

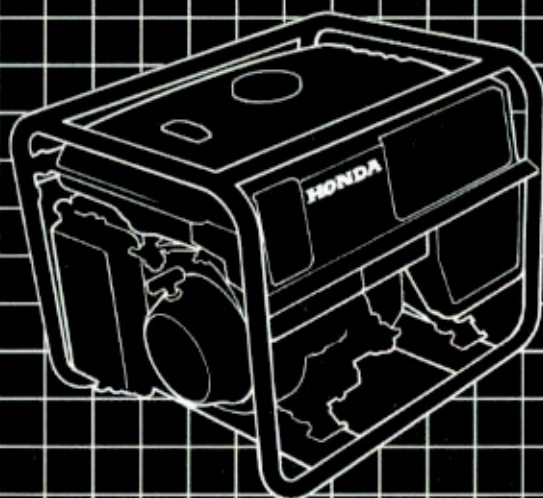
HONDA

Power

Equipment

Owner's Manual

EB3500X



⚠ 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.

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 EB3500X 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 property could be damaged if you don't follow instructions.

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

CONTENTS

SAFETY	4
Safety Label Locations	4
Safety Information	6
COMPONENT IDENTIFICATION	8
CONTROLS	10
Engine Switch	10
Recoil Starter	10
Fuel Valve	11
Choke Rod	11
Circuit Breaker	12
Ground Terminal	12
Oil Alert System	12
Auto-throttle system	13
Circuit Protector	13
Ground Fault Circuit Interrupter (GFCI) Receptacle	14
Voltage Selector Switch (Dual Voltage System)	17
GENERATOR USE	18
Connections to a Building's Electrical System	18
Ground System	18
Special Requirements	18
AC Applications	19
AC Operation	20
AC Receptacle Selection	21
Auto-throttle System	22
High Altitude Operation	23
PRE-OPERATION CHECK	24
Engine Oil	24
Fuel Recommendation	25
STARTING THE ENGINE/STOPPING THE ENGINE	27

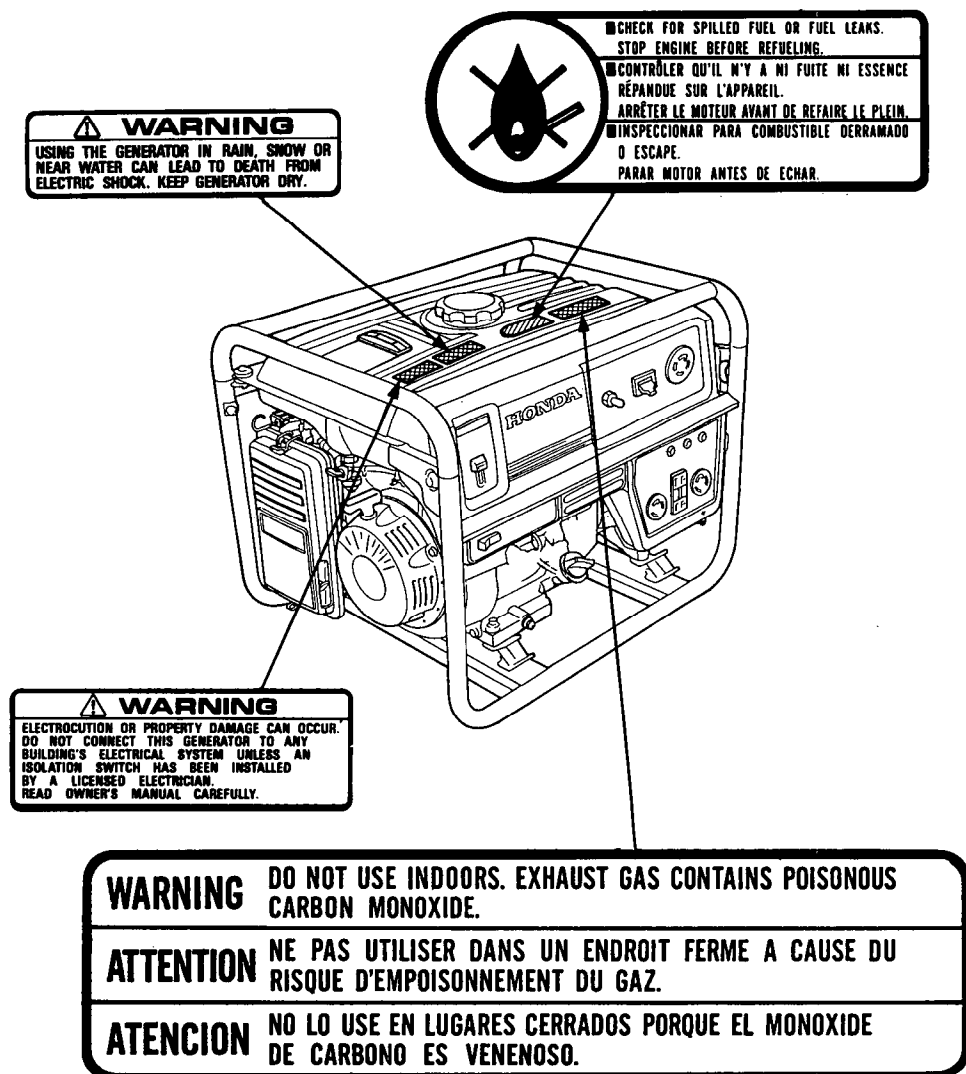
MAINTENANCE	28
Maintenance Schedule	28
Tool Kit	29
Engine Oil Change	30
Air Cleaner Service	31
Fuel Sediment Cup Cleaning	32
Spark Plug Service	33
Spark Arrester Maintenance	34
TRANSPORTING/STORAGE	35
TROUBLESHOOTING	37
WIRING DIAGRAM	39
SPECIFICATIONS	40
INSTALLATION OF OPTIONAL PARTS	41
CUSTOMER SERVICE INFORMATION	44
INDEX	45

SAFETY

SAFETY LABEL LOCATION

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

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



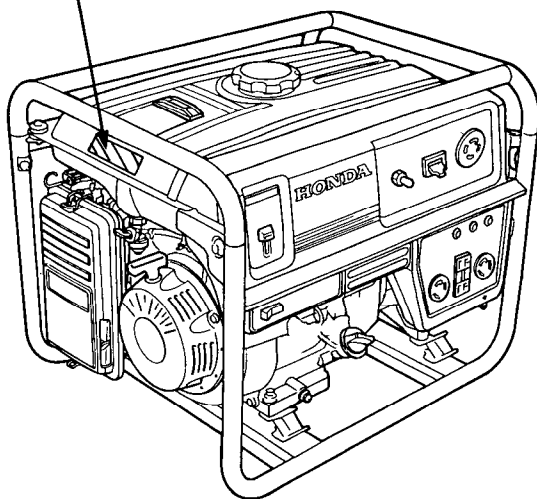
EB3500X HONDA MOTOR CO., LTD. MADE IN JAPAN (A)

CAUTION

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

AC

VOLTAGE 120/240V
FREQUENCY 60Hz
RATED OUTPUT 3.0kVA
MAX. OUTPUT 3.5kVA
PHASE 1φ
FUEL GASOLINE (PETROL)



