

# GENERATOR EU65is



**OWNER'S MANUAL** 

# Honda EU65is

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The"e-SPEC"mark symbolizes environmentally responsible technologies applied to Honda power equipment, which contains our wish to "preserve nature for generations to come."

Thank you for purchasing a Honda generator.

This manual covers operation and maintenance of the EU65is generator.

All information in this publication is based on the latest product information available at the time of approval for printing.

Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

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

Pay special attention to statements preceded by the following words:

AWARNING Indicates a strong possibility of severe personal injury or death if instructions are not followed.

CAUTION: Indicates a possibility of personal injury or equipment damage if instructions are not followed.

NOTE: Gives helpful information.

If a problem should arise, or if you have any questions about the generator, consult an authorized Honda dealer.

# **AWARNING**

Honda generator is designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the generator. Failure to do so could result in personal injury or equipment damage.

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#### **AWARNING**

To ensure safe operation —



 Honda generator is designed to give safe and dependable service if operated according to instructions.

Read and understand the Owner's Manual before operating the generator. Failure to do so could result in personal injury or equipment damage.



 Exhaust gas contains poisonous carbon monoxide. Never run the generator in an enclosed area. Be sure to provide adequate ventilation.

When installed inside, adequate ventilation should be provided.



 Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system.

#### **AWARNING**

To ensure safe operation -

- Stop the engine before refueling.
- Gasoline is extremely flammable and explosive under certain conditions. Refuel in a well ventilated area with the engine stopped.
- Keep away from cigarette, smoke and sparks when refueling the generator. Always refuel in a well-ventilated location.
- Wipe up spilled gasoline at once.

#### **AWARNING**

To ensure safe operation -

- Always make a pre-operation check (page 18) before you start the engine. You may prevent an accident or equipment damage.
- Place the generator at least 1 m (3 ft) away from buildings or other equipment during operation.
- Operate the generator on a level surface.

  If the generator is tilted, fuel spillage may result.
- Know how to stop the generator quickly and understand operation of all the controls. Never permit anyone to operate the generator without proper instructions.
- Keep children and pets away from the generator when it is in operation.
- 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.
- The engine exhaust system will be heated during operation and remain hot immediately after stopping the engine.
  - To prevent scalding, pay attention to the warning marks attached to the generator.
- Keep away from rotating parts while the generator is running.
- The generator is a potential source of electrical shocks when misused; do not operate with wet hands.
- Do not operate the generator in rain or snow and do not let it get wet.

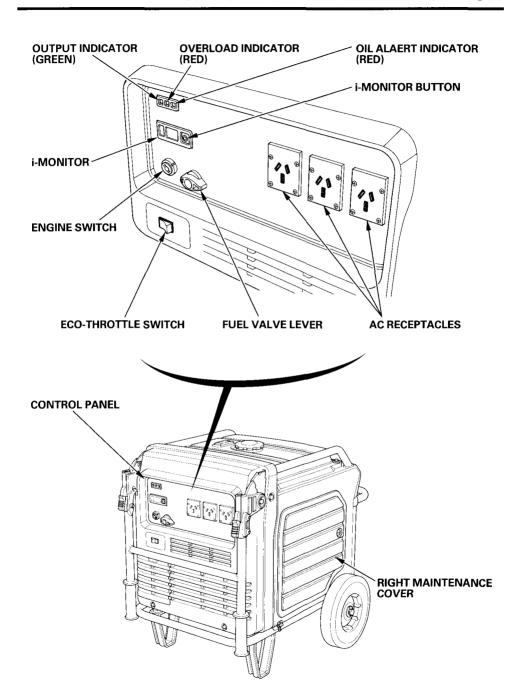
# 2. SAFETY LABEL LOCATIONS

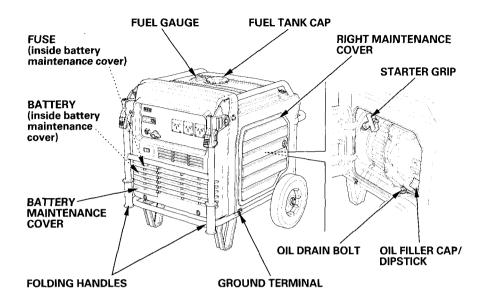
These labels warn you of potential hazards that can cause serious injury. Read the labels and safety notes and precautions described in this manual carefully.

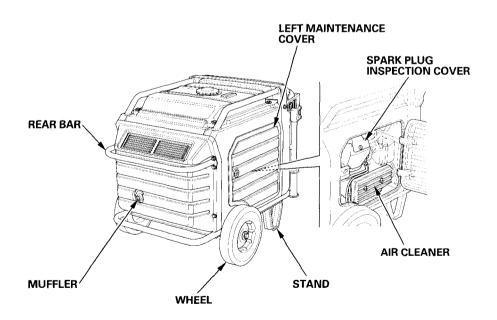
If a label comes off or becomes hard to read, contact your Honda dealer for a replacement.

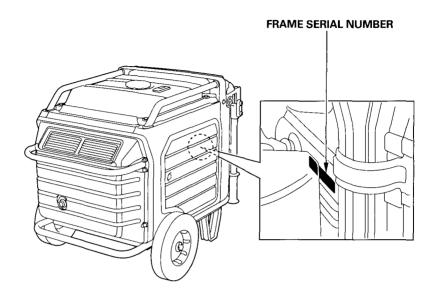


# 3. COMPONENT IDENTIFICATION









Record the frame serial number in the space below. You will need this serial number when ordering parts.

Frame serial number:		

#### **Eco Throttle**

#### ON:

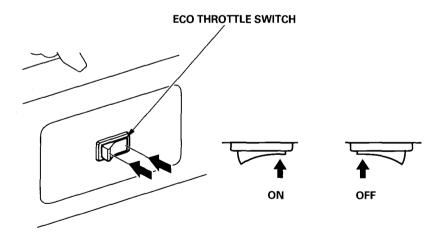
Engine speed is kept at idle automatically when the electrical appliance is disconnected and it returns to the proper speed by the electrical load when electrical appliance is connected. This position is recommended to minimize the fuel consumption while in operation.

#### NOTE:

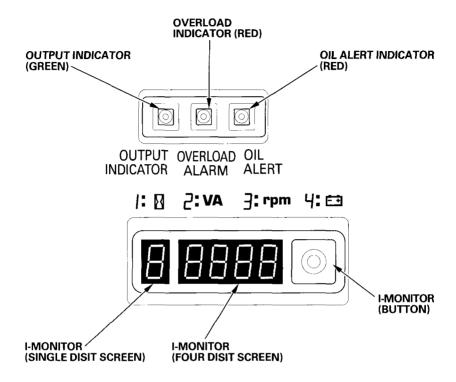
- When high electrical load appliances is connected simultaneously, turn the Eco Throttle switch to the OFF position to reduce voltage changes.
- Eco Throttle system does not operate sufficiently if the electrical appliance requires the momentary electric power.

#### OFF:

Eco Throttle system does not operate. Engine speed is kept over rated speed.



#### Indicators and i-Monitor



# **Output Indicator**

The output indicator (green) is illuminated when the generator is operating normally. It indicates that the generator is producing electrical power at the receptacles.

