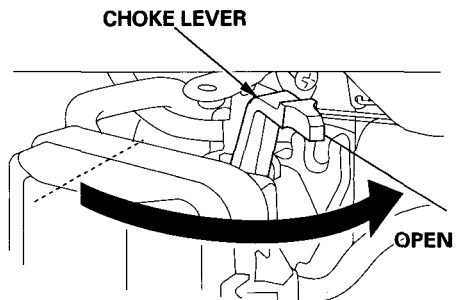
NOTICE

- Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.
- Do not let the starter rope rub against the generator body or the rope will wear out prematurely.



STARTER GRIP

6. If the choke lever was moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.



OPEN

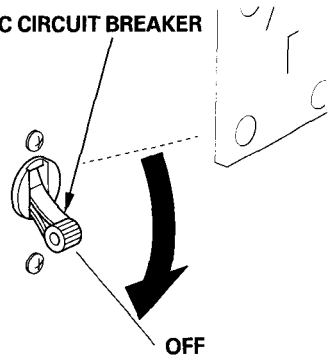
OPERATION

STOPPING THE ENGINE

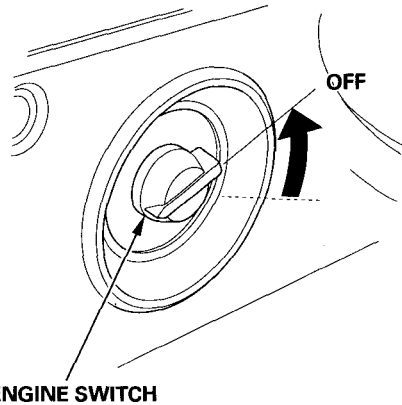
To stop the engine in an emergency, simply turn the engine switch to the OFF position. Under normal conditions, use the following procedure.

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

AC CIRCUIT BREAKER

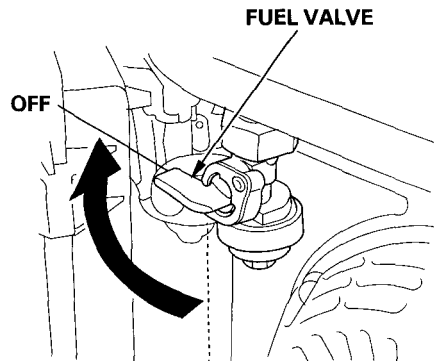


2. Turn the engine switch to the OFF position.



ENGINE SWITCH

3. Turn the fuel valve to the OFF position.



FUEL VALVE

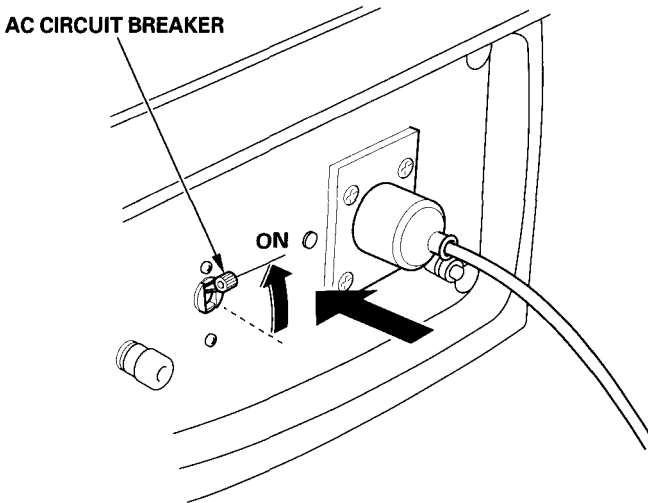
AC OPERATION

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 in the appliance, or if the rated load capacity of the generator has been exceeded.

NOTICE

Substantial overloading may damage the generator. Marginal overloading may shorten the service life of the generator.

1. Start the engine (see page 22).
2. Switch ON the AC circuit breaker.
3. Plug in the appliance.
Most motorized appliances require more than their rated wattage for startup.



OPERATION

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:

2,200 VA

For continuous operation (longer than 30 minutes), do not exceed the rated power.

Rated power is:

2,000 VA

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.

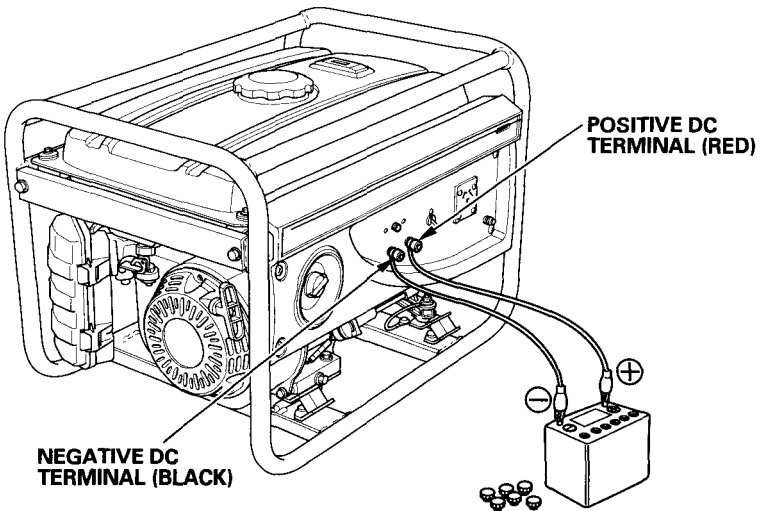
DC OPERATION

The DC receptacle may **ONLY** be used for charging 12 volt automotive type batteries. Follow your battery manufacturer's instructions for charging and handling your battery.

Connecting the battery charging cables:

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling.**

1. Before connecting the battery charging cable to a battery that is installed in a vehicle, disconnect the vehicle battery ground cable from the negative (–) battery terminal.
2. Connect the red lead of battery charging cable into the positive (+) DC terminal of the generator.
3. Connect the black lead of battery charging cable into the negative (–) DC terminal of the generator.
4. Connect the red lead of the battery charging cable to the positive (+) battery terminal and the black lead to the negative (–) battery terminal.



