

Power

Equipment

Owner's Manual EB11000



WARNING

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

WARNING:

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Thank you for purchasing a Honda generator. We want to help you get the best results from your new generator and to operate it safely. This manual contains the information on how to do that; please read it carefully.

This owner's manual describes the operation and maintenance of the Honda EB11000 Generator. All information, in this publication is based on the latest product information available at the time of printing. AMERICAN HONDA MOTOR CO., INC. 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. Pleasa 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 <u>A</u> and one of three words: DANGER, WARNING, or CAUTION. These mean:

A DANGER

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

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

A 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 8
	0.
COMPONENT IDENTIFICATION	.0
	1
CUNTRULS	1
Engine Switch	11
	12
	12
	12
Circuit Breaker	10
Circuit protector	
Ground Fault Circuit Interrupter (GFCI) Receptacle	4
Hour Meter	
Auto-throttle Switch	1/
Ground Terminal	18
Oil Alert System	18
GENERATOR USE	19
Connections to a Building's Electrical System	19
Ground System	19
Special Requirements	19
AC Applications	20
AC Operation	21
How to Use the Receptacles	22
Auto-throttle System	23
High Altitude Operation	24
PRE-OPERATION CHECK	25
Engine Oil	25
Fuel	26
Air Cleaner	27
STARTING THE ENGINE	30
STOPPING THE ENGINE	31

	32
MAINTENANCE	
Importance of Maintenance	
Maintenance safety	
Emission Control System	34
Proper Maintenance is the Owner's Responsibility	35
Maintenance Schedule	36
Engine Oil Change	
Oil Eilter Change	.38
	20
Air Cleaner Service	
Spark Plug Service	
Spark Arrester Maintenance	43
Fuel Sediment Cup Cleaning	45
Fuel Filter	46
Euse Benjacement	47
Potton	
	51
TRANSPORTING AND STURAGE	52
TROUBLESHOUTING	
WIRING DIAGRAM	
SPECIFICATIONS	5/
WARRANTY SERVICE INFORMATION	58
INDEX	60

SAFETY LABEL LOCATIONS

The labels shown here contain important safety information. Please read them carefully, These labels are considered permanent parts of your generator. If a label comes off or becomes hard to read, contact your Honda generator dealer for a repiacement.



4



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 3 feet (1 meter) 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 wellventilated area with the engine stopped.
- Fuel vapors are extremely flammable and may ignite after the engine has started. Maka sure that any spilled fuel has been wiped up before starting, the generator.

COMPONENT IDENTIFICATION



8



* 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 56).

Frame serial number:_____

Engine serial number:

CONTROL PANEL



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.

RECOIL STARTER

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

NOTICE

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



FUEL VALVE

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



CHOKE KNOB

The choke is used to provide proper starting mixture when the engine is cold. It can be opened and closed by operating the choke knob manually. Pull the knob toward the CLOSE position to enrich the mixture for cold starting



12

CIRCUIT BREAKER

The circuit breaker protects the individual circuit protectors and the 50A 120/240V receptacle. The circuit breaker will automatically switch OFF if the circuit is overloaded or the appliance plugged into the circuit is faulty. If the circuit breaker switches OFF automatically, check whether the appliance is working properly or is exceeding the rated load capacity of the circuit before switching the circuit breaker ON again.



CIRCUIT PROTECTOR

The circuit protectors will automatically switch OFF if the circuit is overloaded or the appliance plugged into the circuit is faulty. If a circuit Protector switches OFF automatically, check whether the appliance is working properly or is exceeding the rated load capacity of the circuit before resetting the circuit protector.



GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTA-CLES

AWARNING Using the generator in rain, snow or near water can lead to death from electric shock. Keep the generator 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. An example of groundfault current is the current which would flow through a person who is using an appliance with faulty insulation and, at the same time, is in contact with an electrical ground such as a plumbing fixture, wet floor, or earth.