#### **Overload Indicator**

If the generator is overloaded, or if there is a short circuit in a connected appliance, or if the inverter is overheated, the overload indicator (red) will go ON. When the generator is operating overloaded, the overload indicator (red) will stay ON, and after about five seconds, current to the connected appliance(s) will shut off, and the output indicator (green) will go OFF.

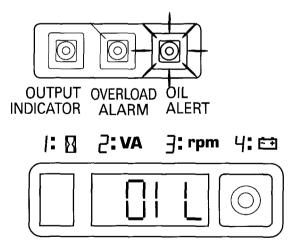
## Oil Alert system

The Oil Alert system is designed to prevent the 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 indicator comes on and the Oil Alert system automatically will stop the engine (the engine switch will remain in the ON position).

The i-Monitor display will show "OIL" on the screen and the Oil Alert indicator will illuminate.

If the engine stops or the Oil Alert indicator comes on when you turn the engine switch to the START position or pull the starter grip, check the engine oil level (see page 18) before troubleshooting in other areas.

Even when the oil is added to the engine, the generator will not restart until the Oil Alert indicator is reset. To reset the Oil Alert indicator, turn the engine switch to the OFF position, add the proper amount of oil (see page 18), and then turn the engine switch back to the ON position.



#### i-Monitor

The i-Monitor is a user interface that allows the operator to view (when the generator is running) total operating time in hours, generator output, engine RPM, battery voltage and error messages. The different display modes are selected by pressing the i-Monitor button.

# i-Monitor at Start Up

During start up, the i-Monitor display and all three indicators will simultaneously blink once. The condition of the i-Monitor display and all three indicators can be checked with the aid of an observer. Once the generator is running, the Output indicator (green) and the i-Monitor display will remain lit.

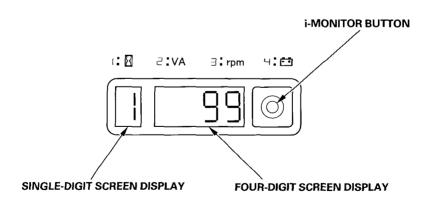
# **Backlight blinks**

When turning the engine switch to the ON position with having not start the engine over 30 seconds, display starts to blink.

Please start the engine or turn the engine switch to the OFF position.

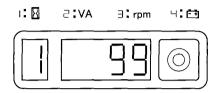
## i-Monitor Display

The i-Monitor display is divided into two screens. The single-digit screen display the i-Monitor mode which is represented by a number 1 through 4. The four-digit screen displays the four mode values total operating hours, power output, engine RPM and battery Voltage or any activated error messages.



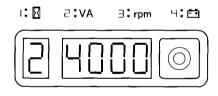
# i-Monitor Display Mode 1 — Total Operating Hours

This mode displays the total operating hours of the generator. When the generator is running, the total operating time accumulates. If the total operating time is less than one hour, the numeric display will be "0." When the operating time is one hour or greater, the display will be "1" or "2" and so on. Base the generator's maintenance schedule on the accumulated time displayed.



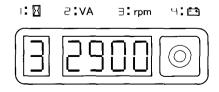
# i-Monitor Display Mode 2 — Power Output

This mode displays an approximate generator output on the display screen. The output is expressed in VA (volt amperes). The output value is not an exact measurement and should be regarded as a reference only. Power output will not display until a load is connected to the generator.

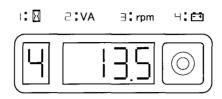


# i-Monitor Display Mode 3 — Engine RPM

When the i-Monitor is in this mode, the engine's speed, expressed in revolutions-per-minute (RPM) is displayed.



# i-Monitor Display Mode 4 — Battery Voltage This mode displays the battery condition, expressed in Volts DC.



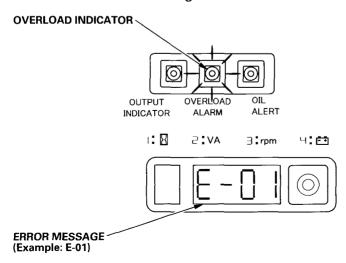
# i-Monitor Low Battery Message

If the engine switch is turned to the START position and "batt" is shown on the i-Monitor display, the battery voltage is too low to operate the engine's electric starter. Use the recoil starter to start the generator. Have the battery recharged and checked (see pages 43 thru. 45).



# i-Monitor System Error Messages

If the generator has a system malfunction, it will show an error message on the i-Monitor display. If an error message displays, contact an authorized Honda generator dealer.



# **Folding Handle**

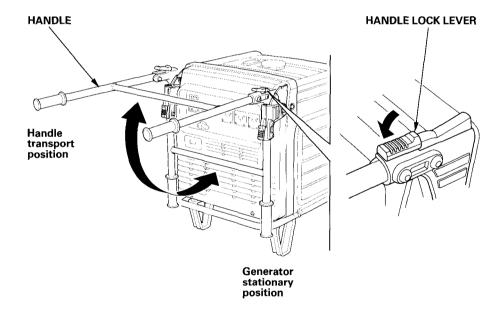
The foldable handle is intended for ease of transportation and should be folded when the generator is stationary. Do not rest objects on the extended handle.

#### To Extend The Handle

Lift handle upward. Lock levers will lock and secure the handle into place.

#### To Fold The Handle

- 1. Press both handle lock levers downward.
- 2. Lower the handle.



#### **Maintenance Covers**

Open and close the maintenance cover for maintenance of the your generator.

Open the maintenance cover, too, to use the recoil starter when the battery is discharged. Be sure to close the maintenance cover while the generator is running.

#### Work made with the right maintenance cover open:

• Engine oil inspection/replacement

# Work made with the left maintenance cover open:

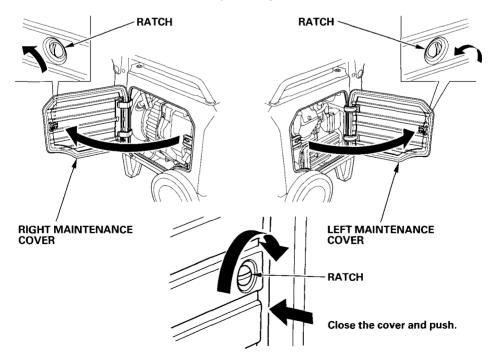
- Spark plug inspection/replacement
- Air cleaner inspection/cleaning
- Sediment cup cleaning

# To open:

Turn the ratch 90° to unlock and open the maintenance cover.

#### To close:

Turn the ratch 90° to lock while pushing the cover.



# 4. PRE-OPERATION CHECK

#### CAUTION:

Be sure to check the generator on a level surface with the engine stopped.

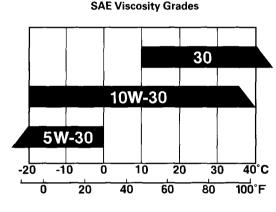
1. Check the engine oil level.

#### **CAUTION:**

Using non detergent oil or 2-stroke engine oil could shorten the engine's service life.

Use high-detergent, premium quality 4-stroke engine oil, certified to meet or exceed U.S. automobile manufacturer's requirements for API Service Classification SE or later (or equivalent).