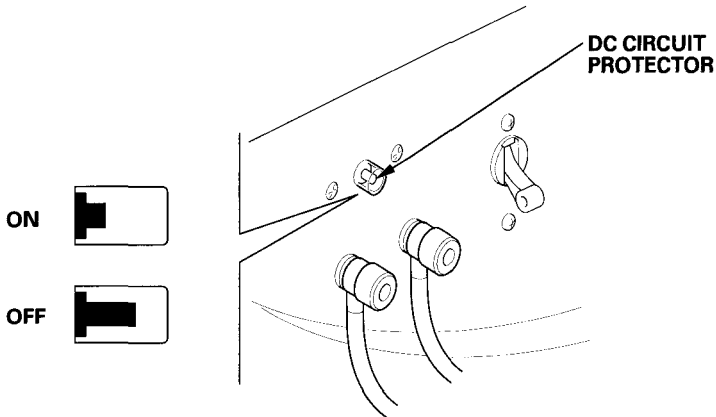
OPERATION

5. Start the generator.

NOTICE

Do not start the vehicle while the battery cable is connected and the generator is running. The vehicle or the generator may be damaged.

An overloaded DC circuit, excessive current drawn by the battery, or a wiring problem will trip the DC circuit protector (the yellow indicator inside the clear circuit protector button will pop out). If this happens, wait a few minutes before pushing in the circuit protector button to resume operation. If the circuit protector continues to go OFF, discontinue charging and see your authorized Honda generator dealer.



Disconnecting the battery charging cable:

1. Stop the engine.
2. Disconnect the black lead of the battery charging cable from the negative (-) battery terminal.
3. Disconnect the red lead of the battery charging cable from the positive (+) battery terminal.
4. Disconnect the battery charging cables from the DC terminals of the generator.
5. Connect the vehicle battery ground cable to the negative (-) battery terminal.

STAND BY POWER

Connections to a Building's Electrical System

Your generator can supply power to a building's electrical system. If the generator will be used as an alternative to utility company power, an isolation switch must be installed to disconnect the utility lines from the building when the generator is connected. Installation must be performed by a qualified electrician and must comply with all applicable laws and electrical codes.

⚠ WARNING

Improper connections to a building's electrical system can allow 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, and the generator may explode, burn, or cause fires when utility power is restored.

Consult the utility company or a qualified electrician prior to making any power connections.

In some areas, generators are required by law to be registered with local utility companies. Check local regulations for proper registration and use procedures.

System Ground

Honda generators have a system ground that connects the 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 with a receptacle tester, it will not show the same ground circuit condition as for a home receptacle.

OPERATION

Special Requirements

There may be applicable laws, 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 that must be observed.

SERVICING YOUR GENERATOR

THE IMPORTANCE OF MAINTENANCE

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

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 unusual conditions, such as sustained high load or high temperature operation, or use it in dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

⚠ 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.

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 and replacement.

SERVICING YOUR GENERATOR

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.**
Operate outside away from open windows or doors.
- **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.

SERVICING YOUR GENERATOR

MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD (3) Perform 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.	Page	
ITEM								
Engine oil	Check level	○					36	
	Change		○		○		37	
Air cleaner	Check	○					39	
	Clean			○(1)			41	
Sediment cup	Clean				○		42	
Spark plug	Check-adjust				○		43	
	Replace					○	43	
Valve clearance	Check-adjust					○(2)	—	
Combustion chamber	Clean	After every 500 Hrs. (2)						—
Fuel tank and filter	Clean				○(2)		—	
Fuel tube	Check	Every 2 years (Replace if necessary) (2)						—

(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 Honda shop manual for service procedures.

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

SERVICING YOUR GENERATOR

REFUELING

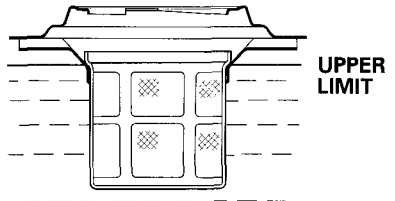
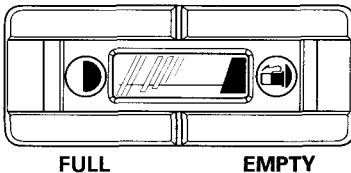
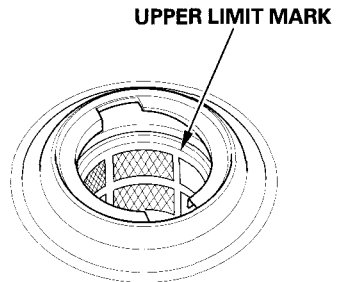
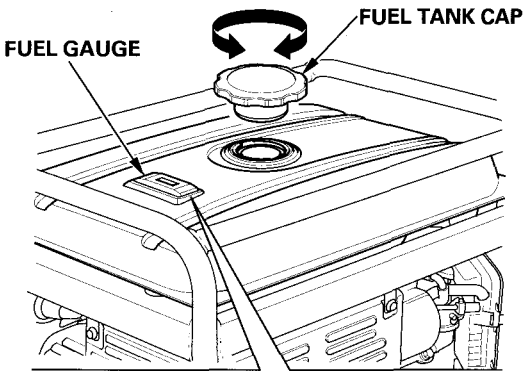
With the engine stopped, check the fuel gauge. Refill the fuel tank if the fuel level is low.

⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.



Refuel in a well ventilated area before starting the engine. If the engine has been running, allow it to cool. Refuel carefully to avoid spilling fuel. Do not fill the fuel tank above the upper limit mark on the fuel strainer.

SERVICING YOUR GENERATOR

Never refuel the engine inside a building where gasoline fumes may reach flames or sparks. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc. Spilled fuel is not only a fire hazard, it causes environmental damage. Wipe up spills immediately.

FUEL RECOMMENDATIONS

Use unleaded gasoline with a research octane rating of 91 or higher (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 an 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 a Honda servicing dealer.

