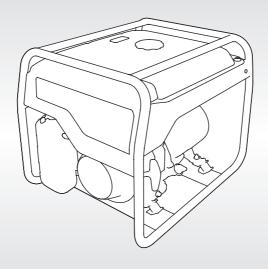


# Owner's Manual GENERATOR EG4000CL/EG5000CL/EG6500CL



See page 82 for instructions on assembling your generator. See page 86 for Initial Use Instructions.

# A WARNING: A

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## **AWARNING**

Exhaust contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas.

Breathing carbon monoxide can cause unconsciousness or death.

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

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

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

## INTRODUCTION

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

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

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

We suggest you read the *Distributor's Limited Warranty* (see page 72) to fully understand its coverage and your responsibilities of ownership.

When your generator needs scheduled maintenance, keep in mind that your servicing dealer is specially trained in servicing Honda generators and is supported by the parts and service divisions of American Honda. Your servicing dealer is dedicated to your satisfaction and will be pleased to answer your questions and concerns.

Best Wishes, Honda Motor Co., Ltd.

#### A FEW WORDS ABOUT SAFETY

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

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

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

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

- Safety Labels on the generator.
- Safety Messages preceded by a safety alert symbol 1 and one of three signal words, DANGER, WARNING, or CAUTION.

These signal words mean:

**▲ DANGER** 

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

**A WARNING** 

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



You CAN be HURT if you don't follow instructions.

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

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

# **CONTENTS**

GENERATOR SAFETY	6
IMPORTANT SAFETY INFORMATION	6
Operator Responsibility	
Carbon Monoxide Hazards	
Electric Shock Hazards	7
Fire and Burn Hazards	7
Refuel With Care	8
SAFETY LABEL LOCATIONS	9
CONTROLS & FEATURES	11
COMPONENT & CONTROL LOCATIONS	11
CONTROLS	13
Engine Switch	13
Starter Grip	13
Fuel Valve Lever	14
Choke Lever	
Voltage Selector Switch	
AC Circuit Breaker	
AC Circuit Protectors	
Ground Fault Circuit Interrupter (GFCI) Receptacle	
FEATURES	
Oil Alert® System	
Automatic Engine Stop Function	
Oil Alert Function	
Overspeed Detection Function	
Abnormal Voltage Detection Function	
Fuel Gauge	
Ground Terminal	19
BEFORE OPERATION	
ARE YOU READY TO GET STARTED?	
Knowledge	
IS YOUR GENERATOR READY TO GO?	
Check the Engine	21
Check the GFCI	21

# **CONTENTS**

OPERATION	22
SAFE OPERATING PRECAUTIONS	22
STARTING THE ENGINE	23
STOPPING THE ENGINE	26
GFCI OPERATION CHECK	27
AC OPERATION	30
AC Applications	32
AC Receptacle Selection	33
Power Producing Circuits	33
Voltage Selector Switch	34
STANDBY POWER	
Connections to a Building's Electrical System	
System Ground	
Special Requirements	37
SERVICING YOUR GENERATOR	38
THE IMPORTANCE OF MAINTENANCE	
MAINTENANCE SAFETY	39
Safety Precautions	39
MAINTENANCE SCHEDULE	40
Tools	40
REFUELING	41
FUEL RECOMMENDATIONS	42
ENGINE OIL LEVEL CHECK	
ENGINE OIL CHANGE	
ENGINE OIL RECOMMENDATIONS	
AIR CLEANER SERVICE	46
AIR CLEANER ELEMENT CLEANING	
SPARK PLUG SERVICE	
SPARK ARRESTER SERVICE	
SEDIMENT CUP CLEANING	52
STORAGE	53
STORAGE PREPARATION	53
Cleaning	
Fuel	53
Engine Oil	
Engine Cylinder	
STORAGE PRECAUTIONS	57
REMOVAL FROM STORAGE	57

# **CONTENTS**

TRANSPORTING	58
TAKING CARE OF UNEXPECTED PROBLEMS	59
ENGINE WILL NOT START	
ENGINE LACKS POWER	60
NO POWER AT THE AC RECEPTACLES	61
TECHNICAL INFORMATION	62
Serial Number Location	62
Carburetor Modification for High Altitude Operation	63
Emission Control System Information	64
Air Index	66
Specifications	67
Wiring Diagram	68
CONSUMER INFORMATION	70
Dealer Locator Information	70
Honda Publications	70
Customer Service Information	71
Distributor's Limited Warranty	72
Emission Control System Warranty	77
ASSEMBLY	82
SAFETY	82
The Importance of Proper Assembly	82
Important Safety Precautions	83
ASSEMBLY	84
HANDLE INSTALLATION (Optional Parts)	84
WHEEL KIT INSTALLATION (Optional Parts)	85
INITIAL USE INSTRUCTIONS	86
ENGINE OIL	86
FUEL	87
BEFORE OPERATION	88
REGISTRATION	
INDEX	89
OUICK REFERENCE INFORMATIONInsid	e back cover

## **GENERATOR SAFETY**

#### IMPORTANT SAFETY INFORMATION

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

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

## **Operator Responsibility**

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

#### **Carbon Monoxide Hazards**

A generator's exhaust contains toxic carbon monoxide, which you cannot see or smell. Breathing carbon monoxide can KILL YOU IN MINUTES. To avoid carbon monoxide poisoning, follow these instructions when operating a generator:

- Only run a generator OUTSIDE, far away from windows, doors, and vents.
- Never operate a generator inside a house, garage, basement, crawl space, or any enclosed or partially enclosed space.
- Never operate a generator near open doors or windows.
- Get fresh air and seek medical attention immediately if you suspect you have inhaled carbon monoxide.

Early symptoms of carbon monoxide exposure include headache, fatigue, shortness of breath, nausea, and dizziness. Continued exposure to carbon monoxide can cause loss of muscular coordination, loss of consciousness, and then death.

To alert you to potentially dangerous levels of carbon monoxide coming from a generator operating outside, or from other sources, install battery operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up on every level of the home and outside sleeping areas in accordance with the manufacturer's instructions.

#### **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 that 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.

## **GENERATOR SAFETY**

#### **Refuel With Care**

Gasoline is extremely flammable, and gasoline vapor can explode.

Do not refuel during operation.

Allow the engine to cool if it has been in operation.

Refuel only outdoors in a well-ventilated area and on a level surface.

Never smoke near gasoline, and keep other flames and sparks away.

Do not overfill the fuel tank.

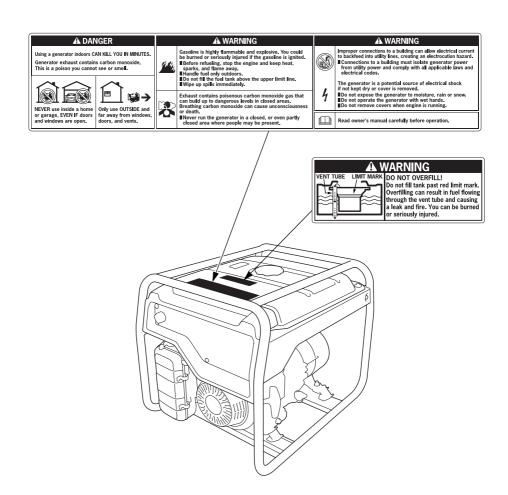
Make sure that any spilled fuel has been wiped up and cleaned before starting the engine.

Always store gasoline in an approved container.

#### 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.



#### **A** CAUTION



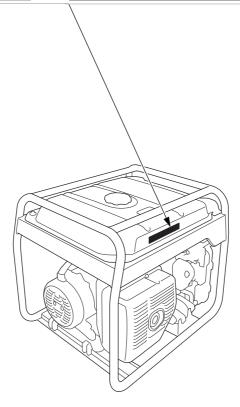
A hot exhaust system can cause serious burns. Avoid contact if the engine has been running.



#### **A WARNING**

Operation of This Equipment May Create Sparks That Can Start Fires
Around Dry Vegetation. A Spark Arrestor May be Required. The Operator
Should Contact Local Fire Agencies For Laws or Regulations Relating to Fire
Prevention Requirements.

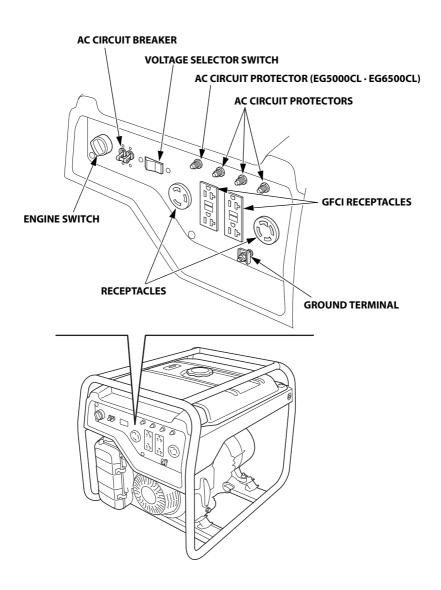
Per California Public Resources Code 4442.6



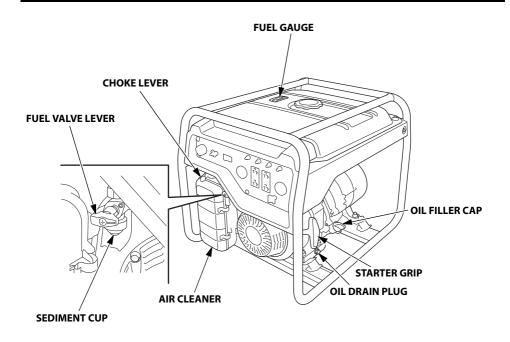
# **CONTROLS & FEATURES**

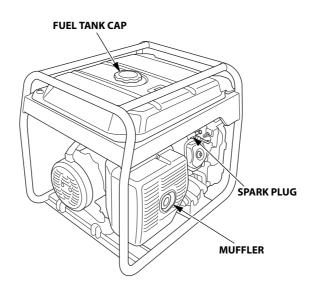
## **COMPONENT & CONTROL LOCATIONS**

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



## **CONTROLS & FEATURES**





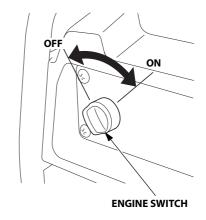
#### **CONTROLS**

#### **Engine Switch**

The engine switch controls the ignition system.