The ground-fault circuit interrupter will not protect against short circuits or overloads. The circuit breaker in the control panel which supplies power to the circuit provides that protection (refer to circuit breaker on page 10).

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

- TEST BUTTON: To test, depress the TEST" button (see page 15).
- RESET BUTTON: To restore power, depress the "RESET" button (see page 16).

Perform this test monthly to ensure proper operation of the GFCI 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 control panel.



INSPECTION

Perform the tests below to ensure proper operation of the GFCI receptacle.

Record your test on the GFCI test card provided on the generator.

Before each use:

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

Monthly:

Under normal operating conditions, perform the GFCI test monthly.

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



- 5. Press the RESET BUTTON
 - The RESET BUTTON should be flush with the test button.
 - If the RESET BUTTON is not flush with the TEST BUTTON. contact an authorized Honda generator dealer.
- 6. When the RESET BUTTON extends during operation:
 - Unplug all appliances from the GFCI protected receptacle.
 - Press the RESET BUTTON:
- IF THE GFCI CANNOT BE RESET: The GFCI is faulty. Contact an
 - authorized Honda generator dealer.
- IF THE GFCI RESETS PROPERLY: Check the appliance or the power cord.



HOUR METER

The hour meter indicates the hours the generator has been operated. Use it to determine when scheduled maintenance should be performed (see Page 36).



AUTO-THROTTLE SWITCH

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. Leave the switch in the OFF position when using appliances that require only momentary power, that have a power demand of less than 1 ampere, or that have large startup power demands (see page 23).



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.



OIL ALERT SYSTEM

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

If the engine stops and will not restart, check the engine oil level (see page 25) before troubleshooting in other areas.



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.

A 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.

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 AC newtral wire is connected to the system ground.

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: 10.5 kVA

For continuous operation, do not exceed the rated power. Rated power is:

9.5 kVA

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

AC OPERATION

- 1. Start the engine (see page 30).
- 2. Switch the AC circuit breaker ON.
- 3. Plug the appliance into the appropriate AC receptacle.

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 or circuit protector.



HOW TO USE THE RECEPTACLES

When two or more receptacles are used, refer to the table below and apply the load to each receptacle equally to prevent overloading.

Voltage fluctuation can be prevented by applying the load equally to the single phase receptacles.

Receptacle	24	0 V		120 V	
Case	50 A	30 A	50 A	30 A	20 A Max. for both
Using 240 V only	39.6 A Max.	30 A Max.	\smallsetminus		
	39.6	A Total			
Using 120 V only		_	50 A Max.	30 A Max.	20 A Max. at one
				Total 79.2 A	
Using both 120 V	Total	10 A		Total 59.2 A	
and 240 V	Total	20 A		Total 39.2 A	
	Total	30 A		Total 19.2 A	· · · · · · · · · · · · · · · · · · ·

When both 240 V and 120 V receptacles are used, be sure that the ampere draw at each receptacle is less than the specified capacity and the total amperage is less than 79.2 A



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 startup 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 too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul, the spark plug and cause hard starting.

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

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

NOTICE

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

ENGINE OIL

NOTICE

- Engine oil is a major factor affecting engine performance and service life. Nondetergent oils and 2-stroke engine oils are not recommended because they have inadequate lubricating characteristics.
- Check the oil level BEFORE EACH USE with the engine on a level surface and the engine stopped.

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



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

Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

- 1. Place the engine on a level surface.
- 2. Remove the dipstick and wipe it clean.
- 3. Fully insert the dipstick, then remove it to check the oil level.
- 4. If the oil level is near or below the lower limit mark on the dipstick, remove the oil filler cap, and fill with the recommended oil to the upper limit mark.



FUEL

Refueling

Fuel tank capacity: 6.9 US gal (26 l, 5.7 Imp gal)

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

WARNING

Gasoline is highly flammable and explosive, and you can be bumed or seriously injured when handling fuel.

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

Refuel in a well-ventilated area before starting the engine. If the engine has been running, allow it to cool. Refuel carefully to avoid spilling. Do not fill above the shoulder of the fuel strainer. After refueling, tighten the fuel tank cap securely.