SAFETY INFORMATION

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

Operator Responsibility

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

Carbon Monoxide Hazards

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

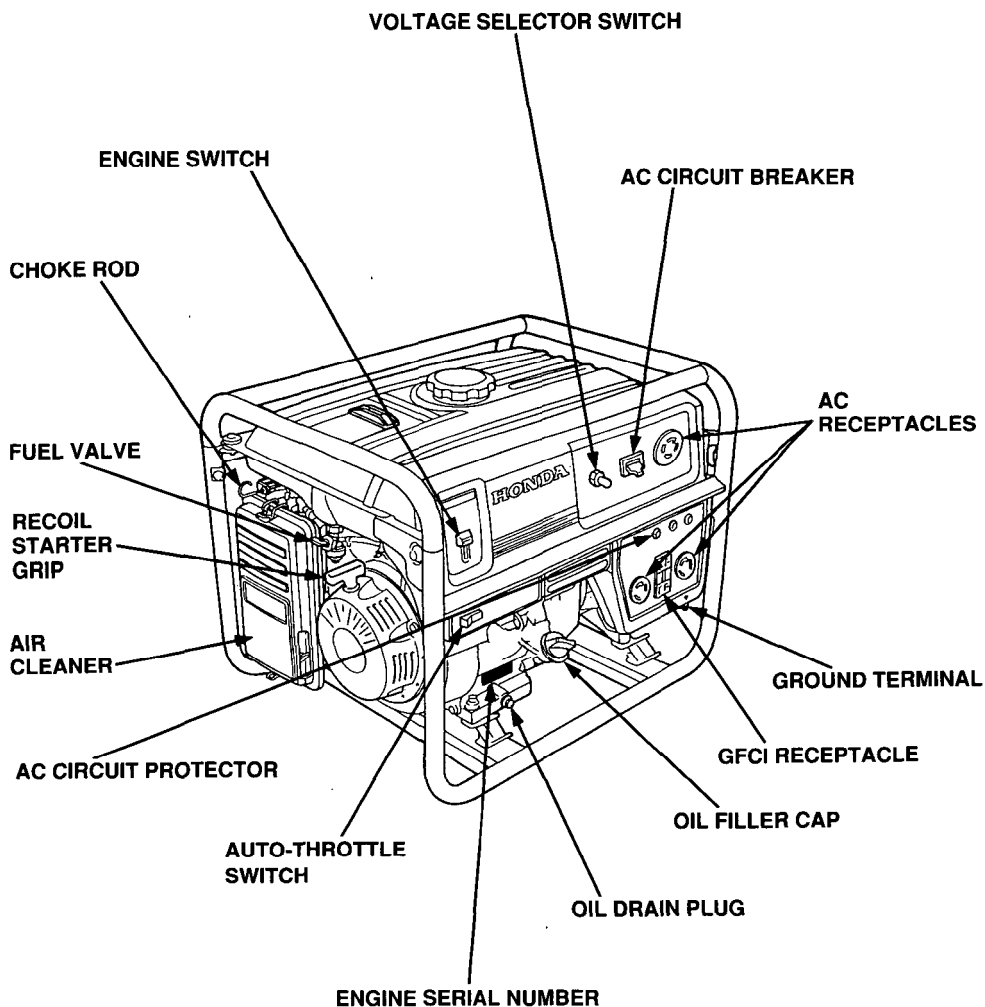
Electric Shock Hazards

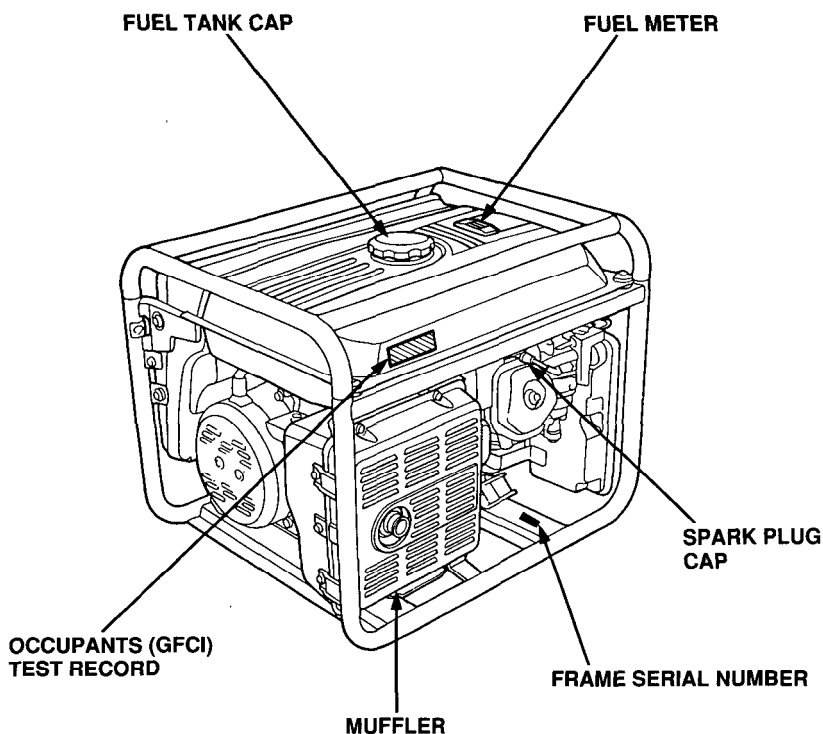
- The generator produces enough electric power to cause a serious shock or electrocution if misused.
- Using a generator or electrical appliance in wet conditions, such as rain or snow, or near a pool or sprinkler system, or when your hands are wet, could result in electrocution. Keep the generator dry.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

Fire and Burn Hazards

- The exhaust system gets hot enough to ignite some materials.
 - Keep the generator at least 1 meter (3 feet) away from buildings and other equipment during operation.
 - Do not enclose the generator in any structure.
 - Keep flammable materials away from the generator.
- The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler-while it is hot. Let the engine cool before storing the generator indoors.
- Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks where the generator is refueled or where gasoline is stored. Refuel in a well-ventilated area with the engine stopped.
- Fuel vapors are extremely flammable and may ignite after the engine has started. Make sure that any spilled fuel has been wiped up before starting the generator.

COMPONENT IDENTIFICATION





- Record the engine and frame serial numbers for your future reference. Refer to these serial numbers when ordering parts, and when making technical or warranty inquiries (see page 44)

Frame serial number: _____

Engine serial number: _____

CONTROLS

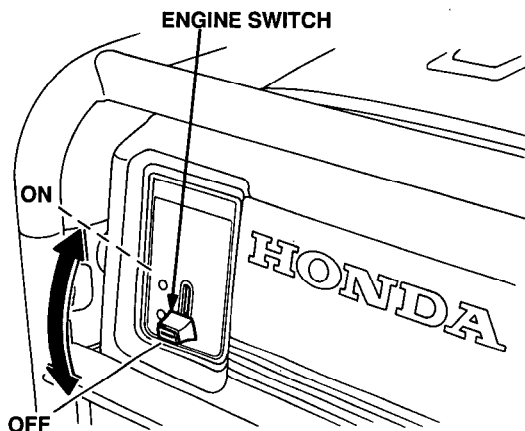
Engine Switch

To start and stop the engine

Switch position:

OFF: To stop the engine.

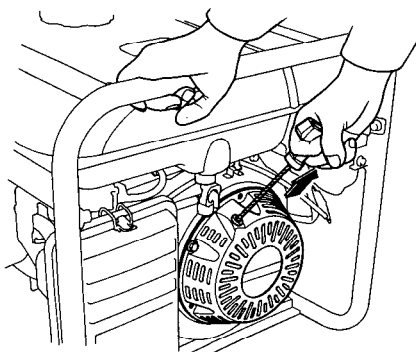
ON: To run the engine.



Recoil Starter

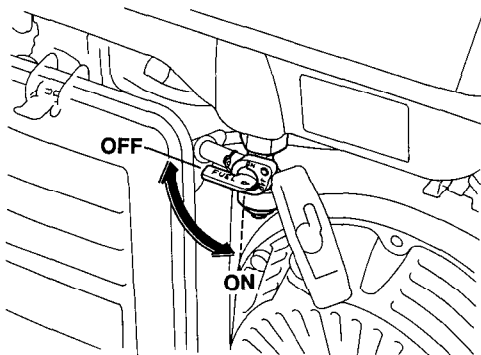
To start the engine, pull the starter grip lightly until resistance is felt, then pull briskly.

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



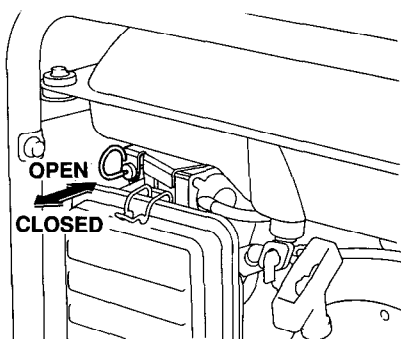
Fuel Valve

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



Choke Rod

The choke is used to provide proper starting mixture when the engine is cold. It can be opened and closed by operating the choke rod manually. Pull the rod out toward CLOSER to enrich the mixture.



Circuit Breaker

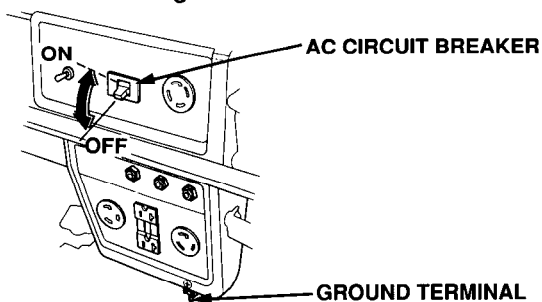
The circuit breaker will automatically switch OFF if there is a short circuit or a significant overload of the generator at the receptacle. If the circuit breaker is switched OFF automatically, check that the appliance is working properly and does not exceed the rated load capacity of the circuit before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

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

Ground Terminal

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

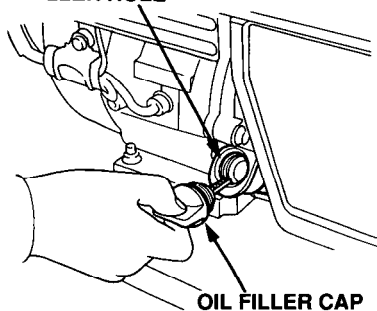
Before using the ground terminal, consult a qualified electrician, electrical inspector or local agency having jurisdiction for local codes or ordinances that apply to the intended use of the generator.