OFF - Stops the engine.

ON – Running position, and for starting.

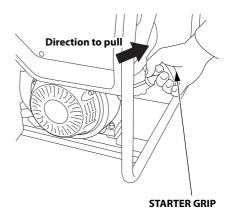


## **Starter Grip**

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

#### NOTICE

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



## **CONTROLS & FEATURES**

#### **Fuel Valve Lever**

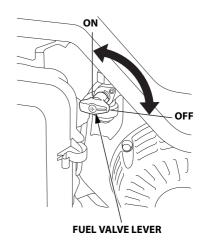
The fuel valve lever is located between the fuel tank and carburetor.

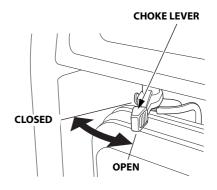
The fuel valve lever must be in the ON position for the engine to run.

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



The choke is used to provide proper starting mixture when the engine is cold. It can be opened and closed by operating the choke lever manually. Move the choke lever to the CLOSED position to enrich the mixture for cold starting.





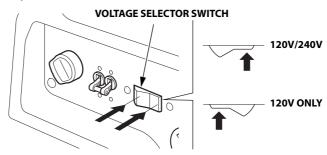
## **Voltage Selector Switch**

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

Select the voltage before starting the engine.

#### **Switch Position**

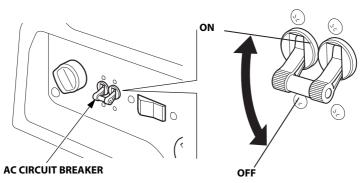
**120V/240V:** The 120V and 120V/240V receptacles can be used simultaneously. **120V ONLY:** ONLY the 120V receptacles can be used. Do not use the 120V/240V receptacle in this position. The most power will be available at the 30A 120V locking plug receptacle.



#### **AC Circuit Breaker**

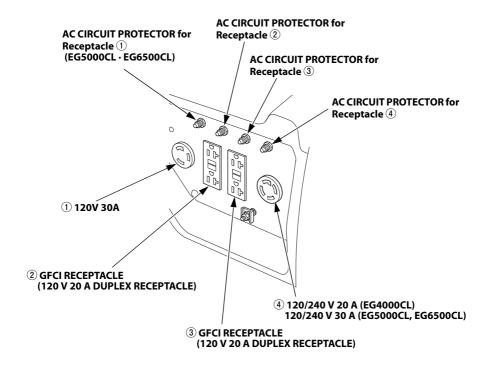
The AC circuit breaker will automatically switch OFF if there is a short circuit or a significant overload at the receptacles.

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

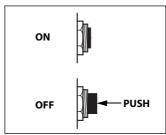


#### **AC Circuit Protectors**

The AC circuit protectors will automatically switch OFF if there is a short circuit or a significant overload of the generator at each receptacle. If an AC circuit protector switches OFF automatically, check that the appliance is working properly and does not exceed the rated load capacity of the circuit before resetting the AC circuit protector ON.



#### **AC CIRCUIT PROTECTOR**



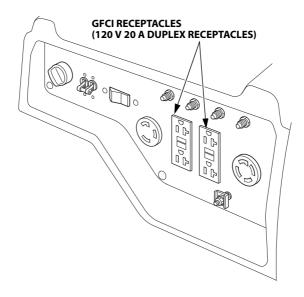
## **Ground Fault Circuit Interrupter (GFCI) Receptacle**

Each 120 V 20 A duplex receptacle is protected by a Ground Fault Circuit Interrupter (GFCI) for protection against the shock hazard of ground-fault currents.

An example of ground-fault current is the current that 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 GFCI will protect against current flowing through that person.

The GFCI will not protect against short circuit or overloads.

GFCIs can be expected to interrupt power supply if there are ground faults or stray current imposed on the wiring by other electrical devices, wiring, or equipment. Due to the risk of a power interruption, this generator is not recommended for powering medical or life support equipment.



## **CONTROLS & FEATURES**

#### **FEATURES**

## Oil Alert® System

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

If the engine stops and will not restart, check the engine oil level (see page 43) before troubleshooting in other areas.

## **Automatic Engine Stop Function**

#### **Oil Alert Function**

During operation, the engine will automatically stop if there is not enough oil in the tank. Moreover, if the generator is on a slope, the oil alert function may operate and stop the engine.

#### **Overspeed Detection Function**

To protect the engine from exceeding the engine load, the engine will automatically stop if the engine speed becomes abnormal.

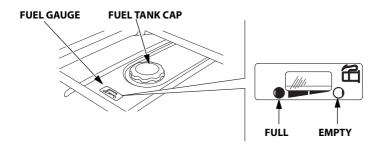
## **Abnormal Voltage Detection Function**

The engine will automatically stop during generation when it detects abnormal voltage.

If the engine stops, make sure the oil level is correct. Wait a few minutes, and then try to restart the engine. If the engine still won't start, take the generator to your authorized servicing Honda power equipment dealer.

## **Fuel Gauge**

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



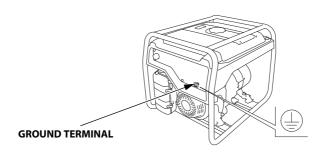
#### **Ground Terminal**

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.

#### **NEUTRAL FLOATING:**

- The generator (stator winding) is isolated from the frame and from the AC receptacle ground pin.
- Electrical devices that require a grounded receptacle pin connection will not function if the receptacle ground pin is not functional.



## **BEFORE OPERATION**

#### ARE YOU READY TO GET STARTED?

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

#### **Knowledge**

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

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

If the generator is being used to power appliances, be sure that they do not exceed the generator's load rating (see page 32).

#### IS YOUR GENERATOR READY TO GO?

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

# **AWARNING**

Failure to properly maintain this generator, or failing to correct a problem before operation, could result in a significant malfunction.

Some malfunctions can cause serious injuries or death.

Always perform a pre-operation inspection before each operation and correct any problems.

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

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

## **Check the Engine**

- Before each use, look around and underneath the engine for signs of oil or gasoline leaks.
- Check the oil level (see page 43). A low oil level will cause the Oil Alert system to shut down the engine or prevent it from starting.
- Check the air cleaner (see page 46). A dirty air cleaner element will restrict air flow to the carburetor, reducing engine and generator performance.
- Check the fuel level (see page 41). Starting with a full tank will help to eliminate or reduce operating interruptions for refueling.

#### **Check the GFCI**

Check the GFCI operation (see page 27) after starting the engine.

## **OPERATION**

#### SAFE OPERATING PRECAUTIONS

Before operating the generator for the first time, review chapters *GENERATOR SAFETY* (see page 6) and *BEFORE OPERATION* (see page 20).

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

# **AWARNING**

Exhaust contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas.

Breathing carbon monoxide can cause unconsciousness or death.

Never run this product's engine in a closed, or even partly closed area where people may be present.

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

- Use grounded 3-prong extension cords, tools, and appliances, or double-insulated tools and appliances.
- Inspect cords and plugs, and replace if damaged.
- Do not use cord lengths greater than 164 feet (50 meters), and do not use multiple tools and appliances with built-in noise filters. Such use may activate the GFCI.
- Make sure that the appliance is in good working order. Faulty appliances or power cords can create a potential for electric shock.
- Make sure the electrical rating of the tool or appliance does not exceed the rated power of the generator or the receptacle being used.
- Operate the generator at least 3 feet (1 meter) away from buildings and other equipment.
- Do not operate the generator in an enclosed structure.
- Do not place flammable objects close to the engine or locate the generator near flammable materials.

#### STARTING THE ENGINE

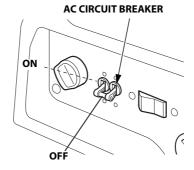
To prevent a possible fire, keep the generator at least 3 feet (1 meter) away from building walls and other equipment during operation. Do not place flammable objects close to the engine.

#### NOTICE

Operating this generator less than 3 feet (1 meter) from a building or other obstruction can cause overheating and damage the generator. For proper cooling, allow at least 3 feet (1 meter) of empty space above and around the generator.

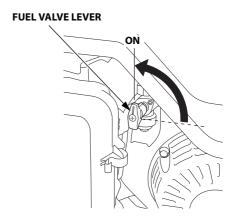
Refer to SAFE OPERATING PRECAUTIONS on page 22 and perform the IS YOUR GENERATOR READY TO GO checks (see page 20). Refer to AC OPERATION (see page 30) for connecting loads to the generator.

- 1. Make sure that all appliances are disconnected from the AC receptacle.
- 2. Make sure that the AC circuit breaker is in the OFF position.

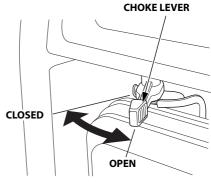


## **OPERATION**

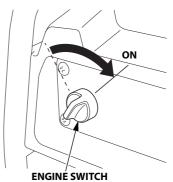
3. Turn the fuel valve lever to the ON position.



4. To start a cold engine, move the choke lever to the CLOSED position. To restart a warm engine, leave the choke lever in the OPEN position.



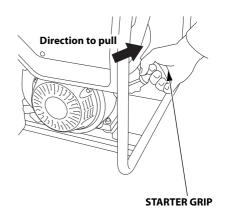
5. Turn the engine switch to the ON position.

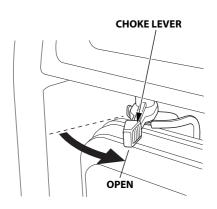


6. Pull the starter grip lightly until you feel resistance; then pull briskly in the direction of the arrow as shown.

#### NOTICE

- Do not allow the starter grip to snap back against the engine.
   Return it gently to prevent damage to the starter.
- Do not let the starter rope rub against the generator body, or the rope will wear out prematurely.
- 7. If the choke lever was moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.



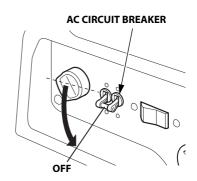


## **OPERATION**

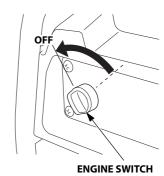
#### STOPPING THE ENGINE

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

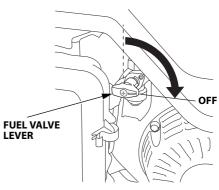
- 1. Turn off or disconnect all appliances that are connected to the generator.
- 2. Move the AC circuit breaker to the OFF position.



