HONDA

Power

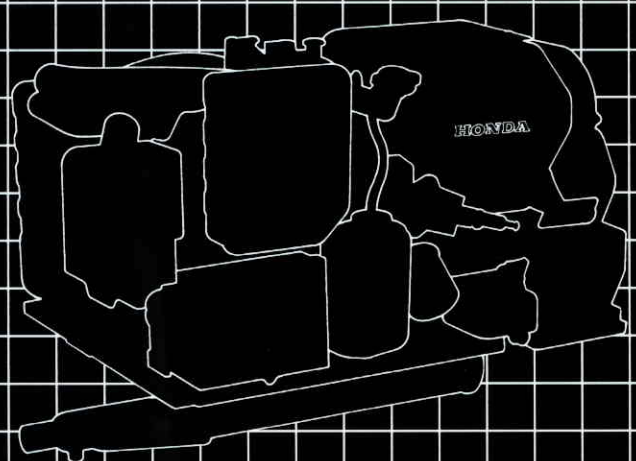
Equipment

Owner's Manual

GENERATOR

EVD4010

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 EVD4010 Honda Generator. 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. No part of this publication may be reproduced without written permission.

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

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 properly could be damaged if you don't follow instructions.

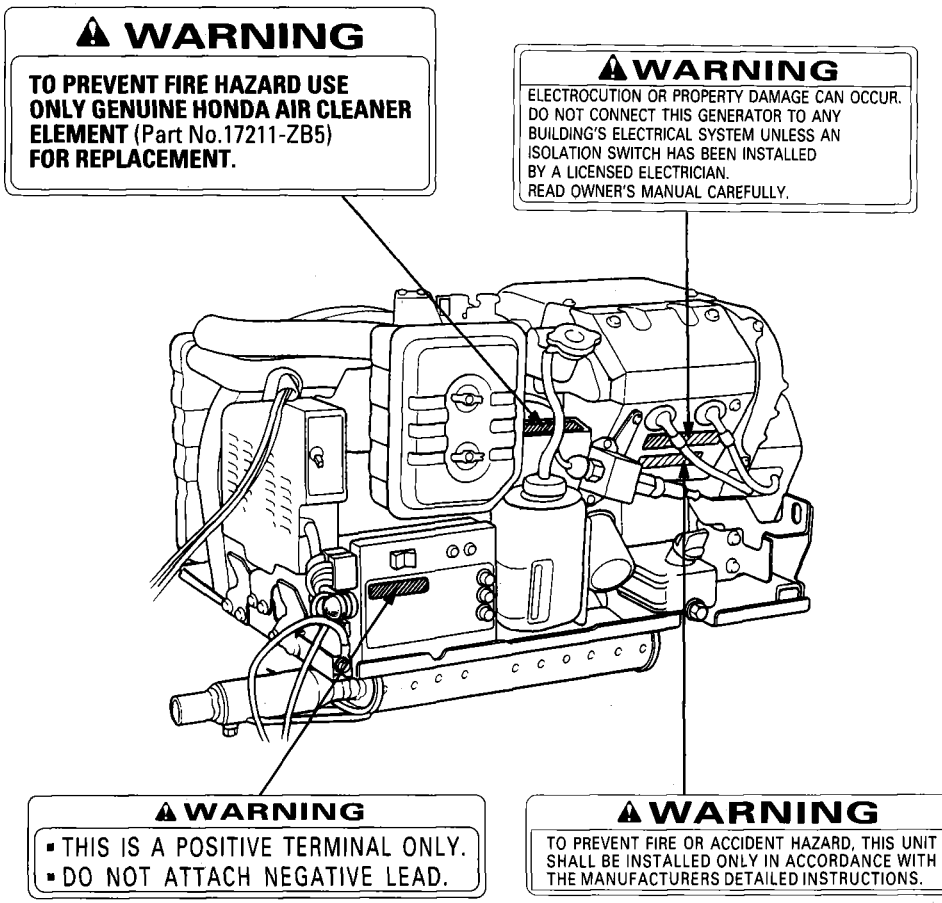
The purpose of these messages is to help prevent damage to your generator, other property, or the environment.

CONTENTS

SAFETY LABEL 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 Generator dealer for a replacement.



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, which is a colorless and odorless gas that can cause loss of consciousness and may lead to death.**
- **Select a parking area that has enough ventilation for safe generator operation. If you run the generator in an area that is confined, or even partially enclosed, the air you breathe will contain a dangerous amount of exhaust gas.**
- **When parking, be careful that the exhaust is not directed into an area that you or your neighbors will use as working space. Avoid the exhaust area when the generator is running.**
- **Provide enough ventilation to keep exhaust gas from building up. Placing awnings or other objects in the exhaust area will restrict ventilation; this may cause exhaust gas to build up and enter working areas.**

Electric Shock Hazards

- **The generator produces enough electric power to cause a serious shock or electrocution if misused.**
- **Improper connection to a building's electrical system can cause electric power to backfeed through utility lines and may cause serious injury or death to utility workers or others. Consult the utility company or a qualified electrician before connecting the generator to a building's electrical system.**

Fire and Burn Hazards

- Improper generator installation or wiring connections can cause a fire. Installation should be done only by an authorized Honda generator dealer or other qualified generator installer.
- **The exhaust system gets hot enough to ignite some materials. Make sure flammable materials such as vegetation, paper and wood products, and chemicals are kept clear of the exhaust system.**
- **Touching a hot engine or exhaust system can cause serious burns. Let the engine cool before performing maintenance.**
- **Gasoline is extremely flammable, and gasoline vapor can explode. Keep flames and sparks away, and do not smoke in the area.**
- **Coolant contains ethylene glycol, which is flammable. When ignited, it has an invisible flame that can cause severe burns. Use care when handling coolant.**

GENERATOR INSTALLATION AND CONNECTIONS

Connections for a Vehicle

⚠ WARNING Incorrect generator installation or connection can cause electrocution or fire. The generator must be installed and connected as described in the Honda EVD4010 Generator Installation Manual.

