

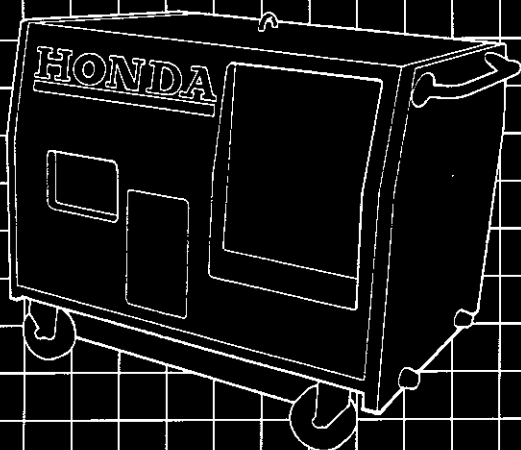
HONDA

Power

Equipment

Owner's Manual

EX3300S/4500S



⚠ 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 EX3300S and EX4500S 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
Circuit Breaker	10
Ground Terminal	11
Oil Alert System	11
Auto-throttle System	12
Voltage Selector Switch (Dual voltage System)	12
Volt Meter	13
Pilot Lamp	13
DC Terminals	14
DC Circuit Protector	14
GENERATOR USE	15
Connections to a Building's Electrical System	15
Ground System	15
Special Requirements	15
AC Applications	16
AC Operation	17
AC Receptacle Selection	18
DC Operation	19
Connecting the battery cables	19
Disconnecting the battery cables	20
Auto-throttle System	21
High Altitude Operation	22
PRE-OPERATION CHECK	23
Engine Oil	23
Fuel	24
Battery	26
STARTING THE ENGINE	27
STOPPING THE ENGINE	28

MAINTENANCE	29
Maintenance Schedule	29
Engine Oil Change	30
Air Cleaner Service	32
Spark Plug Service	33
Fuel Sediment Cup Cleaning	34
Spark Arrester Maintenance	36
Battery	38
Fuse Replacement	40
TRANSPORTING	41
STORAGE	42
TROUBLESHOOTING	44
WIRING DIAGRAM	46
SPECIFICATIONS	48
INSTALLATION OF OPTIONAL PARTS	49
CUSTOMER SERVICE INFORMATION	51
INDEX	52

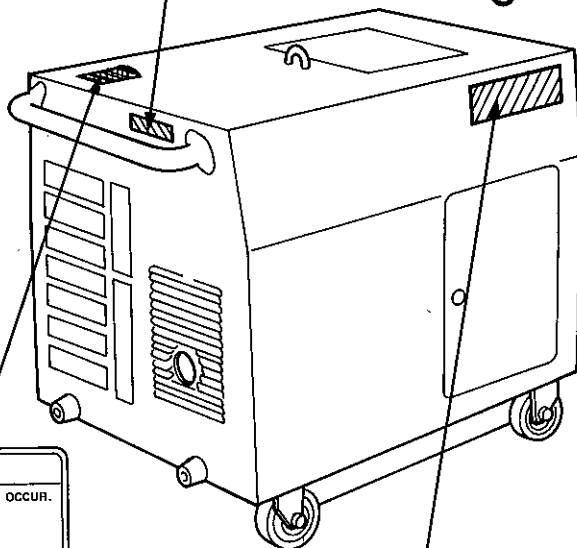
SAFETY

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 Generator dealer for a replacement.

HOT • EXHAUST
ECHAPPEMENT • CHAUD



WARNING

ELECTROCUTION OR PROPERTY DAMAGE CAN OCCUR.
DO NOT CONNECT THIS GENERATOR TO ANY
BUILDING'S ELECTRICAL SYSTEM UNLESS AN
ISOLATION SWITCH HAS BEEN INSTALLED
BY A LICENSED ELECTRICIAN.
READ OWNER'S MANUAL CAREFULLY.

EX4500S

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.

A C

VOLTAGE 120/240V
FREQUENCY 60Hz
RATED OUTPUT 4.0kVA
MAX. OUTPUT 4.5kVA
PHASE 1Ø

D C

VOLTAGE 12V
CURRENT 8.3A

FUEL GASOLINE
(PETROL)

EX3300S

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.

A C

VOLTAGE 120/240V
FREQUENCY 60Hz
RATED OUTPUT 3.0kVA
MAX. OUTPUT 3.3kVA
PHASE 1Ø

D C

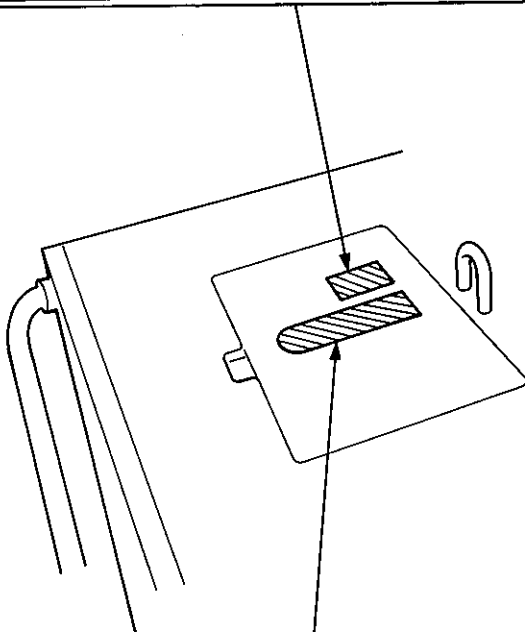
VOLTAGE 12V
CURRENT 8.3A

FUEL GASOLINE
(PETROL)

WARNING DO NOT USE INDOORS. EXHAUST GAS CONTAINS POISONOUS CARBON MONOXIDE.

ATTENTION NE PAS UTILISER DANS UN ENDROIT FERME A CAUSE DU RISQUE D'EMPOISONNEMENT DU GAZ.

ATENCION NO LO USE EN LUGARES CERRADOS PORQUE EL MONOXIDE DE CARBONO ES VENENOSO.



■ CHECK FOR SPILLED FUEL OR FUEL LEAKS.
STOP ENGINE BEFORE REFUELING.

■ CONTROLER QU'IL N'Y A NI FUITE NI ESSENCE
REPAÑDUE SUR L'APPAREIL.
ARRETER LE MOTEUR AVANT DE REFAIRE LE PLEIN.

■ INSPECCIONAR PARA COMBUSTIBLE DERRAMADO
O ESCAPE.
PARAR MOTOR ANTES DE ECHAR.

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.

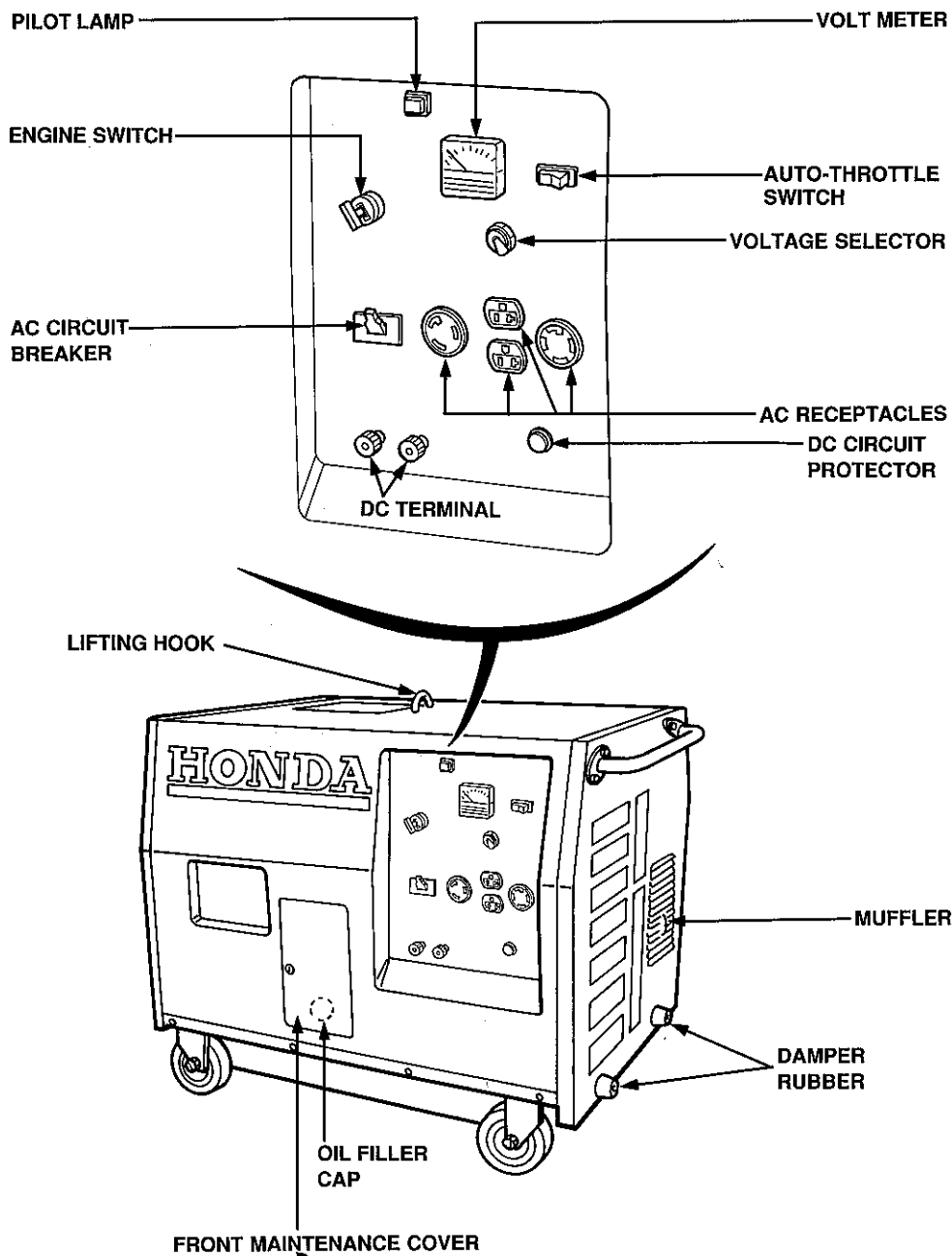
Electric Shock Hazards

- 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 all 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