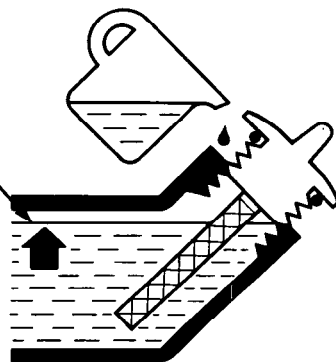
Oil Alert System

The Oil Alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit, the Oil Alert system will automatically stop the engine (the engine switch will remain in the ON position). If the engine stops and will not restart, check the engine oil level (p. 24) before troubleshooting in other areas.

OIL FILLER HOLE



UPPER LEVEL

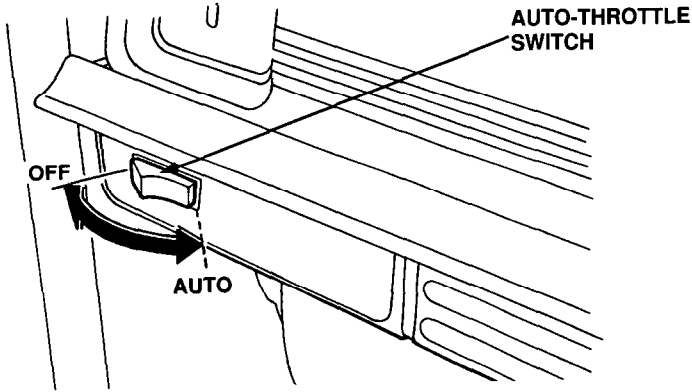


Auto-throttle System

The auto-throttle system automatically reduces engine speed when all loads are turned off or disconnected. When appliances are turned on or reconnected, the engine returns to the rated speed.

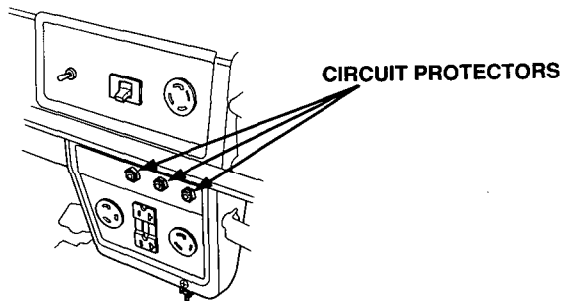
AUTO: Recommended to minimize fuel consumption and further reduce noise levels when no load is applied to the generator.

OFF: The auto-throttle system does not operate.



Circuit Protector

The circuit protectors will automatically switch OFF if there is a short circuit or a significant overload of the generator at the 20A 120V GFCI, 20A 120V twist lock, or 120/240V twist lock receptacle. If the circuit protector is switched OFF automatically, check that the appliance is working properly and does not exceed the rated load capacity of the circuit before resetting the circuit protector.



Ground Fault Circuit Interrupter (GFCI) Receptacle

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

All of the 20 ampere 120 volt receptacles on the generator are protected by a Ground Fault Circuit Interrupter (GFCI) for protection against the hazards of ground fault currents. Examples of ground fault current is the current which would flow through a person who is using an appliance with faulty insulation and, at the same time, is in contact with an electrical ground such as a plumbing fixture, wet floor, or earth.

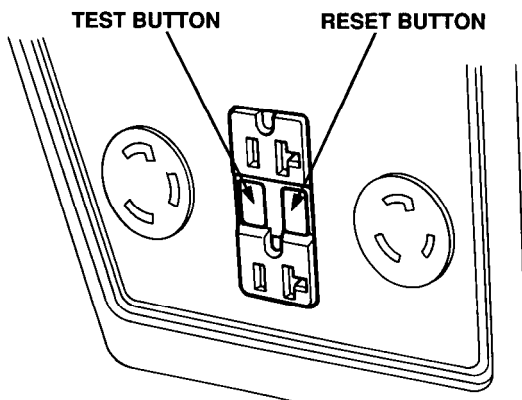
The ground fault circuit interrupter will not protect against short circuits or overloads. The circuit breaker or circuit protector in the control panel which supplies power to the circuit provides that protection (refer to circuit breaker and circuit protector on page 13).

The ground fault circuit interrupter can be identified by the TEST and RESET buttons. The receptacles on the GFCI and the 20 ampere twist lock receptacle (labeled as GFCI protected) are all tested with the TEST and RESET buttons.

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

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

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



INSPECTION

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

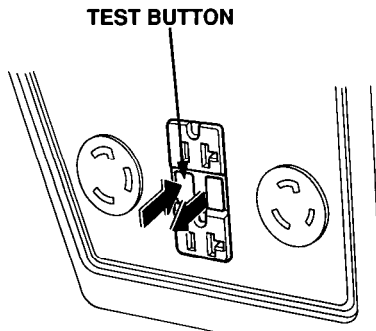
Before each use:

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

Monthly:

Under normal operating conditions, perform the GFCI test monthly.

1. Unplug all appliances from the generator.
2. Start the engine.
3. Turn the circuit breaker ON.
4. Make sure the auto-throttle switch is OFF.
5. Press the TEST BUTTON
 - The RESET BUTTON should extend with a click.
 - If the RESET BUTTON does not extend, contact an authorized Honda generator dealer.



6. Press the RESET BUTTON

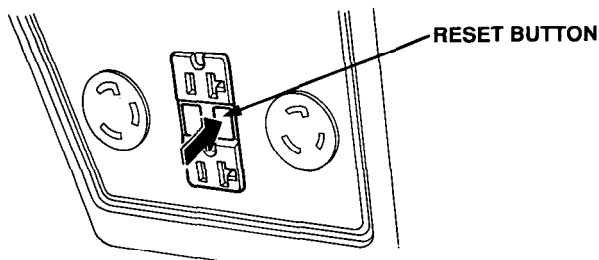
- The RESET BUTTON should be flush with the test button.
- If the RESET BUTTON is not flush with the TEST BUTTON, contact an authorized Honda generator dealer.

7. When the RESET BUTTON extends during operation:

- Unplug all appliances from the GFCI protected receptacle.
- Press the RESET BUTTON:

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

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

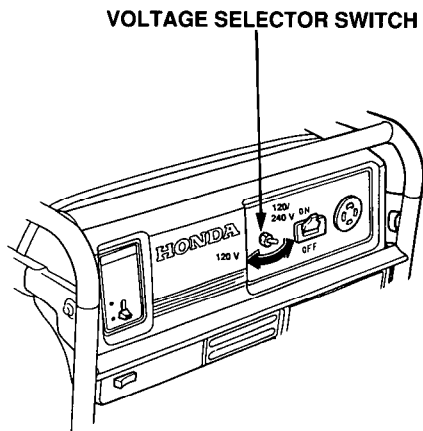


Voltage Selector Switch (Dual Voltage System)

The voltage selector switches the main power carrying windings of the generator to produce "120V ONLY" or "120/240V". If a 240V appliance is connected to the 4-prong receptacle, the switch must be in the "120/240V" position. If a 120V appliance ONLY is being connected to any of the 120V 3-prong receptacles, select the "120V ONLY" position.

120/240V: The 120V and 120/240V receptacles can be used simultaneously.

120V ONLY: ONLY the 120V receptacles can be used. Do not use the 120/240V receptacle in this position. Rated power will be available at the 30A 120V twist lock receptacle.



GENERATOR USE

Connections to a Building's Electrical System

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

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

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

Ground System

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

Special Requirements

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

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

AC Applications

Before connecting an appliance or power cord to the generator:

- Make sure that it is in good working order. Faulty appliances or power cords can create a potential for electrical shock.
- If an appliance begins to operate abnormally, becomes sluggish or stops suddenly, turn it off immediately. Disconnect the appliance, and determine whether the problem is the appliance, or if the rated load capacity of the generator has been exceeded.
- Make sure that the electrical rating of the tool or appliance does not exceed that of the generator. Never exceed the maximum power rating of the generator. Power levels between rated and maximum may be used for no more than 30 minutes.

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

Limit operation requiring maximum power to 30 minutes.

Maximum power is:

3.5KVA

For continuous operation, do not exceed the rated power.

Rated power is:

3.0KVA

In either case, the total power requirements (VA) of all appliances connected must be considered. Appliance and power tool manufacturers usually list rating information near the model number or serial number.