3. Turn the engine switch to the OFF position.



4. Turn the fuel valve lever to the OFF position.



#### **GFCI OPERATION CHECK**

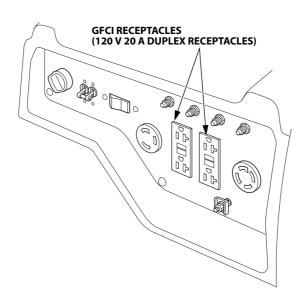
Always check GFCI operation before using the generator.

# **AWARNING**

A faulty GFCI system will not provide proper protection against electric shock as designed.

An electric shock can result in serious injury or death.

Always perform the GFCI system inspection before using the generator. If the GFCI system fails the test, the generator must be repaired by an authorized Honda servicing dealer before use.



## **OPERATION**

- 1. Unplug all tools and appliances from the generator.
- 2. Start the engine (see page 23).
- 3. Turn the AC circuit breaker to the ON position. When the GFCI is operating normally, the indicator will continuously light green.

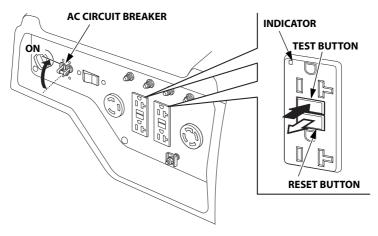
## Light order:

(red) Blink once  $\rightarrow$  (green) Light once  $\rightarrow$  (red) Blink once  $\rightarrow$  (green) Lights continuously

- If the green indicator does not light on, press the RESET button.
- If the red indicator starts to blink continuously, contact an authorized Honda generator dealer.

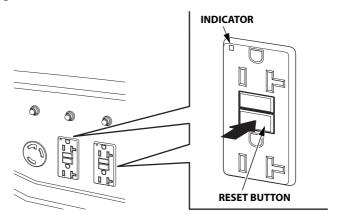
#### 4. Press the TEST button:

- The RESET button will pop out and the green indicator will go off.
- If the GFCI does not function as described, contact an authorized Honda generator dealer.



#### 5. Press the RESET button:

- The green indicator will light continuously.
- If the red indicator starts to blink continuously, contact an authorized Honda generator dealer.



When the RESET button pops out or the green indicator does not lit 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 RESET button extends, this usually indicates a faulty power tool, appliance, or cord. If that occurs, perform operation check steps 1 through 5 to verify that the GFCI is in proper working order. If the GFCI tests correctly, then the fault is likely to be in the power tool, appliance, or cord. Repair or replace the faulty power tool, appliance, or cord before further use.

## **OPERATION**

#### **AC OPERATION**

If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn it off immediately. Disconnect the appliance, and determine whether the problem is in the appliance or the rated load capacity of the generator has been exceeded.

#### NOTICE

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

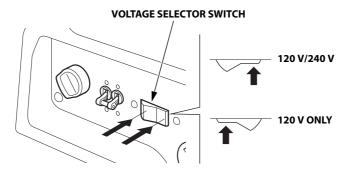
1. Turn the voltage selector switch to either position.

With the voltage selector switch in the "120V/240V" position, you can use the 120V and 120V/240V receptacles simultaneously. If you are NOT using 240 volts, then select the "120V ONLY" position.

#### NOTICE

Disconnect or turn OFF all appliances or tools connected to the generator before changing the voltage selector switch position.

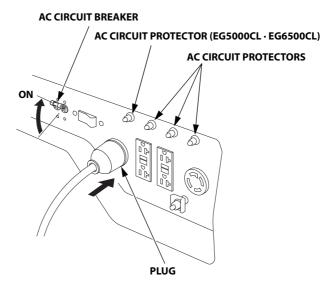
The generator may be damaged if the switch position is changed with loads connected and operating.



2. Start the engine (see page 23).

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

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



## 5. Turn on the appliance.

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

## **OPERATION**

## **AC Applications**

Before connecting an appliance or power cord to the generator:

- Make sure that it is in good working order. A faulty appliance or power cord 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 the rated load capacity of the generator has been exceeded.

Most appliance motors require more than their rated wattage for startup. Make sure the electrical rating of the tool or appliance does not exceed the maximum power rating of the generator.

#### Maximum power is:

EG4000CL: 4.0 kVA EG5000CL: 5.0 kVA EG6500CL: 6.5 kVA

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

EG4000CL: 3.6 kVA EG5000CL: 4.5 kVA EG6500CL: 5.5 kVA

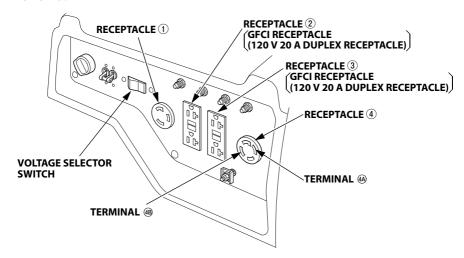
In either case, the total power requirements (VA) of all appliances connected must be considered. Appliance and power tool manufacturers usually list rating information near the model number or serial number.

## NOTICE

Substantial overloading will open the AC circuit breaker. Slightly overloading the generator may not switch the AC circuit breaker OFF, but will shorten the service life of the generator.

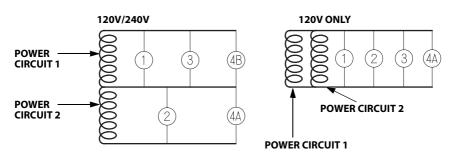
## **AC Receptacle Selection**

The control panel, shown below, has a voltage selector switch and four receptacles. Receptacle 4, the 240-volt receptacle, has two powered terminals, 4A and 4B.



## **Power Producing Circuits**

This generator is equipped with two power generating circuits. When the voltage selector switch is in the 120V/240V position, each of the two power producing circuits supplies power to specific receptacles. When the voltage selector switch is in the 120V ONLY position, the power producing circuits operate in parallel, sharing the total load connected to terminal 4A and receptacles 1, 2, and 3.



## **OPERATION**

## **Voltage Selector Switch**

The power available to each receptacle depends on the position of the voltage selector switch.

Switch	Receptacle		<b>Available Power</b>	•
Position	EG4000CL	EG5000CL	EG6500CL	
120V ONLY	1	30A at 120V	30A at 120V	30A at 120V
	2	20A at 120V	20A at 120V	20A at 120V
	3	20A at 120V	20A at 120V	20A at 120V
	<b>4A</b>	20A at 120V	30A at 120V	30A at 120V
	4B	None	None	None
120V/240V	1)	15.0A at 120V	18.8A at 120V	22.9A at 120V
	2	15.0A at 120V	18.8A at 120V	20A at 120V
	3	15.0A at 120V	18.8A at 120V	20A at 120V
	4A-4B	15.0A at 240V	18.8A at 240V	22.9A at 240V

#### 120V ONLY Position

When the voltage selector switch is in the 120V ONLY position, you do not need to spread the load over the receptacles. You must, however, make sure the load on any receptacle does not exceed its available power shown below and the total load does not exceed the total current available.

**Total Current Available:** 

30.0 A (EG4000CL)

37.5 A (EG5000CL)

45.8 A (EG6500CL)

#### 120V/240V Position

When the voltage selector switch is in the 120V/240V position, you must balance the load. Divide the load between the two sets of receptacles shown below. Balancing is necessary because each set of receptacles is powered by only one power producing circuit that can produce a maximum of amps(\*).

**\***.

15.0 A (EG4000CL)

18.8 A (EG5000CL)

22.9 A (EG6500CL)

Set of	Total Current Available			Power Producing	
Receptacles	EG4000CL	EG5000CL	EG6500CL	Circuit	
1) + 3) + 4B	15.0A	18.8A	22.9A	1	
2 + 4A	15.0A	18.8A	22.9A	2	

#### **STANDBY POWER**

### **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.

# **AWARNING**

Improper connections to a building's electrical system can allow current from the generator to backfeed into the utility lines.

Such backfeed may electrocute utility company workers or others who contact the lines during a power outage, and the generator may explode, burn, or cause fires when utility power is restored.

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

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

### **System Ground**

This generator has a system ground that connects generator frame components to ground terminals in the AC output receptacles. The system ground is not connected to the AC neutral wire.

### **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 that must be observed.

# SERVICING YOUR GENERATOR

#### THE IMPORTANCE OF MAINTENANCE

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

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

The maintenance schedule applies to normal operating conditions. If you operate your generator under unusual conditions, such as sustained high-load or high-temperature operation, or use it in dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

# **AWARNING**

Failure to properly maintain this generator, or failing to correct a problem before operation, could result in a significant malfunction.

Some malfunctions can cause serious injuries or death.

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

Remember that an authorized Honda 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, Honda Genuine parts or their equivalents for repair and replacement.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any engine repair establishment or individual, using parts that are "certified" to EPA standards.

#### **MAINTENANCE SAFETY**

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

# **AWARNING**

Improper maintenance can cause an unsafe condition.

Failure to properly follow maintenance instructions and precautions can cause serious injuries or death.

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

### **Safety Precautions**

Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:

- Carbon monoxide poisoning from engine exhaust.
   Operate outside away from open windows or doors.
- Burns from hot parts.
   Let the engine and exhaust system cool before touching.
- Injury from moving parts.
   Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a non-flammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

### SERVICING YOUR GENERATOR

#### **MAINTENANCE SCHEDULE**

REGULAR SERVICE PERIOD (3)			First	Every	Every	Every	
Perform at every indicated month		Each	month	3	6	year	
or operating hour interv	al,	use	or	months	months	or	Page
whichever comes first.			20 Hrs.	or	or	300 Hrs.	
ITEM				50 Hrs.	100 Hrs.		
Engine oil	Check level	0					43
	Change		0		0		44
Air cleaner	Check	0					46
	Clean			o (1)			48
GFCI operation	Check	0					27
Sediment cup	Clean				0		52
Spark plug	Check-adjust				0		49
	Replace					0	49
Spark arrester	Clean				0		51
Idle speed	Check-adjust					o (2)	_
Valve clearance	Check-adjust					o (2)	_
Combustion chamber	Clean		After e	very 1,000	Hrs. (2)		_
Fuel tank and filter	Clean				o (2)		_
Fuel tube	Check Every 2 years (Replace if necessary) (2)			_			
Canister	nister Check Every 2 years (2)			_			
Purge tube	Check	Every 2 years (2)		_			
Charge tube	Check	Every 2 years (2)			_		

- (1) Service more frequently when used in dusty areas.
- (2) These items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda shop manual for service procedures. See "Honda Publications" on page 70 for ordering information.
- (3) For commercial use, log hours of operation to determine proper maintenance intervals.