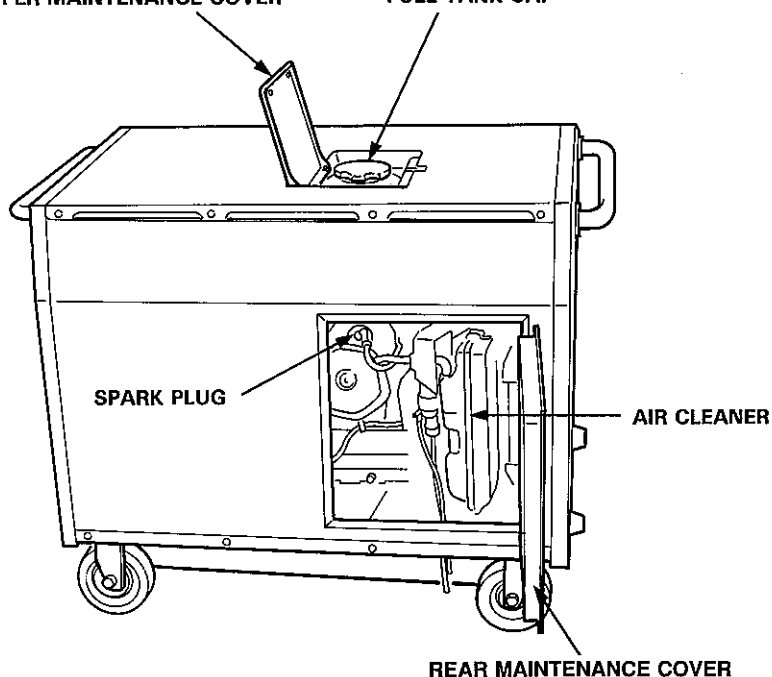
- The exhaust system gets hot enough to ignite some materials.
 - Keep the generator at least 1 meter (3 feet) away from buildings and other equipment during operation.
 - Do not enclose the generator in any structure.
 - Keep flammable materials away from the generator.
- The muffler becomes very hot 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



UPPER MAINTENANCE COVER

FUEL TANK CAP

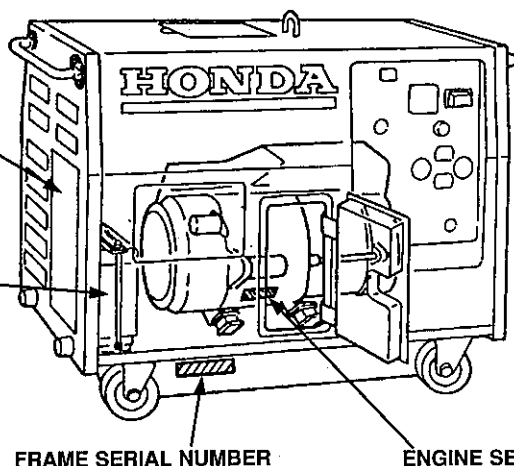


LEFT SIDE
MAINTENANCE
COVER

BATTERY

FRAME SERIAL NUMBER

ENGINE SERIAL NUMBER



* 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 51)

Frame serial number: _____

Engine serial number: _____

CONTROLS

Engine Switch

To start and stop the engine.

Key position:

OFF:

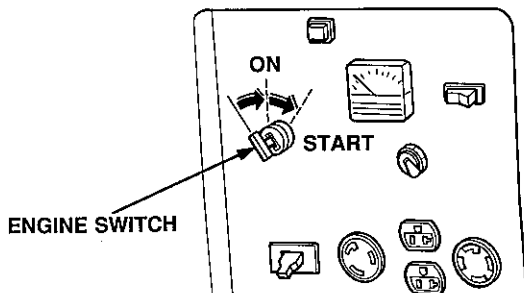
To Stop the engine. Key can be removed/inserted.

ON:

To run the engine after starting.

START:

To start the engine by turning the starter motor.

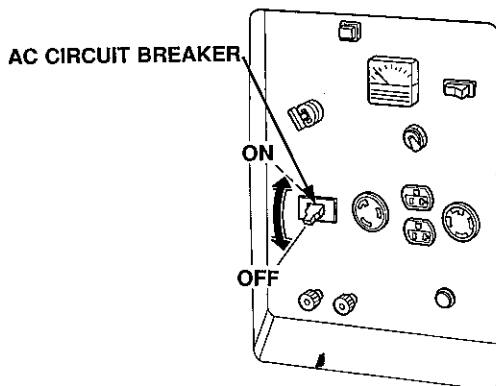


Return the key to the ON position once the engine has started. Do not use the starter for more than 5 seconds at a time. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.

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.

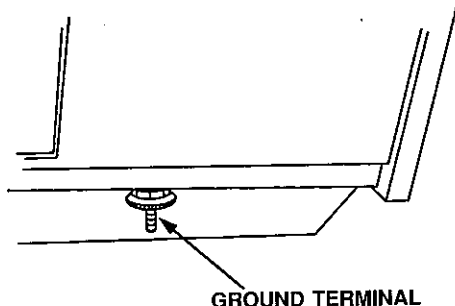
The circuit breaker may be used to switch the generator power ON or OFF.



Ground Terminal

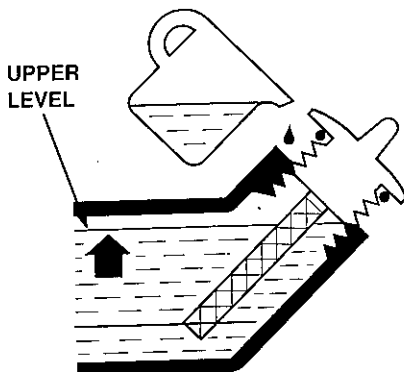
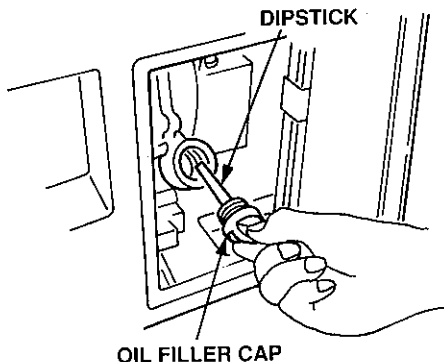
The generator ground terminal is connected to the frame of the generator, the metal non-current carrying parts of the generator, and the ground terminals of each receptacle.

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. 23) before troubleshooting in the other areas.

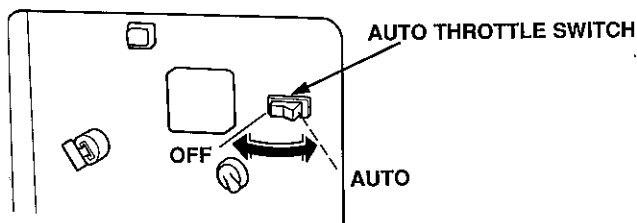


Auto-throttle System

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. Recommended to minimize warm-up time when the generator is started.

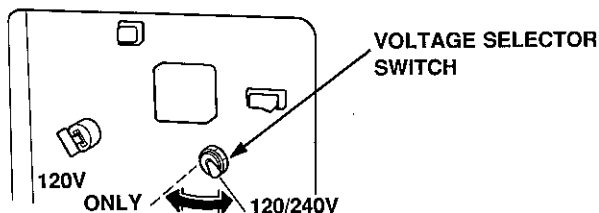


Voltage Selector Switch (Dual voltage System)

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.

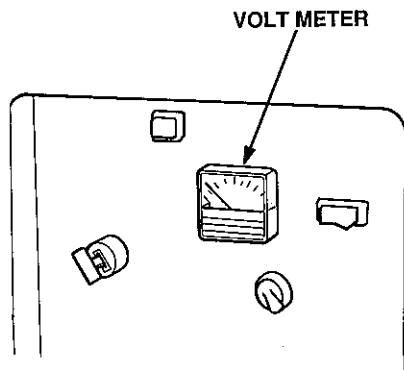
120/240V: The 120V and 120/240V receptacles can be used simultaneously.