Select the appropriate viscosity for the average temperature in your area.



AMBIENT TEMPERATURE

Open the right maintenance cover.

Remove the oil filler cap, and wipe the dipstick with a clean rag. Check the oil level by inserting the dipstick in the filler hole without screwing it in.

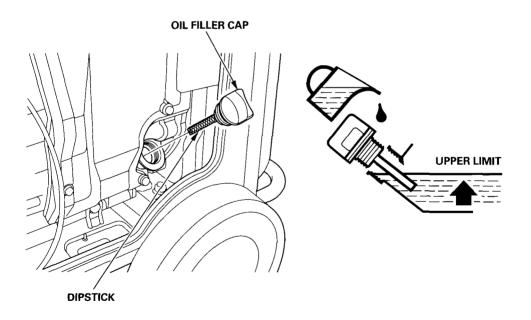
If the oil level is below the end of the dipstick, refill with recommended oil up to the top of the oil filler neck.

#### **CAUTION:**

Running the engine with insufficient oil can cause serious engine damage.

#### NOTE:

The Oil Alert System will automatically stop the engine before the oil level falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, it is still advisable to visually inspect the oil level regularly.



#### 2. Check the fuel level.

If the fuel level is low, remove the fuel tank cap and refill. Do not overfill.

After refueling, tighten the fuel tank cap securely.

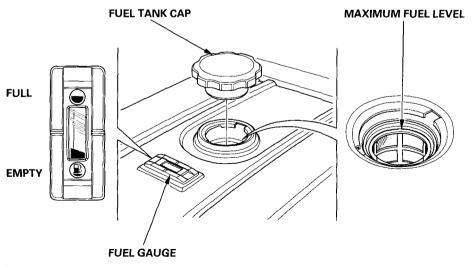
Use automotive unleaded gasoline with a Research Octane Number of 91 or higher (a Pump Octane Number of 86 or higher).

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

#### **AWARNING**

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

KEEP OUT OF REACH OF CHILDREN.



#### NOTE:

Gasoline spoils very quickly depending on factors such as light exposure, temperature and time.

In worst cases, gasoline can be contaminated within 1 month.

Using contaminated gasoline can seriously damage the engine (carburetor clogged, valve stuck).

Such damage due to spoiled fuel is disallowed from coverage by the warranty.

To avoid this please strictly follow these recommendations:

- Only use specified gasoline (see page 20).
- To slow deterioration, keep gasoline in a certified fuel container.
- If long storage (more than 1 month) is foreseen, drain fuel tank and carburetor.

# Gasolines containing alcohol

If you decide to use a gasoline containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other containing methanol.

Do not use gasohol that contains more than 10% ethanol. Do not use gasoline containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

#### NOTE:

- Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty.
  - Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.
- Before buying fuel from an unfamiliar station, try to find out if the fuel contains alcohol, if it does, confirm the type and percentage of alcohol used.
  - If you notice any undesirable operating symptoms while using a gasoline that contains alcohol, or one that you think contains alcohol, switch to a gasoline that you know does not contain alcohol.

#### 3. Check the air cleaner.

Open the left maintenance cover.

Loosen the cover screws and remove the air cleaner cover.

Remove the air cleaner element from the air cleaner cover.

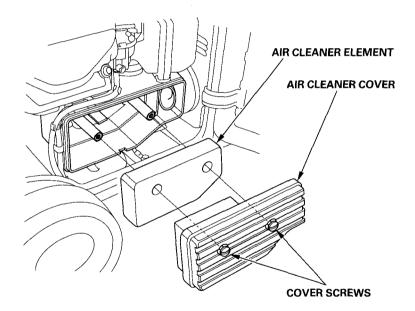
Check the air cleaner element to be sure it is clean and in good condition.

If the air cleaner element is dirty, clean it as described on page 36.

Replace the air cleaner element if it is damaged.

Reinstall the air cleaner element in the air cleaner cover and then install them and secure the cover screws.

Close the left maintenance cover.



#### **CAUTION:**

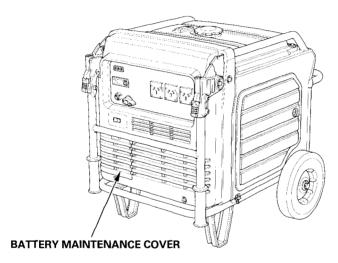
Never run the engine without the air cleaner element. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.

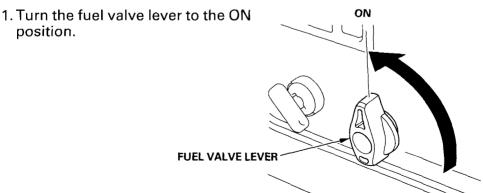
#### **CAUTION:**

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

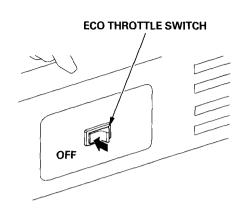
Before starting the engine disconnect any load from the AC receptacle.

Never operate the generator without the battery maintenance cover in place, as poor engine and generator performance will result.

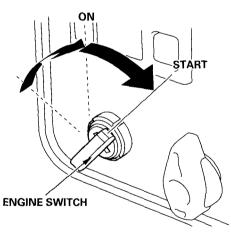




2. Make sure the Eco Throttle switch is in the OFF position, or more time will be required for warm up.



 Turn the engine switch to the START position and hold it there until the engine starts.
 Use the recoil starter when the battery voltage is too low to turn the starter motor (see page 25).



### **CAUTION:**

Do not use the starter motor for more than 5 seconds. If the engine fails to start, release the key, and wait at least 10 seconds before operating the starter motor again.

#### NOTE:

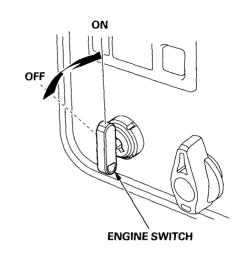
When the speed of the starter motor drops after a period of time, it is an indication that the battery should be recharged.

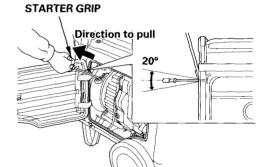
4. After the engine starts, let the engine switch return to the ON position.

- Use the recoil starter when the battery voltage is too low to turn the starter motor.
  - a. Turn the engine switch to the ON position.
  - b.Open the right maintenance cover by turning its latch counterclockwise.
  - c. Pull the starter grip lightly until you feel resistance, then pull briskly in the direction of the arrow as shown.

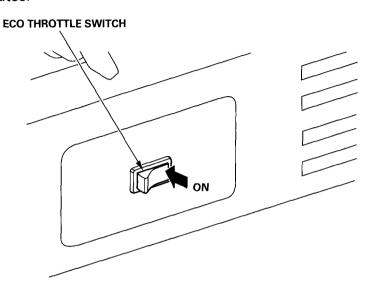
# NOTICE

- Do not exceed 20 degrees from horizontal when pulling the starter grip.
- 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.
- d.Close the right maintenance cover by turning its latch clockwise.





5. If you wish to use the Eco Throttle system, turn the Eco Throttle switch to the ON position after the engine has warmed up for 2 or 3 minutes.