Failure to follow this maintenance schedule could result in non-warrantable failures.

#### **Tools**

A box wrench and wrench handle are supplied with the generator. Use the supplied tools to perform maintenance tasks. Using an incorrect tool may damage the generator.

#### **REFUELING**

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

# **AWARNING**

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- · Keep heat, sparks, and flame away.
- · Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.

#### NOTICE

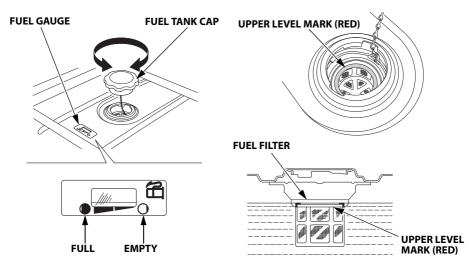
Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilled fuel is not covered under the Distributor's Limited Warranty.

Refuel in a well-ventilated area before starting the engine. If the engine has been running, allow it to cool. Refuel carefully to avoid spilling fuel. Do not fill above the upper level mark (see page 42) or fuel may flow into the charcoal canister causing fuel spillage. This overflow may also prevent the fuel tank from venting properly.

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

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

### SERVICING YOUR GENERATOR



After refueling, reinstall the fuel tank cap securely.

#### **FUEL RECOMMENDATIONS**

Unleaded gasoline

U.S.	Pump octane rating 86 or higher
Except U.S.	Research octane rating 91 or higher
	Pump octane rating 86 or higher

This engine is certified to operate on regular unleaded gasoline with a pump octane rating of 86 or higher. (a research octane rating of 91 or higher)

Never use gasoline that is stale, contaminated, or mixed with oil. Avoid getting dirt or water in the fuel tank.

You may use regular unleaded gasoline containing no more than 10% ethanol (E10) or 5% methanol by volume. In addition, methanol must contain cosolvents and corrosion inhibitors.

Use of fuels with content of ethanol or methanol greater than shown above may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of the fuel system.

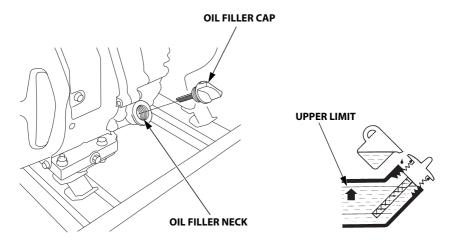
Engine damage or performance problems that result from using a fuel with percentages of ethanol or methanol greater than shown above are not covered under warranty.

If your equipment will be used on an infrequent or intermittent basis, please refer to the fuel section of the *STORAGE* chapter (see page 53) for additional information regarding fuel deterioration.

#### **ENGINE OIL LEVEL CHECK**

Check the engine oil level with the engine stopped and in a level position.

- 1. Remove the oil filler cap.
- 2. Check the oil level. If it is below the upper limit, fill with the recommended oil (see page 45) to the upper limit.
- 3. Reinstall the oil filler cap securely.



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

### **SERVICING YOUR GENERATOR**

#### **ENGINE OIL CHANGE**

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

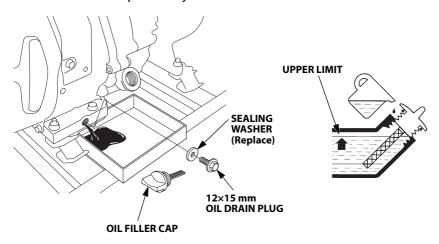
- 1. Place a suitable container below the engine to catch the used oil, and then remove the oil filler cap, 12×15 mm drain plug, and sealing washer.
- 2. Allow the used oil to drain completely, and then reinstall the 12×15 mm drain plug and a new sealing washer. Tighten the plug securely.

**TORQUE:** 16.6 lbf·ft (22.5 N·m, 2.25 kgf·m)

3. With the generator in a level position, fill with the recommended oil to the outer edge of the oil filler neck (see page 43).

**Maximum oil capacity:** 1.2 US qt (1.1 L)

4. Reinstall the oil filler cap securely.



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

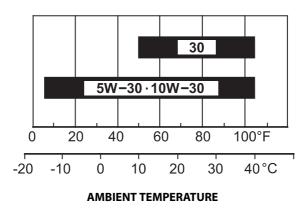
### NOTICE

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

#### **ENGINE OIL RECOMMENDATIONS**

Oil is a major factor affecting performance and service life. Use 4-stroke automotive detergent oil.

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

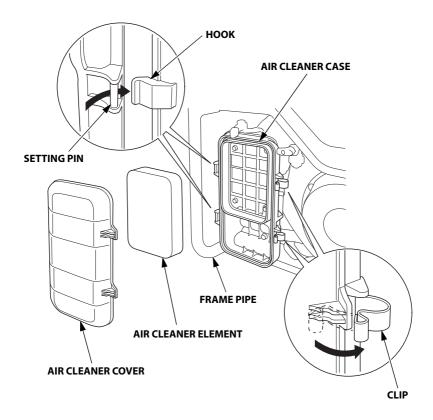


The SAE oil viscosity and service category are in the API label on the oil container. Honda recommends that you use API service category SJ or later (or equivalent) oil.

### SERVICING YOUR GENERATOR

#### **AIR CLEANER SERVICE**

- 1. Unsnap the air cleaner cover clips and open the air cleaner cover.
- 2. Free the hooks from the setting pins on the air cleaner case and remove the air cleaner cover to the right side of the frame pipe, taking care not to damage the air cleaner cover.
- 3. Remove the air cleaner element from the air cleaner case.
- 4. Check the air cleaner element to be sure it is clean and in good condition. If the air cleaner element is dirty, clean it as described on page 48. Replace the air cleaner element if it is damaged.

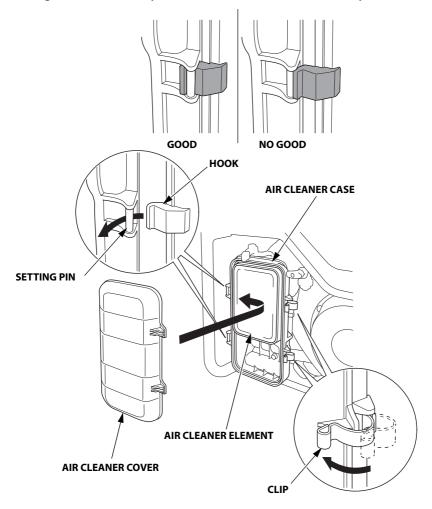


- 5. Reinstall the air cleaner element in the air cleaner case.
- 6. Set the hooks of the air cleaner cover to the setting pins securely, and then push the air cleaner cover to lock the clips.

  Be sure that the cover is set securely. There must be no clearance between the air cleaner cover and air cleaner case.

#### NOTICE

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

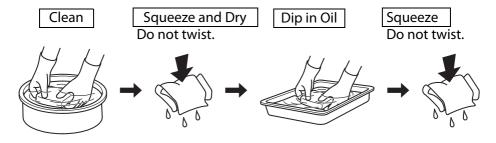


### **SERVICING YOUR GENERATOR**

#### AIR CLEANER ELEMENT CLEANING

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

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



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

#### **SPARK PLUG SERVICE**

**Recommended spark plug:** BPR5ES (NGK)

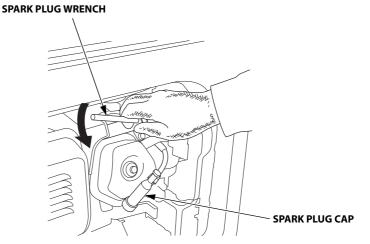
To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

#### NOTICE

An incorrect spark plug can cause engine damage.

If the engine is hot, allow it to cool before servicing the spark plug.

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

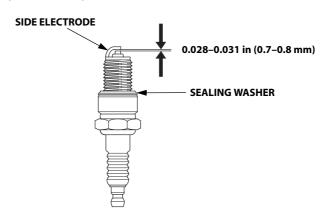


### **SERVICING YOUR GENERATOR**

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

  The gap should be:

0.028-0.031 in (0.7-0.8 mm)



- 5. Check that the spark plug sealing washer is in good condition, and thread the spark plug in by hand to prevent cross-threading.
- 6. 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.

**TORQUE:** 13.3 lbf·ft (18 N·m, 1.8 kgf·m)

### NOTICE

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

7. Attach the spark plug cap.

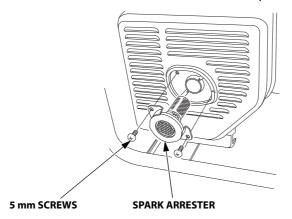
#### **SPARK ARRESTER SERVICE**

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

If the engine has been running, the muffler will be very hot. Allow the muffler to cool before servicing the spark arrester.

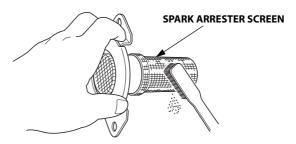
Clean the spark arrester as follows:

1. Remove the two 5 mm screws, and remove the spark arrester.



2. Use a brush to remove carbon deposits from the spark arrester screen. Be careful to avoid damaging the screen.

The spark arrester must be free of breaks and tears. Replace the spark arrester if it is damaged.



3. Install the spark arrester in the reverse order of removal.

#### SEDIMENT CUP CLEANING

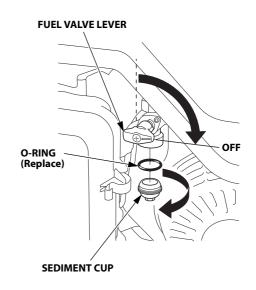
The sediment cup prevents dirt or water that may be in the fuel tank from entering the carburetor. If the engine has not been run for a long time, the sediment cup should be cleaned.

# **AWARNING**

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Keep away from your vehicle.
- · Wipe up spills immediately.
- 1. Turn the engine switch to the OFF position.
- Turn the fuel valve lever to the OFF position; then remove the sediment cup and the O-ring. Discard the O-ring.
- Clean the sediment cup in nonflammable solvent, and dry it thoroughly.
- Reinstall a new O-ring and sediment cup, and tighten the sediment cup securely.
- 5. Turn the fuel valve lever to the ON position and check for leaks.