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 120V locking plug receptacle.



Volt Meter

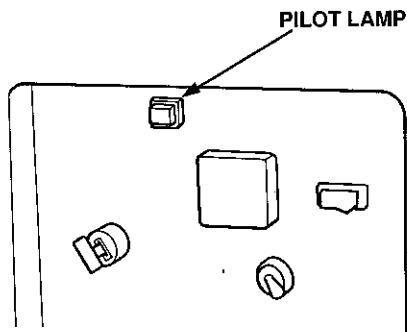
The volt meter displays the voltage the generator is producing depending on the position of the voltage selector switch. If the voltage selector switch is in the "120/240 V" position, the volt meter will display 240 volts. If the voltage selector switch is in the "120 V ONLY" position, the volt meter will display 120 volts.



Pilot Lamp

The pilot lamp is illuminated when the generator is operating normally. It indicates that the generator is producing electrical power at the 120 or 120/240 volt receptacles. If the pilot light is illuminated, the volt meter should be displaying 120 or 240 volts depending on the position of the voltage selector switch.

When the auto-throttle is in the AUTO position, and there is no load connected to the generator, the engine will run slower and pilot light will be dimmer than at normal operating speed.



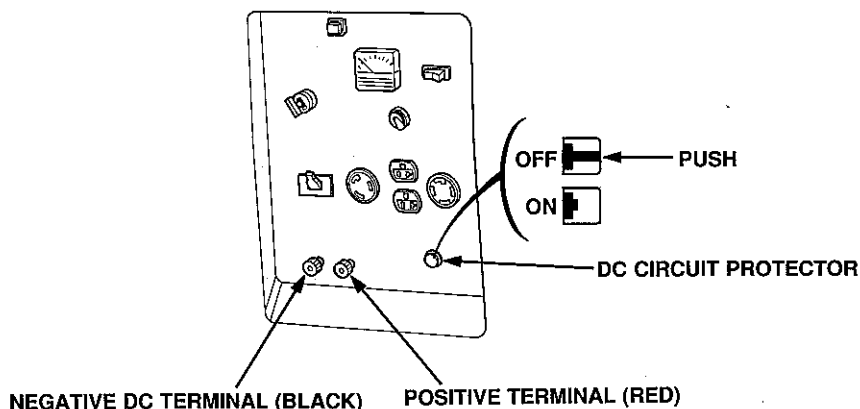
DC Terminals

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).

DC Circuit Protector

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



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 for 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:

EX3300S: 3.3 KVA

EX4500S: 4.5 KVA

For continuous operation, do not exceed the rated power.

Rated power is:

EX3300S: 3.0 KVA

EX4500S: 4.0 KVA

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

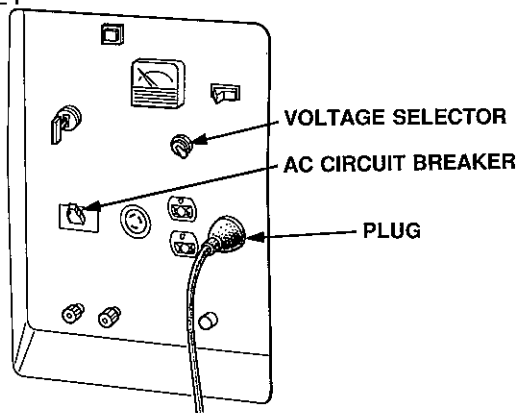
AC Operation

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

With the voltage selector switch in the "120/240V" position, you can use the 120V and 120/240V receptacles simultaneously. If you are NOT using the 120/240V receptacle, but require more power from the 120V locking plug receptacle, then select the "120V 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 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 different 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 for the EX3300S is 25.0A.

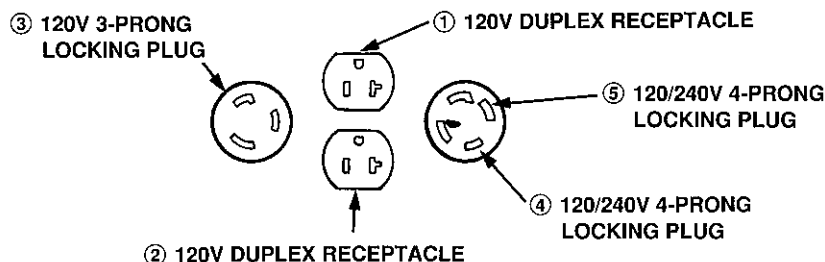
The total rated ampere draw for the EX4500S is 33.3A.

Main power circuit	Receptacles Powered by each main circuit	Power Distribution
Main Circuit I	1 and 5	1 + 5 = 12.5A (EX3300S) 16.6A (EX4500S) maximum
Main Circuit II	2, 3 and 4	2 + 3 + 4 = 12.5A (EX3300S) 16.6A (EX4500S) maximum

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

Example (EX4500S):

Receptacle 3 has a 15A load connected to it. Receptacle 2 has a 10A 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 25A. This is a substantial overload of this circuit. To eliminate the excess power draw on circuit II, the load from receptacle 2 should be switched to receptacle 1. Now circuit I is powering the 10A load (less than 16.6A) and circuit II is powering the 15A load (less than 16.6A).



DC Operation

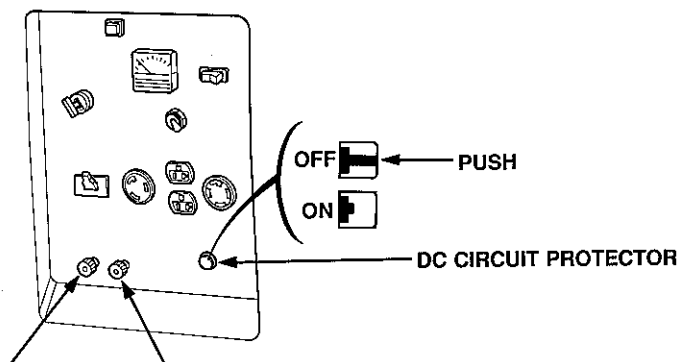
The DC terminals may ONLY be used for charging 12 volt automotive-type batteries.

Connecting the battery cables:

1. Before connecting charging cables to a battery that is installed in a vehicle, disconnect the vehicle's ground cable from the battery.

⚠ WARNING The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging or using batteries.

2. Connect the positive (+) battery cable to the battery positive (+) terminal.
3. Connect the other end of the positive (+) battery cable to the generator positive (+) terminal.



NEGATIVE DC TERMINAL (BLACK) POSITIVE TERMINAL (RED)

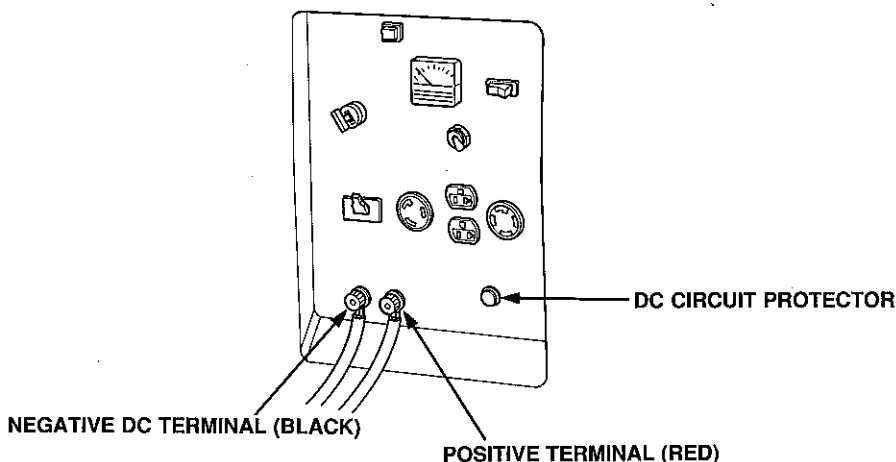
4. Connect the negative (–) battery cable to the battery negative (–) terminal.
5. Connect the other end of the negative (–) battery cable to the generator negative (–) terminal.
6. Start the generator.

NOTICE Do not start the vehicle while the battery charging cables are connected and the generator is running. The vehicle or the generator may be damaged.

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

Disconnecting the battery cables:

1. Stop the engine,
2. Disconnect the negative (-) battery cable from the generator negative (-) terminal.
3. Disconnect the other end of the negative (-) battery cable from the battery negative (-) terminal.
4. Disconnect the positive (+) battery cable from the generator positive (+) terminal.
5. Disconnect the other end of the positive (+) battery cable to the battery positive (+) terminal.
6. Connect the vehicle ground cable to the battery negative (-) terminal.