Never refuel the generator inside a building where gasoline fumes may reach flames or sparks. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc.

Spilled fuel is not only a fire hazard, it causes environmental damage. Wipe up spills immediately.



FUEL TANK CAP



Fuel Recommendations

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

This engine is certified to operate on unleaded gasoline. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

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

Occasionally you may hearalight "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 your servicing dealer.

NOTICE

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

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

Oxygenated Fuels

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

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

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

The following are the EPA approved percentages of oxygenates:

- ETHANOL- (ethyl or grain alcohol) 10% by volume You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name "Gasohol".
- MTBE (methyl tertiary butyl ether) 15% by volume You may use gasoline containing up to 15% MTBE by volume.

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

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

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

AIR CLEANER

- 1. Remove the wing bolt and air cleaner cover and remove the foam air filter.
- Inspect the air filters. Clean or replace the filters if necessary. If the air filters need cleaning, follow the procedure described on page 39.
- 3. Reinstall the air filters and air cleaner cover. Tighten the wing bolt securely.



NOTICE

Do not allow dust, dirt, and debris to enter the air cleaner body when servicing the air cleaner.

STARTING THE ENGINE

- 1. Turn the fuel valve ON.
- 2. Make sure that the circuit breaker is OFF. The generator may be hard to start if a load is connected.
- 3. Make sure the auto-throttle switch is off, or more time will be required for warm up.
- 4. Turn the engine switch to START and hold it there until the engine starts.

Do not use the electric 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.

Pull the choke knob out to the CLOSE position to start a cold engine. The choke may not be needed if the engine is warm or the air temperature is hot.



NOTICE

When the speed of the starter motor drops after a period of time, it is an indication that the battery should be recharged.

- 5. After the engine starts, let the engine switch return to ON.
- 6. Warm up the engine for 2-3 minutes. Turn the auto-throttle switch to AUTO after the engine has warmed up.

STOPPING THE ENGINE

In an emergency:

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

In normal use:

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

MAINTENANCE

THE IMPORTANCE OF MAINTENANCE

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

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

The maintenance schedule applies to nomal operating conditions. If you operate your generator under unusual conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

WARNING

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

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

MAINTENANCE SAFETY

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

WARNING

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

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

Safety Precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:
 - Carbon monoxide poisoning from englne exhaust. Be sure there is sdequate ventilation whenever you operate the engine.
 - -Bums from hot parts. Let the engine and exhaust system cool before touching.
 - Injury from moving parts.
 Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

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

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

EMISSION CONTROL SYSTEM

Source of Emissions

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

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

The California Clean Air Act

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

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

Tampering and Altering

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

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

Problems That May Afect Emissions

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

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

PROPER MAINTENANCE IS THE OWNER'S RESPONSIBILITY

Replacement Parts

The emission control systems on your Honda engine were designed, built, and certified to conform with California emissions regulations. Honda recommends only the use of new, genuine Honda parts or their equivalent.

The use of other replacement parts which are not of equivalent quality may impair the effectiveness of your emission control system.

Maintenance

Follow the maintenance schedule on page 36. Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, will require more frequent service.

MAINTENANCE SCHEDULE

ľ.	REGULAR SER	/ICE PERIOD(3)	Fach	First	Every 3 months	Every 6 months	Every vear
ľ	month or or terval, whic	berating hour in- hever comes first.	use	or 20 Hrs.	or 50 Hrs.	or 100 Hrs.	or 300 Hrs.
Þ	Engine oil	Check level	0				
		Change		0		0	
•	Engine oil filter	Replace					⊖ or 200 Hrs
•	Air filters	Check	0		_		
		Clean			0(1)		
		Replace					0.
•	Spark plug	Clean-Readjust				0	
		Replace					0
Γ	Spark arrester	Clean				0	
•	Idle speed	Check-Adjust					(2)
•	Valve clearance	Check-Readjust				_	O(2)
•	Fuel filter	Check				0	
		Replace					(2)
Fuel line Che (Rep		Check (Replace if necessary)		Eve	ery 2 years	s (2)	-

- Emission related items.
- Replace the paper air filter only.