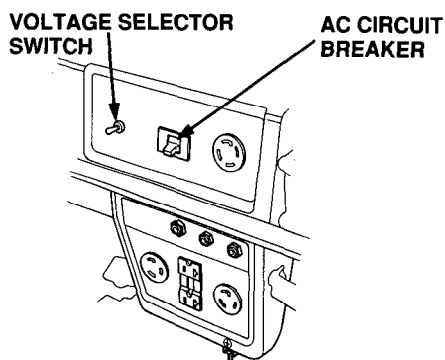
AC Operation

1. Start the engine (refer to page 27).
2. Turn the voltage selector switch to either position.

With the voltage selector switch in the “120/240 V” position, you can use the 120 V and 120/240 V receptacles simultaneously. If you are NOT using the 120/240 V receptacle, but require more power from the 120 V twist lock receptacle, then select the “120 V ONLY” position.

3. Switch ON the AC circuit breaker.
4. Plug in the appliance.

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



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

AC Receptacle Selection

The generator has two separate main power producing circuits. These two circuits supply equal power to receptacles shown when the voltage selector switch is in the 120/240 V position.

When two or more receptacles are used; prevent overloading by dividing the load between the two power circuits.

The chart below shows the rated load in amperes that can be connected to each receptacle to balance the generator.

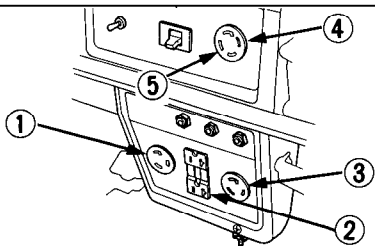
The total rated ampere draw is 25.0 A.

Main power circuit	Receptacles Powered by each main circuit	Power Distribution
Main Circuit I	2,3 and 4	$2 + 3 + 4 = 12.5 \text{ A}$ maximum
Main Circuit II	1 and 5	$1 + 5 = 12.5 \text{ A}$ maximum

* The table shows the specification when the 120/240 V Twist Lock Receptacle is used for 120 V.

Example:

Receptacle 2 has a 10 A load connected to it. Receptacle 3 has a 10 A load connected to it. Both receptacles are powered by main power circuit II. The equation tells us that the total power draw on Circuit II is 20 A. This is a substantial overload of this circuit. To eliminate the excess power draw on circuit II, the load from receptacle 3 should be switched to receptacle 1. Now circuit I is powering the 10 A load (less than 12.5 A) and circuit II is powering the 10 A load (less than 12.5 A).



- ① 120 V 30A
- ② 120 V 20A (GFCI)
- ③ 120 V 20A
- ④ 120/240 V 20A
- ⑤ 120/240 V 20A

Auto-throttle system

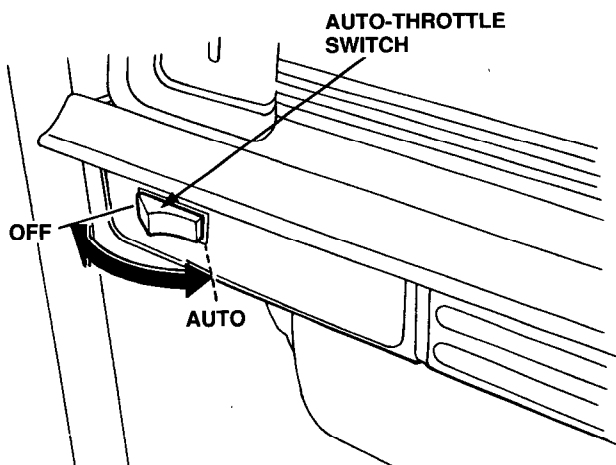
With the switch in the AUTO position, engine speed is automatically reduced when ALL loads are turned OFF or disconnected. When appliances are turned ON or reconnected, the engine returns to rated speed. In the OFF position, the auto-throttle system does not operate.

The auto-throttle system will not respond to electrical loads of less than 1 ampere. Turn the auto-throttle to the OFF position to operate loads of less than 1 amp.

Appliances with large start-up power demands may not allow the engine to reach normal operating rpm when they are connected to the generator. Turn the auto-throttle to the OFF position and connect the appliance to the generator. If the engine still will not reach normal operating speed, check that the appliance does not exceed the rated load capacity of the generator.

To avoid extended warm-up periods, keep the switch OFF until the engine reaches operating temperature.

The auto-throttle system is not effective for use with appliances that require only momentary power. If the tool or appliance will be turned ON and OFF quickly, the auto -throttle switch should be in the OFF position.



High Altitude Operation

At high altitude, the standard carburetor air-fuel mixture will be excessively rich. Performance will decrease, and fuel consumption will increase.

High altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor and readjusting the pilot screw. If you always operate the engine at altitudes higher than 6,000 feet above sea level, have an authorized Honda generator dealer perform this carburetor modification.

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

NOTICE If a generator jetted for high altitude is used at a lower altitude the lean air fuel mixture will reduce performance and may overheat or seriously damage the engine.

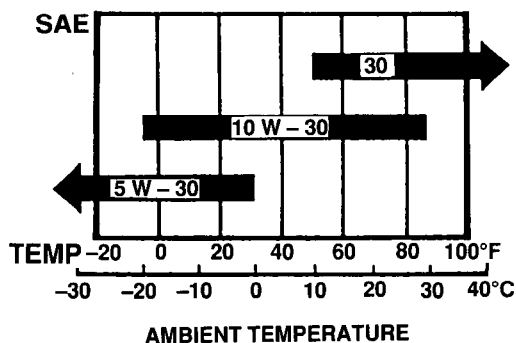
PRE-OPERATION CHECK

Engine oil

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

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

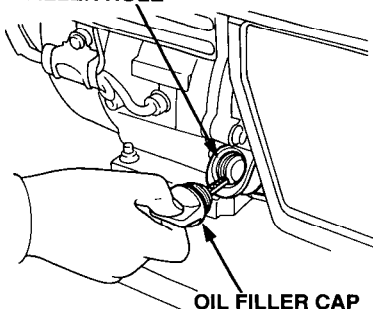
Use Honda 4-stroke oil, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for Service Classification SG, SF/CC, CD. Motor oils classified SG, SF/CC, CD will show this designation on the container.



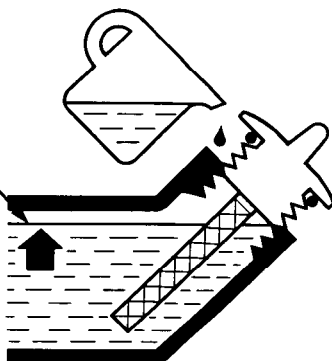
SAE 10W-30 is recommended for general, all-temperature use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

1. Remove the oil filler cap and wipe the dipstick clean.
2. Check the oil level by inserting the dipstick into the filler neck without screwing it in.
3. If the level is low, fill to the top of the oil filler neck with the recommended oil.

OIL FILLER HOLE



UPPER LEVEL



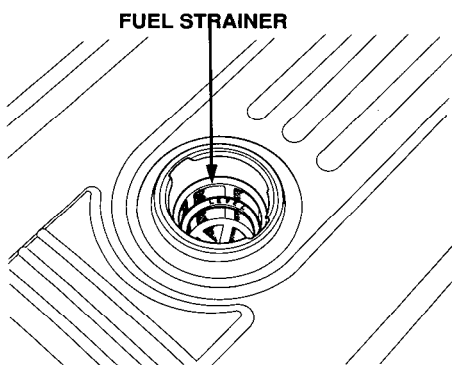
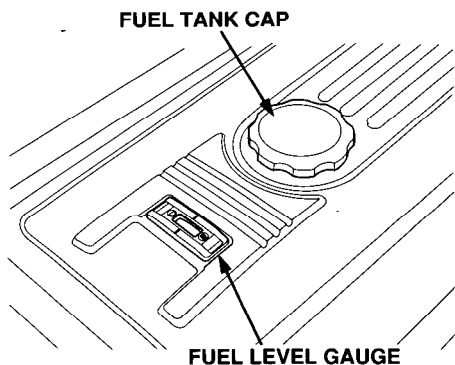
Fuel Recommendation

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

⚠ WARNING

- Gasoline is extremely flammable and is explosive under certain conditions.
- Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely. Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapor.
- **KEEP OUT OF REACH OF CHILDREN.**

Fuel tank capacity: 17.0 ℓ (4.50 US gal, 3.74 Imp gal)



Use gasoline with a pump octane rating of 86 or higher.

We recommend unleaded gasoline because it produces fewer engine and spark plug deposits and extends exhaust system life.

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

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

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

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

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

Oxygenated Fuels

Some gasolines are being blended with alcohol or an ether compound to increase the octane. These gasolines are collectively referred to as oxygenated fuels. Some areas of the United States use oxygenated fuels to help meet clean air standards.

If you use an oxygenated fuel, be sure its pump octane rating is 86 or higher.