Auto-throttle System

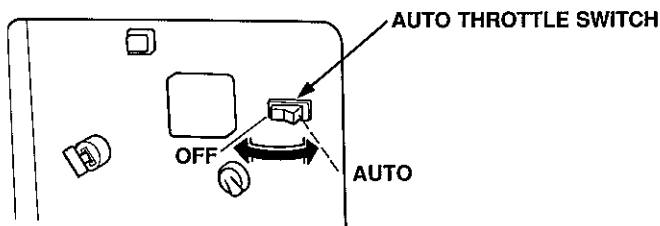
With the switch in the AUTO position, engine speed is automatically reduced when ALL loads are turned OFF or disconnected. When appliances are turned ON or reconnected, the engine returns to rated speed. In the OFF position, the auto-throttle system does not operate.

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 engines 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 and seriously damage the engine.

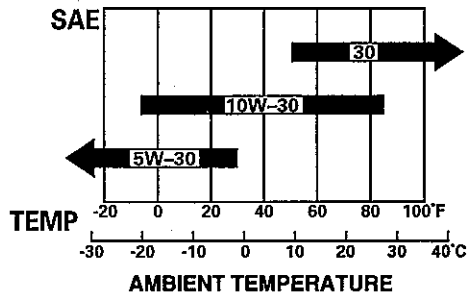
PRE-OPERATION CHECK

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.

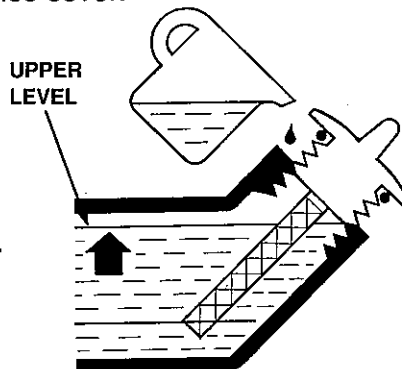
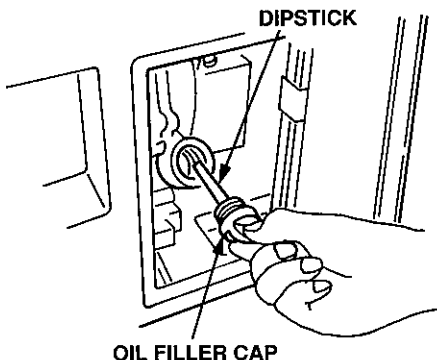
Check the oil level **BEFORE EACH USE** with the generator on a level surface with the engine stopped.

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. Open the front maintenance cover.
2. Remove the oil filler cap and wipe the dipstick clean.
3. Check the oil level by inserting the dipstick into the filler neck without screwing it in.
4. If the level is low, fill to the top of the oil filler neck with the recommended oil.
5. Close and latch the front maintenance cover.



Fuel

Check the fuel gauge, and refill the tank if the fuel level is low.

Use unleaded gasoline with a pump octane rating of 86 or higher. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

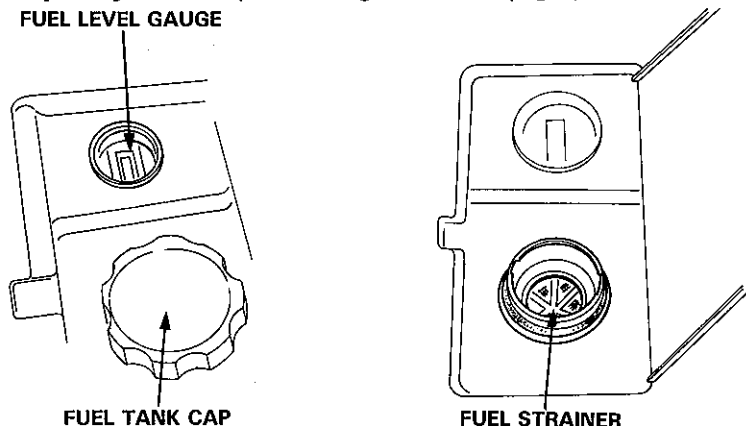
Refuel carefully to avoid spilling fuel. Do not fill above the shoulder of the fuel strainer.

⚠ WARNING

Gasoline is highly flammable and explosive, and you can be burned or seriously injured when refueling.

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

Fuel tank capacity: 19.0 ℓ (5.02 US gal, 4.18 Imp gal)



NOTICE

Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilling fuel is not covered under warranty.

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

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

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

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

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

Oxygenated Fuels

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

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

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

The following are the EPA approved percentages of oxygenates:

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

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

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

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

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

Battery

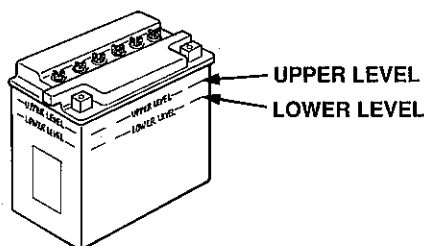
If the generator is operated with insufficient battery electrolyte, sulfation and battery plate damage will occur.

If rapid loss of electrolyte is experienced, or if your battery seems to be weak, causing slow starting or other electrical problems, see your authorized Honda generator dealer.

⚠ WARNING

- The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging or using batteries in an enclosed space.
- The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
 - If electrolyte gets on your skin, flush with water.
 - If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.
- Electrolyte is poisonous.
 - If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.
- **KEEP OUT OF REACH OF CHILDREN.**

1. Open the left side maintenance cover.
2. Check the electrolyte level in each cell.
3. The electrolyte level must be maintained between the UPPER and LOWER level marks. If the electrolyte level is near the LOWER mark, add distilled water.



NOTICE

Use only distilled water in the battery. Tap water will shorten the service life of the battery. Filling the battery above the UPPER LEVEL line may cause the electrolyte to overflow, resulting in corrosion to engine or nearby parts. Immediately wash off any spilled electrolyte.

4. Check the battery terminals to be sure the cables are tightened and free of corrosion. Remove any corrosion, and coat the terminals and cable ends with grease. Refer to page 38 for battery maintenance.
5. Close and latch the maintenance cover.

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. Make sure the auto-throttle switch is in the OFF position, or more time will be required for warm up.
3. Turn the engine switch to the START position and hold it there for 5 seconds or until the engine starts.

NOTICE

- **Operating the starter motor for more than 5 seconds can damage the motor. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.**
- **If the speed of the starter motor drops after a period of time, it is an indication that the battery should be recharged.**

When the engine starts, allow the engines switch to return to the ON position.

4. If the outside air temperature is below 75°F., the automatic choke will stay ON until the engine warms up. The engine may run rough until the choke OPENS; this is normal. Avoid connecting electrical loads to the engine until the choke has OPENED.
5. 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, turn the engine switch to the OFF position.

In normal use:

1. Turn the AC circuit breaker to the OFF position.
Disconnect DC battery charging cables.
2. Move the engine switch to the OFF position. The fuel valve will automatically close.

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		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	Perform at every indicated month or operating hour interval, whichever comes first.					
Engine oil	Check level	o				
	Change		o		o	
Air cleaner	Check	o				
	Clean			o (1)		
Battery electrolyte	Check level	o				
	Check level and gravity		o (4)			
Sediment Cup	Clean				o	
Spark plug	Check-Clean				o	
Spark Arrester	Clean				o	o (2)
Valve clearance	Check-Adjust					o (2)
Fuel tank and strainer	Clean					
Fuel line	Check (Replace if necessary)	Every 2 years (2)				

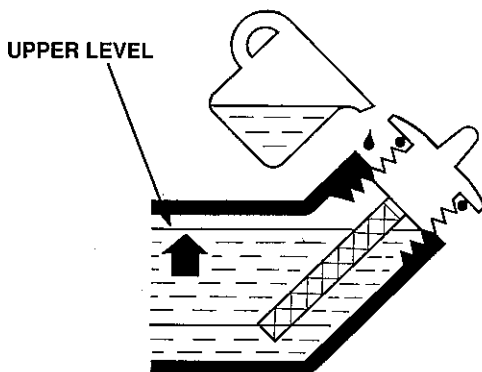
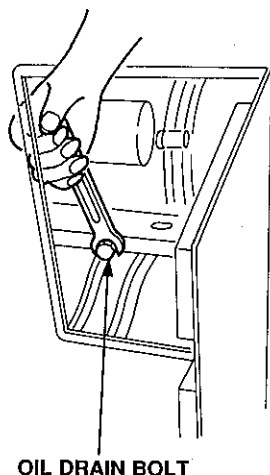
- (1) Service more frequently when used in dusty areas.
- (2) These items should be serviced by an authorized Honda generator dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.
- (3) For professional commercial use, log hours of operation to determine proper maintenance intervals.
- (4) Once each month.

Engine Oil Change

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

1. Open the front maintenance cover.
2. Remove the drain plug and sealing washer, oil filler cap, and drain the the oil.
3. Reinstall the drain plug and sealing washer. Tighten the plug securely.
4. Refill with the recommended oil (see page 23) and check the oil level.
5. Close and latch the front maintenance cover.

Oil capacity: 1.1 l (1.16 US qt, 0.97 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 or pour it on the ground.

Air Cleaner Service

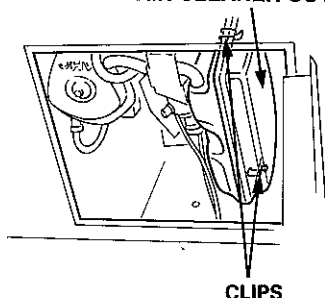
A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the generator in extremely dusty areas.