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

- (2)These items should be serviced by an authorized Honda engine dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.
- (3)For commercial use, log hours of operation to determine proper maintenance intervals.

36

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ENGINE OIL CHANGE

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

- Remove the oil filler cap and drain bolt, and drain the oil into a suitable container.
- 2. Retighten the drain bolt securely.
 - 3. Refill to the upper limit mark on the dipstick with the recommended oil (see page 25). Tighten the oil filler cap securely.

ENGINE OIL REFILL CAPACITIES:

Without oil filter replacement: 1.27 US qt (1.20 l, 1.06 lmp qt)

With oil filter replacement: 1.59 US qt (1.50 l, 1.32 lmp qt)



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

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

OIL FILTER CHANGE

- 1. Drain the engine oil, and retighten the drain bolt securely (see page 37).
- 2. Remove the oil filter, and drain the oil into a suitable container. Discard the used oil filter.

NOTICE

Use an oil filter socket tool, rather than a strap wrench, to avoid striking

3. Clean the filter nounting base, and coat the O-ring of the new oil filter with clean engine oil.

NOTICE

Use only a Honda genuine oil filter or a filter of equivalent quality specified for your model. Using the wrong Honda filter or a non-Honda filter which is not of equivalent quality may cause engine damage.

4. Screw on the new oil filter by hand, until the O-ring contacts the filter mounting base, then use an oil filter socket tool to tighten the filter an additional 7/8 turn.

TORQUE: 16 ft-lb (22 Nm, 2.2 kg-m)

- 5. Refill the crankcase with the specified amount of the recommended oil (see page 25 & 33). Reinstall the oil filler cap/dipstick.
- 6. Start the engine and check for oil filter leaks.
- 7. Stop the engine, and check the oil level as described on page 25. If necessary, add oil to the upper limit mark on the dipstick.



38



OIL FILTER SOCKET TOOL

AIR CLEANER SERVICE

Dirty air filters will restrict air flow to the carburetor, reducing engine performance. If you operate the generator in very dusty areas, clean the air filters more often than specified in the MAINTENANCE SCHEDULE.

NOTICE

Operating the engine without air filters, or with damaged filters, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by the Distributor's Limited Warranty.

- 1. Remove the wing bolt, and remove the air cleaner cover.
- 2. Remove the two 5 mm screws from the air cleaner cover, and remove the paper air filter from the cover.
- 3. Remove the foam air filter from the air cleaner body.
- 4. Inspect both air filters, and replace them if they are damaged. Also, replace the paper air filter every year, or 300 hours of use, whichever occurs first.
- 5. Clean the air filters if they are to be reused.

Paper air filter. Tap the filter several times on a hard surface to remove dirt, or blow compressed air [not exceeding 30 psi (207 kPa, 2.1 kg/ cm²)] through the filter from the clean side. Never try to brush off dirt; brushing will force dirt into the fibers.

Foam air filter. Clean in warm soapy water, ninse, and allow to dry thoroughly. Or clean in nonflammable solvent and allow to dry. Dip the filter in clean engine oil, then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the filter.

- 6. Wipe dirt from the inside of the air cleaner body and cover, using a moist rag. Be careful to prevent dirt from entening the air duct that leads to the carburetor.
- 7. Reinstall the air filters and cover. Be sure that both gaskets are installed on the paper air filter. Tighten the wing bolt securely.



SPARK PLUG SERVICE

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

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

If the engine has been running, the exhaust pipe and muffler will be very hot. Be careful to avoid touching the exhaust pipe or muffler.

- 1. Remove the spark plug caps.
- 2. Clean any dirt from around the spark plug bases.
- 3. Use a plug wrench to remove the spark plugs.