NOTICE

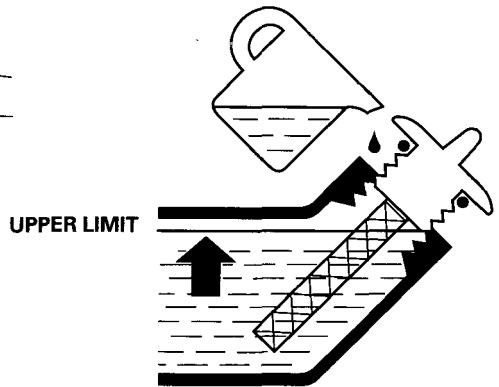
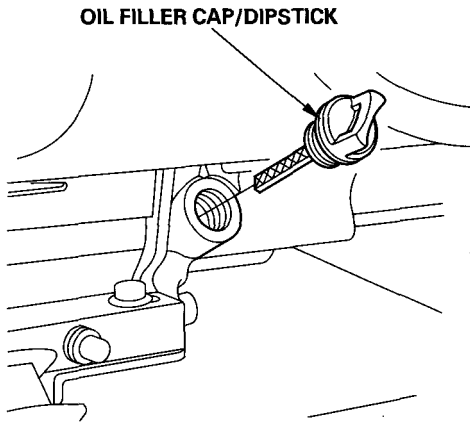
Running the engine with persistent spark knock or pinging can cause engine damage.

SERVICING YOUR GENERATOR

ENGINE OIL LEVEL CHECK

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

1. Remove the oil filler cap/dipstick and wipe it clean.
2. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
3. If the oil level is low, fill to the top of the oil filler neck with the recommended oil (see page 38).
4. Screw in the oil filler cap/dipstick securely.



The Oil Alert system will automatically stop the engine before the oil level falls below safe limits. However, to avoid the inconvenience of an unexpected shutdown, check the oil level regularly.

SERVICING YOUR GENERATOR

ENGINE OIL CHANGE

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

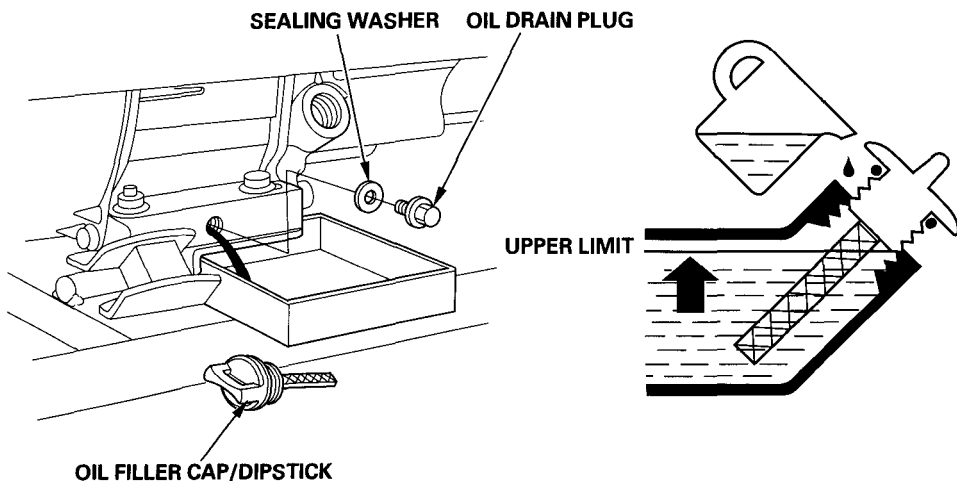
1. Place a suitable container below the engine to catch the used oil, then remove the oil filler cap/dipstick, drain plug and sealing washer.
2. Allow the used oil to drain completely, then reinstall the drain plug and sealing washer. Tighten the plug securely.

NOTICE

Improper disposal of engine oil can be harmful to the environment. If you change your own oil, please dispose of the used oil properly. Put it in a sealed container and take it to a recycling center. Do not discard it in a trash bin, dump it on the ground or pour it down the drain.

3. With the generator in a level position, fill to the outer edge of the oil filler hole with the recommended oil (see page 38).
4. Screw in the oil filler cap/dipstick securely.

Wash your hands with soap and water after handling used oil.



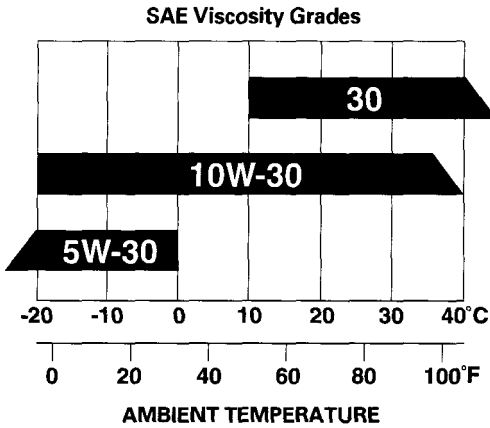
SERVICING YOUR GENERATOR

ENGINE OIL RECOMMENDATIONS

Oil is a major factor affecting engine performance and service life.

Use 4-stroke automotive detergent oil that meets or exceeds the requirements for API service classification SE or equivalent.