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

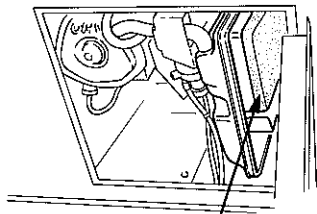
NOTICE Never run the generator without the air cleaner. Rapid engine wear will result.

1. Open the rear maintenance cover.
2. Unsnap the air cleaner cover clips, remove the air cleaner cover, and remove the element.
3. 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.
4. 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.
5. Reinstall the air cleaner element and the cover.
6. Close and latch the rear maintenance cover.

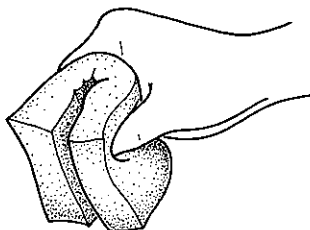
AIR CLEANER COVER



CLIPS



AIR CLEANER ELEMENT



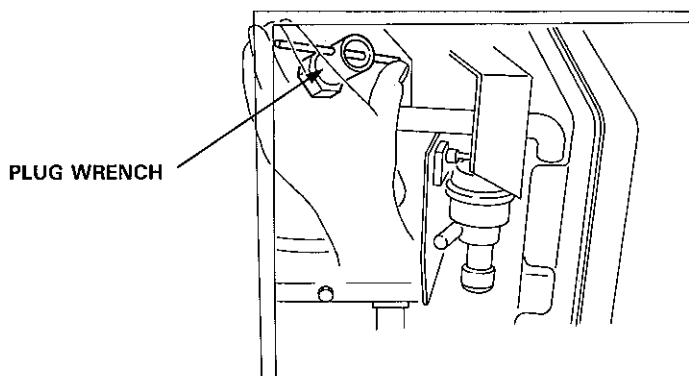
Spark Plug Service

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.

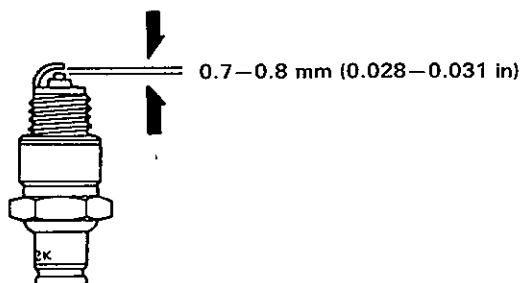
1. Open the rear maintenance cover.
2. Remove the spark plug cap.
3. Clean any dirt from around the spark plug base.
4. Use the wrench to remove the spark plug.



5. 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.
6. Measure the plug gap with a feeler gauge.

Correct as necessary by carefully bending the side electrode.

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



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

NOTICE The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and could damage the engine.

Never use spark plugs which have an improper heat range. Use only the recommended spark plugs or equivalent.

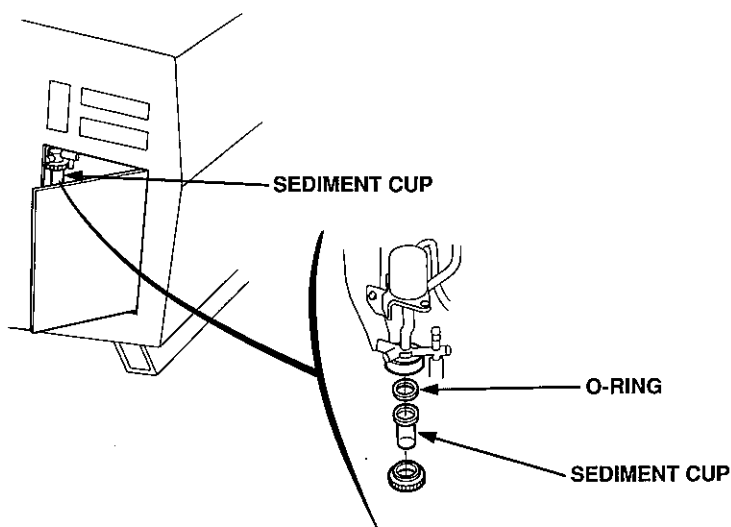
9. Close and latch the rear maintenance cover.

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.

Shut the engine off and make sure the key switch is in the OFF position. The fuel valve is electrically opened when the key is in the ON position.

1. Open the left side maintenance cover.
2. Remove the sediment cup.



3. Clean the cup thoroughly in nonflammable or high flashpoint solvent.
4. Check to be sure the O-ring is in place, and reinstall the sediment cup.
5. Turn the key to the ON position and check for fuel leaks.
 - Do not attempt to start the engine if fuel has leaked from the sediment cup.
 - Be sure the area is dry before starting the engine.
6. Turn the key to the OFF position.
7. Close and latch the left side maintenance cover.

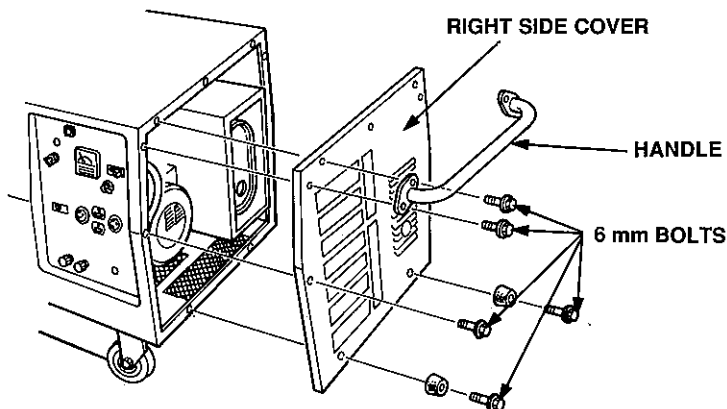
Spark Arrester Maintenance

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

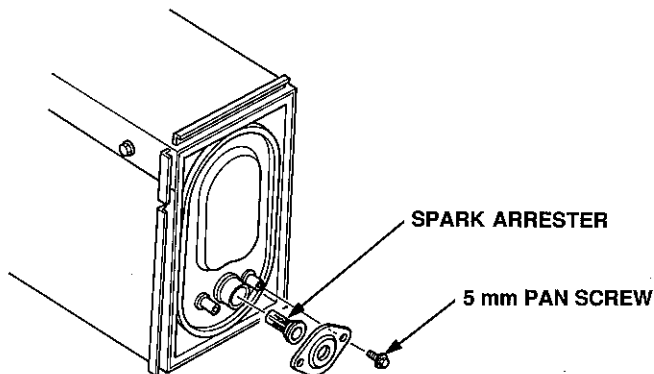
NOTICE The spark arrester must be serviced every 100 hours to maintain its efficiency.

Clean the spark arrester as follows:

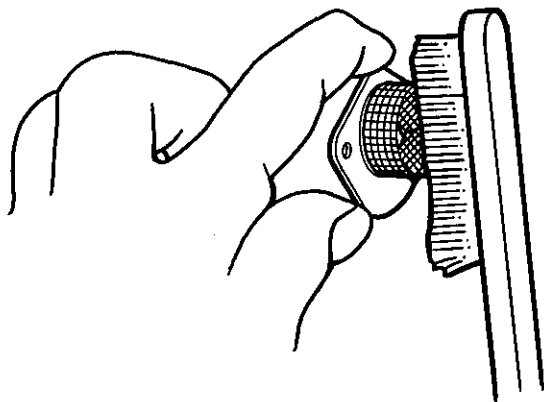
1. Remove the nine 6 mm bolts, the handle and the right side cover.



2. Remove the two 5 mm pan screws by the exhaust port of the muffler and remove the spark arrester.



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



4. Inspect the screen for breaks or tears and replace it if necessary.
5. Install the spark arrester right side cover and handle in the reverse order of removal.

Battery

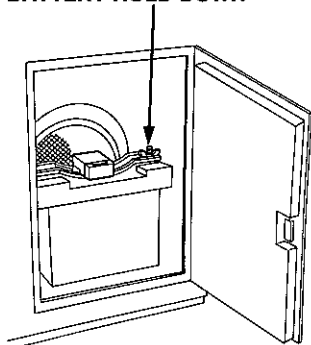
The generator's engine has a 3 amp charging system to charge the battery while the engine is running. If the generator is only used periodically, the battery must be charged monthly to maintain the battery service life.

A lead acid battery self discharges at a rate of 0.5 – 1.0% per day. This means that the battery, if the generator is not operated in a month, can discharge as much as 30% in the same period. This could cause the engine not to crank or shorten the service life of the battery. To charge the battery, follow the procedures below.

Removal:

1. Open the rear maintenance cover.
2. Remove the battery hold down and cover.
3. Remove the negative (–) cable from the battery negative (–) terminal; then remove the positive (+) cable from the battery positive (+) terminal.