Ethanol (ethyl or grain alcohol)

Gasoline containing more than 10% ethanol by volume may cause starting and/or performance problems. Gasoline containing ethanol may be marketed under the name “Gasohol”.

Methanol (methyl or wood alcohol)

Gasoline containing methanol must contain cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems and may damage metal, rubber and plastic parts of your fuel system.

MTBE (methyl tertiary butyl ether)

You may use gasoline containing up to 15% MTBE by volume.

Before using an oxygenated fuel, try to confirm the fuel’s contents. Some states (provinces in Canada) require this information to be posted on the pump. If you notice any undesirable operating symptoms, switch to a conventional unleaded gasoline. Fuel system damage or performance problems resulting from the use of an oxygenated fuel are not the responsibility of Honda and are not covered under warranty.

NOTICE **Oxygenated fuels can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilled fuel is not covered under warranty.**

STARTING THE ENGINE/STOPPING THE ENGINE

Starting the Engine

1. Make sure that the AC circuit breaker is in the OFF position.
The generator may be hard to start if a load is connected.
2. Turn the fuel valve to the ON position.
3. Pull the choke rod to the CLOSE position.
4. Make sure the auto-throttle switch is in the OFF position, or more time will be required for warm up.
5. Move the engine switch to the ON position.
6. Pull the starter grip until compression is felt, then pull briskly.

NOTICE

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

7. Push the choke rod to the OPEN position as the engine warms up.
8. If you wish to use the auto-throttle system, turn the auto-throttle switch to the AUTO position after the engine has warmed up for 2 or 3 minutes.

Stopping the Engine

In an emergency:

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

In normal use:

1. Turn the AC circuit breaker to the OFF position.
2. Move the engine switch to the OFF position.
3. Turn the fuel valve to the OFF position.

MAINTENANCE

Periodic maintenance and adjustment is necessary to keep the generator in good operating condition. Perform the service and inspection at the intervals shown in the Maintenance schedule below.

⚠ WARNING Exhaust gas contains poisonous carbon monoxide. Shut off the engine before performing any maintenance. If the engine must be run, make sure the area is well ventilated.

NOTICE Use only genuine HONDA parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage the generator.

MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD Performed at every indicated month or operating hour interval, whichever comes first.		Each use	First month or 20 Hrs. (3)	Every 3 months or 50 Hrs. (3)	Every 6 months or 100 Hrs. (3)	Every year or 300 Hrs. (3)
ITEM						
Engine oil	Check level	o				
	Change		o		o	
Air cleaner	Check	o				
	Clean			o (1)		
GFCI receptacle	Check	o (4)	o (5)			
Sediment Cup	Clean				o	
Spark plug	Check-Clean				o	
Spark Arrester	Clean				o	
Valve clearance	Check-Adjust					o (2)
Fuel tank and strainer	Clean					o (2)
Fuel line	Check (Replace if necessary)	Every 2 years (2)				

- (1) Service more frequently when used in dusty areas.
- (2) These items should be serviced by an authorized Honda generator dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.
- (3) For professional commercial use, log hours of operation to determine proper maintenance intervals.
- (4) Check the GFCI before each use if the generator is stored outside unprotected; otherwise, test the GFCI monthly and record the test results on the fuel tank.
- (5) Once each month.

Tool kit

The tools supplied with the generator will help you to perform the owner maintenance procedures listed on the following page. Always keep this tool kit with the generator.



10 × 12 mm WRENCH



SCREW DRIVER



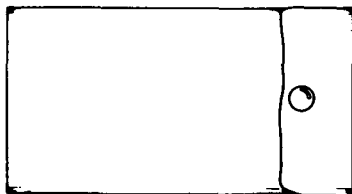
PLUG WRENCH



DRIVER HANDLE



HANDLE BAR



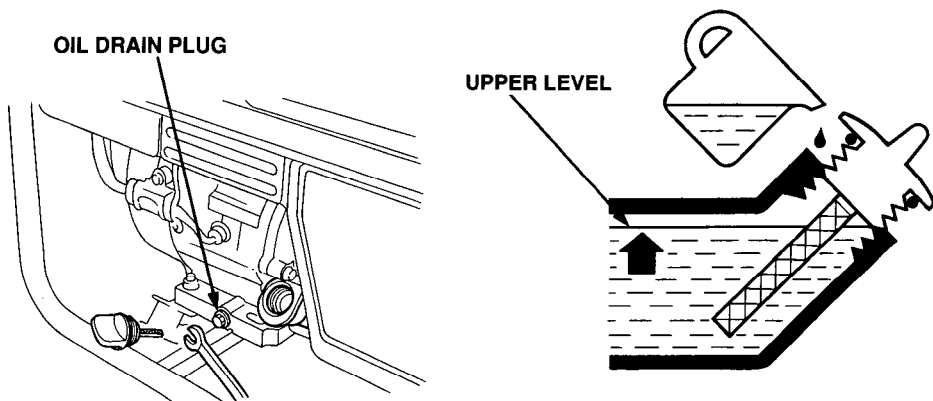
TOOL BAG

Engine oil change

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

1. Remove the drain plug and sealing washer, oil filler cap, and drain the oil.
2. Install the drain plug and sealing washer. Tighten the plug securely.
3. Refill with the recommended oil (see page 24) and check the level.

Oil capacity: 1.1 ℓ (1.16 US qt, 0.97 Imp qt)



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

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

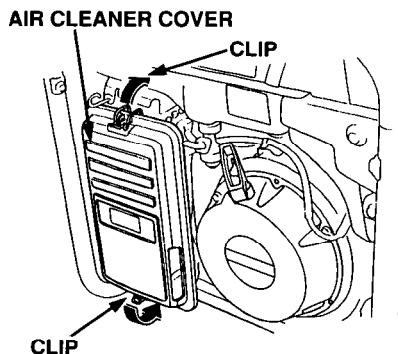
Air cleaner service

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

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

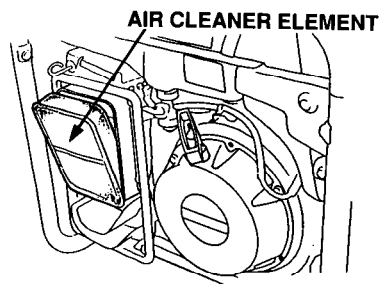
NOTICE Never run the generator without the air cleaner. Rapid engine wear will result.

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

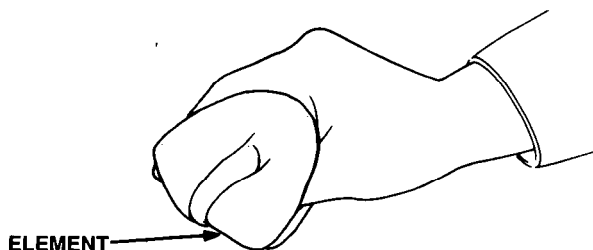


2. Wash the element in a solution of household detergent and warm water, then rinse thoroughly; or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly.

3. Soak the element in clean engine oil and squeeze out the excess oil. The engine will smoke during initial start-up if too much oil is left in the element.



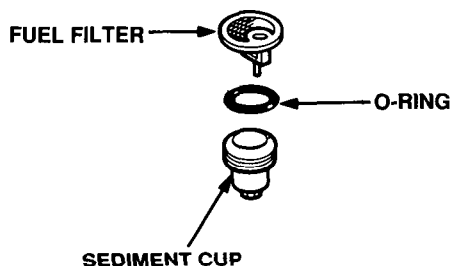
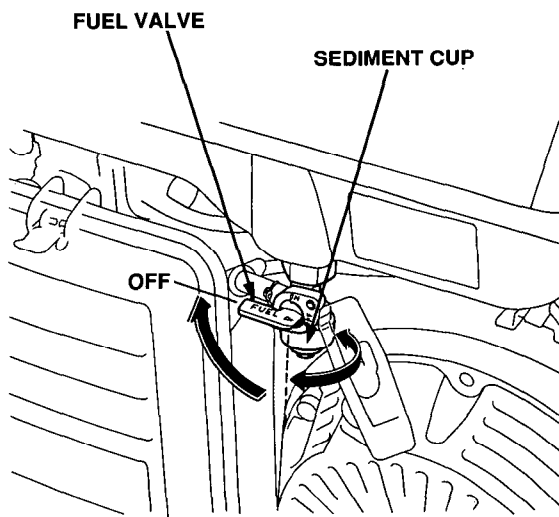
4. Reinstall the air cleaner element and the cover.



Fuel Sediment Cup Cleaning

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

1. Turn the fuel valve to the OFF position. Remove the sediment cup, O-ring, and filter.
2. Clean the sediment cup, O-ring, and filter in nonflammable or high flash point solvent.
3. Reinstall the filter, O-ring, and sediment cup.