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

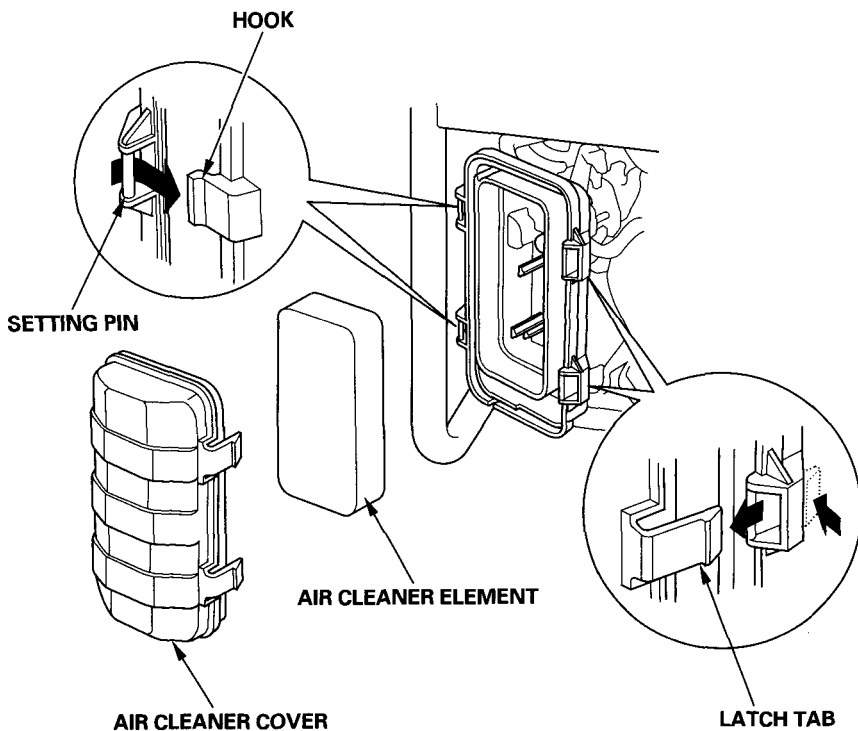


The SAE oil viscosity and service classification are on the API label on the oil container.

SERVICING YOUR GENERATOR

AIR CLEANER SERVICE

1. Push the latch tabs and open the air cleaner cover.
2. Free the hooks from the setting pins on the air cleaner case and remove the air cleaner cover to the right side of the frame pipe taking care not to damage the air cleaner cover.
3. Check the air cleaner element to be sure it is clean and in good condition.
If the air cleaner element is dirty, clean it as described on page 41.
Replace the air cleaner element if it is damaged.



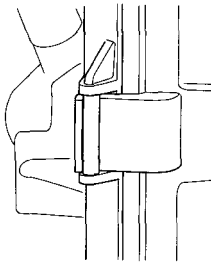
SERVICING YOUR GENERATOR

4. Install the air cleaner element.

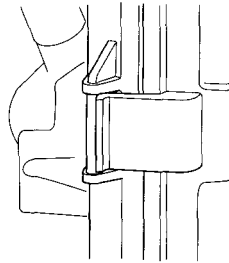
5. Set the hooks of the air cleaner cover to the setting pins securely, then push the air cleaner cover to lock the latch tabs. Be sure that the cover is set securely. There must be no clearance between the air cleaner cover and case.

NOTICE

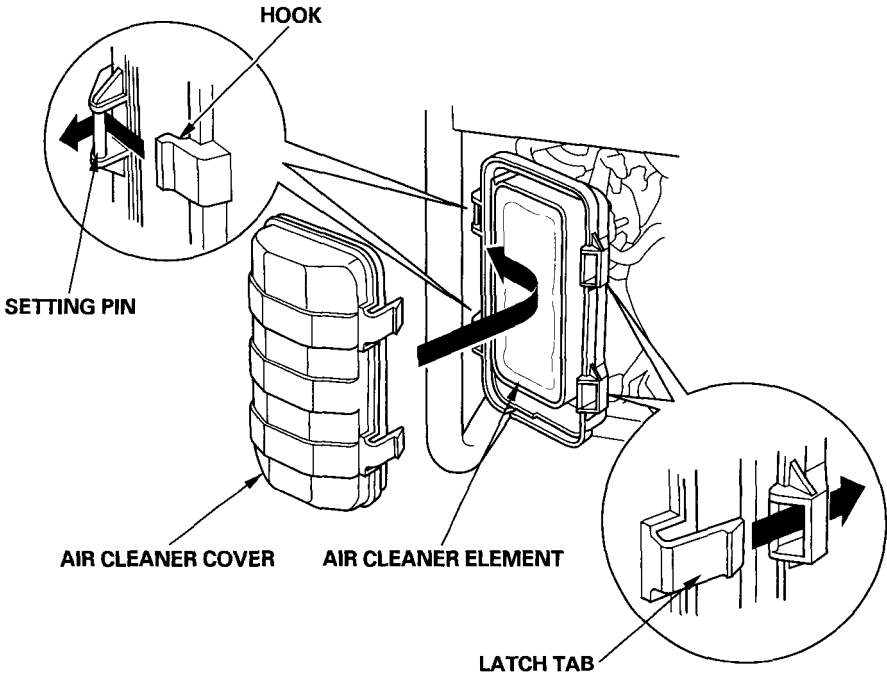
Operating the engine without an air cleaner element, or with a damaged air cleaner element, will allow dirt to enter the engine, causing rapid engine wear.



GOOD



NO GOOD

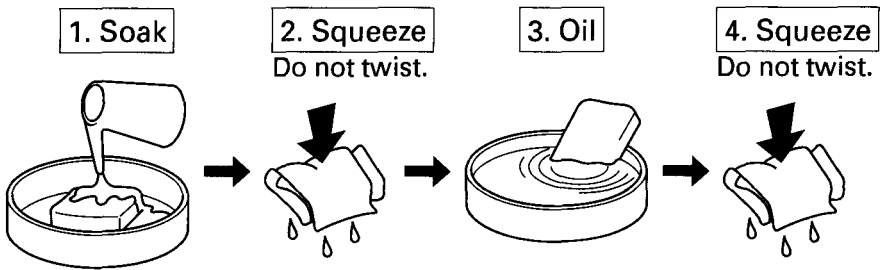


SERVICING YOUR GENERATOR

AIR CLEANER ELEMENT CLEANING

A dirty air cleaner element will restrict air flow to the carburetor, reducing engine performance. If you operate the generator in very dusty areas, clean the air cleaner element more frequently than specified in the Maintenance Schedule.

1. Clean the air cleaner element in warm soapy water, rinse, and allow to dry thoroughly, or clean in nonflammable solvent and allow to dry.
2. Dip the air cleaner element in clean engine oil, then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the air cleaner element.