# • High altitude operation

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

High altitude performance can be improved by specific modifications to the carburetor. If you always operate the generator at altitudes higher than 1,500-meter (5,000 feet) above sea level, have your authorized Honda dealer perform these carburetor modifications.

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

#### **CAUTION:**

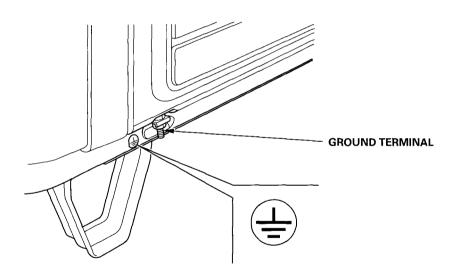
Operation of the generator at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture.

# 6. GENERATOR USE

Be sure to ground the generator when the connected equipment is grounded.

# AWARNING

Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system.

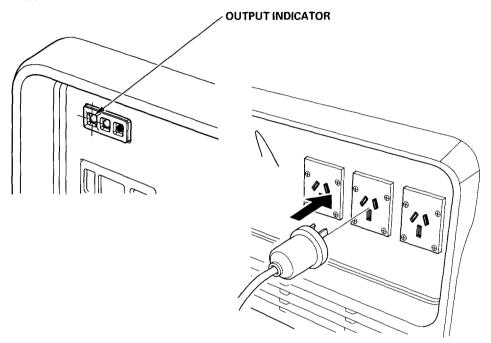


#### CAUTION:

- Limit operation requiring maximum power (see page 50) to 30 minutes.
  - For continuous operation, do not exceed the rated power (see page 50).
  - In either case, the total wattage of all appliances connected must be considered.
- Do not exceed the current limit specified for any one receptacle.
- Do not connect the generator to a household circuit. This could cause the damage to the generator or to electrical appliances in the house.
- Do not modify or use the generator for other purposes than it is intended for. Also observe the following when using the generator.
- Do not connect an extension to the exhaust pipe.
- When an extension cable is required, be sure to use a tough rubber sheathed flexible cable (IEC 245 or equivalent).
- Limit length of extension cables; 60 m for cables of 1.5 mm<sup>2</sup> and 100 m for cables of 2.5 mm<sup>2</sup>. Long extension cables will lower usable power due to resistance in the extension cable.
- Keep the generator away from other electric cables or wires such as commercial power supply lines.

## **AC** applications

- 1. Start the engine and make sure the output indicator (green) comes on.
- 2. Confirm that the appliance to be used is switched off, and plug in the appliance.



#### **CAUTION:**

- Substantial overloading that continuously lights the Overload indicator (red) may damage the generator. Marginal overloading that temporarily lights the Overload indicator (red) may shorten the service life of the generator.
- Be sure that all appliances are in good working order before connecting them to the generator. If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn off the generator engine switch immediately. Then disconnect the appliance, and examine it for signs of malfunction.

# **Output and Overload Indicators**

The Output indicator (green) will remain ON during normal operating conditions.

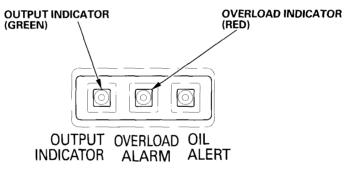
If the generator is overloaded (see page 50), or if there is a short in the connected appliance, the Output indicator (green) will go OFF, the overload indicator (red) will go ON and current to the connected appliance will be shut off.

Stop the engine if the Overload indicator (red) comes ON and investigate the overload source.

#### NOTE:

The Overload indicator (red) also lights in the following cases:

- When the inverter is overheated; the current to the connected appliance will be shut off. Check to see if the air intake is obstructed.
- Before connecting an appliance to the generator, check that it is in good order, and that its electrical rating does not exceed that of the generator. Then connect the power cord of the appliance, and start the engine.



## NOTE:

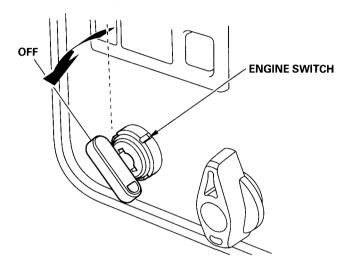
When an electric motor is started, both the Overload indicator (red) and the Output indicator (green) may go on simultaneously. This is normal if the Overload indicator (red) goes off after about five (5) seconds. If the Overload indicator (red) stays on, consult your Honda generator dealer.

# 7. STOPPING THE ENGINE

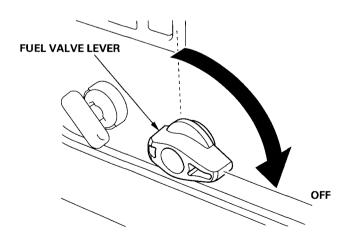
To stop the engine in an emergency, turn the engine switch to the OFF position.

#### IN NORMAL USE:

- 1. Switch off the connected equipment and pull off the inserted plug.
- 2. Turn the engine switch to the OFF position.



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



The purpose of the maintenance and adjustment schedule is to keep the generator in the best operating condition. Inspect or service as scheduled in the table below.

#### **AWARNING**

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

#### **CAUTION:**

Use genuine Honda parts or their equivalent. The use of replacement parts which are not of equivalent quality may damage the generator.

#### Maintenance Schedule

REGULAR SERVICE	Each use	First	Every	Every	Every	
Item			month	3 months	6 months	year
Performed at every indicated \			or	or	or	or
month or operating		20 hrs.	50 hrs.	100 hrs.	300 hrs.	
whichever comes first.						
Engine oil	Check level	0				
	Change		0		0	
Air cleaner	Check	0				
	Clean			0 (1)		
Sediment cup	Clean				0	
Spark plug	Check-adjust				0	
	Replace					0
Spark arrester	Clean				0	
Valve Clearance	Check-adjust					0 (2)
Combustion	Clean	After every 500 hrs. (2)				
chamber						
Fuel tank & filter	Clean				○ (2)	
Fuel line Check Every 2 years (Replace if necessary) (2)						(2)

<sup>(1)</sup> Service more frequently when used in dusty areas.

<sup>(2)</sup> These items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to Honda shop manual for service procedures.

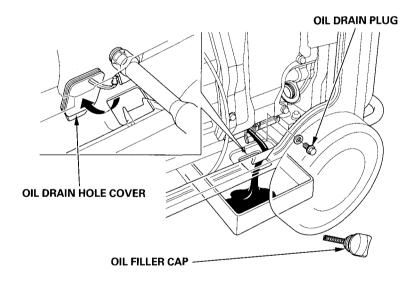
<sup>(3)</sup> For commercial use, log hours of operation to determine proper maintenance intervals.

#### 1. CHANGING OIL

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

- 1. Open the right maintenance cover and remove the oil drain hole cover.
- 2. Remove the oil filler cap and oil drain plug to drain the oil.
- 3. Install the oil drain plug, and tighten it securely.
- 4. Refill with the recommended oil (see page 18) and check the oil level.
- 5. Reinstall the oil drain hole cover and close the right maintenance cover.