# **STORAGE**

#### STORAGE PREPARATION

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

### Cleaning

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

#### **Fuel**

#### NOTICE

Depending on the region where you operate your equipment, fuel formulations may deteriorate and oxidize rapidly. Fuel deterioration and oxidation can occur in as little as 30 days and may cause damage to the carburetor and/or fuel system. Please check with your servicing dealer for local storage recommendations.

Gasoline will oxidize and deteriorate in storage. Old gasoline will cause hard starting, and it leaves gum deposits that clog the fuel system. If the gasoline in your generator deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced. The length of time that gasoline can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as gasoline blend, your storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Fuel deterioration problems may occur within a few months, or even less if the gasoline was not fresh when you filled the fuel tank.

The *Distributor's Limited Warranty* does not cover fuel system damage or engine performance problems resulting from neglected storage preparation. You can extend fuel storage life by adding a gasoline stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining the carburetor, sediment cup, and/or fuel tank.

# **STORAGE**

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 stabilizer*.
	Fill with fresh gasoline and add gasoline stabilizer*.
2 months to 1 year	Drain the carburetor float bowl (see page 55). Drain
	the fuel sediment cup (see page 52).
	Fill with fresh gasoline and add gasoline stabilizer*.
	Drain the carburetor float bowl (see page 55). Drain
	the fuel sediment cup (see page 52). Remove the
	spark plug. Put a teaspoon of engine oil into the
1 year or more	cylinder. Turn the engine slowly with the pull rope
1 year or more	to distribute the oil. Reinstall the spark plug.
	Change the engine oil (see page 44).
	After removal from storage, drain the stored
	gasoline into a suitable container, and fill with fresh
	gasoline before starting.

<sup>\*</sup> Use gasoline stabilizers that are formulated to extend storage life. Follow the manufacturer's instructions for use.

Contact your authorized Honda generator dealer for stabilizer recommendations.

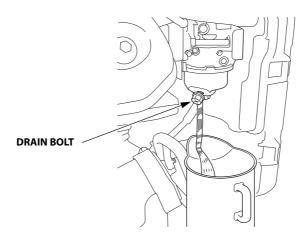
### Draining the Fuel Tank and Carburetor

# **AWARNING**

Gasoline is highly flammable and explosive.

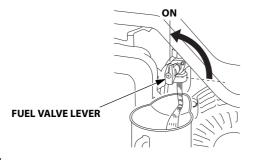
You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- · Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.
- 1. Place a suitable gasoline container below the carburetor.
- 2. Turn the fuel valve lever to the OFF position, loosen the carburetor drain bolt by turning 1 to 2 turns counterclockwise, and drain the fuel from the carburetor.



### **STORAGE**

- 3. Remove the sediment cup (see page 52), and then turn the fuel valve lever to the ON position and drain the fuel from the fuel tank.
- 4. After all the fuel has drained into the container, tighten the carburetor drain bolt securely.
- 5. Install the sediment cup and a new O-ring.
- 6. Turn the fuel valve lever to the OFF position.

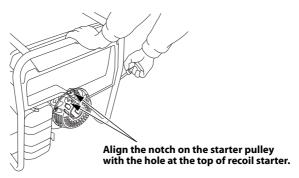


### **Engine Oil**

Change the engine oil (see page 44).

# **Engine Cylinder**

- 1. Remove the spark plug, and pour a teaspoon (5 cc) of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil, then reinstall the spark plug.
- 2. Slowly pull the starter grip until resistance is felt. At this point, the piston is coming up on its compression stroke, and both the intake and exhaust valves are closed. Storing the engine in this position will help to protect it from internal corrosion.



#### STORAGE PRECAUTIONS

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

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

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

Unless all fuel has been drained from the fuel tank, leave the engine switch in the OFF position, and the fuel valve lever in the OFF position (see page 26) to reduce the possibility of leakage.

Place the generator on a level surface. Tilting or laying it on its side can cause fuel or oil leakage.

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

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

#### REMOVAL FROM STORAGE

Check your generator as described in the *BEFORE OPERATION* chapter of this manual (see page 20).

If the generator was stored for 1 year or longer, drain the fuel tank (see page 56) and refuel with fresh gasoline. If you keep a container of gasoline for refueling, be sure that it contains only fresh gasoline. Gasoline oxidizes and deteriorates over time, causing hard starting.

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

# **TRANSPORTING**

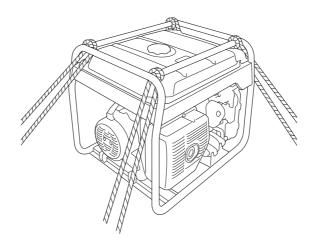
#### NOTICE

Do not lay the generator on its side when moving, storing, or operating it. Oil or fuel may leak and damage the engine or your property.

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

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

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



# **TAKING CARE OF UNEXPECTED PROBLEMS**

### **ENGINE WILL NOT START**

Possible Cause	Correction
Fuel valve lever OFF.	Turn lever ON (see page 24).
Choke OPEN.	Move to CLOSED unless engine is
	warm (see page 24).
Engine switch OFF.	Turn engine switch to ON
	(see page 24).
Out of fuel.	Refuel (see page 41).
Bad fuel; generator stored without	Drain fuel tank and carburetor
treating or draining gasoline, or	(see page 55).
refueled with bad gasoline.	Refuel with fresh gasoline
	(see page 41).
Low oil level caused Oil Alert to stop	Add oil (see page 43).
engine.	Turn engine switch to OFF and then
	restart the engine.
Spark plug faulty, fouled, or	Gap or replace spark plug
improperly gapped.	(see page 49).
Spark plug wet with fuel	Dry and reinstall spark plug.
(flooded engine).	
Fuel filter restricted, carburetor	Take the generator to an authorized
malfunction, ignition malfunction,	Honda servicing dealer, or refer to the
valves stuck, etc.	shop manual.

# **TAKING CARE OF UNEXPECTED PROBLEMS**

### **ENGINE LACKS POWER**

Possible cause	Correction
Air filter restricted.	Clean or replace air filter
	(see pages 46, 48).
Bad fuel; generator stored without	Drain fuel tank and carburetor
treating or draining gasoline, or	(see page 55).
refueled with bad gasoline.	Refuel with fresh gasoline
	(see page 41).
Fuel filter restricted, carburetor	Take the generator to an authorized
malfunction, ignition malfunction,	Honda servicing dealer, or refer to the
valves stuck, etc.	shop manual.

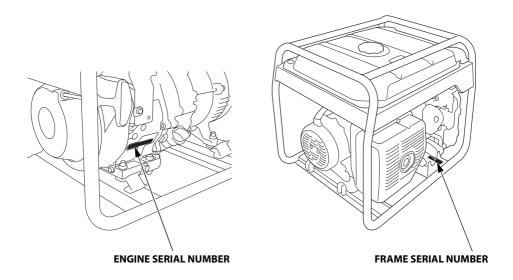
# **TAKING CARE OF UNEXPECTED PROBLEMS**

### **NO POWER AT THE AC RECEPTACLES**

Possible Cause	Correction
AC circuit breaker left in the OFF	Switch AC circuit breaker ON
position after starting.	(see page 30).
GFCI system activated.	GFCI receptacle
	(120 V 20 A duplex receptacle): Test
	GFCI and press the RESET button
	(see page 27).
	Replace or repair power tool or
	appliance.
AC circuit protector tripped.	Check AC load and reset AC circuit
	protector (see page 16).
Faulty power tool or appliance.	Replace or repair power tool or
	appliance.
	Stop and restart the engine.
Faulty generator.	Take the generator to an authorized
	Honda servicing dealer, or refer to the
	shop manual.

# **TECHNICAL INFORMATION**

### **Serial Number Location**



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

Engine serial number:	
Frame serial number:	
Date purchased:	

### **Carburetor Modification for High Altitude Operation**

At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your generator at altitudes above 2,000 feet (610 meters), have your authorized Honda servicing dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modifications for high altitude use, will meet each emission standard throughout its useful life.

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 2,000 feet (610 meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

### **TECHNICAL INFORMATION**

### **Emission Control System Information**

#### 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 appropriate air/fuel ratios and other emissions control systems to reduce the emissions of carbon monoxide, oxides of nitrogen, and hydrocarbons.

Additionally, Honda fuel systems utilize components and control technologies to reduce evaporative emissions.

#### The U.S. and California Clean Air Acts

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

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

### Tampering and Altering

# NOTICE

Tampering is a violation of Federal and California law.

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 intake, fuel, or exhaust systems.
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters.

### **Problems That May Affect Emissions**

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

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

### **Replacement Parts**

The emission control systems on your new Honda engine were designed, built, and certified to conform with applicable emission regulations. We recommend the use of Honda Genuine parts whenever you have maintenance done. These original-design replacement parts are manufactured to the same standards as the original parts, so you can be confident of their performance. The use of replacement parts that are not of the original design and quality may impair the effectiveness of your emission control system.

A manufacturer of an aftermarket part assumes the responsibility that the part will not adversely affect emission performance. The manufacturer or rebuilder of the part must certify that use of the part will not result in a failure of the engine to comply with emission regulations.

#### Maintenance

Follow the MAINTENANCE SCHEDULE on page 40. 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 dusty conditions, will require more frequent service.

### **TECHNICAL INFORMATION**

### Air Index (Models sold in California)

An Air Index Information label is applied to engines certified to an emission durability time period in accordance with the requirements of the California Air Resources Board.

The bar graph is intended to provide you, our customer, the ability to compare the emissions performance of available engines. The lower the Air Index, the less pollution.

The durability description is intended to provide you with information relating to the engine's emission durability period. The descriptive term indicates the useful life period for the engine's emission control system. See your *Emission Control System Warranty* (see page 77) for additional information.