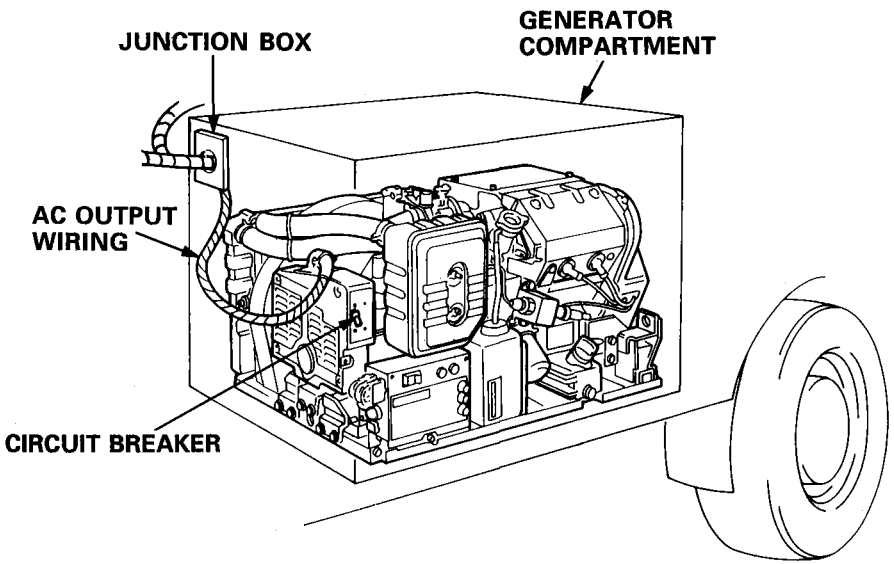
The EVD4010 generator should be installed by a qualified generator installer. Installation must comply with the standards and codes of the following organizations:

U.S.A.: Occupational Health and Safety Administration (OHSA)
National Fire Protection Association (NFPA)
National Electric Code (NEC)

Either 120V or 240V is available by reconnecting the out put leads. Select the voltage according to the equipment to be connected.

For protection against electrical shock, all 15 and 20 A 120 volt receptacles connected to the generator must be protected by ground-fault circuit interrupters (GFCI's). All individual circuits must be provided with circuit breakers or fuses for protection against circuit overload.

If the vehicle is equipped to use an outside AC power source, the generator output wires must be completely isolated when the outside AC power source is connected.



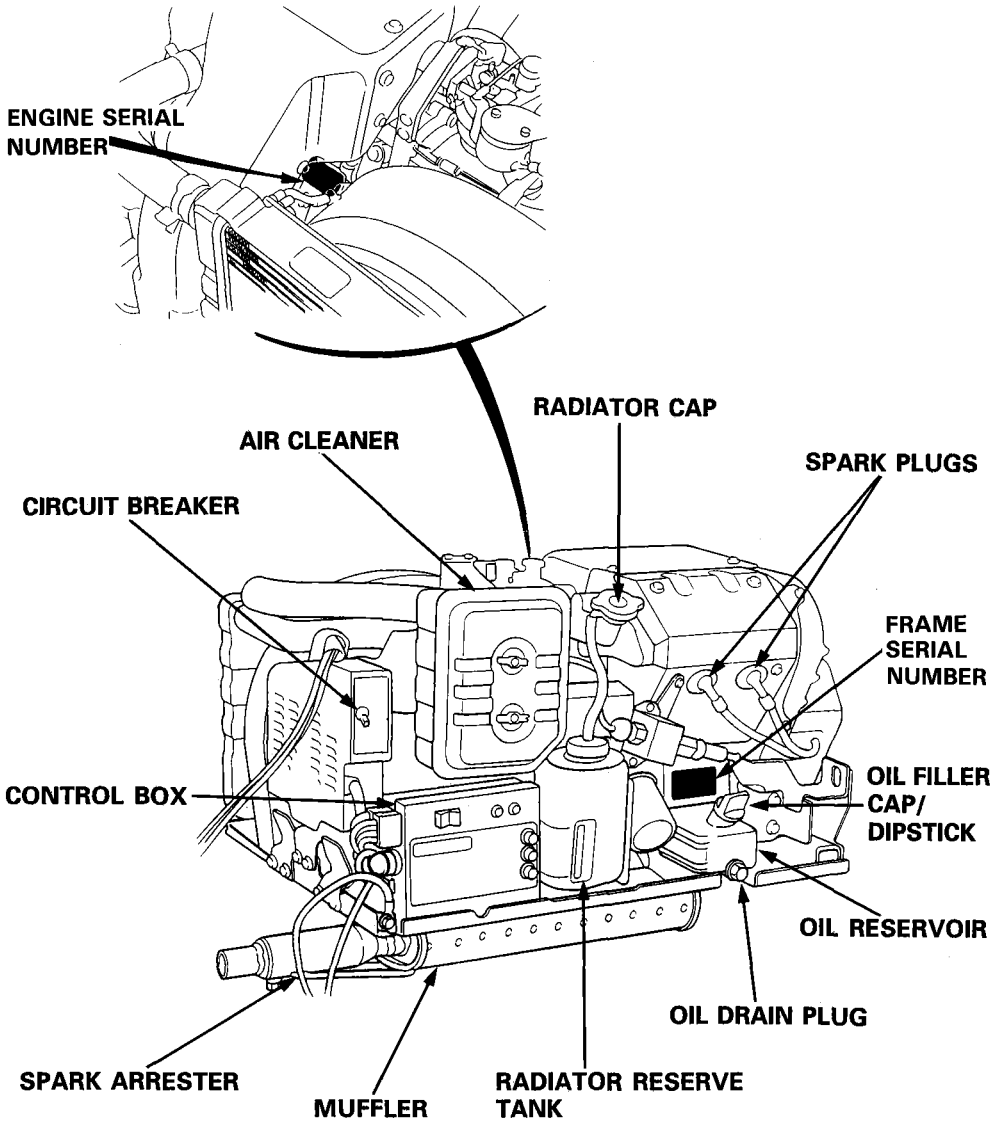
Connections to a Building's Electrical System

Although the Honda EVD4010 generator is designed for vehicle use, it can also 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 electric current from the generator to backfeed into utility lines and may cause serious injury or death to utility company workers or others who contact the lines. Consult the utility company or a qualified electrician.

NOTICE Improper connections to a building's electrical system can allow electric current from the utility company to backfeed into the generator, which will severely damage the generator and may cause fires.

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



- 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 page 38).
  Frame serial number: _____
  Engine serial number: _____

CONTROL BOX

Circuit breaker: Switch ON for AC power. The breaker will automatically switch OFF if the circuit is more than 20% overloaded.