3. Wipe dirt from the air cleaner housing and cover using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.

SERVICING YOUR GENERATOR

SEDIMENT CUP CLEANING

1. Turn the fuel valve to the OFF position, then remove the sediment cup, O-ring and filter. Discard the O-ring.

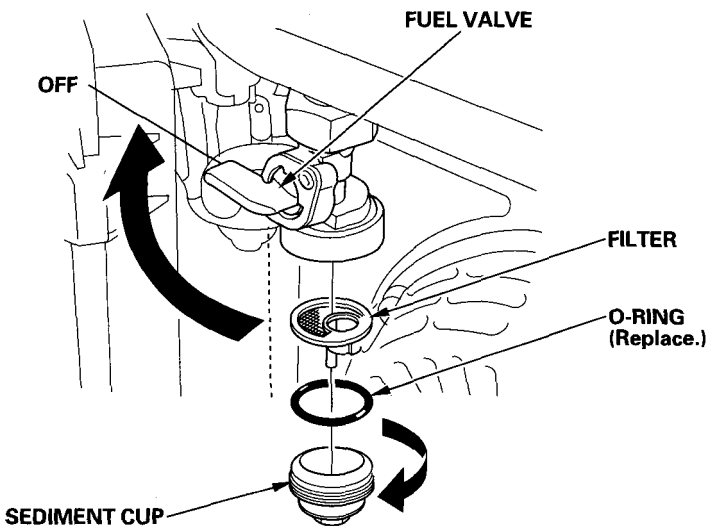
⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

2. Clean the sediment cup and filter in nonflammable solvent, and dry them thoroughly.
3. Install the filter, new O-ring and sediment cup, and tighten the sediment cup securely.
4. Make sure there is no fuel leakage.



SERVICING YOUR GENERATOR

SPARK PLUG SERVICE

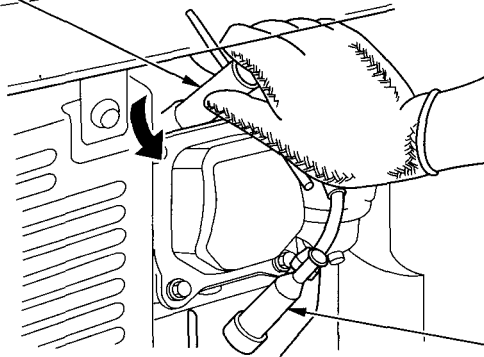
Recommended spark plugs: BPR6ES (NGK)
W20EPR-U (DENSO)

NOTICE

Incorrect spark plugs can cause engine damage.

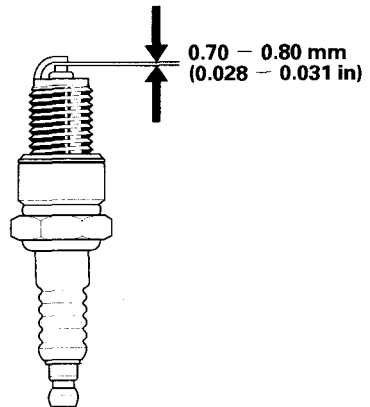
1. Disconnect the spark plug cap, and remove any dirt from around the spark plug area.
2. Remove the spark plug with a spark plug wrench.

SPARK PLUG WRENCH



3. Inspect the spark plug. Replace it if the electrodes are worn or if the insulator is cracked, chipped or fouled.
4. Measure the spark plug electrode gap with a wire type feeler gauge. Correct the gap, if necessary, by carefully bending the side electrode.

The gap should be:
0.70–0.80 mm (0.028–0.031 in)



SERVICING YOUR GENERATOR

5. Make sure that the spark plug sealing washer is in good condition, and thread the spark plug in by hand prevent cross threading.
6. After the spark plug seats, tighten with a 13/16 inch spark plug wrench to compress the washer.

If reinstalling a used spark plug, tighten 1/8— 1/4 turn after the spark plug seats.

If installing a new spark plug, tighten 1/2 turn after the spark plug seats.

NOTICE

*A loose spark plug can overheat and damage the engine.
Overtightening the spark plug can damage the threads in the cylinder head.*