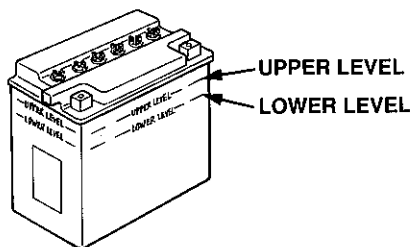
BATTERY HOLD DOWN



4. Remove the battery from the battery tray.

Inspection:

1. Remove the battery cell caps.
2. Inspect the electrolyte level of each cell. The electrolyte level must be maintained between the UPPER and LOWER level marks.
3. If the electrolyte level is near the LOWER mark, add distilled water as necessary.



Charging:

The battery is rated at 14AH (ampere-hour). 10% of the ampere-hour rating should be used as the charging current. A battery charger should be used that can be adjusted to deliver 1.4 amps.

⚠ WARNING The battery gives off explosive gasses; keep sparks, flames and cigarettes away from the battery while charging. Provide adequate ventilation when charging.

- The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
 - If electrolyte gets on your skin, flush with water.
 - If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.
- Electrolyte is poisonous.
 - If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.
- **KEEP OUT OF REACH OF CHILDREN.**
 1. Remove the battery cell caps.
 2. Connect the battery charger following the manufacturer's instructions.
 3. Charge the battery 3-4 hours.
 4. After the battery is charged, inspect the electrolyte level in each of the cells. Add distilled water as necessary.
 5. Install the battery caps.
 6. Clean the outside of the battery and the battery tray compartment with a solution of baking soda and water.

Installation:

1. Install the battery into the generator.
2. Install the positive (+) cable onto the battery positive (+) terminal; then install the negative (–) cable onto the battery negative (–) terminal.
3. Install the battery cover and hold down.
4. Close and latch to rear maintenance cover.

Fuse Replacement

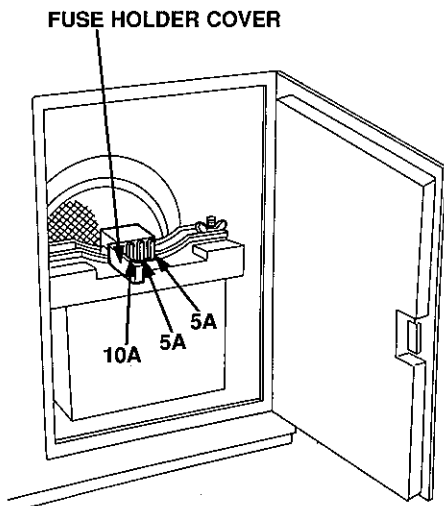
The fuse holder is located in the left side maintenance cover above the battery.

The fuses protect the following functions on the generator. If the fuse is blown, the symptoms for each fuse is indicated.

Fuse	Function	Symptom (if blown)
5A	Charging system	Battery discharges
5A	Fuel valve	Engine cranks but won't start
10A	Starting circuit	Starter motor won't crank

1. Turn the engine switch to the OFF position.
2. Open the rear maintenance cover, open the fuse holder cover and replace the fuse. The specified fuses are 5A, 5A, 10A.

NOTICE If fuse failure occurs, determine the cause and correct the problem before attempting to operate the generator further. Never use a fuse with a different rating from that specified. Serious damage to the electrical system or fire may result.



TRANSPORTING

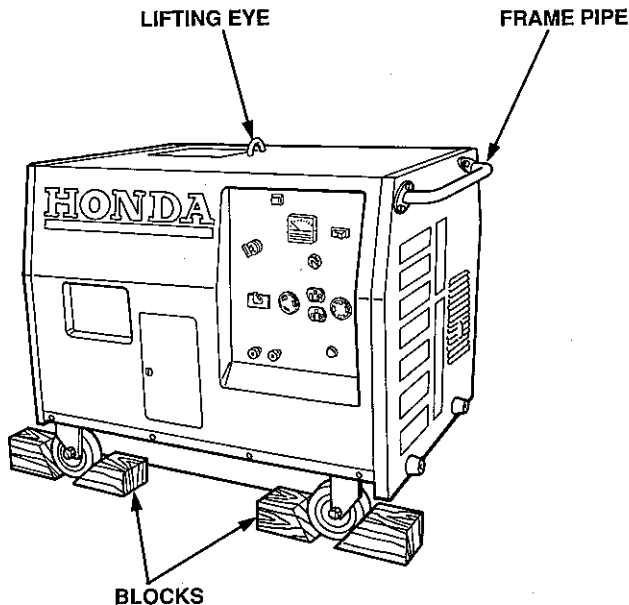
When transporting the generator, turn the engine switch OFF and keep the generator level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

⚠ 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.

Load and unload the generator in a level area. Use the lifting eye when lifting the generator. Do not use the frame pipes to lift the generator.

When transporting the generator in a truck, tie ropes to the frame pipes to secure the generator. Place blocks under the wheels to secure the generator.



STORAGE

Before storing the unit for an extended period:

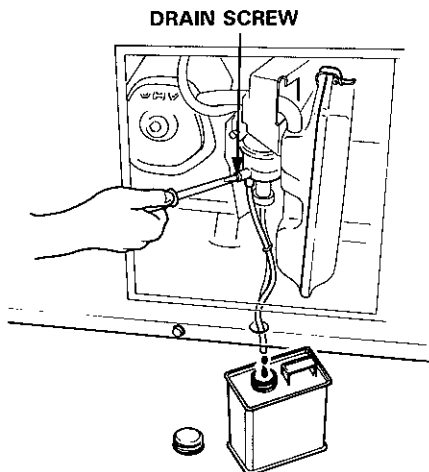
1. Be sure the storage area is free of excessive humidity and dust.
2. Service according to the table below:

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 42). Drain the fuel sediment cup (page 35).
1 year or more	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl (page 42). Drain the fuel sediment cup (page 35). Remove the spark plug. Put a tablespoon of engine oil into the cylinder. Turn the engine slowly with the pull rope to distribute the oil. Reinstall the spark plug. Change the engine oil (page 30). 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.	

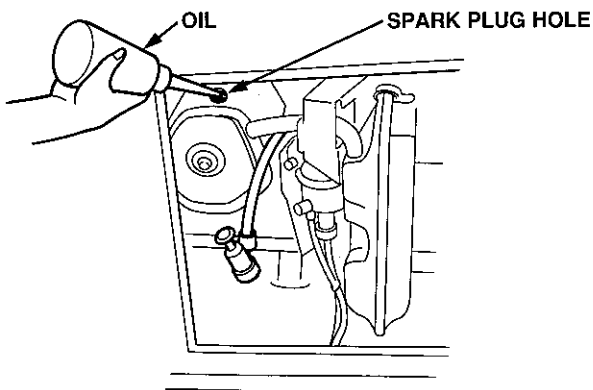
- a. Open the rear maintenance cover.
- b. Loosen the carburetor drain screw.
- c. Drain the gasoline from the carburetor into a suitable container.

⚠ 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.

- d. Tighten the carburetor drain screw.
- e. Drain the fuel sediment cup (see page 35).
- f. Close the rear maintenance cover.



-
3. Change the engine oil (see page 30).
 4. 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.