Pilot lamp: Lights when the engine is running and goes off when the engine is stopped.

Overheating warning lamp: Lights when the engine or coolant temperature exceeds the safe operating limit.

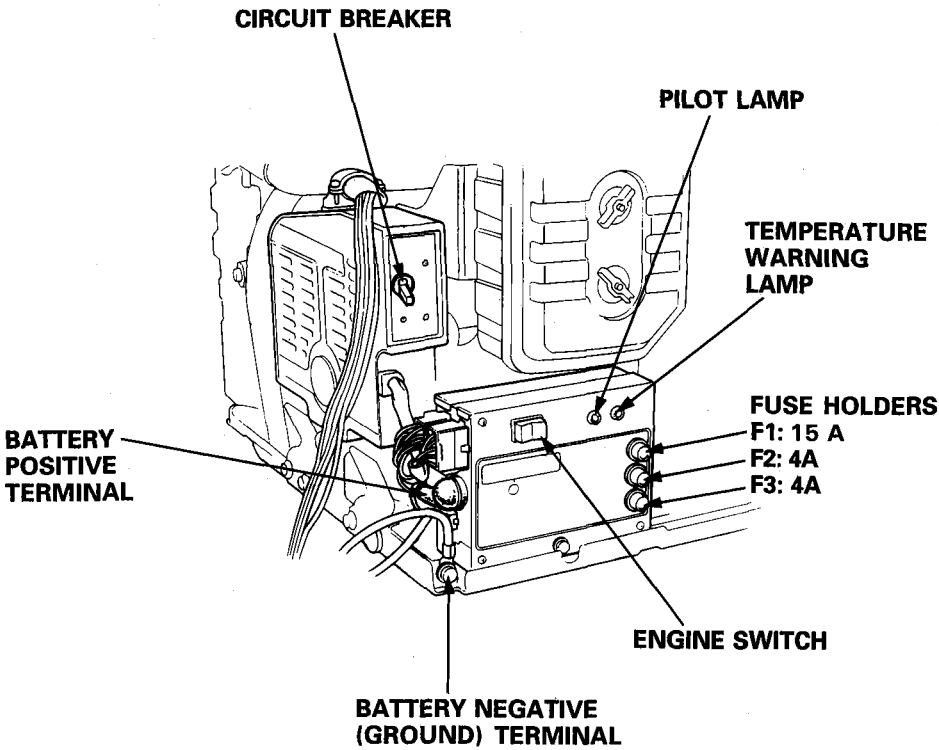
Battery terminal: Connect the battery positive (+) cable here.

Ground terminal: Connect the battery negative (-) cable here.

Engine switch: Starts and stops the generator engine.

Fuse holders: F1: 15 amp fuse; F2: 4 amp fuse; F3: 4 amp fuse.

Remote control coupler: The remote control panel coupler is connected here.

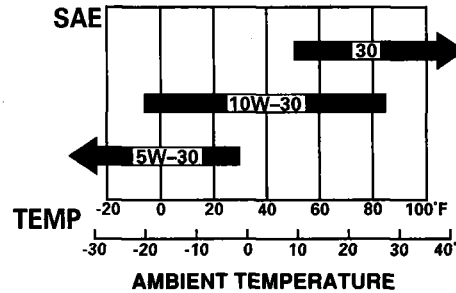


Engine oil

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.**

Before you start the generator, check the engine oil level while parked on a level surface and the generator 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.

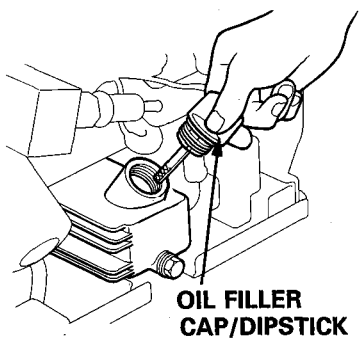


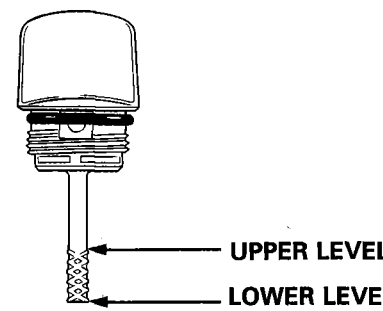
Oil capacity: 1.2 litters (1.27 US qt, 1.06 Imp qt)

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.

The engine protection system will automatically stop the engine before the oil pressure falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, you should inspect the oil level regularly.

1. Remove the oil filler cap and wipe the dipstick clean.
2. Insert the dipstick into the oil filler neck, but do not screw it in.
3. Check the oil level shown on the dipstick. If near the lower level, fill to the upper level with the recommended oil.





Fuel

Before starting the generator, check for fuel system leaks. Repair any fuel leaks before starting the generator.

⚠ WARNING Gasoline is extremely flammable, and gasoline vapor can explode, causing serious injury or death. Use extreme care when handling gasoline.

Keep flames and sparks away, and do not smoke in the area. Be sure the engine compartment is dry and clear of fuel vapor before starting the generator.

Fuel Recommendation

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 your servicing 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.

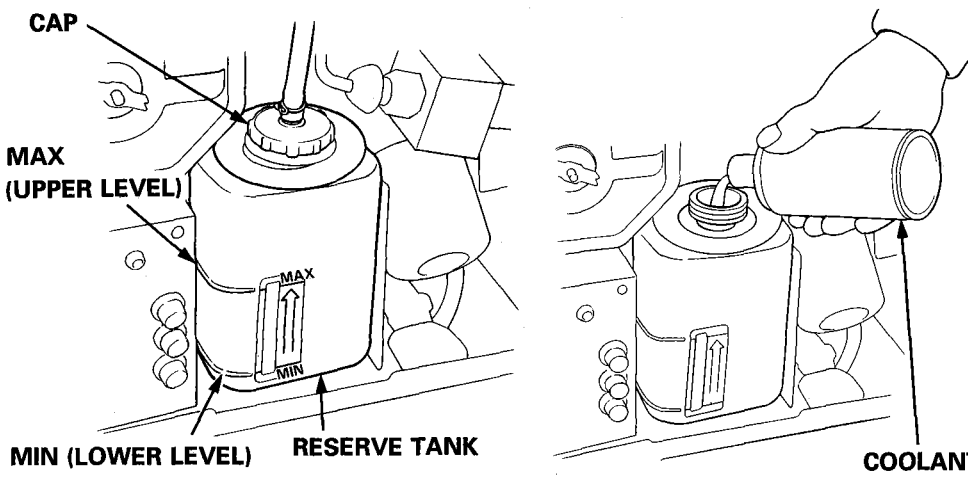
Coolant

⚠ WARNING

- **Coolant contains ethylene glycol, which is flammable. When ignited, it has an invisible flame that can cause severe burns. Use care when handling coolant.**
- **Coolant may cause skin, eye, and mucous membrane irritation. Breathing high concentrations of mist or vapors may cause nausea. SKIN or EYE CONTACT: flush with water and go to a hospital. IF SWALLOWED: induce vomitting and call a physician. KEEP OUT OF REACH OF CHILDREN.**

Check the coolant level in the reserve tank while parked on a level surface.