**ENGINE OIL CAPACITY**: 1.12 ℓ (1.18 US gt , 0.99 Imp gt)



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

#### NOTE:

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

### 2. AIR CLEANER SERVICE

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

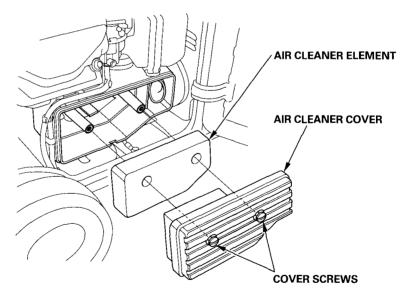
### AWARNING

Do not use gasoline or low flash point solvents for cleaning. They are flammable and explosive under certain conditions.

#### CAUTION:

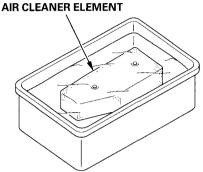
Never run the generator without the air cleaner. Rapid engine wear may result.

- 1. Open the left maintenance cover.
- 2. Loosen the cover screws and remove the air cleaner cover.

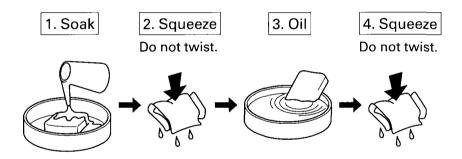


3. Remove the air cleaner element.

4. Clean the air cleaner element in warm soapy water, rinse, and allow to dry thoroughly, or clean in non-flammable solvent and allow to dry.



5. Dip the air cleaner element in clean engine oil, then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the filter.



- 6. Wipe dirt from the air cleaner housing and cover using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.
- 7. Install the air cleaner element to the air cleaner cover and reinstall the air cleaner cover and secure the cover screws.
- 8. Close the left maintenance cover.

### 3. FUEL SEDIMENT CUP SERVICE

### **AWARNING**

Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in the area.

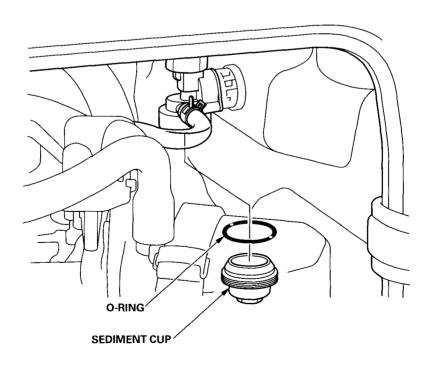
You can be burned or seriously injured when handling fuel.

Stop the engine and keep heat, sparks, and flame away.

Handle fuel only outdoors.

Wipe up spills immediately.

- 1. Turn the engine switch to the STOP position.
- 2. Turn the fuel valve lever to the OFF position.
- 3. Open the left maintenance cover.
- 4. Remove the sediment cup by turning it counterclockwise.
- 5. Wash the sediment cup in non-flammable solvent, and dry it thoroughly.
- 6. Reinstall the new O-ring and sediment cup.
- 7. Close the left maintenance cover.

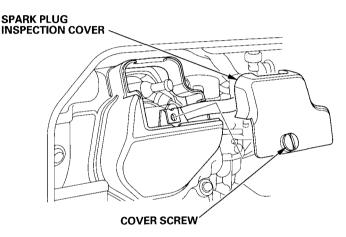


## 4. SPARK PLUG SERVICE

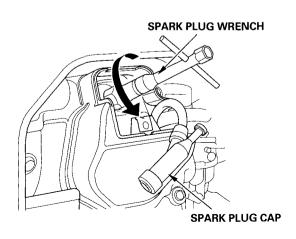
# RECOMMENDED SPARK PLUG: BPR5ES (NGK) W16EPR-U (DENSO)

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

- 1. Open the left maintenance cover.
- 2. Loosen the cover screw and remove the spark plug inspection cover.



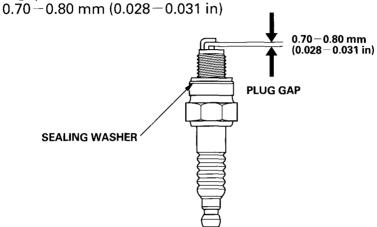
- 3. Disconnect the spark plug cap, and remove any dirt from around the spark plug area.
- 4. Remove the spark plug with a spark plug wrench.



- 5. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
- 6. Measure the plug gap with a feeler gauge.

Correct as necessary by carefully bending the side electrode.

The gap should be:



- 7. Install the spark plug carefully, by hand, to avoid cross-threading.
- 8. After a new spark plug has been seated by hand, it should be tightened 1/2 turn with a wrench to compress its washer.

If a used plug is being reinstalled, it should only require 1/8 to 1/4 turn after being seated.

9. Reinstall the spark plug inspection cover and tighten the cover screw.

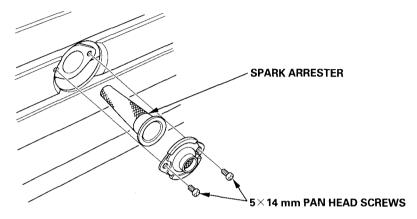
#### CAUTION:

- The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the generator.
- Never use a spark plug with an improper heat range.
- 10. Close the left maintenance cover.

### 5. SPARK ARRESTER CLEANING

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

1. Remove the two 5  $\times$  14 mm pan head 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 holes. Replace the spark arrester if it is damaged.

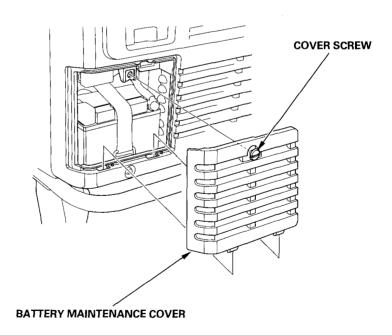


3. Install the spark arrester in the reverse order of removal.

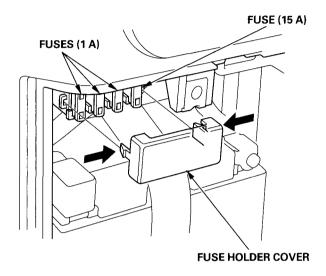
### 6. FUSE REPLACEMENT

In the event of fuse failure, locate the cause of failure and repair before you continue operation. If the fuse continues to fail, discontinue generator use and consult an authorized Honda generator dealer.

- 1. Turn the engine switch OFF and remove the key before checking or replacing the fuse.
- 2. Lift handle upward. Lock levers will lock and secure handle into place.
- 3. Loosen the cover screw and remove the battery maintenance cover.



- 4. Remove the fuse holder cover and pull the fuse out.
- 5. Replace the fuse with a fuse of the same type and rating.Specified fuse: 1A, 15A



### CAUTION:

- If frequent fuse failure occurs, determine the cause and correct the problem before attempting to operate the generator further.
- Never use a fuse with a different rating from that specified. Serious damage to the electrical system or fire may result.
- 6. Install the fuse holder cover and the battery maintenance cover in the reverse order of removal.

Never operate the generator without the battery maintenance cover in place, as poor engine and generator performance will result.