Descriptive Term	Applicable to Emission Durability Period
Moderate	50 hours (0–80 cc, inclusive)
	125 hours (greater than 80 cc)
Intermediate	125 hours (0–80 cc, inclusive)
	250 hours (greater than 80 cc)
Extended	300 hours (0–80 cc, inclusive)
	500 hours (greater than 80 cc)
	1,000 hours (225 cc and greater)

### **Specifications**

#### **Dimensions**

Model	EG4000CL	EG5000CL	EG6500CL
Туре	AT1 type		
Description code	EBGC EBEC EBBC		
Length	26.8 in (681 mm)		
Width	20.9 in (530 mm)		
Height	22.5 in (571 mm)		
Dry mass [weight]	147.7 lbs	173.1 lbs	178.6 lbs
	(67.0 kg)	(78.5 kg)	(81.0 kg)

### **Engine**

Model	GX270T	GX390T		
Engine type	4-stroke, ov	4-stroke, overhead valve, single cylinder		
Displacement	16.5 cu-in (270 cm <sup>3</sup> )	23.7 cu-in (389 cm <sup>3</sup> )		
[Bore×Stroke]	[3.03×2.28 in	[3.46×2.52 in		
	(77.0×58.0 mm)]	(88.0×64.0 mm)]		
Compression ratio	8.5:1	8.2:1		
Engine speed		3,600 min <sup>-1</sup> (rpm)		
Cooling system		Forced air		
Ignition system		CDI magneto		
Oil capacity		1.2 US qt (1.1 L)		
Fuel tank capacity	6	6.34 US gal (24.0 L)		
Spark plug		BPR5ES (NGK)		

### Generator

Model		EG4000CL	EG5000CL	EG6500CL	
Type		AT1 type			
Rated voltage		120 V/240 V			
100	Rated frequency	60 Hz			
AC output	Rated current	30.0 A/15.0 A	37.5 A/18.8 A	45.8 A/22.9 A	
output	Rated output	3.6 kVA	4.5 kVA	5.5 kVA	
	Maximum output	4.0 kVA	5.0 kVA	6.5 kVA	

### Tuneup

ITEM	SPECIFICATION	MAINTENANCE
Spark plug gap	0.028–0.031 in (0.7–0.8 mm)	Refer to page 49
Valve clearance (cold)	IN: 0.15±0.02 mm EX: 0.20±0.02 mm	See your authorized Honda dealer.
Other specifications	No other adjustments needed.	

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

# **TECHNICAL INFORMATION**

# **Wiring Diagram**

# **Abbreviations**

Symbol	Part name
AC O	AC Outlet
AC CB	AC Circuit Breaker
CBB	Control Box Block
D-AVR	Digital-Automatic
	Voltage Regulator
D-CDI	Digital-CDI
ESw	Engine Switch
EgB	Engine Block
EX W	Exciter Winding
FrB	Frame Block
Fu	Fuse
FW	Field Winding
GeB	Generator Block
GFCI	Ground Fault Circuit
	Interrupter
GND	Ground
GT	Ground Terminal
IgC	Ignition Coil
J/B	Junction Box
MW	Main Winding
OLSw	Oil Level Switch
PoC	Power Coil
SP	Spark Plug
VSSw	Voltage Selector
	Switch

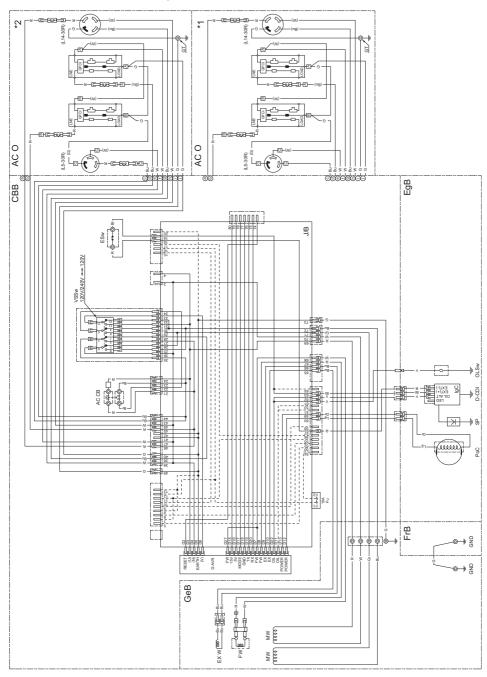
# Wire color code

BI	BLACK
Υ	YELLOW
Bu	BLUE
G	GREEN
R	RED
W	WHITE
Br	BROWN
Lg	LIGHT GREEN
Gr	GRAY
Lb	LIGHT BLUE
0	ORANGE
Р	PINK

# **Engine switch**

	IG	DC12V
OFF		
ON	0	0

### EG4000CL: \*1 · EG5000CL, EG6500CL: \*2



# **CONSUMER INFORMATION**

#### **Dealer Locator Information**

To find an authorized Honda Servicing Dealer anywhere in the United States, visit our website:

http://powerequipment.honda.com/dealer-locator

#### **Honda Publications**

### **Shop Manual**

This manual covers complete maintenance and overhaul procedures.

It is intended to be used by a skilled technician.

Available through your Honda dealer or visit

http://powerequipment.honda.com/support/shop-manuals

### **Parts Catalog**

This manual provides complete, illustrated parts lists. Available through your Honda dealer.

### **Accessories Catalog**

Your authorized Honda power equipment dealer offers a wide selection of accessories (optional equipment) to make your Generator even more useful. Visit http://powerequipment.honda.com/generators/accessories and click on Generators and Welders to see the entire catalog of accessories.

#### **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 Relations Office. You can write to:

American Honda Motor Co., Inc. Power Equipment Division Customer Relations Office 4900 Marconi Drive Alpharetta, Georgia 30005-8847

Or telephone: (770) 497-6400 8:30 am to 7:00 pm ET

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

- Model and serial numbers (see page 62)
- 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

### **Distributor's Limited Warranty**

This warranty is limited to the following Honda Power Equipment products when distributed by American Honda Motor Co., Inc., Power Equipment Division, 4900 Marconi Drive, Alpharetta, Georgia 30005-8847. The following warranty applies to products purchased at retail or placed in rental service on or after January 1, 2010.

PRODUCTS COVERED	<b>LENGTH OF WARRANTY (1)</b> (from date of original retail purchase)		
BY THIS WARRANTY	PRIVATE RESIDENTIAL (2)	COMMERCIAL/ RENTAL/INSTITUTIONAL	
EB2800i, EG2800i	36 months	12 months	
EU1000i	24 months	12 months	
Generators (all others except as listed above)	36 months	36 months	
The Parts & Accessories warranty is on page 75			

- (1) Length of Warranty: Batteries supplied with applicable products as standard, original equipment are covered by this warranty for a period of 12 months (private residential) or 3 months (commercial/rental/institutional use) from the date of original retail product purchase.
- (2) Private residential: Used in maintaining owner's primary and/or secondary residence. Any other use, including but not limited to informal "for hire" use, is considered commercial/rental/institutional use.

## To Qualify for this Warranty:

The product must be purchased in the United States, Puerto Rico, or the U.S. Virgin Islands from American Honda or a dealer authorized by American Honda to sell those products. This warranty applies to the first retail purchaser and each subsequent owner during the applicable warranty time period.

### What American Honda will Repair or Replace Under Warranty:

American Honda will repair or replace, at its option, any part that is proven to be defective in material or workmanship under normal use during the applicable warranty time period. Warranty repairs and replacements will be made without charge for parts or labor. Anything replaced under warranty becomes the property of American Honda Motor Co., Inc. All parts replaced under warranty will be considered as part of the original product, and any warranty on those parts will expire coincident with the original product warranty.

### **To Obtain Warranty Service:**

You must, at your expense, take the Honda Power Equipment product, accessory, replacement part, apparel, or the power equipment on which the accessory or replacement part is installed, and proof of purchase to any Honda Power Equipment dealer in the United States, Puerto Rico, or the U.S. Virgin Islands who is authorized to sell that product, during the dealer's normal business hours. To locate a dealer near you, visit our web site at http://powerequipment.honda.com/dealer-locator/. If you are unable to obtain warranty service or are dissatisfied with the warranty service you receive, contact the owner of the dealership involved; normally this will resolve the problem. However, if you should require further assistance, write or call the Power Equipment Customer Relations Dept. of American Honda Motor Co., Inc. at the following address:

American Honda Motor Co., Inc.
Power Equipment Customer Relations Dept.
4900 Marconi Drive
Alpharetta, GA 30005-8847 Telephone: (770) 497-6400

#### **Exclusions:**

- 1. Any damage or deterioration resulting from the following:
  - Neglect of the periodic maintenance as specified in this manual
  - Improper repair or maintenance
  - Operating methods other than those indicated in this manual
  - The use of non-genuine Honda parts and accessories other than those approved by Honda (other than recommended lubricants and fluids)
  - Exposure of the product to soot and smoke, chemical agents, bird droppings, sea water, salt or other corrosive environments
  - Collision, fuel contamination or deterioration, neglect, unauthorized alteration, misuse, incorporation or use of unsuitable attachments or parts
  - Natural wear and tear (natural fading of painted or plated surfaces, sheet peeling and other natural deterioration)
- 2. Consumable parts: Honda does not warrant parts deterioration due to natural wear and tear. The parts listed below are not covered by warranty (unless they are needed as a part of another warranted repair):
  - Spark plug, fuel filter, air cleaner element, clutch disc, tire, wheel bearing, recoil starter rope, cable, belt, cutter blade.
  - Lubricant: oil and grease.
- 3. Cleaning, adjustment, and normal periodic maintenance work (carburetor cleaning, engine oil draining, blade sharpening, belt and cable adjustments).
- 4. Any product that has ever been declared a total loss or sold for salvage by a financial institution or insurer.
- 5. Auger and paddle assemblies of snowthrowers, tiller tines of rototillers, mower blades and mower deck housings, are specifically not warranted against impact damage, including but not limited to, abrasive damage.

# Disclaimer of Consequential Damage and Limitation of Implied Warranties:

American Honda disclaims any responsibility for loss of time or use of the product, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written limited warranty. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions and limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## Honda Accessories, Replacement Parts, And Apparel

This warranty is limited to Honda Power Equipment parts, accessories, and apparel when distributed by American Honda Motor Co., Inc., 4900 Marconi Drive, Alpharetta, Georgia 30005-8847.

