

HONDA

PORTABLE GENERATOR

ED1000

OWNER'S MANUAL

This manual covers operation and maintenance of the ED1000 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. The manual should be considered a permanent part of the generator and remain with the generator when sold.

Read the manual carefully. Pay special attention to statements preceded by the following words:

WARNING

Indicates a possibility of personal injury or loss of life if instructions are not followed.

CAUTION

Indicates a possibility of equipment damage if instructions are not followed.

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

Thank you for purchasing a Honda Generator.

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WARNING

The 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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GENERATOR SAFETY

WARNING

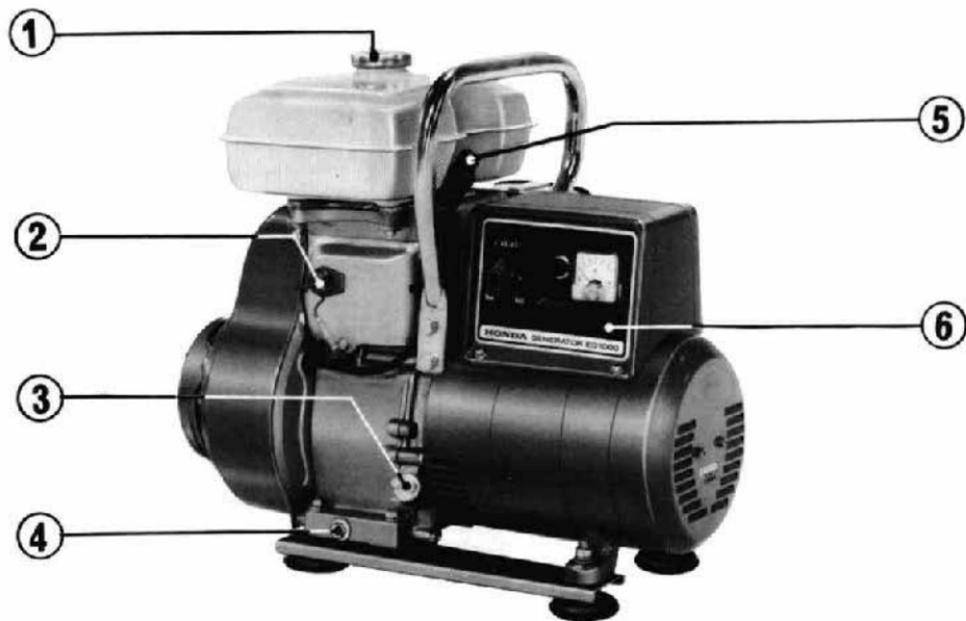
To ensure safe operation –

- * Know how to stop the generator quickly and understand operation of all the controls. Never permit anyone to operate the generator without proper instruction.*
- * Keep children and pets away from the generator when in operation.*
- * The generator is a potential source of electrical shock when misused: Do not operate with wet hands.*



COMPONENT IDENTIFICATION

1. Fuel Filler Cap
2. Engine Switch
3. Oil Filler Cap
4. Oil Drain Plug
5. Spark Plug Cap
6. Control Box



1. Choke Lever
2. Fuel Valve
3. Air Cleaner
4. Recoil starter
5. Throttle Lever
6. Muffler

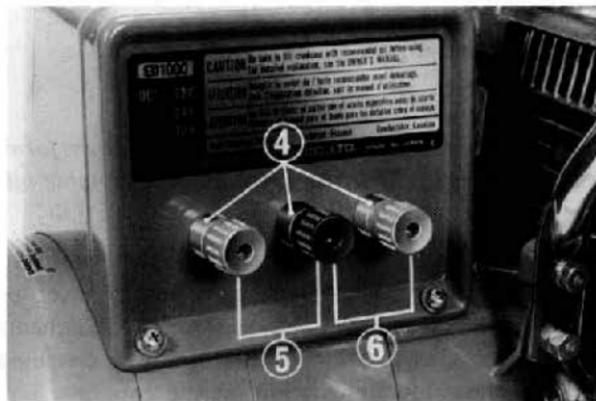


CONTROL BOX

1. **CURRENT ADJUSTING KNOB.** Turn to achieve correct charging current.
2. **PILOT LAMP.** Lights when the engine is running.
3. **AMMETER.** Indicates charging current being generated.