### 7. BATTERY REMOVAL/INSTALLATION

### **AWARNING**

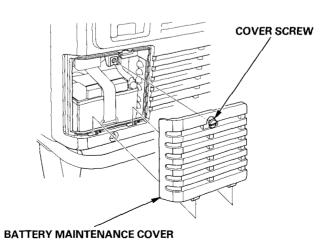
- Batteries produce explosive gases: If ignited, and explosion can cause serious injury or blindness. Provide adequate ventilation when charging.
- CHEMICAL HAZARD: Battery electrolyte contains sulfuric acid. Contact with eyes or skin, even through clothing, may cause severe burns. Wear a face shield and protective clothing.
- Keep flames and sparks away, and do not smoke in the area.
   ANTIDOTE: If electrolyte gets into your eyes, flush thoroughly with warm water for at least 15 minutes and call a physician immediately.
- POISON: Electrolyte is poison.

### **ANTIDOTE**

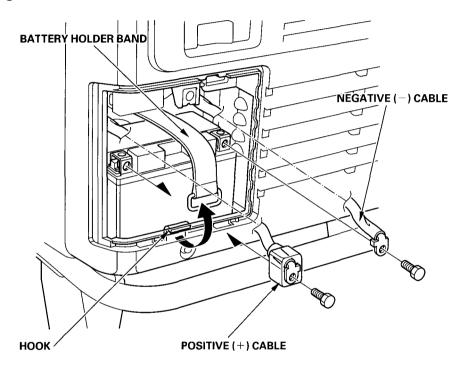
- External: Flush thoroughly with water.
- Internal: Drink large quantities of water or milk.
   Follow with milk of magnesia or vegetable oil, and call a physician immediately.
- KEEP OUT OF REACH OF CHILDREN.

### Removal:

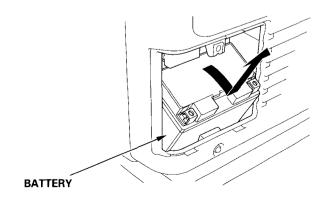
- 1. Turn the engine switch to the OFF position.
- 2. Lift handle upward. Lock levers will lock and secure handle into place.
- 3. Loosen the cover screw and remove the battery maintenance cover.



- 4. Remove the negative (-) cable from the battery negative (-) terminal, then remove the positive (+) cable from the battery positive (+) terminal.
- 5. Unhook the battery holder band from the bottom hook of the generator.



6. Remove the battery from the battery tray.



### Installation:

- 1. Make sure that the engine switch is turned OFF.
- 2. Install the battery. Connect the battery positive (+) cable to the battery positive (+) terminal, then the battery negative (-) cable to the battery negative (-) terminal. Tighten the bolts and nuts securely.
- 3. Install the battery holder band.
- 4. Install the battery maintenance cover, and tighten the cover screw. Never operate the generator without the battery maintenance cover in place, as poor engine and generator performance will result.

### CAUTION:

When disconnecting the battery cable, be sure to disconnect at the battery negative (-) terminal first. To connect, connect at the positive (+) terminal first, then at the negative (-) terminal. Never dis/connect the battery cable in the reverse order, or it causes a short circuit when a tool contacts the terminals.

# Charging:

The battery is rated at 11.2 Ah (ampere hours). Charging current should equal 10% of the battery's ampere hour rating.

# **AWARNING**

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

- The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
  - If electrolyte gets on your skin, flush with water.
  - -If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.
- Electrolyte is poisonous.
  - If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.
- 1. Connect the battery charger following the manufacturer's instructions.
- 2. Charge the battery.
- 3. Clean the outside of the battery and the battery tray compartment with a solution of baking soda and water.

# 9. TRANSPORTING/STORAGE

To prevent fuel spillage when transporting or during temporary storage, the generator should be secured upright in its normal operating position, with the engine switch OFF.

The fuel valve lever should be turned OFF.

### **AW**ARNING

When transporting the generator:

- Do not overfill the tank.
- Do not operate the generator while it is on a vehicle. Take the generator off the vehicle and use it in a well ventilated place.
- Avoid a place exposed to direct sunlight when putting the generator on a vehicle. If the generator is left in an enclosed vehicle for many hours, high temperature inside the vehicle could cause fuel to vaporize resulting in a possible explosion.
- Do not drive on a rough road for an extended period with the generator on board. If you must transport the generator on a rough road, drain the fuel from the generator beforehand.

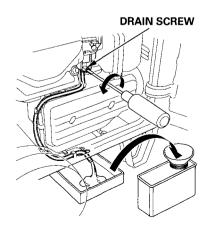
Before storing the unit for an extended period:

- 1. Be sure the storage area is free of excessive humidity and dust.
- 2. Drain the fuel.

## **▲WARNING**

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

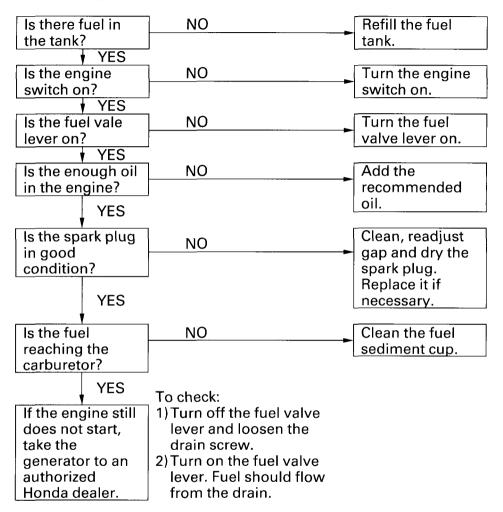
- a. Open the left maintenance cover and place a suitable container under the drain tube.
- b. Turn the fuel valve lever to the ON position. Loosen the drain screw and drain the gasoline from the carburetor and fuel tank.



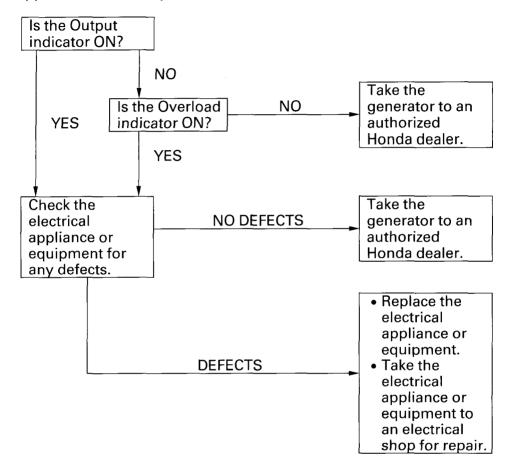
- c. After all the fuel has drained, tighten the carburetor drain screw securely and turn the fuel valve to the OFF position.
- d. Remove the sediment cup, and empty it and reinstall.
- 3. Change the engine oil (see page 34).
- 4. Remove the spark plug and pour about a tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil, then reinstall the spark plug.
- 5. 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.
- 6. Remove the battery maintenance cover and disconnect the battery negative (-) terminal (see page 44). Cover the battery cable negative terminal with vinyl tape.
- Once a month, recharge the battery. 7. Store the generator in clean area.