7. Attach the spark plug cap.

SERVICING YOUR GENERATOR

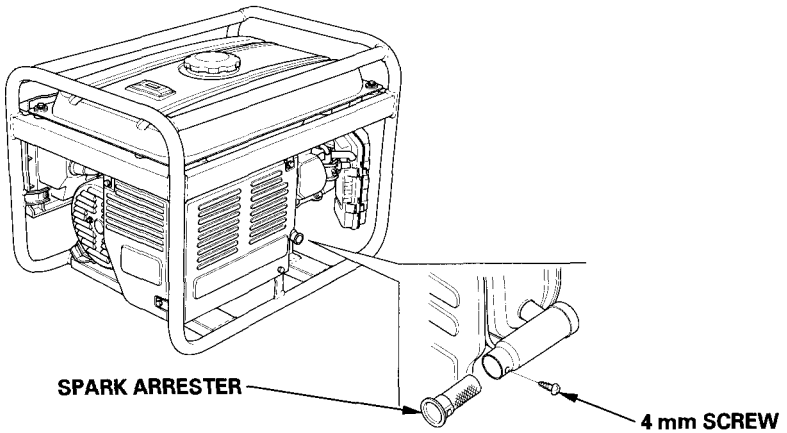
SPARK ARRESTER SERVICE

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

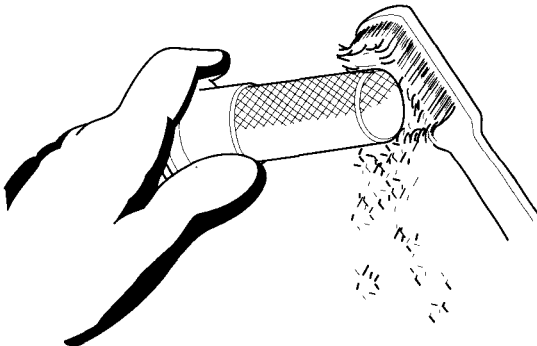
⚠ WARNING

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

1. Remove the 4 mm screw, then pull out the spark arrester.



2. Use a brush to remove carbon deposits from the spark arrester screen.

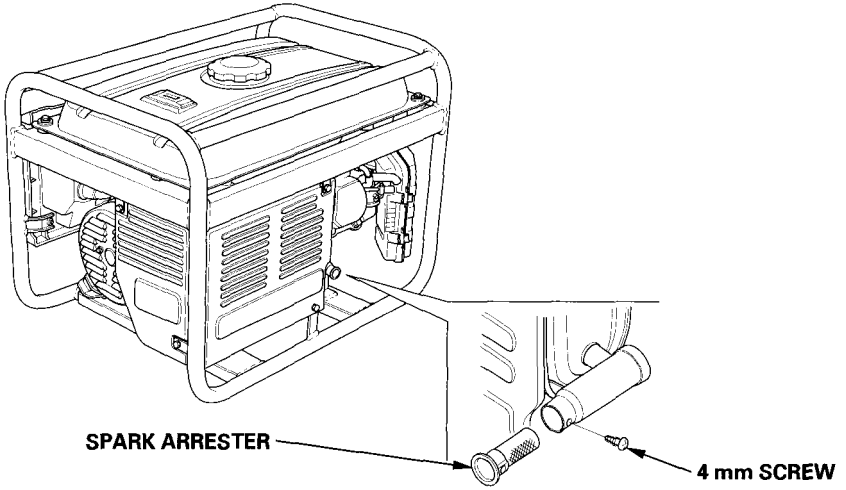


SERVICING YOUR GENERATOR

NOTICE

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

3. Reinsert the spark arrester, tighten the 4 mm screw to reinstall it.



STORAGE

STORAGE PREPARATION

Proper storage preparation is essential for keeping your generator trouble free and looking good. The following steps will help to keep rust and corrosion from impairing your generator's function and appearance, and will make the engine easier to start when you use the generator again.

Cleaning

Wipe the generator with a moist cloth. After the generator has dried, touch up any damaged paint, and coat other areas that may rust with a light film of oil.

Fuel

Gasoline will oxidize and deteriorate in storage. Old gasoline will cause hard starting, and it leaves gum deposits that clog the fuel system. If the gasoline in your generator deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced.

The length of time that gasoline can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as gasoline blend, your storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Fuel deterioration problems may occur after 30 days from keeping the fuel in the fuel tank, or even less depending on the gasoline formulation in your area.

You can extend fuel storage life by adding a gasoline stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining the fuel tank and carburetor.

STORAGE

Adding a Gasoline Stabilizer to Extend Fuel Storage Life

When adding a gasoline stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage. If you keep a container of gasoline for refueling, be sure that it contains only fresh gasoline.

1. Add fuel stabilizer following manufacturer's instructions.
2. After adding a fuel stabilizer, run the engine outdoors for 10 minutes to be sure that treated gasoline has replaced the untreated gasoline in the carburetor.
3. Stop the engine, and turn the fuel valve to the OFF position.

STORAGE PROCEDURE

1. Drain the fuel tank and carburetor.

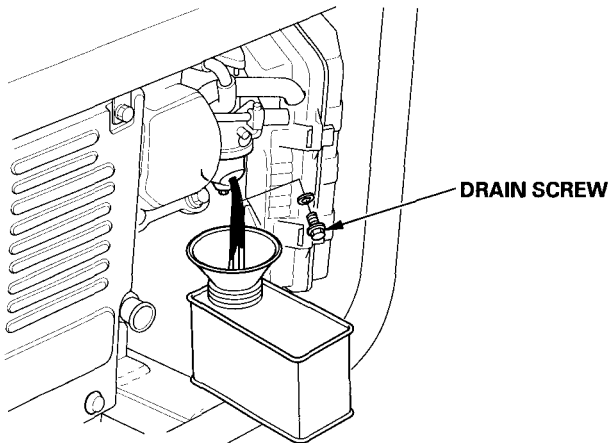
⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

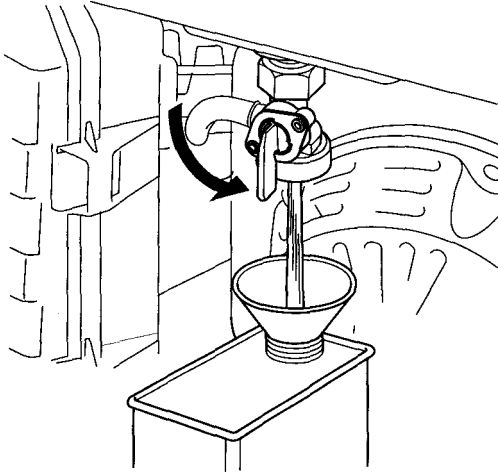
- a. Place a suitable gasoline container below the carburetor, and use a funnel to avoid spilling fuel.
- b. Remove the drain screw and drain the gasoline from the carburetor.



- c. After all fuel has drained into a suitable container, tighten the drain screw securely.

STORAGE

- d. Place a suitable gasoline container below the sediment cup, and use a funnel to avoid spilling fuel.
- e. Remove the sediment cup then turn the fuel valve to the ON position.
- f. Allow the fuel to drain completely, then install the sediment cup (see page 42).



2. Change the engine oil (see page 37).
3. Remove the spark plug (see page 43).
4. Pour a tablespoon (5 – 10 cm³/5 – 10 cc) of clean engine oil into the cylinder.
5. Pull the starter rope several times to distribute the oil in the cylinder.
6. Reinstall the spark plug.
7. 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. Return the starter grip gently.

STORAGE PRECAUTIONS

If your generator will be stored with gasoline in the fuel tank and carburetor, it is important to reduce the hazard of gasoline vapor ignition.

Select a well ventilated storage area away from any appliance that operates with a flame, such as a furnace, water heater, or clothes dryer. Also avoid any area with a spark producing electric motor, or where power tools are operated.

If possible, avoid storage areas with high humidity, because that promotes rust and corrosion.

Unless all fuel has been drained from the fuel tank, leave the fuel valve in the OFF position to reduce the possibility of leakage.

Place the generator on a level surface. Tilting can cause fuel or oil leakage.

With the engine and exhaust system cool, cover the generator to keep out dust. A hot engine and exhaust system can ignite or melt some materials.

Do not use sheet plastic as a dust cover. A nonporous cover will trap moisture around the generator, promoting rust and corrosion.

REMOVAL FROM STORAGE

Check your generator as described in the *BEFORE OPERATION* chapter of this manual.

If the fuel was drained during storage preparation, fill the tank with fresh gasoline. If you keep a container of gasoline for refueling, be sure that it contains only fresh gasoline. Gasoline oxidizes and deteriorates over time, causing hard starting.