When the engine is at operating temperature, the coolant level should be between the MIN and MAX marks on the reserve tank. If the level is near the MIN mark, add coolant to bring the level up to the MAX mark.



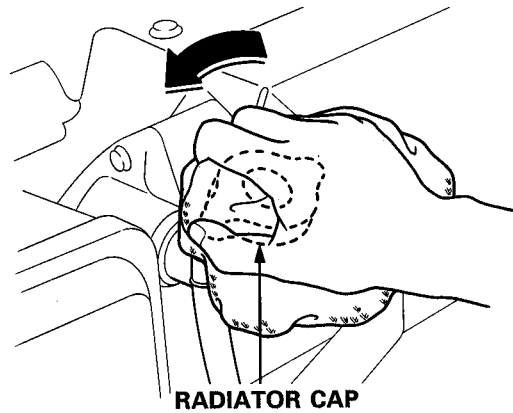
The engine protection system will automatically stop the engine if the coolant becomes excessively hot, which may occur if the coolant level is too low. To avoid the inconvenience of an unexpected shutdown, inspect the coolant level in the reserve tank regularly.

If there is no coolant in the reserve tank:

Make sure the engine is cool, then check the coolant system for leaks and have repairs made if needed. Add coolant to the radiator and reserve tank before starting the engine.

⚠ WARNING Hot coolant is under pressure. If you remove the radiator cap when the engine is hot, you may be scalded. Wait for the engine to cool.

1. When the engine is cool, relieve any remaining coolant pressure by turning the radiator cap counterclockwise until it reaches its stop; DO NOT PRESS DOWN WHILE TURNING THE CAP. After all pressure has been relieved, press the cap down and continue turning the cap to remove it.



2. Fill the radiator with coolant, and reinstall the radiator cap. Tighten the cap securely.

3. Fill the reserve tank to the MAX mark with coolant.

Antifreeze/Coolant Recommendation

Use high quality ethylene glycol coolant that is specifically formulated for aluminum engines. Mix the coolant with low-mineral drinking water or distilled water.

A 50/50 mixture of ethylene glycol coolant and water is recommended for most temperatures, and it provides good corrosion protection. A higher concentration of coolant decreases cooling efficiency and is recommended if additional protection against freezing is needed. A concentration of less than 40% antifreeze will not provide enough corrosion protection.

NOTICE The wrong type of coolant, hard water, or salt water can cause corrosion damage in the engine.

Exhaust System

Check the exhaust system for any damage or deterioration. Look for dents, or leaks caused by rust.

⚠ WARNING Exhaust contains poisonous carbon monoxide, which is a colorless and odorless gas that can cause loss of consciousness and may lead to death. Repair any exhaust system leaks before starting the generator.

Starting the Engine

1. Turn off all electrical loads (lights and appliances).

2. Push the engine switch to START, and hold the switch in that position until the engine starts and the green pilot light glows steadily.

   If the engine does not start within 10 seconds, release the engine switch, and wait at least 30 seconds for the starter motor to cool before pushing the switch to START again.

NOTICE **Using the electric starter for more than 10 seconds at a time can damage the starter motor.**

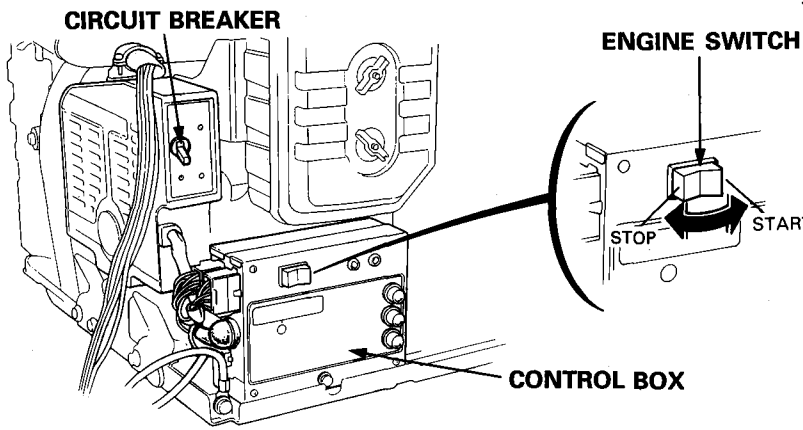
If you experience difficulty starting the engine, turn the circuit breaker (s) OFF to be sure there is no electrical load on the generator, then push the engine switch to START again. Turn the circuit breaker (s) ON after the engine starts.

If the engine stops a few seconds after starting, this may indicate that the engine protection system has been activated (see page 18). Check the engine oil and coolant levels before attempting to restart the generator.

If the engine stops because it ran out of fuel, then, after refilling the vehicle's fuel tank, it may be necessary to operate the starter repeatedly (10 seconds ON, 30 seconds OFF), until fuel reaches the carburetor.

Stopping the Engine

Push the engine switch to STOP, and release the switch. It is not necessary to hold the switch until the engine stops.



GENERATOR USE

Be sure your parking area has enough ventilation for safe generator operation. If you run the generator in an area that is confined, or even partially enclosed, the air you breathe will contain a dangerous amount of exhaust gas.

⚠ WARNING Exhaust contains poisonous carbon monoxide, which is a colorless and odorless gas that can cause loss of consciousness and may lead to death. Provide enough ventilation to keep exhaust gas from building up.

When parking, be careful that the exhaust is not directed into an area that you or others will use as working space. Avoid the exhaust area when the generator is running.