# 10. TROUBLESHOOTING

When the engine will not start:



# Appliance does not operate:



# 11. SPECIFICATIONS

**Dimensions and Weight** 

Model	EU65is	
Description code	EASJ	
Length	850 mm (33.5 in)	
[extended handle]	[1,195 mm (47.0 in)]	
Width	672 mm (26.5 in)	
Height	699 mm (27.5 in)	
[extended handle]	[716 mm (28.2 in)]	
Dry weight	115.0 kg (253.5 lbs)	

**Engine** 

Model	GX390K1
Engine type	4-stroke, overhead valve, single cylinder
Displacement	389.2 cm³ (23.74 cu-in)
Bore $ imes$ Stroke	88.0  imes 64.0 mm (3.2 in $ imes$ 2.5 in)
Compression ratio	8.0
Engine speed (Eco Throttle ON)	2,400 – 3,600 rpm
Cooling system	Forced air
Ignition system	Full transistor
Oil capacity	1.12 l (1.18 US qt , 0.99 lmp qt)
Fuel tank capacity	16.5 ℓ (4.36 US gal , 3.63 Imp gal)
Spark plug	BPR5ES (NGK)
	W16EPR-U (DENSO)

Generator

	Model	EU65is	
	Туре	U	
	Rated Voltage	240 V	
AC	Rated Frequency	50 HZ	
output	Rated Ampere	22.9 A	
	Rated Output	5500 VA	
	Max Output	6500 VA	

# 12. INSTALLATION OF KIT PARTS

### STANDARD KIT PARTS

### Wheel Kit Installation

Do not operate the generator without the wheel kit installed. The wheel kit provides an air space between the ground and the generator air intake.

#### NOTE:

If the wheel kit is not installed, it may be possible for dirt and debris to be drawn into the generator air intake causing possible generator damage. Always operate the generator with the wheel kit installed.

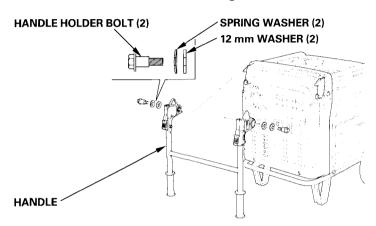
- 1. Install the two wheels on the axle shaft using the washers and cotter pins.
- 2. Install the axle assembly on the generator using four 8  $\times$  25 mm flange bolts and four 8 mm washers (t=2.3 mm).
- 3. Install the two stands on the under frame using four 8  $\times$  25 mm flange bolts and four 8 mm washers (t=6 mm).

**TORQUE**: 24-29 N·m (2.4-3.0 kgf·m, 17-22 lbf·ft) 8 mm WASHER (4) (t=6 mm) SHORTER 8 mm WASHER (4) (t=2.3 mm)**AXLE** 20 mm WASHER (2) 10 4.0×2.8 mm **COTTER PIN (2)** STAND (2) 8×25 mm FLANGE BOLT (4) 8×25 mm WHEEL (2) FLANGE BOLT (4)

# **Handle Installation**

Install the handle assembly on the generator upper frame using the 12 mm washers, spring washers and handle holder bolts.

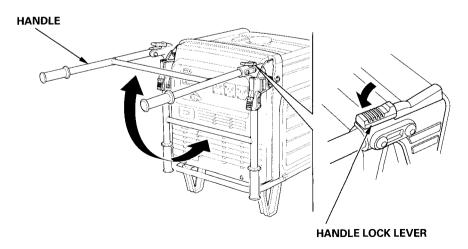
**TORQUE**: 20-23 N·m (2.0-2.3 kgf·m , 14-17 lbf·ft)



Operation must be checked after attaching a handle.

## To extend handle:

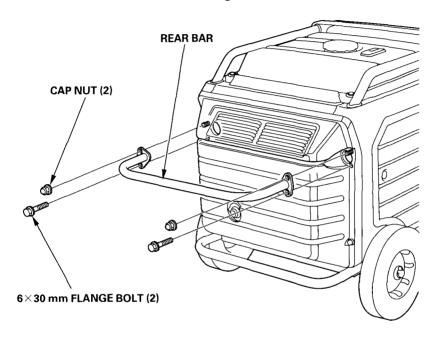
Raise the handle to the horizontal position. The handle will click into place when locked.



### **Rear Bar Installation**

Install the rear bar on the generator frame using the two 6  $\times$  30 mm flange bolts and two cap nuts.

**TORQUE**:  $9-13 \text{ N} \cdot \text{m} (0.9-1.3 \text{ kgf} \cdot \text{m}, 6.5-9 \text{ lbf} \cdot \text{ft})$ 

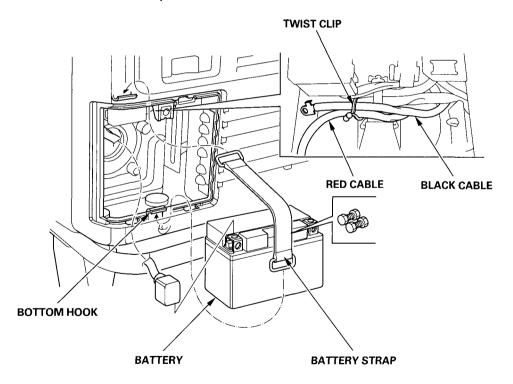


## **Battery**

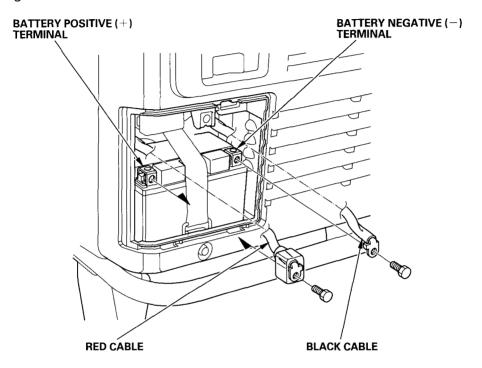
**WARNING**: Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling**.

The battery is disconnected and strapped into the battery tray for shipment.

- 1. Remove the battery maintenance cover (see page 41).
- 2. Remove the battery strap from the bottom hook, and then remove the battery.
- 3. Remove the red cable and the black cable from the twist clip, and reinstall the battery.



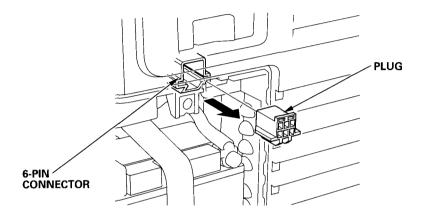
- 4. Remove the protective cover from the battery positive (+) terminal, connect the red cable to the battery positive (+) terminal.
- 5. Connect the black cable to the battery negative (-) terminal.
- 6. Secure the battery by hooking the strap onto the bottom hook of the generator.



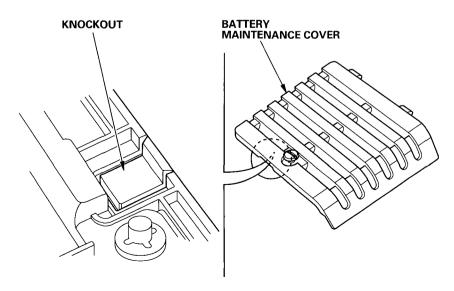
### **OPTIONAL KIT PARTS**

# **Remote Control Kit**

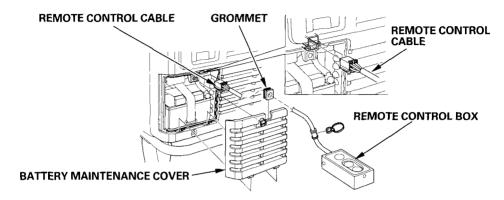
- 1. Remove the battery maintenance cover (see page 41).
- 2. Remove the plug from the 6-pin connector.