	LENGTH OF WARRANTY		
PRODUCTS COVERED	(from date of original retail purchase)		
BY THIS WARRANTY	PRIVATE	COMMERCIAL/	
	RESIDENTIAL	RENTAL/INSTITUTIONAL	
Accessories	12 months	3 months	
Replacement parts	6 months	3 months	
Apparel	6 months	3 months	

#### To Qualify for This Warranty:

- The accessories, replacement parts, or apparel must be purchased from American Honda, or a dealer, distributor, or distributor's dealer authorized by American Honda to sell those products in the United States, Puerto Rico, and the U.S. Virgin Islands. Parts and Accessories must be purchased for installation on original Honda equipment or engines to be eligible for warranty coverage. Installing parts and accessories on non-Honda products or engines voids this warranty.
- 2. You must be the first retail purchaser. This warranty is not transferable to subsequent owners.

#### What American Honda Will Repair or Replace Under Warranty:

American Honda will repair or replace, at its option, any Honda Power Equipment accessories, replacement parts, or apparel that are proven to be defective in material or workmanship under normal use during the applicable warranty time period. Anything replaced under warranty becomes the property of American Honda Motor Co., Inc. All parts replaced under warranty will be considered as part of the original product, and any warranty on those parts will expire coincident with the original product warranty.

Accessories and replacement parts installed by a dealer, distributor, or distributor's dealer who is authorized by American Honda to sell them will be repaired or replaced under warranty without charge for parts or labor. If installed by anyone else, accessories and replacement parts will be repaired or replaced under warranty without charge for parts, but any labor charges will be the responsibility of the purchaser.

Apparel will be repaired or replaced under warranty without any charge.

#### **To Obtain Warranty Service:**

You must, at your expense, take the Honda Power Equipment accessory, replacement part, apparel, or the Honda Power Equipment on which the accessory or replacement part is installed, and proof of purchase to any Honda Power Equipment dealer, distributor, or distributor's dealer in the United States, Puerto Rico, or the U.S. Virgin Islands who is authorized to sell that product, during the dealer's or distributor's normal business hours. To locate a dealer near you, go to our web site at http://powerequipment.honda.com/dealer-locator/. If you are unable to obtain warranty service or are dissatisfied with the warranty service you receive, contact the owner of the dealership or distributorship involved; normally this will resolve the problem. However, if you should require further assistance, write or call the Power Equipment Customer Relations Department of America Honda Motor Co., Inc. Refer to page 73 for contact information.

#### **Exclusions:**

This warranty does not extend to accessories, parts, or apparel affected or damaged by collision, normal wear, use in an application for which the product was not designed or any other misuse, neglect, incorporation or use of unsuitable attachments or parts, unauthorized alteration, improper installation, or any causes other than defects in material or workmanship of the product. Installing Parts and Accessories on non-Honda products or engines voids this warranty.

## Disclaimer of Consequential Damage and Limitation of Implied Warranties:

American Honda disclaims any responsibility for loss of time or use of the product, or the power equipment on which the product is installed, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written warranty. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions and limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## **Emission Control System Warranty**

Your new Honda Power Equipment engine complies with the U.S. EPA, Environment Canada, and State of California (models certified for sale in California only) emission regulations. American Honda Motor Co., Inc. provides the emission warranty coverage for engines in the United States and its territories. Honda Canada Inc. provides the emission warranty for engines in the 13 provinces and territories of Canada. In the remainder of this Emission Control System Warranty, American Honda Motor Company Inc. and Honda Canada Inc. will be referred to as Honda.

#### **Your Warranty Rights And Obligations**

#### California

The California Air Resources Board and Honda are pleased to explain the emission control system warranty on your 2019 and later Honda Power Equipment engine. In California, new spark-ignited small off-road equipment engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. Specific Honda products that do not meet the California emissions regulations can be identified by a "Not for sale in California" decal.

## Other States, U.S. territories, and Canada

In other areas of the United States and in Canada, your engine must be designed, built, and equipped to meet the U.S. EPA and Environment Canada emission standards for spark-ignited engines at or below 19 kilowatts.

#### All of the United States and Canada

Honda must warrant the emission control system on your power equipment engine for the period of time listed below, provided there has been no abuse, neglect, or improper maintenance of your power equipment engine. Where a warrantable condition exists, Honda will repair your power equipment engine at no cost to you including diagnosis, parts, and labor.

Your emission control system may include such parts as the carburetor or fuel injection system, the ignition system, and catalytic converter. Also included may be hoses, connectors, and other emission-related assemblies (see page 81 for additional covered parts).

### **Owner's Warranty Responsibility**

As the power equipment engine owner, you are responsible for completing all required maintenance listed in your owner's manual. Honda recommends that you retain all receipts covering maintenance on your power equipment engine, but Honda cannot deny warranty coverage solely for the lack of receipts or for your failure to ensure that all scheduled maintenance has been completed.

As the power equipment engine owner, you should however be aware Honda may deny you warranty coverage if your power equipment engine or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.

You are responsible for presenting your power equipment engine to a Honda Power Equipment dealer as soon as a problem exists. The emission related warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

or

If you have any questions regarding your emission warranty rights and responsibilities, you should contact the Honda office in your region:

American Honda Motor Co., Inc. Power Equipment Customer Relations

4900 Marconi Drive

Alpharetta, Georgia 30005-8847 Telephone: (888) 888-3139

Email: powerequipmentemissions

@ahm.honda.com

Honda Canada Inc.
Power Equipment
Customer Relations
180 Honda Blvd.
Markham, ON, L6C 0H9
Telephone: (888) 946-6329

#### **Warranty Coverage**

Honda power equipment engines sold in the United States and Canada are covered by this warranty for a period of two years from the date of delivery to the original retail purchaser or the length of the *Honda Distributor's Limited Warranty*, whichever is longer. This warranty is transferable to each subsequent purchaser for the duration of the warranty period.

If any emission-related part on your engine is defective, the part will be repaired or replaced by Honda without charge for diagnosis, parts, or labor. All defective parts replaced under this warranty become the property of Honda. Only Honda approved replacement parts may be used in the performance of any warranty repairs and must be provided without charge to the owner. A list of warranted parts is on page 81. Normal maintenance items, such as spark plugs and filters, that are on the warranted parts list are warranted up to their required replacement interval only.

Honda will also replace other engine components damaged by a failure of any warranted part during the warranty period.

Honda cannot deny coverage under the emission warranty solely for use of non-Honda replacement parts or service performed at a location other than an authorized Honda dealership; however, use of a part that is not functionally identical to the original equipment part in any respect that may in any way affect emissions (including durability) could result in denial of coverage. If such a non-Honda replacement part is used in the repair or maintenance of your engine, and an authorized Honda dealer determines it is defective or causes a failure of a warranted part, your claim for repair of your engine may be denied. If the part in question is not related to the reason your engine requires repair, your claim will not be denied.

#### **To Obtain Warranty Service**

You must, at your own expense, take your Honda Power Equipment engine or the product on which it is installed, along with your sales registration card or other proof of original purchase date, to any Honda Power Equipment dealer who is authorized by Honda to sell and service that Honda product during their normal business hours. Claims for repair or adjustment found to be caused solely by defects in material or workmanship will not be denied because the engine was not properly maintained and used.

If you are unable to obtain emission warranty service or are dissatisfied with the warranty service you received, contact the owner of the dealership involved. Normally this should resolve your problem. However, if you require further assistance, contact the Honda office in your region:

or

American Honda Motor Co., Inc. Power Equipment Customer

Relations

4900 Marconi Drive

Alpharetta, Georgia 30005-8847 Telephone: (888) 888-3139

Email: powerequipmentemissions

@ahm.honda.com

Honda Canada Inc. Power Equipment Customer Relations 180 Honda Blvd. Markham, ON, L6C 0H9

Telephone: (888) 946-6329

#### **Exclusions**

Failures other than those resulting from defects in material or workmanship are not covered by this warranty. This warranty does not extend to emission control systems or parts that are affected or damaged by owner abuse, neglect, improper maintenance, misuse, misfueling, improper storage, collision, the incorporation of, or use of, unsuitable attachments, or the unauthorized alteration of any part.

This warranty does not cover replacement of expendable maintenance items made in connection with required maintenance service after the item's first scheduled replacement as listed in the maintenance section of the product owner's manual, such as: spark plugs and filters.

### Disclaimer of Consequential Damage and Limitation of Implied Warranties

American Honda Motor Co., Inc. and Honda Canada Inc. disclaim any responsibility for incidental or consequential damages such as loss of time or the use of the power equipment, or any commercial loss due to the failure of the equipment; and any implied warranties are limited to the duration of this written warranty. This warranty is applicable only where the California, U.S. EPA, or Environment Canada emission control system warranty regulation is in effect.

## **Emission Control System Warranty Parts**

SYSTEMS COVERED BY THIS WARRANTY:	PARTS DESCRIPTION:
Fuel Metering	Carburetor assembly (includes starting enrichment
	system),
	Oxygen sensor, Throttle body,
	Engine temperature sensor,
	Engine control module, Fuel injector,
	Fuel regulator, Intake manifold
Evaporative	Fuel tank, Fuel cap, Fuel hoses,
	Vapor hoses, Carbon canister,
	Canister mounting brackets,
	Fuel strainer, Fuel valve, Fuel pump,
	Fuel hose joint, Canister purge hose joint
Exhaust	Catalyst, Exhaust pipe, Muffler (with catalyst)
Air Induction	Air cleaner case, Air cleaner element*
Ignition	Flywheel comp., Flywheel magneto, Ignition pulse
	generator, Crankshaft position sensor, Power coil,
	Ignition coil assembly, Ignition control module,
	Spark plug cap, Spark plug*
Crankcase Emission	Crankcase breather tube, Breather valve assembly,
Control	Oil filler cap
Miscellaneous Parts	Tubing, fittings, seals, gaskets, and clamps
	associated with these listed systems.

Note: This list applies to parts supplied by Honda and does not cover parts supplied by the equipment manufacturer. Please see the original equipment manufacturer's emissions warranty for non-Honda parts.

<sup>\*</sup>Covered up to the first required replacement only. See the *MAINTENANCE SCHEDULE* on page 40.

# **ASSEMBLY**

#### **SAFETY**

#### The Importance of Proper Assembly

Proper assembly is essential to operator safety and the reliability of the generator. Any error or oversight made by the person assembling and servicing a unit can easily result in faulty operation, damage to the generator, or injury to the operator.

# **AWARNING**

Improper assembly can cause an unsafe condition.

Failure to properly follow assembly procedures can lead to serious injury or death.