Placing awnings or similar structures in the exhaust area will restrict ventilation; this may cause exhaust gas to build up and enter working areas.

Obstructions, such as trees, rocks, dirt or snow embankments, or heavy brush can also restrict ventilation. Be sure the area near the exhaust pipe is clear of obstructions before starting the generator.

Be especially careful in snowy areas. Snow may build up near the exhaust pipe and trap exhaust gas, causing it to enter the working area.

Be sure that anyone who operates the generator receives proper instruction. Do not let children operate the generator without parental supervision.

Appliance Operation

To avoid overloading the generator, be sure the total power requirements of all connected appliances do not exceed maximum generator output.

Maximum power is: 4.0 KVA

Most appliance and power tool motors require more than their rated operating current for startup. To match appliance power needs to generator capability, allow a sufficient generator power reserve to accommodate motor startup requirements.

Be sure that all appliances are in good working order before connecting them to the generator. If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn off the appliance or the generator circuit breaker immediately. Disconnect the appliance, and determine whether the problem is due to appliance malfunction or generator overloading.

Engine Protection System

The engine protection system will automatically stop the engine to prevent damage from lack of lubrication or overheating.

Low Oil Pressure Protection

If there is a loss of oil pressure, which may indicate low oil level, the engine protection system will automatically stop the engine.

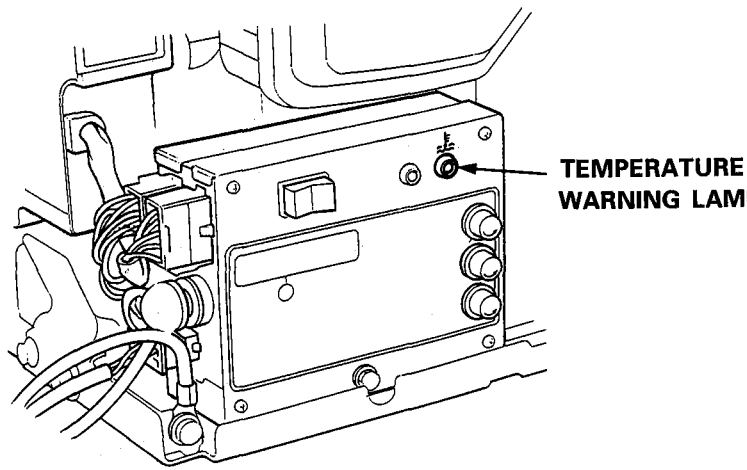
If this occurs, check the engine oil level, and add oil if the level is low (see page 11).

Engine Overheating Protection

If the engine or coolant becomes too hot, the engine protection system will automatically stop the engine, and the temperature warning lamp will light. The temperature warning lamp is located on the generator control box.

If this occurs, check the coolant level, and refill if the coolant level is low (see pages 14 & 15) . If the cooling system leaks, or if the temperature warning lamp lights with the cooling system properly filled, take the generator to your servicing dealer.

Allow an overheated engine to cool for 15 to 40 minutes before restarting. If restarted while overheated, the engine protection system will immediately stop the engine again. The generator is ready for operation when the temperature warning lamp is no longer lit.



Circuit Breaker and Fuses

The generator's electrical system is protected by 3 fuses in the generator control unit and a circuit breaker for the AC output circuit.

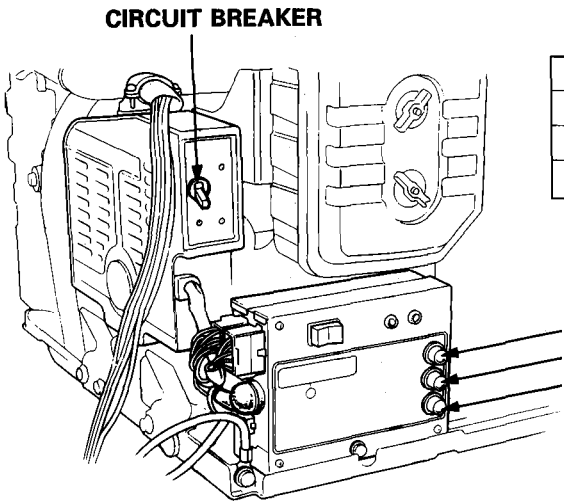
Circuit Breaker

An overload will trip (switch off) the circuit breaker. If this happens, reduce the electrical load on the circuit. Wait a few minutes before resetting the circuit breaker.

Fuses

In the event of fuse failure locate and repair the cause of the failure. To replace a fuse, unscrew the fuse holder, and install a replacement fuse of the specified rating. Then reinstall the fuse holder, and tighten it securely.

NOTICE **Using fuses with ratings higher than specified can cause a fire or equipment damage.**

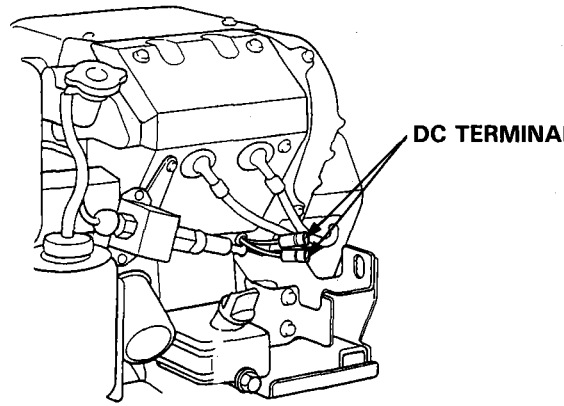


FUSE HOLDER	FUSE RATING
F1	15 A
F2	4 A
F3	4 A

If frequent fuse failure occurs, consult your servicing dealer to determine the cause. Correct the problem before operating the generator again.

DC Terminals

The DC terminals can be used for operating a 12 V DC appliance through a voltage regulator and a 12 V battery. The maximum rating is 10 A.



- **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 altitude 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.

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 26. 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 / REGULLAR SERVICE PRCIOD (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.	Each year or 300 Hrs.
	Exhaust system	Check	○				
•	Engine oil	Check level	○				
		Change		○		○	
•	Air cleaner	Check	○				
		Clean			○(1)		
		Replace					○(**)
	Radiator coolant	Check level	○				
		Change					○(2)
•	Spark plug	Clean-Readjust				○	
		Replace					○
	Spark arrester	Clean				○	
•	Valve clearance	Check-Readjust					○(2)
	Oil filter	Change				○(2)	
•	Fuel tank and filter	Clean					○(2)
•	Fuel line		Every 2 years (Replace if necessary) (2)				

NOTE: • Emission related items.