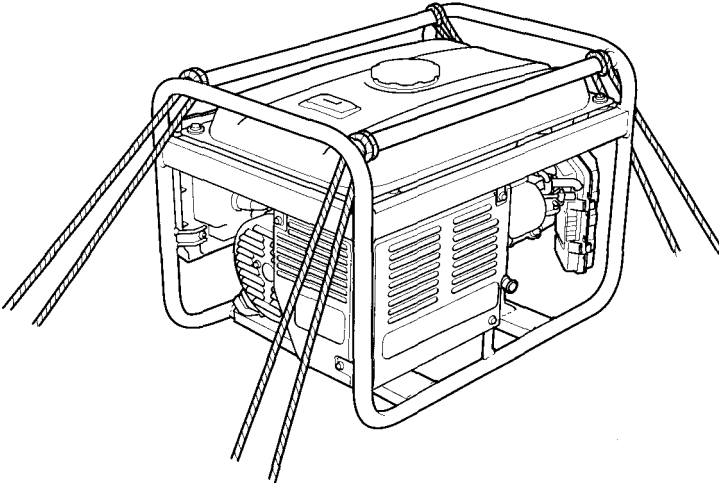
If the cylinder was coated with oil during storage preparation, the engine may smoke briefly at startup. This is normal.

TRANSPORTING

If the generator has been running, allow the engine to cool for at least 15 minutes before loading the generator on the transport vehicle. A hot engine and exhaust system can burn you and can ignite some materials.

Keep the generator level when transporting to reduce the possibility of fuel leakage. Move the fuel valve to the OFF position.

When using ropes or tie down straps to secure the generator for transportation, be sure to only use the frame bars as attachment points. Do not fasten ropes or straps to any portions of the generator body.



TAKING CARE OF UNEXPECTED PROBLEMS

ENGINE PROBLEMS

Engine Will Not Start	Possible Cause	Correction
1. Check control positions.	Fuel valve lever OFF.	Turn lever ON.
	Choke OPEN.	Move to CLOSED unless engine is warm.
	Engine switch OFF.	Turn engine switch to ON.
2. Check fuel.	Out of fuel.	Refuel (p. 34).
	Bad fuel; generator stored without treating or draining gasoline, or refueled with bad gasoline.	Drain fuel tank and carburetor (p. 47 and 48). Refuel with fresh gasoline (p. 34).
3. Check engine oil level.	Low oil level caused Oil Alert to stop engine.	Add oil (p. 36). Turn engine switch to OFF and restart the engine.
4. Remove and inspect spark plug.	Spark plug faulty, fouled, or improperly gapped.	Gap, or replace spark plug (p. 43).
	Spark plug wet with fuel (flooded engine).	Dry and reinstall spark plug.
5. Take generator to an authorized Honda servicing dealer, or refer to shop manual.	Fuel filter restricted, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.

TAKING CARE OF UNEXPECTED PROBLEMS

Engine Lacks Power	Possible cause	Correction
1. Check air cleaner element.	Air cleaner element restricted.	Clean or replace air cleaner element (p. 39 thru. 41).
2. Check fuel.	Bad fuel; generator stored without treating or draining gasoline, or refueled with bad gasoline.	Drain fuel tank and carburetor (p. 47 and 48). Refuel with fresh gasoline (p. 34).
3. Take generator to an authorized Honda servicing dealer, or refer to shop manual.	Fuel filter restricted, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.

TAKING CARE OF UNEXPECTED PROBLEMS

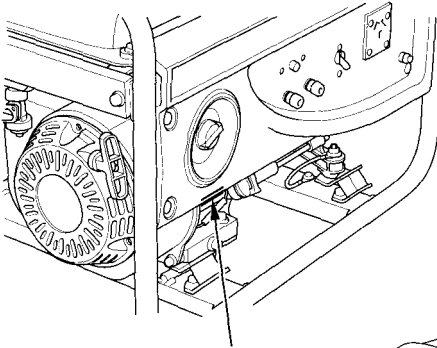
GENERATOR PROBLEMS

No Power at the AC Receptacle	Possible Cause	Correction
1. Check circuit breaker.	Circuit breaker left in the OFF position after starting.	Switch circuit breaker ON.
2. Check the power tool or appliance at a known, good AC power source.	Faulty power tool or appliance.	Replace or repair power tool or appliance. Stop and restart the engine.
3. Take generator to an authorized Honda servicing dealer, or refer to shop manual.	Faulty generator.	Replace or repair faulty components as necessary.

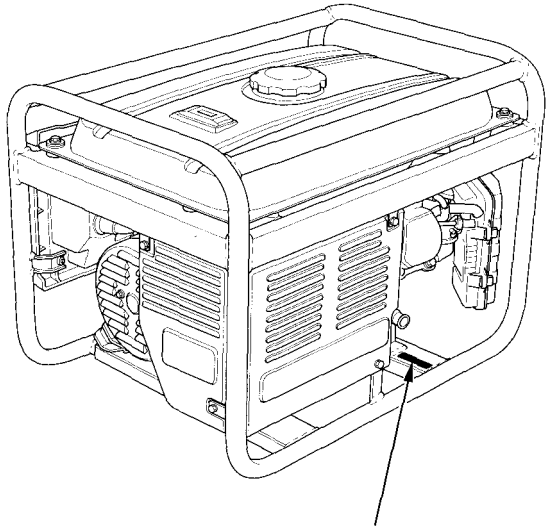
No Power at the DC Terminals	Possible Cause	Correction
1. Check DC circuit protector.	DC circuit protector OFF.	Switch ON DC circuit protector.
2. Take generator to an authorized Honda servicing dealer.	Faulty generator.	Replace or repair faulty component as necessary.

TECHNICAL INFORMATION

SERIAL NUMBER LOCATION



ENGINE SERIAL NUMBER



FRAME SERIAL NUMBER

Record the engine and frame serial numbers in the spaces below. You will need this serial number when ordering parts, and when making technical or warranty inquiries.