- 4. Visually inspect the spark plugs. Discard them if the insulator is cracked or chipped. Clean the spark plugs with a wire brush if they are to be reused.
- 5. Measure the spark plug electrode gap with a suitable gauge. The gap should be 0.028-0.031 in (0.70-0.80 mm). Correct the gap, if necessary, by carefully bending the side electrode.



41

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 may cause engine damage.
- Use only the recommended spark plug or equivalent. A spark plug which has an improper heat range may cause engine damage.

SPARK ARRESTER MAINTENANCE

The spark arrester must be serviced every 100 hours to keep it functioning as designed.

If the engine has been running, the exhaust pipe and muffler will be very hot. Allow the exhaust pipe and muffer to cool before Servicing the spark arrester.

1. Remove the special screw from the muffler and remove the spark arrester.



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



- 3. The spark arrester must be free of breaks and holes. Replace, if necessary.
- 4. Install the spark arrester and the muffler in the reverse order of disassembly.

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 OFF. Remove the sediment cup.
- 2. Clean the cup thoroughly.
- 3. Reassemble. Do not damage the O-ring.



FUEL FILTER

1. Remove the two 6 mm special bolts from the control cover and remove the control cover.



2. Check the fuel filter for water accumulation or sediment. If no water or sediment is found, reinstall the control cover.



3. If the fuel filter is found with excessive water accumulation or sediment, take the generator to your servicing dealer.

FUSE REPLACEMENT

If the fuse is blown, the engine will not start until it is replaced.

- 1. Turn the engine switch OFF.
- 2. Remove the fuse holder and replace the fuse. Use only a 10A fuse. **NOTICE**
 - If frequent fuse failure occurs, determine the cause and correct the problem before attempting to operate the generator further.
 - Never use a fuse with a rating other than 10 A. Serious damage to the electrical system or a fire may result.



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. Remove the battery set plate.
- 2. Remove the negative (-) cable from the battery negative (-) terminal; then remove the positive (+) cable from the battery positive (+) terminal.



3. Remove the battery from the battery tray.

48

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 limit marks.
- 3. If the electrolyte level is near the LOWER mark, add distilled water as necessary.



WARNING

The battery contains sulfuric acid (electrolyte) which is highly corrosive and poisonous.

Getting electrolyte in your eyes or on your skin can cause serious bums.

Wear protective clothing and eye protection when working near the battery.

EMERGENCY PROCEDURES:

Eyes – Flush with water from a cup or other container for at least 15 minutes (water under pressure can damage the eye). Immediately call a physician, local poison control, or 911.

Skin-Remove contaminated clothing. Flush the skin with large quantities of water. Call a physician immediately.

Swallowing – Drink water or milk. Call your local poison control center or a physician immediately.

Charging:

The battery is rated at 14AH (ampere-hour). 10% of the amperehour 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 hydrogen gas during normal operation.

A spark or open flame can cause the battery to explode with enough force to kill or seriously hurt you.

Keep sparks and flames away. Wear protective clothing and a face shield, or have a skilled mechanic do battery maintenance.

- 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 with a solution of baking soda and water.

Installation:

- 1. Install the battery in the generator.
- Install the positive (+) cable to the battery positive (+) terminal; then install the negative (-) cable to the battery negative (-) terminal.
- 3. Install the battery set plate.

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

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

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 52). Drain the fuel sediment cup (page 45)
1 year or more	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl (page 52). Drain the fuel sediment cup (page 45). Remove the spark plugs. Pour a tablespoon (5-10 cc) of clean engine oil into each cylinder. Using the electric starter, crank the engine a few revolutions to distribute the oil in the cylinders. Reinstall the spark plugs. Change the engine oil (page 37). After removal from storage, drain the stored gaso- line into a suitable container, and fill with fresh gasoline before starting.
 Use gasoline conditione Contact your authorized 	rs that are formulated to extend storage life. Honda generator dealer for conditioner recommendations.