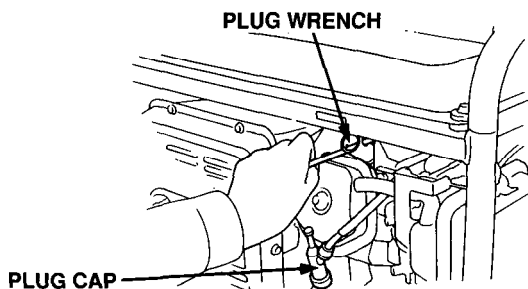
Spark Plug Service

Recommended spark plugs: BPR5ES (NGK)
W16EPR-U (NIPPONDENSO)

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

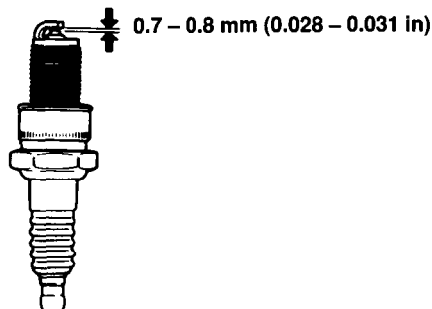
If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.

1. Remove the spark plug cap.
2. Clean any dirt from around the spark plug base.
3. Use the wrench supplied in the tool kit to remove the spark plug.



4. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
5. Measure the plug gap with a feeler gauge.
Correct as necessary by carefully bending the side electrode.

The gap should be: 0.7–0.8 mm (0.028–0.031 in)



6. Check that the spark plug washer is in good condition, and thread the spark plug in by hand to prevent cross-threading.
7. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.
 - If installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer. If reinstalling a used spark plug, tighten 1/8-1/4 turn after the spark plug seats to compress the washer.

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

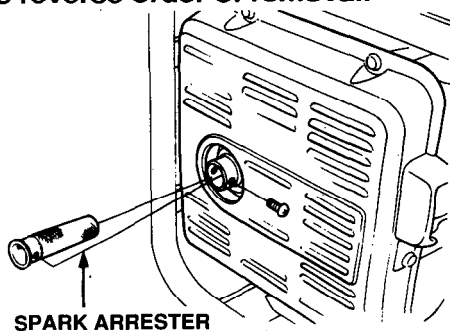
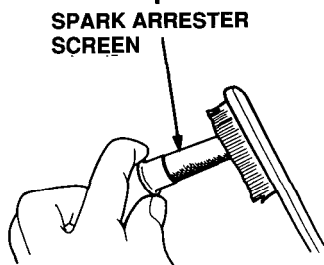
Spark Arrester Maintenance

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. Loosen the screw by the exhaust port of the muffler and remove the spark arrester.
2. Use a brush to remove carbon deposits from the spark arrester screen. Inspect the screen for breaks or tears and replace it if necessary.
3. Install the spark arrester in the reverse order of removal.



TRANSPORTING/STORAGE

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

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

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

Before storing the unit for an extended period:

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

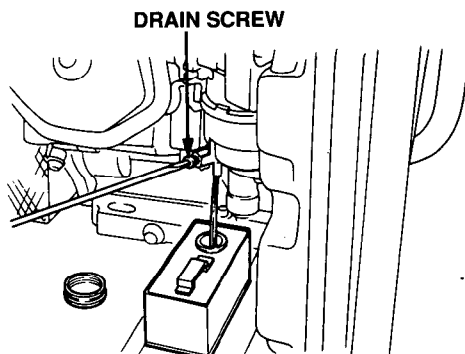
STORAGE TIME	RECOMMENDED SERVICE PROCEDURE TO PREVENT HARD STARTING
Less than 1 month	No preparation required
1 to 2 months	Fill with fresh gasoline and add gasoline conditioner*.
2 months to 1 year	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl (page 36). Drain the fuel sediment cup (page 32).
1 year or more	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl (page 36). Drain the fuel sediment cup (page 32). Remove the spark plug. Put a tablespoon of engine oil into the cylinder. Turn the engine slowly with the pull rope to distribute the oil. Reinstall the spark plug. Change the engine oil. After removal from storage, drain the stored gasoline into a suitable container, and fill with fresh gasoline before starting.

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

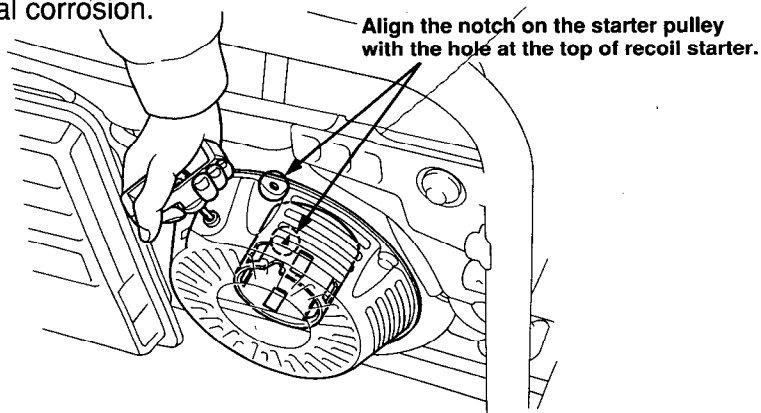
1. Drain the carburetor by loosening the drain screw. Drain the gasoline into a suitable container.

⚠ WARNING

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

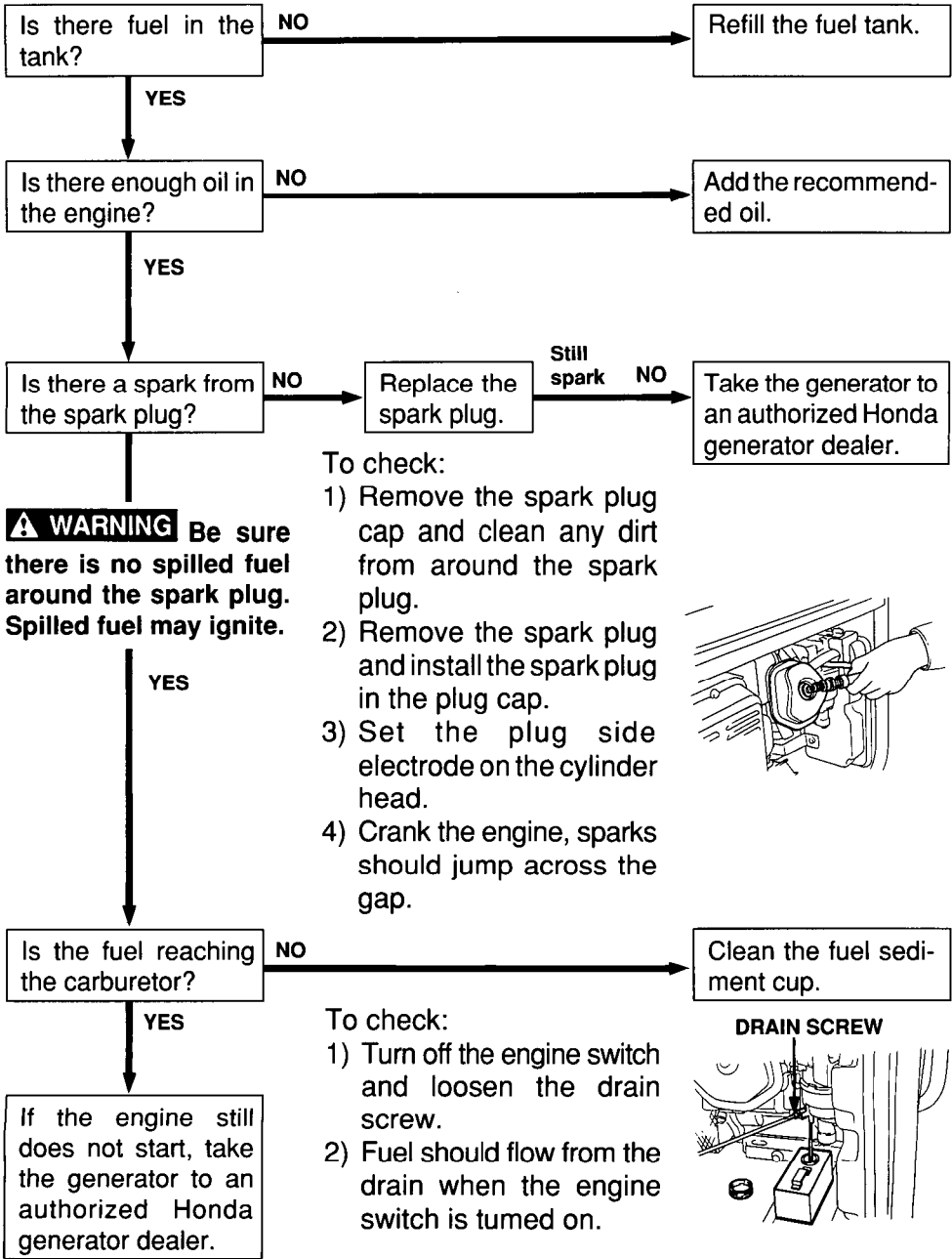


2. Change the engine oil. (page 30)
3. Remove the spark plug, and pour about a tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil, then reinstall the spark plug.
4. Slowly pull the starter grip until resistance is felt. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed. Storing the engine in this position will help to protect it from internal corrosion.