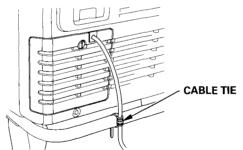
3. View the back of the battery maintenance cover and locate the knockout near the top center of the cover. Carefully remove the knockout.



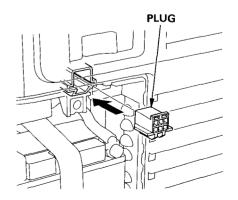
- 4. Pass the remote control cable through the supplied wire grommet and fit the grommet into the battery maintenance cover knockout.
- 5. Plug the remote control cable into the 6-pin connector.
- 6. Install the battery maintenance cover and tighten the cover screw.



7. To avoid accidentally unplugging the remote control cable, secure the cable to the generator frame with a cable tie as shown.

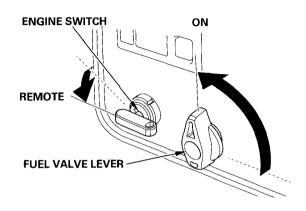


- Never operate the generator without the battery maintenance cover in place, as poor engine and generator performance will result.
- When the remote control is not being used, replace the plug on the connector.



# Starting the engine with remote control:

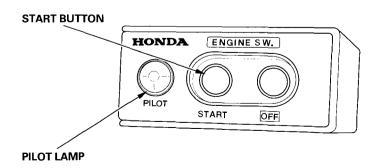
- 1. Turn the fuel valve lever to the ON position.
- 2. Turn the engine switch to the REMOTE (far left) position.



Press and hold the start button until the engine pilot lamp illuminates. The start button will automatically be disabled after the engine starts.

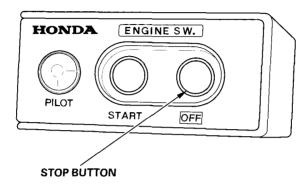
### **CAUTION:**

Do not use the starter motor for more than 5 seconds. If the engine fails to start, release the start button, and wait at least 10 seconds before operating the starter motor again.

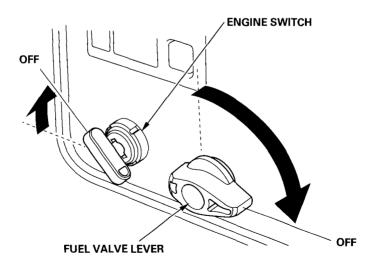


# Stopping the engine:

1. Press the stop button.



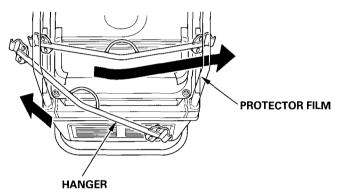
- 2. Turn the engine switch to the OFF position.3. Turn the fuel valve lever to the OFF position.



# **Hanger Kit**

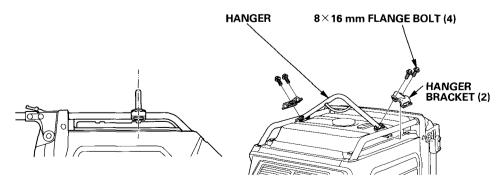
Protect the fuel tank and frame pipe with the protector films during installation of the hanger.

- 1. Insert the bracket installation part at one end of the hanger into the clearance between the frame pipe and fuel tank.
- 2. Slide the hanger and insert another bracket installation part of the hanger into the gap between the frame pipe and fuel tank on the other side.



3. Slide the hanger along the frame pipe to align the center of the hanger with the recessed part on the rear side of the fuel tank. Install the hanger brackets on both ends of the hanger and tighten the 8  $\times$  16 mm flange bolts securely.

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



# 13. WIRING DIAGRAM

ACM	Auto Choke Motor	MW	Main Winding
ACOR	AC Output Receptacle	OAL	Oil Alert Indicator
BAT	Battery	OI	Overload Indicator
CPB	Control Panel Block	OLSw	Oil Level Switch
CSw	Combination Switch	OP	Optional
EcoSw	Eco Throttle Switch	PL	Output Indicator
EgB	Engine Block	RCB	Remote Control Block
FrB	Frame Block	RcBX	Remote Control Box
FuB	Fuse Box	SeW	Sub Winding
GeB	Generator Block	SP	Spark Plug
GeCU	Generator Control Unit	StM	Starter Motor
GT	Ground Terminal	TCM	Throttle Control Motor
lgC	Ignition Coil	TSe	Te Sensor
lgPG	Ignition Pulse Generator		
l ĭU l	Inverter Unit		·
IUB	Inverter Unit Block		

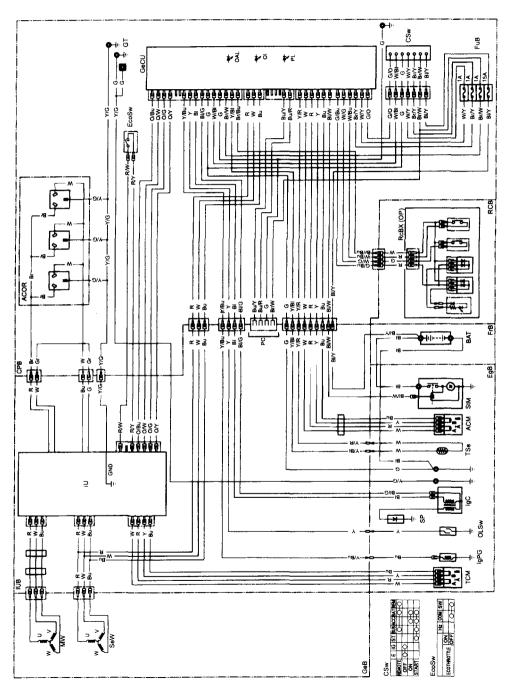
BI	BLACK
Υ	YELLOW
Bu	BLUE
G	GREEN
R	RED
W	WHITE
Br	BROWN
Lg	LIGHT GREEN
Gr	GRAY
Lb	LIGHT BLUE
0	ORANGE
Р	PINK

### COMBINATION SWITCH

	E	IG	ST	SUB	ACC	BAT	REM
REMOTE				0-		0	0
OFF	0	-0					
ON					0	0	
START			0	-0			

# **ECOTHROTTLE SWITCH**

<u> </u>						
	R/W	R/Y	ECOTHROTTLE			
ON	0	0	OFF			
OFF			ON			



# 14. MAJOR Honda DISTRIBUTOR ADDRESSES

# For Australian

NAME OF FIRM (COMPANY)	ADDRESS	TEL: FAX:
Honda Australia Motorcycle and Power	1954-1956 Hume Highway	Tel: (03) 9270 1111
Equipment Pty. Ltd	Campbellfield Victoria 3061	Fax: (03) 9270 1133

# HONDA The Power of Dreams