Before storing the unit for an extended period;

- 1. Be sure the storage area is free of excessive humidity and dust.
- 2. Drain the fuel.
 - a. Disconnect the fuel line to the engine, and drain the fuel tank into an approved gasoline container. Turn the fuel valve to the ON position to enable draining. After draining is completed, reconnect the fuel line.
 - b. Remove the control cover (see page 46), loosen the carburetor drain screw, and drain the carburetor into an approved gasoline container. After draining is completed, tighten the carburetor drain screw, and reinstall the control cover.

WARNING

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

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



- 3. Change the engine oil (page 37).
- 4. Remove the two spark plugs and pour about a tablespoon of clean engine oil into the cylinders. Crank the engine several revolutions to distribute the oil, then reinstall the spark plugs.
- 5. Remove the battery and store it in a cool, dry place. Recharge it once a month.
- 6. Cover the engine to keep out dust.

TROUBLESHOOTING



54



WIRING DIAGRAM



DIMENSIONS

Model	EB11000	
Length	37.5 in (953 mm)	
Width	24.3 in (617 mm)	
Height	24.5 in (622 mm)	
Dry weight	403 lb (183 kg)	

ENGINE

Model	GX620
Engine Type	4-Stroke, O.H.V. 2 cylinder
Displacement	37.5 cu in (614 cm ³)
[Bore x Stroke]	3.03 x 2.60 in (77 x 66 mm)
Engine Speed	3600rpm
Cooling System	Forced air
Ignition System	Transistorzed magneto
Engine Oil Refill Capacities	1.27 US qt (1.20 l, 1.06 lmp qt) without oil filter replacement 1.59 US qt (1.50 l, 1.32 lmp qt) with oil filter replacement
Fuel Tank Capacity	6.9 US gal (26 ℓ, 5.7 Imp gal)
Spark Plugs	BPR6ES (NGK)

GENERATOR

	Model	EB11000
Туре		2-pole, revolving magnetic field type
	Rated voltage	120/240 V
	Rated frequency	60 Hz
AC output	Rated ampere	79.2/39.6 A
	Rated output	9.5 kVA
	Maximum output	10.5 kVA

TUNEUP

ITEM	SPECIFICATION	MAINTENANCE
Spark plug gap	0.028-0.031 in (0.70-0.80 mm)	Refer to page: 36
Valve clearance	IN: 0.15 ± 0.02 mm (cold) EX: 0.20 ± 0.02 mm (cold)	See your authorized Honda dealer
Other specifications	No other adjustmen	ts needed.

Specifications are subject to change without notice.

WARRANTY SERVICE INFORMATION

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

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

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

Or telephone: (770) 497-6400

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

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

Current customer service contact information:

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

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

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

59

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INDEX

COMPONENT IDENTIFICATION	.8
CONTETS	3
CONTROLS1	11
Auto-throttle Switch1	7
Choke KnoB1	2
Circuit Breaker1	3
Circuit protector1	3
Engine Switch1	1
Fuel Valve1	2
Ground Fault Circuit Interrupter (GFCI) Receptacle1	14
Ground Terminal1	18
Hour Meter1	17
Oil Alert System1	18
Recoil Starter	11
GENERATOR USE1	19
AC Applications	20
AC Operation	21
Auto-throttle System	23
Connections to a Building's Electrical System	19
Ground System	19
High Altitude Operation	24
How to Use the Recep tacles	22
Special Requirements	19
INDEX	50
MAINTENANCE	32
Air Cleaner Service	39
Battery	18
Emission Control System	34
Engine Oil Change	31
	46
Fuel Sediment Cup Cleaning	45
Fuse Replacement	4/
Importance of Maintenance	32
Maintenance Safety	33
Maintenance Schedule	30

•

Oil Filter Change	
Bronar Maintenance is the Owner's Responsibility	
Spark Arrester Maintenance	
Spark Plug Service	
Air Cleaper	
Engine Ail	
Fuel	
SAFETY	
Safety Label Locations	4
Safety Information	6
	57
	30
	21
	Б1

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