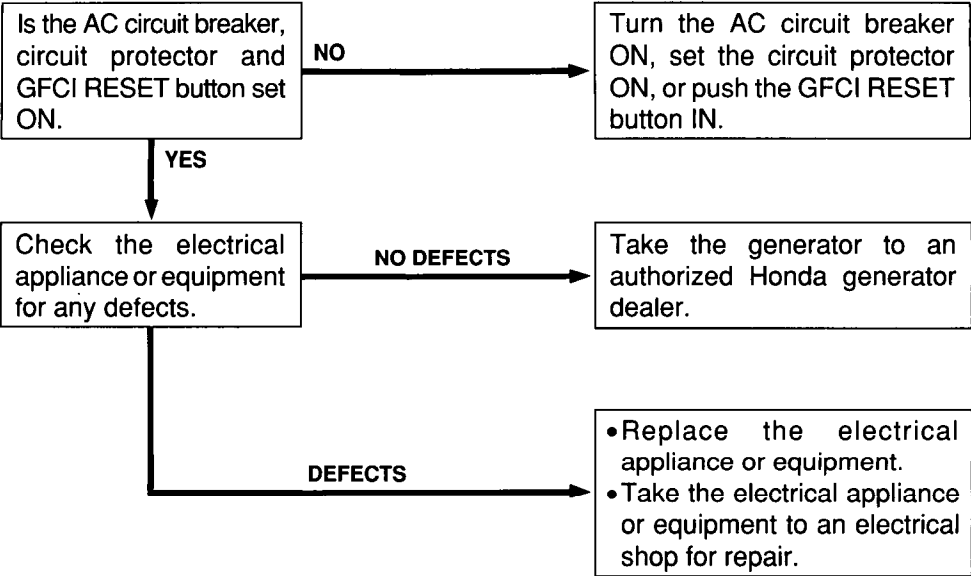


TROUBLESHOOTING

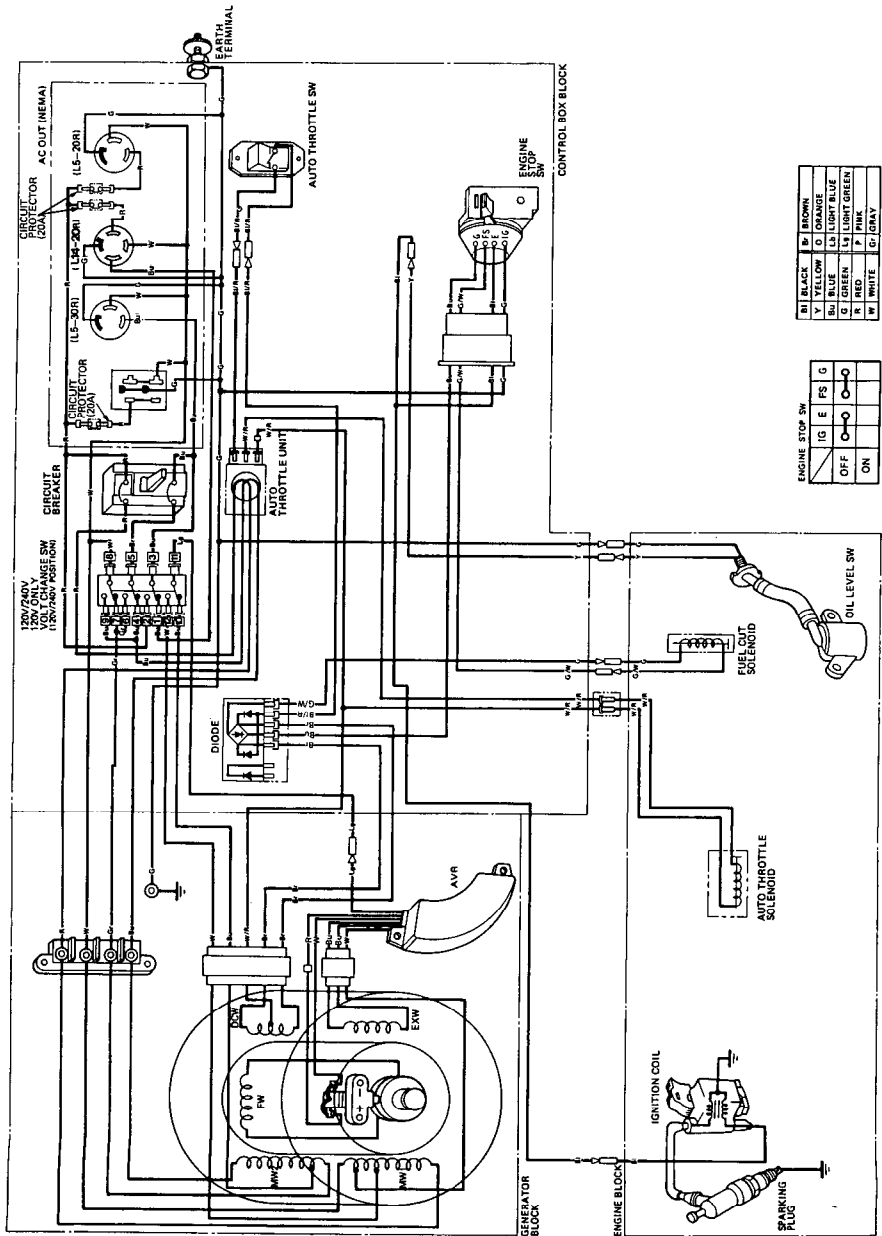
When the engine will not start:



No electricity at the AC receptacles:



WIRING DIAGRAM



SPECIFICATIONS

Dimensions

Model	EB3500X
Power equipment description code	EA6
Length × Width × Height	605 × 495 × 485 mm (23.8 × 19.5 × 19.1 in)
Dry weight	62 kg (136.7 lb)

Engine

Model	GX240K1
Engine type	4-stroke, overhead valve, single cylinder
Displacement (Bore × Stroke)	242 cc (14.8 cu in) [73 × 58 mm (2.9 × 2.3 in)]
Compression ratio	8.2 : 1
Engine speed	3,600 r.p.m.
Cooling system	Forced air
Ignition system	Transistorized magneto
Oil capacity	1.1 ℓ (1.16 US qt, 0.97 Imp qt)
Fuel tank capacity	17.0 ℓ (4.5 US gal, 3.74 Imp gal)
Spark plug	BPR5ES (NGK), W16EPR-U (NIPPONDENSO)

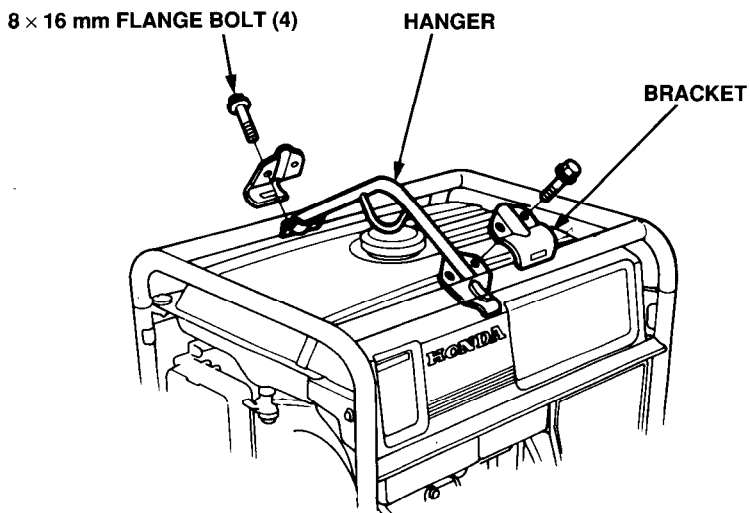
Generator

Model		EB3500SX
Type		AG
AC output	Rated voltage	120/240 V
	Rated frequency	60 Hz
	Rated ampere	25/12.5 A
	Rated output	3,000 VA
	Maximum output	3,500 VA

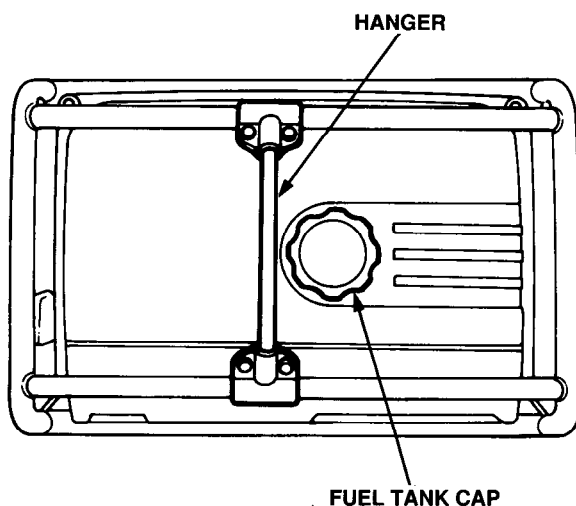
NOTE: Specifications are subject to change without notice.