(**)Replace paper element only.

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

(2) These items should be serviced by your sevicing dealer, unless you have the proper tools and are mechanically proficient. See the Honda Shop Manual.

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

Maintenance Record

When scheduled maintenance is performed, record the actual hour meter readings below.

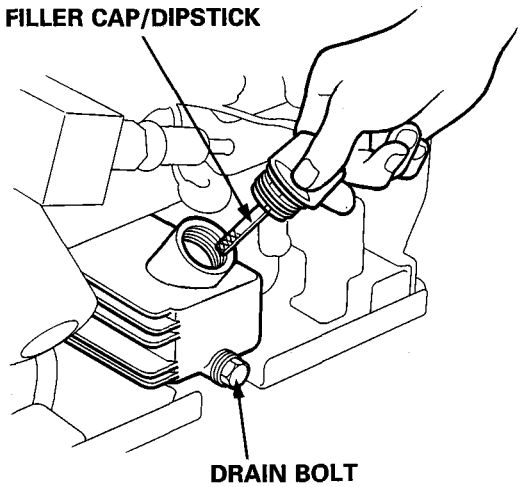
Interval / Items / Hours	Every 50 Hr.	Every 100 Hr.	Every 300 Hr.
	• Air cleaner element cleaning	• Engine oil change • Oil filter change • Spark arrester cleaning • Spark plug maintenance	• Fuel filter replacement • Valve clearance adjustment • Radiator coolant change • Air cleaner element replacement
100 Hr.	O		
200 Hr.	O	O	
300 Hr.	O		O
400 Hr.	O	O	
500 Hr.	O		
600 Hr.	O	O	O
700 Hr.	O		
800 Hr.	O	O	
900 Hr.	O		O
1000 Hr.	O	O	
1100 Hr.	O		
1200 Hr.	O	O	O
1300 Hr.	O		
1400 Hr.	O	O	
1500 Hr.	O		O
1600 Hr.	O	O	
1700 Hr.	O		
1800 Hr.	O	O	O
1900 Hr.	O		
2000 Hr.	O	O	
2100 Hr.	O		O
2200 Hr.	O	O	
2300 hr.	O		
2400 Hr.	O	O	O
2500 Hr.	O		

Engine oil change

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

1. Remove the filter cap/dipstick and the drain plug, and allow the oil to drain into a suitable container.
2. Check that the drain plug washer is in good condition (replace if necessary), then install the drain plug and tighten it securely.
3. Refill with the recommended oil (see page 11) to the upper level on the dipstick. Install the filler cap/dipstick.
4. Run the engine for a few minutes, then recheck the oil level. Add oil if necessary.

Oil capacity: 1.2 ℓ (1.27 US qt, 1.06 Imp qt)



Please dispose of used motor oil 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 drain.

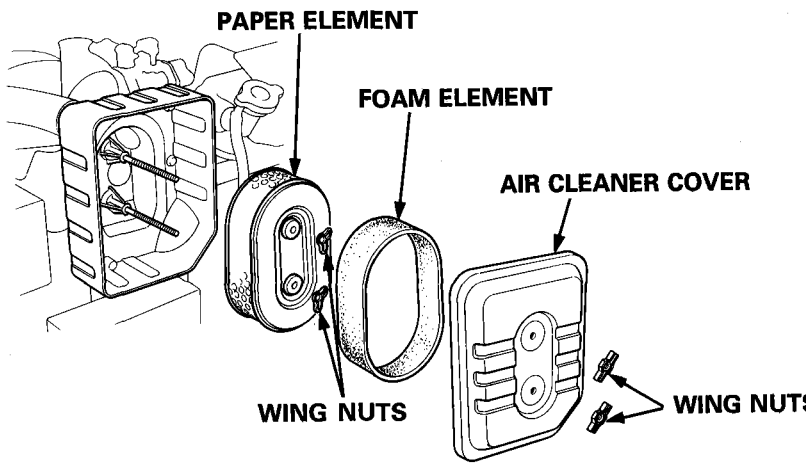
Air Cleaner Service

A dirty air cleaner will restrict air flow to the carburetor, reducing engine performance. If the generator is operated in very dusty areas, clean the air cleaner more frequently than specified in the MAINTENANCE SCHEDULE.

⚠ 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. Remove the wing nuts and air cleaner cover. Remove the elements and separate them. Carefully check both elements for holes or tears, and replace if damaged.
2. Foam element: Clean in warm soapy water, rinse, and allow to dry thoroughly. Or clean in nonflammable solvent and allow to dry. Dip the element in clean engine oil and squeeze out all excess oil. The engine will smoke during initial running if too much oil is left in the foam.
3. Paper element: Tap the element several times on a hard surface to remove excess dirt, or blow compressed air through the filter from the inside. Never try to brush off dirt; brushing will force dirt into the fibers.
4. Reinstall the air cleaner elements and the cover.



Spark Plug Service

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

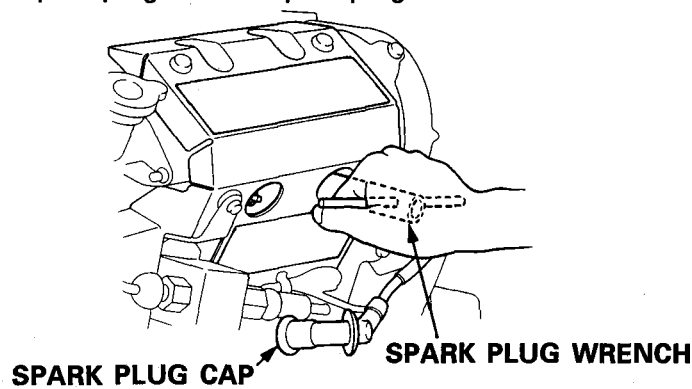
Recommended spark plugs: BPR4HS (NGK)

For good performance, the spark plugs 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.

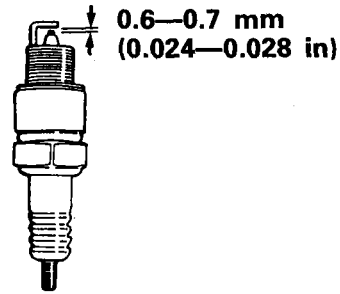
1. Disconnect the spark plug caps, and remove any dirt from around the spark plug area.