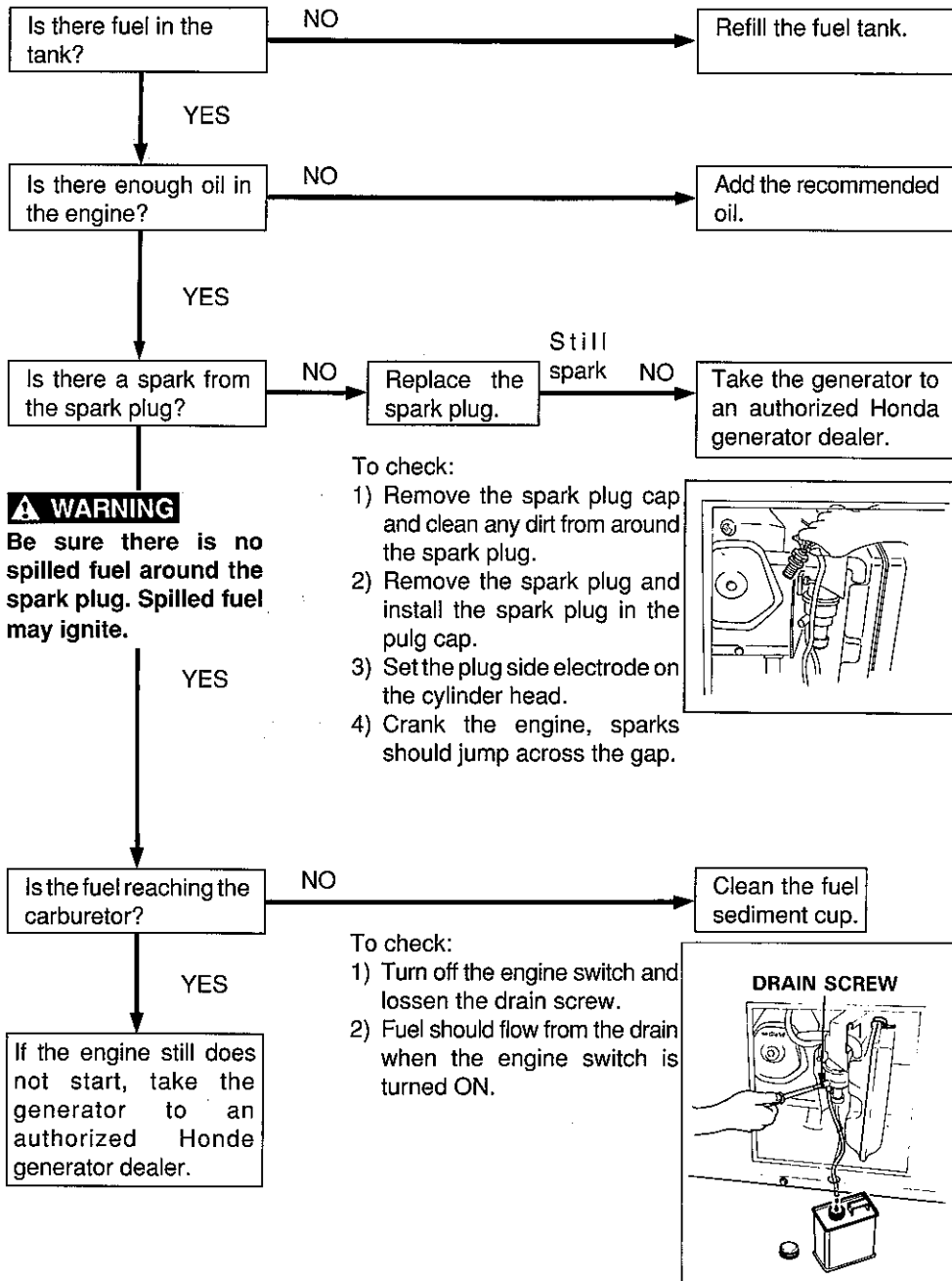


5. Check the air cleaner and clean as necessary (see page 32).
6. Cover the generator to keep out dust.
7. Once a month, recharge the battery (see page 39).

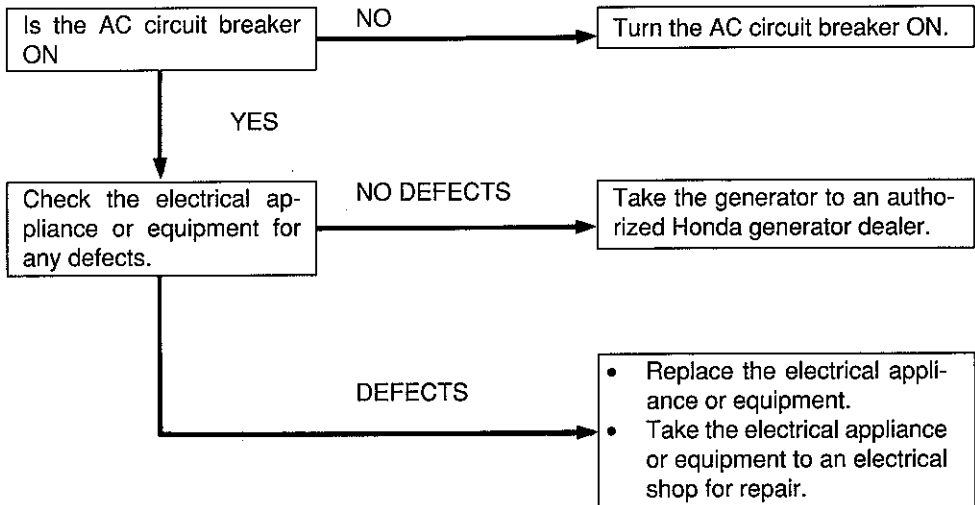
When starting the generator after adding fuel for the first time, after long-term storage, or after running out of fuel, turn the engine switch to the "ON" position and wait for 10 to 20 seconds before starting the engine.

TROUBLESHOOTING

When the engine will not start:

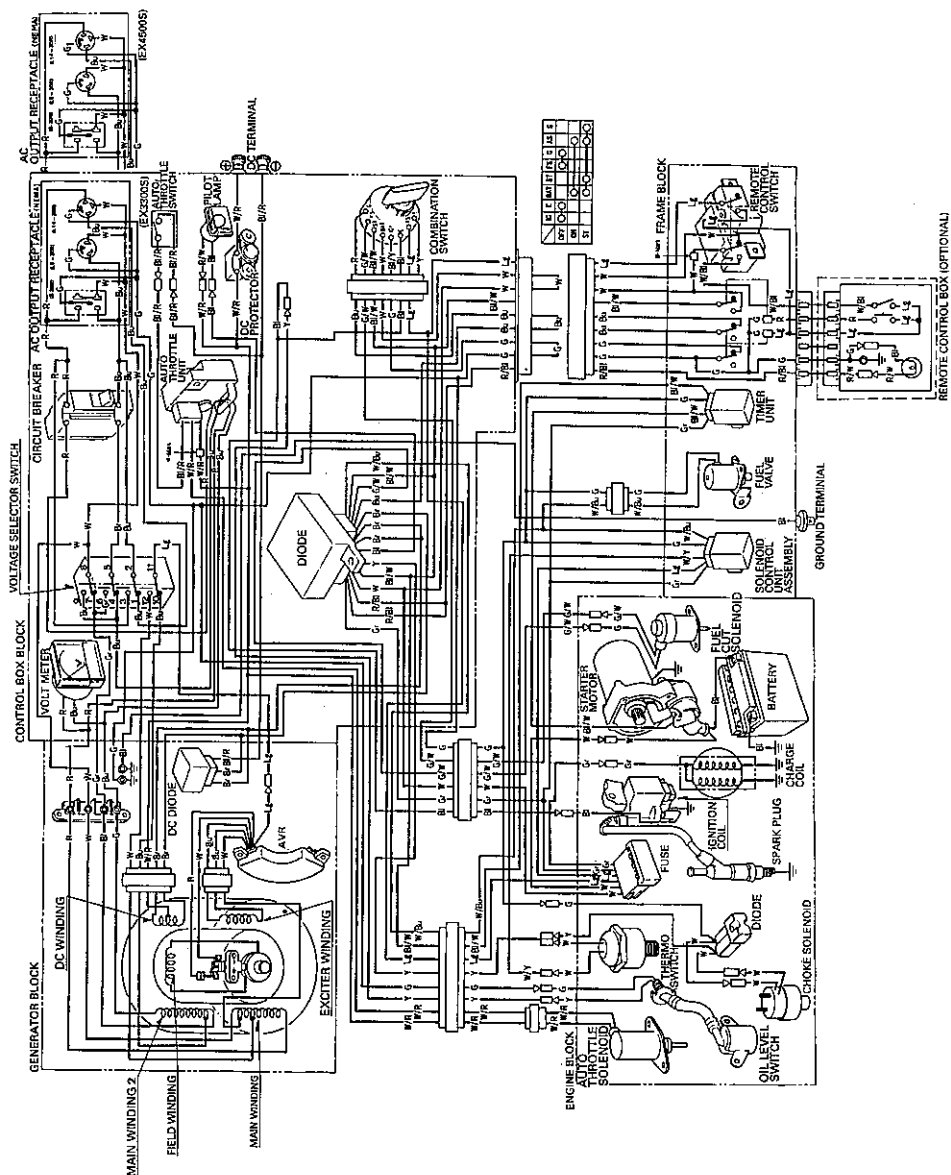


No electricity at the AC receptacles:

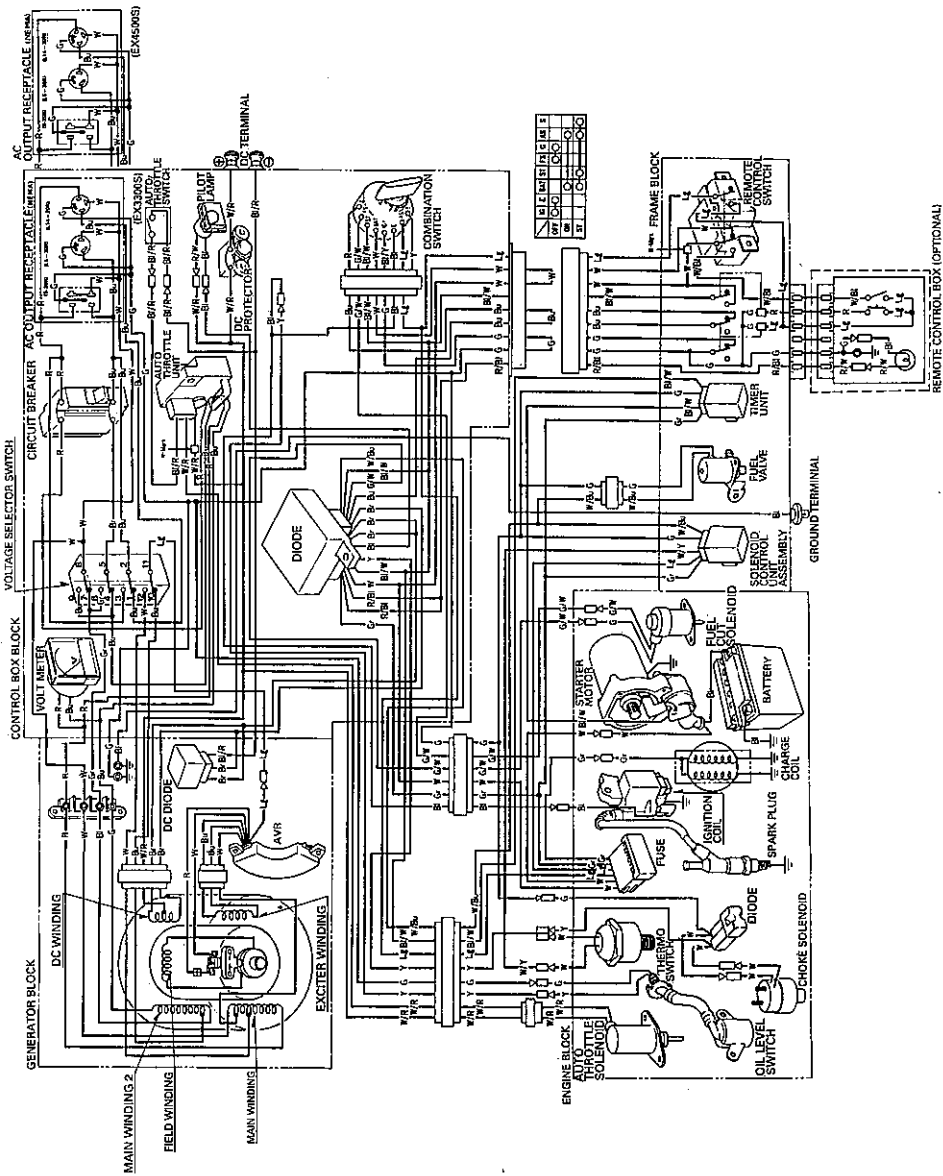


WIRING DIAGRAM

EX3300S



EX4500S



SPECIFICATIONS

Model	EX3300S	EX4500S
Power equipment description code	EB2	EB3
Length × Width × Height	910 × 530 × 695 mm (35.8 × 20.9 × 27.4 in)	
Dry weight	109 kg (240.3 lb)	122 kg (268.9 lb)

Engine

Model	GX240K1	GX340K1
Engine type	4-stroke, overhead valve, single cylinder	
Displacement (Bore × Stroke)	242 cc (14.8 cu in) [73 × 58 mm (1.9 × 2.3 in)]	337 cc (20.6 cu in) [82 × 64 mm (3.2 × 2.5 in)]
Compression ratio	8.2 : 1	8.0 : 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)	
Fuel tank capacity	19 ℓ (5.02 US gal)	
Spark plug	BPR5ES (NGK), W16EPR-U (NIPPONDENSO)	

Generator

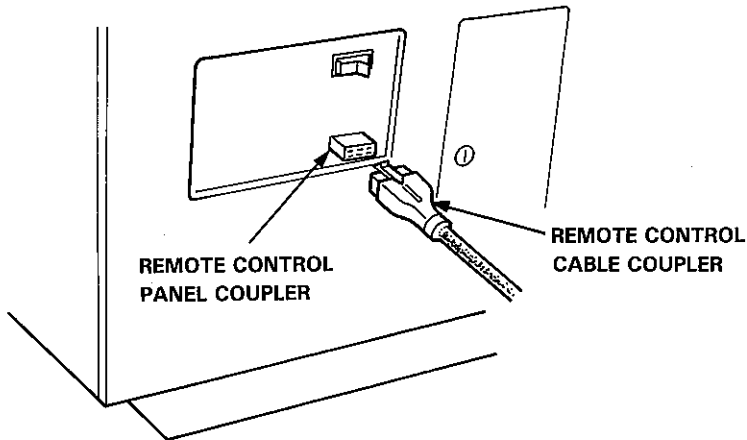
Model		EX3300S	EX4500S
Type		A	
AC output	Rated voltage	120/240V	
	Rated frequency	60 Hz	
	Rated ampere	25.0/12.5A	33.3/16.7A
	Rated output	3.0kVA	4.0kVA
	Maximum output	3.3kVA	4.5kVA
DC output		Only for charging 12 V automotive batteries. Maximum charging output = 8.3 A	

NOTE: Specifications are subject to change without notice.

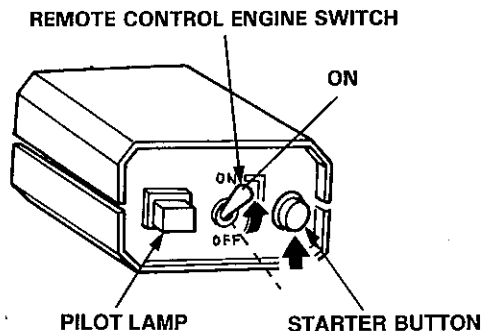
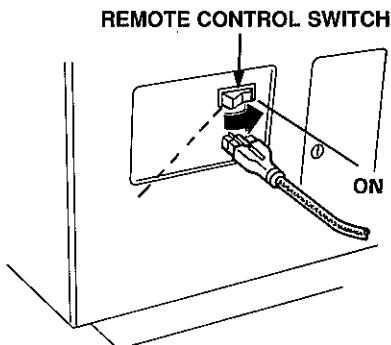
INSTALLATION OF OPTIONAL PARTS

Remote Control Kit (Installation)

1. Remove the panel from the front cover.
2. Disconnect the jumper coupler from the 9-P coupler.
3. Connect the 9-P coupler of the remote control panel to the 9-P coupler disconnected in step 2.
4. Install the remote control panel with four screws.



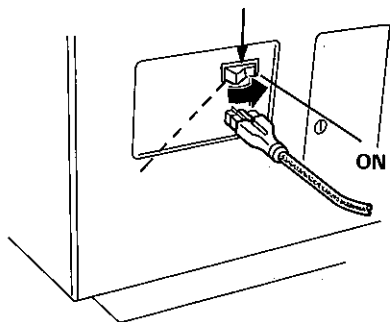
5. Connect the remote control cable coupler to the remote control panel coupler.



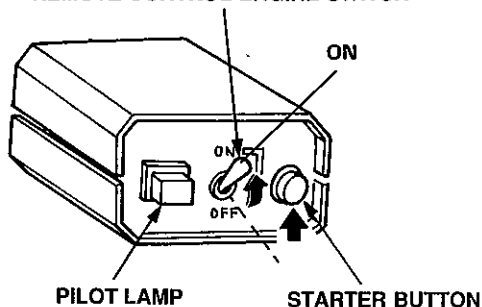
STARTING WITH REMOTE CONTROL

1. Make sure the engine switch is OFF.
2. Turn the auto throttle switch to OFF.
3. Remove the ignition switch key from the generator.
4. Turn the remote control switch to ON.
5. Flip the remote control engine switch knob up to ON.
6. Depress the starter button until the pilot lamp comes on.
7. Turn the remote control switch to the OFF position if you wish to start the generator by using the engine switch on the generator control panel.

REMOTE CONTROL SWITCH



REMOTE CONTROL ENGINE SWITCH



8. To stop the engine, flip the remote control engine switch to the OFF position.

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 GA 30136-2565

Or telephone: (404) 497-6400

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

- Model and serial numbers (see page 9)
- Name of the dealer who sold the generator to you
- Name and address of the 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.

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

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

COMPONENT IDENTIFICATION	8
CONTROLS	10
Engine Switch	10
Circuit Breaker	10
Ground Terminal	11
Oil Alert System	11
Auto-throttle System	12
Voltage Selector Switch (Dual voltage System)	12
Volt Meter	13
Pilot Lamp	13
DC Terminals	14
DC Circuit Protector	14
CUSTOMER SERVICE INFORMATION	51
GENERATOR USE	15
Connections to a Building's Electrical System	15
Ground System	15
Special Requirement	15
AC Applications	16
AC Operation	17
AC Receptacle Selection	18
DC Operation	19
Connecting the battery cables	19
Disconnecting the battery cables	20
Auto-throttle System	21
High Altitude Operation	22
INDEX	52
INSTALLATION OF OPTIONAL PARTS	49
MAINTENANCE	29
Maintenance Schedule	29
Engine Oil Change	30
Air Cleaner Service	32
Spark Plug Service	33
Fuel Sediment Cup Cleaning	34
Spark Arrester Maintenance	36
Battery	38
Fuse Replacement	40

PRE-OPERATION CHECK.....	23
Engine Oil	23
Fuel	24
Battery	26
SAFETY	4
Safety Label Locations	4
Safety Information	6
SPECIFICATIONS	48
STARTING THE ENGINE	27
STOPPING THE ENGINE	28
STORAGE	42
TRANSPORTING	41
TROUBLESHOOTING	44
WIRING DIAGRAM	46

HONDA
HONDA MOTOR CO., LTD. TOKYO, JAPAN

31ZB7702
00X31-ZB7-7020

K1 ㊞ ㊞ ㊞ 2009310
PRINTED IN JAPAN