INSTALLATION OF OPTIONAL PARTS

Hanger Kit Installation

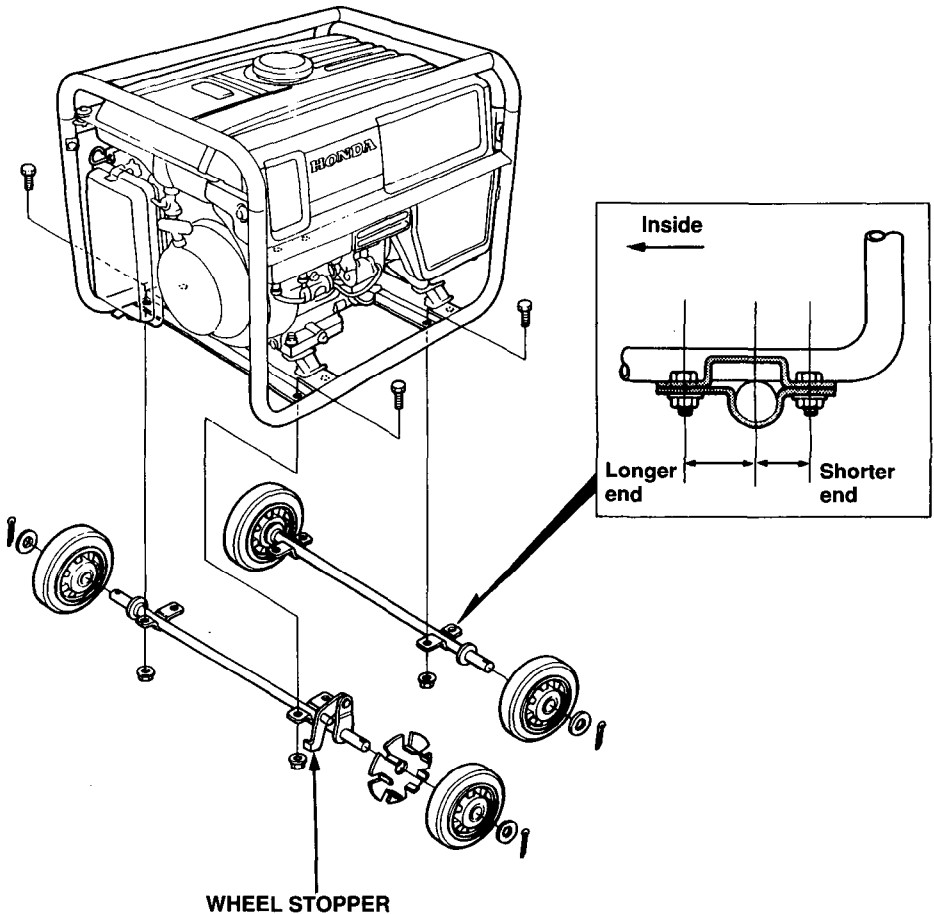


1. Position the hanger at the generator's balance point, in the middle of the fuel tank.
2. Fit the end tabs of the hanger through the bracket slots, and bolt the brackets to the hanger.



4 Wheel Kit Installation

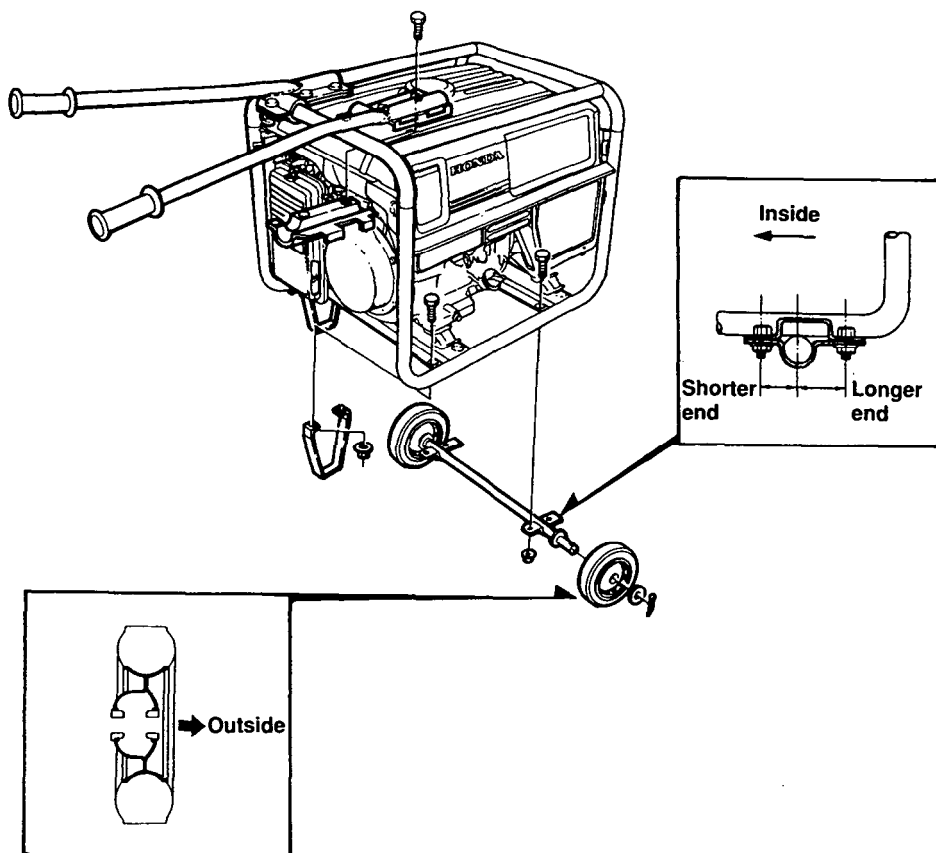
1. Install the four wheels on the axle shaft.
2. Install the assembly to the generator using four bolts and nuts.



NOTE: Install the shaft with wheel stopper facing engine side.

2 Wheel kit Installation

1. Install the two wheels on the axle shaft.
2. Install the axle assembly on the generator using four bolts and nuts.
3. Install the two stands using four bolts and nuts.
4. Install right and left handles on the generator upper frame using brackets and six bolts.



CUSTOMER 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 Service Office. You can write to:

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

Or telephone: (404) 497-6400

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

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

COMPONENT IDENTIFICATION	8
CONTROLS	10
Auto-throttle system	13
Choke Rod	11
Circuit Breaker	12
Circuit Protector	13
Engine Switch	10
Fuel Valve	11
Ground Fault Circuit Interrupter (GFCI) Receptacle	14
Ground Terminal	12
Oil Alert System	12
Recoil Starter	10
Voltage Selector Switch (Dual Voltage System)	17
CUSTOMER SERVICE INFORMATION	44
GENERATOR USE	18
AC Applications	19
AC Operation	20
AC Receptacle Selection	21
Auto-throttle System	22
Connections to a Building's Electrical System	18
Ground System	18
High Altitude Operation	23
INDEX	45
INSTALLATION OF OPTIONAL PARTS	41
MAINTENANCE	28
Air Cleaner Service	31
Engine Oil Change	30
Fuel Sediment Cup Cleaning	32
Maintenance Schedule	28
Spark Arrester Maintenance	34
Spark Plug Service	33
Tool Kit	29
PRE-OPERATION CHECK	24
Engine Oil	24
Fuel Recommendation	25
SAFETY	4
Safety Information	6
Safety Label Locations	4

INDEX

SPECIFICATIONS	40
STARTING THE ENGINE/STOPPING THE ENGINE	27
TRANSPORTING/STORAGE	35
TROUBLESHOOTING	37
WIRING DIAGRAM	39

MEMO

MEMO

HONDA
HONDA MOTOR CO., LTD. TOKYO, JAPAN

31ZB4651
00X31-ZB4-6510

K1 Ⓐ Ⓜ Ⓜ 20009302
PRINTED IN JAPAN