2. Remove the spark plugs with a spark plug wrench.

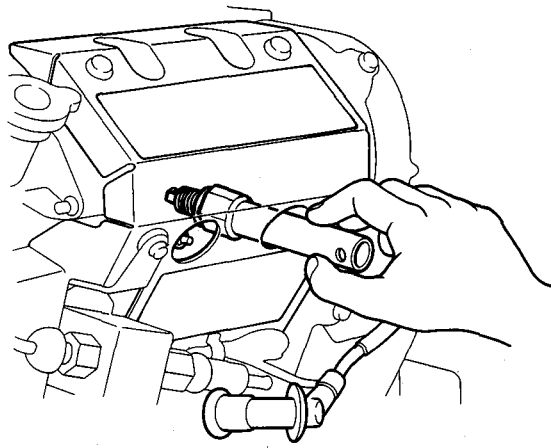


3. Inspect the spark plugs. Replace them if the electrodes are worn, or if the insulators are cracked or chipped. Clean the spark plugs with a wire brush if you will be reusing them.

4. Measure the gap of each spark plug with a feeler gauge. The gap should be 0.6—0.7 mm (0.024—0.028 in). Correct the gap as necessary by carefully bending the side electrode.



5. Install the spark plugs carefully by hand, to avoid cross-threading.



6. After the spark plugs are seated, tighten with a spark plug wrench to compress the washers.

If installing new spark plugs, tighten 1/2 turn after the spark plugs seat to compress the washers. If reinstalling used spark plugs, tighten 1/8—1/4 turn after the spark plugs seat.

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.

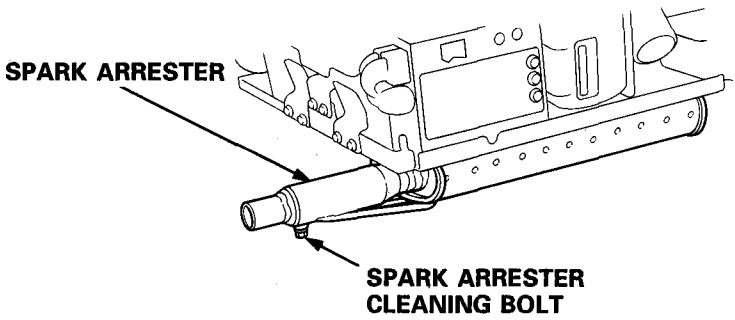
NOTICE **The spark arrester must be serviced every 100 hours to maintain its efficiency.**

Clean the spark arrester as follows:

1. Remove the spark arrester cleaning bolt.
2. Start the engine and run it for several minutes. Exhaust gas will blow loose carbon particles through the hole where the cleaning bolt was removed.

⚠ WARNING **Exhaust contains poisonous carbon monoxide, which is a colorless and odorless gas that can cause loss of consciousness and may lead to death. Provide enough ventilation to keep exhaust gas from building up.**

3. Reinstall the cleaning bolt and tighten it securely.



For storage of less than 1 month:

No storage preparation required.

For storage of 1 to 2 months:

1. Fill the vehicle's fuel tank with fresh gasoline, and add a gasoline conditioner that is formulated to extend fuel storage life.

2. Run the generator's engine for 10 minutes to be sure the carburetor float bowl contains treated gasoline.

For storage of 2 months or longer:

1. Change the engine oil (see page 28).

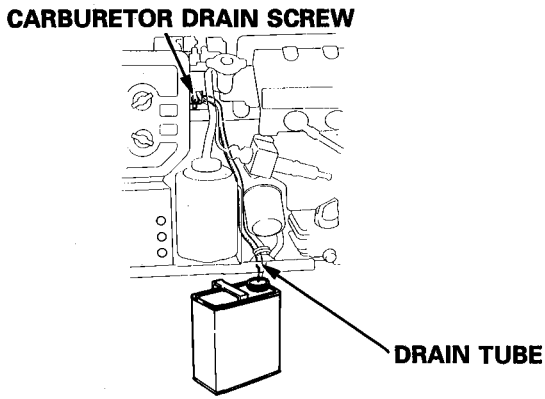
2. Remove the spark plugs, and pour a tablespoon of clean engine oil into each cylinder. Crank the engine for several seconds to distribute the oil, then reinstall the spark plugs.

   If the cylinders are coated with oil, the engine will smoke briefly at start-up; this is normal.

3. Drain the carburetor by placing the drain tube in a suitable gasoline container and loosening the drain screw. Retighten the screw after draining.

   ⚠ WARNING Gasoline is extremely flammable, and gasoline vapor can explode, causing serious injury or death. Use extreme care when handling the gasoline.

   Keep flames and sparks away, and do not smoke in the area. Be sure the generator compartment is dry and clear of fuel vapor before starting the engine.