Follow the procedures and precautions in the assembly instructions carefully.

Some of the most important safety precautions are given in the *Important Safety Precautions* chapter.

However, we cannot warn you of every conceivable hazard that can arise in performing this assembly. Only you can decide whether or not you should perform a given task.

## **Important Safety Precautions**

and	e sure you have a clear understanding of all basic shop safety practices that you are wearing appropriate clothing and safety equipment. When orming this assembly, be especially careful of the following:		
	Read the instructions before you begin, and be sure you have the tool and skills required to perform the tasks safely.		
	e sure the engine is off before you begin any assembly, maintenance, or irs. This will help eliminate several potential hazards:		
	Carbon monoxide poisoning from engine exhaust.		
	Operate outside away from open windows or doors.		
	Burns from hot parts.		
	Let the engine and exhaust system cool before touching.		
	Injury from moving parts.		
	Do not run the engine unless the instruction tells you to do so. Even then, keep your hands, fingers, and clothing away. Do not run the engine when any protective guard or shield is removed.		

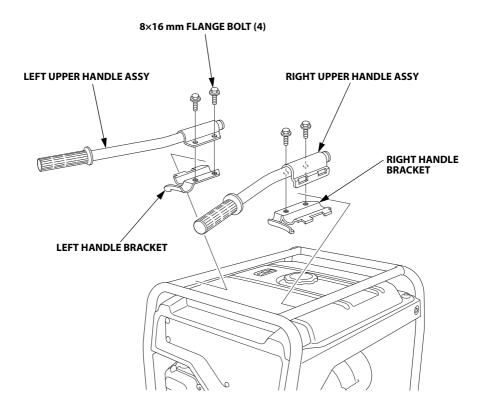
 To reduce the possibility of a fire or explosion, be careful when working around gasoline or batteries. Use only a non-flammable solvent, not gasoline, to clean parts. Keep all cigarettes, sparks, and flames away from all fuelrelated parts.

#### **ASSEMBLY**

## **HANDLE INSTALLATION (Optional Parts)**

Install the right and left handles on the generator upper frame using the handle brackets and four flange bolts.

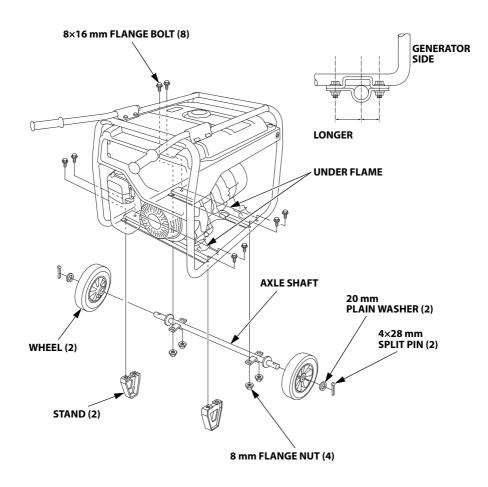
**TORQUE:** 17–22 lbf·ft (24–29 N·m, 2.4–3.0 kgf·m)



#### **WHEEL KIT INSTALLATION (Optional Parts)**

- 1. Install the two stands on the under frame using four 8×16 mm flange bolts.
- 2. Install the two wheels on the axle shaft using the plain washers and split pins. After installing the split pins, bend the pins to ensure that the wheels are secured to the axle.
- 3. Install the axle assembly on the generator using four  $8\times16$  mm flange bolts and 8 mm flange nuts.

**TORQUE:** 17–22 lbf·ft (24–29 N·m, 2.4–3.0 kgf·m)



# INITIAL USE INSTRUCTIONS

#### **ENGINE OIL**

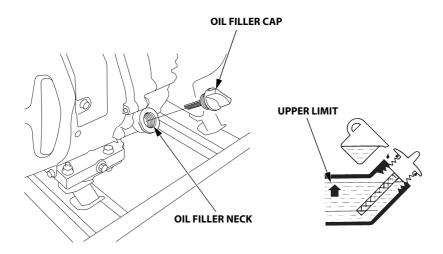
The generator is shipped **WITHOUT OIL** in the engine.

- 1. Place the generator on a level surface.
- 2. Remove the oil filler cap.
- 3. Add enough oil to bring the oil level to the upper limit of the oil filler neck. SAE 10W-30 API service category SJ or later (or equivalent) is recommended for general use; for additional recommendations (see page 45).

Maximum oil capacity: 1.2 US qt (1.1 L)

**Do not overfill the engine with oil.** If the engine is overfilled, the excess oil may be transferred to the air cleaner housing and air filter.

4. Reinstall the oil filler cap securely.



#### **FUEL**

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

This engine is certified to operate on unleaded gasoline with a pump octane rating of 86 or higher. Refer to page 42 for additional fuel recommendations.

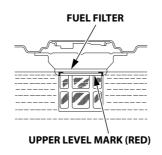
# **AWARNING**

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- · Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.
- 1. Remove the fuel tank cap.
- 2. Fuel carefully to avoid spilling fuel. Do not fill the fuel tank above the upper level mark (red) on the fuel filter.
- 3. After refueling, reinstall the fuel tank cap securely.







### INITIAL USE INSTRUCTIONS

#### NOTICE

Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilled fuel is not covered under the Distributor's Limited Warranty.

Move the generator at least 10 feet (3 meters) away from the fueling source and site before starting the engine.

#### **BEFORE OPERATION**

Before using the generator, all generator operators must read the following chapters and sections:

- GENERATOR SAFETY (see pages 6–10)
- CONTROLS & FEATURES (see pages 11–19)
- **BEFORE OPERATION** (see pages 20–21)
- **OPERATION** (see page 22)
- **STARTING THE ENGINE** (see pages 23–25)
- STOPPING THE ENGINE (see page 26)
- MAINTENANCE SCHEDULE (see page 40)

#### REGISTRATION

## **Please Register Your Generator**

If your dealer did not collect registration information from you, please take a few minutes and register your purchase with Honda. This allows us to contact you with any important updates regarding your generator. Please note registration is not required to obtain warranty service. You can register your generator by visiting the Honda Power Equipment website,

www.hondapowerequipment.com and selecting Product Registration. Your information will remain confidential. It will not be released to any other company or organization.

Α		
	Abnormal Voltage Detection Function	10
	AC Applications	
	AC Circuit Breaker	
	AC Circuit Dieacei	
	AC OPERATION	
	AC Receptacle Selection	
	AIR CLEANER ELEMENT CLEANING	
	AIR CLEANER SERVICE	
	Air Index	
	ARE YOU READY TO GET STARTED?	
	ASSEMBLY82,	
	Automatic Engine Stop Function	18
В		
	BEFORE OPERATION	88
	·	
C		
	Carbon Monoxide Hazards	. 6
	Carburetor Modification for High Altitude Operation	
	Check the Engine	
	Check the GFCI	
	Choke Lever	
	Cleaning	53
	COMPONENT & CONTROL LOCATIONS	11
	Connections to a Building's Electrical System	
	CONSUMER INFORMATION	70
	CONTENTS	. 3
	CONTROLS	
	CONTROLS & FEATURES	
	Customer Service Information	71
D		

Ε		
	Electric Shock Hazards	7
	Emission Control System Information	
	Emission Control System Warranty	
	Engine Cylinder	
	ENGINE LACKS POWER	60
	Engine Oil	
	ENGINE OIL CHANGE	
	ENGINE OIL LEVEL CHECK	
	ENGINE OIL RECOMMENDATIONS	45
	Engine Switch	13
	ENGINE WILL NOT START	
F		
	FEATURES	18
	Fire and Burn Hazards	7
	Fuel	53, 87
	Fuel Gauge	19
	FUEL RECOMMENDATIONS	42
	Fuel Valve Lever	14
G	i	
	GENERATOR SAFETY	6
	GFCI OPERATION CHECK	
	Ground Fault Circuit Interrupter (GFCI) Receptacle	
	Ground Terminal	
Н	1	
	HANDLE INSTALLATION (Optional Parts)	84
	Honda Publications	
ı		
-	IMPORTANT SAFETY INFORMATION	6
	Important Safety Precautions	

K		
	Knowledge	20
M	ı	
	MAINTENANCE SAFETY	
N		
	NO POWER AT THE AC RECEPTACLES	51
o		
	Oil Alert Function	18
	Operator Responsibility	
Ρ		
	Power Producing Circuits	33
Q		
	QUICK REFERENCE INFORMATION Inside back cover	er
R		
	REFUELING	
	Refuel With Care	
	REMOVAL FROM STORAGE	

	SAFE OPERATING PRECAUTIONS	22
	SAFETY	
	SAFETY LABEL LOCATIONS	ç
	SEDIMENT CUP CLEANING	
	Safety Precautions	39
	Serial Number Location	62
	SERVICING YOUR GENERATOR	38
	SPARK ARRESTER SERVICE	51
	SPARK PLUG SERVICE	49
	Special Requirements	
	Specifications	
	STANDBY POWER	
	Starter Grip	
	STARTING THE ENGINE	
	STOPPING THE ENGINE	
	STORAGE	
	STORAGE PRECAUTIONS	
	STORAGE PREPARATION	
	System Ground	36
_		
•		
	TAKING CARE OF UNEXPECTED PROBLEMS	59
	TECHNICAL INFORMATION	
	THE IMPORTANCE OF MAINTENANCE	
	The Importance of Proper Assembly	.82
	Tools	
	TRANSPORTING	58
V		
	Voltage Selector Switch	34
N		
•		
	WHEEL KIT INSTALLATION (Optional Parts)	
	Wiring Diagram	.68

# **QUICK REFERENCE INFORMATION**

Fuel	Туре	Regular unleaded gasoline with an
		ethanol content of no more than 10%
		and a pump octane rating of 86 or
		higher (see page 42)
Engine Oil	Туре	SAE 10W-30, API SJ or later (or
		equivalent), for general use
		(see page 45)
		Maximum oil capacity:
		1.2 US qt (1.1 L)
Spark Plug	Туре	BPR5ES (NGK)
	Electrode Gap	0.028-0.031 in (0.7-0.8 mm)
Maintenance	Before each use	Check engine oil level.
		Check air cleaner element.
		Check GFCI operation.
	First 20 hours	Change engine oil.
	Subsequent	See MAINTENANCE SCHEDULE
		(see page 40)

# **HONDA**