Engine serial number: _____

Frame serial number: _____

Date purchased: _____

CARBURETOR MODIFICATION FOR 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. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your generator at altitudes above 1,500 meters (5,000 feet), have your authorized Honda servicing 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 1,500 meters (5,000 feet) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

TECHNICAL INFORMATION

OXYGENATED FUELS

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels.

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.

The following are 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.

TECHNICAL INFORMATION

SPECIFICATIONS

Dimensions

Model	EP2200CX
Description code	EAHC
Length	597 mm (23.5 in)
Width	435 mm (17.1 in)
Height	437 mm (17.2 in)
Dry weight	45 kg (99 lbs)

Engine

Model	GX160H1
Engine Type	4-stroke, overhead valve, single cylinder
Displacement	163 cm ³ (9.9 cu-in)
Bore × Stroke	68 × 45 mm (2.68 × 1.77 in)
Cooling System	Forced air
Ignition System	Transistorized magneto ignition
Oil Capacity	0.60 l (0.63 US qt , 0.53 Imp qt)
Fuel Tank Capacity	14.5 l (3.83 US gal , 3.19 Imp gal)
Spark Plug	BPR6ES (NGK) , W20EPR-U (DENSO)

Generator

AC output	Rated voltage	240 V
	Rated frequency	50 Hz
	Rated ampere	8.3 A
	Rated output	2,000 VA
	Maximum output	2,200 VA
DC output	Only for charging 12 V automotive batteries. Maximum charging output = 8.3 A	

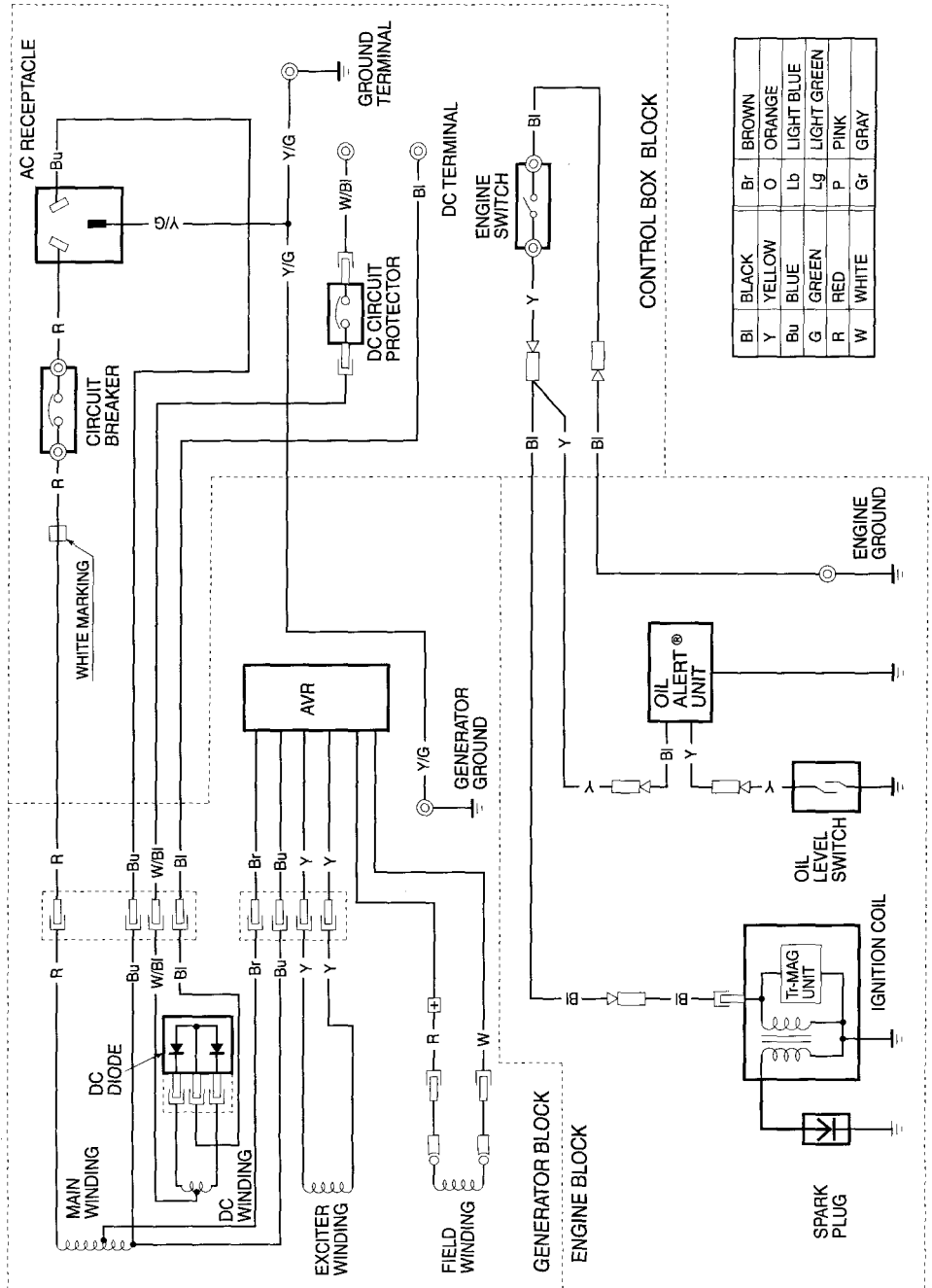
Tuneup Specifications

ITEM	SPECIFICATION	MAINTENANCE
Spark plug gap	0.70 – 0.80 mm (0.028 – 0.031 in)	Refer to page: 43
Valve clearance (cold)	IN: 0.15 ± 0.02 mm EX: 0.20 ± 0.02 mm	See your authorized Honda dealer
Other specifications	No other adjustments needed.	

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

TECHNICAL INFORMATION

WIRING DIAGRAM



CONSUMER INFORMATION

DISTRIBUTOR/DEALER LOCATOR INFORMATION

NAME OF FIRM (COMPANY)	ADDRESS	TEL: FAX:
Honda Australia Motorcycle and Power Equipment Pty. Ltd	1954-1956 Hume Highway Campbellfield Victoria 3061	Tel: (03) 9270 1111 Fax: (03) 9270 1133

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HONDA

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