TROUBLESHOOTING

STARTER MOTOR WILL NOT OPERATE

1. Check the vehicle battery and battery connector to the generator.
2. Check the F1 fuse (see page 20).

STARTER MOTOR WORKS, BUT ENGINE WILL NOT START

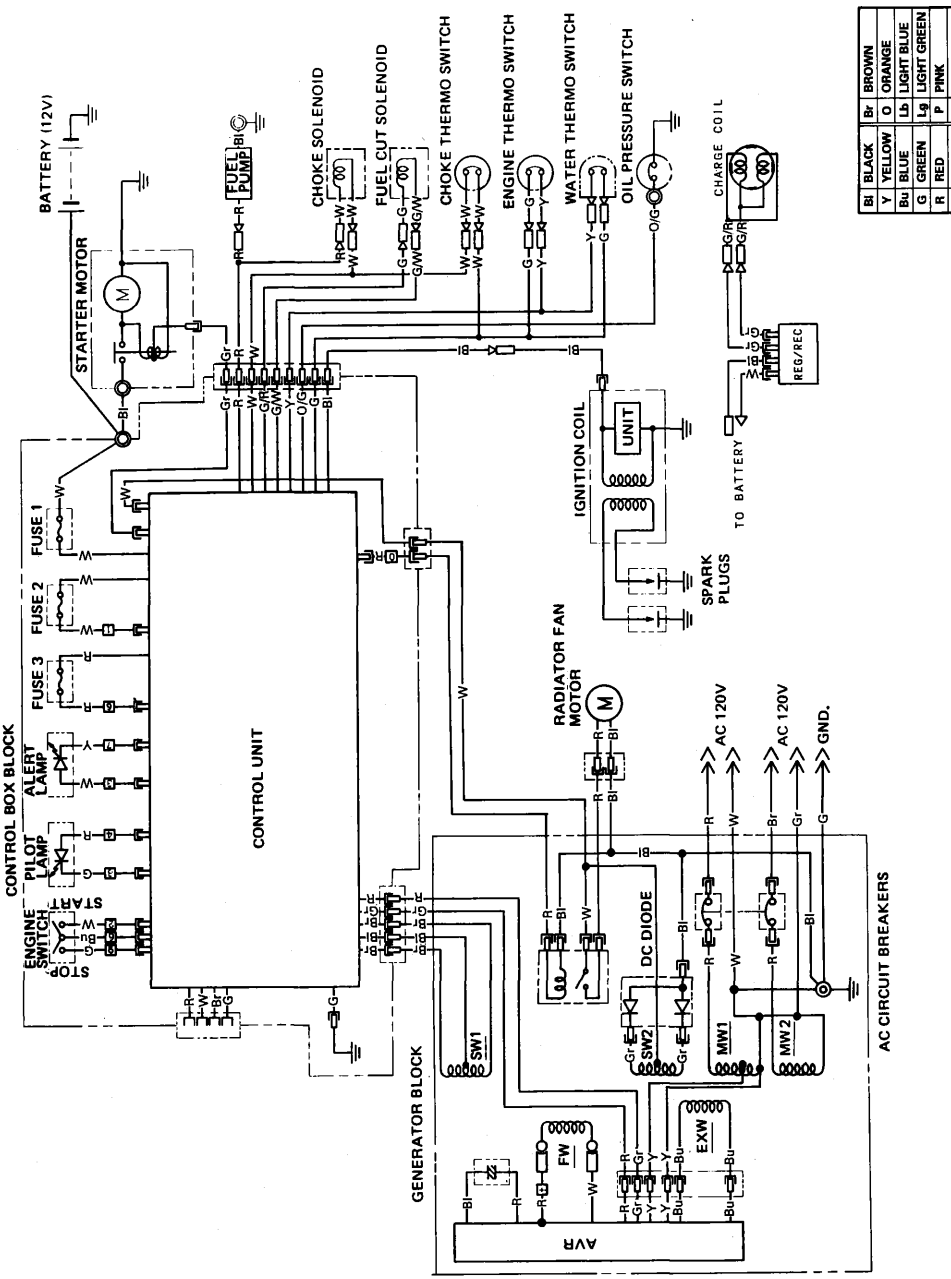
1. Check fuel level. Some vehicles will not supply fuel to the generator when the fuel tank level is below a certain limit.
2. Turn off all electrical loads (lights and appliances), or turn the circuit breaker(s) OFF. Turn the circuit breaker(s) ON after the engine starts.
3. Check the F2 fuse (see page 20).
4. Check the spark plugs (see page 30). Be sure the spark plugs are clean and properly gapped. If the engine still does not start, install new spark plugs and try again.

ENGINE STARTS, BUT STOPS IMMEDIATELY

1. The engine protection system may have been activated (see page 19). If the temperature warning lamp is lit, check the coolant level; if not, check the engine oil level.
2. Check the F3 fuse (see page 20).

ENGINE RUNS, BUT THERE IS NO ELECTRICITY OUTPUT

1. Check that the generator circuit breaker is in the ON position.
2. If the vehicle is equipped to isolate the generator when using an outside power source, check to be sure the generator has been reconnected.
3. Check circuit breakers and ground fault circuit interrupters in the vehicle. If they have been tripped (switched off), check appliances or equipment for malfunction before further use.


BATTERY (12V)
STARTER MOTOR
FUEL PUMP
CHOKE SOLENOID
FUEL CUT SOLENOID
CHOKE THERMO SWITCH
ENGINE THERMO SWITCH
WATER THERMO SWITCH
OIL PRESSURE SWITCH
CHARGE COIL
REG/REC
TO BATTERY
IGNITION COIL
UNIT
SPARK PLUGS
RADIATOR FAN MOTOR
CONTROL BOX BLOCK
FUSE 1
FUSE 2
FUSE 3
ALERT LAMP
PILOT LAMP
ENGINE SWITCH
START
STOP
CONTROL UNIT
DC DIODE
AC 120V
AC 120V
GND.
AC CIRCUIT BREAKERS
GENERATOR BLOCK
SW1
SW2
MW1
MW2
FW
EXW
AVR
Bl BLACK
Br BROWN
Y YELLOW
O ORANGE
Bu BLUE
Lb LIGHT BLUE
G GREEN
Lg LIGHT GREEN
R RED
P PINK
W WHITE
Gr GRAY

SPECIFICATIONS

Dimensions

Model	EVD4010
Power equipment description code	EZCW
*Length x Width x Height	650 x 483 x 361 mm (25.6 x 19.0 x 14.2 in)
Dry weight	92 kg (203 lb)

* Muffler and spark arrester are not included.

Engine

Model	GX360K1
Engine type	4-stroke, OHC Twin cylinder
Displacement (Bore x Stroke)	359 cc (21.9 cu in) [58 x 68 mm (2.3 x 2.7 in)]
Compression ratio	8.5 : 1
Engine speed	3,600 r.p.m.
Cooling system	Liquid cooled
Ignition system	Transistorized magneto
Oil capacity	1.2 ℓ (1.27 US qt, 1.06 Imp qt)
Spark plug	BPR4HS (NGK)

Generator

Type		ADV
AC output	Rated voltage	120/240 V
	Rated frequency	60 Hz
	Rated ampere	33.5 A/16.8 A
	Rated output	4.0 KVA
	Maximum output	4.0 KVA

Tune-up Specifications

ITEM	SPECIFICATION	MAINTENANCE
spark plug gap	0.6—0.7 mm (0.024—0.028 in)	Refer to page: 30
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 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 page 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:

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.

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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
- Name and address of the dealer who services your equipment
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

INDEX

MEMO

HONDA

HONDA MOTOR CO., LTD. TOKYO, JAPAN

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