4. **OUTPUT TERMINALS.**
5. **12V DC CONNECTION.**
6. **24V DC CONNECTION.**



OPERATION

WARNING

- *Exhaust gas contains poisonous carbon monoxide. Never run the generator in an enclosed area, or without adequate ventilation.*
- *Operate the generator on a level surface to prevent fuel spillage.*

CAUTION

The generator is air-cooled and may be damaged if ventilation is inadequate.

Pre-Operation Check

1. Check the engine oil level.

CAUTION

Engine oil is a major factor affecting engine performance and service life. Non-detergent or vegetable oils are not recommended.

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

SAE 10W-40 is recommended for general, all-temperature use. If single viscosity oil is used, select the appropriate viscosity for the average temperature in your area.

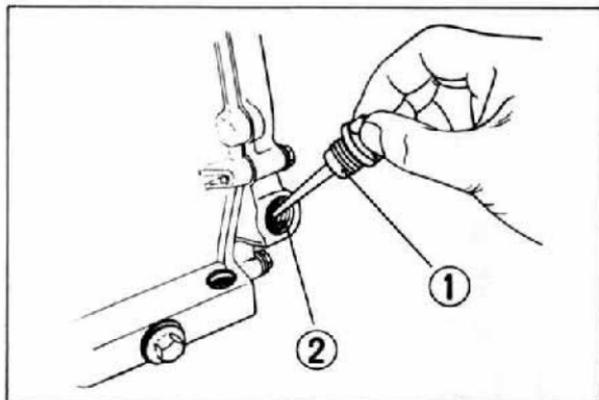
SAE	°C	°F	
40			SAE 10W-30 or 10W-40
	30°	86°	
30			
	15°	59°	
20 20W			
	0°	32°	
10W			

- A. With the generator on a level surface, remove the oil filler cap and check the oil level.
- B. If the level is low, fill to the upper limit. Do not overfill; excess oil will result in power loss and smoking.

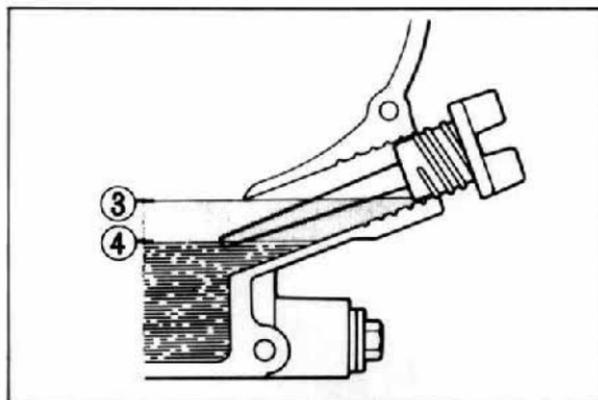
CAUTION

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

- (1) Oil filler cap
(2) Oil filler hole



- (3) Upper limit
(4) Lower limit



2. Check the fuel level

Use automotive gasoline with a research octane of 91 or higher or a pump octane ($\frac{R+M}{2}$) of 86 or higher.

Fill to half-way up the filler screen.

Never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.

WARNING

- *Gasoline is extremely flammable and explosive under certain conditions. Refuel in a well ventilated area with the engine stopped.*

- *If any fuel is spilled, make sure the area is dry before starting the engine.*
 - *Do not smoke or allow open flames or sparks in the area where the generator is refueled or where gasoline is stored.*
 - *Do not overfill the tank and make sure the filler cap is securely closed after refueling.*
3. Disconnect any appliances. The generator may be difficult to start if a load is connected.

(1) Fuel filler cap



(2) Fuel filler hole



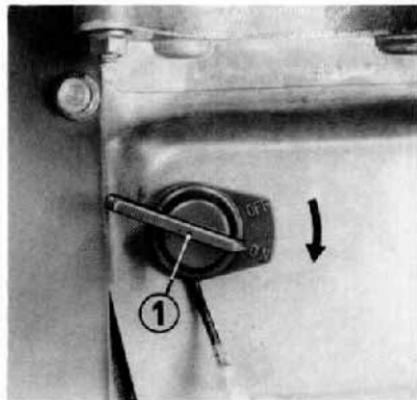
Starting the Engine

1. Adjust the ammeter needle to "0", if necessary, by turning the adjusting screw. (The needle should always be at "0" when the engine is off.)
2. Set the current adjusting knob at MINIMUM.
3. Turn the engine switch and fuel valve "ON".
4. Close the choke.

NOTE:

Do not use the choke if the engine is warm or the air temperature is high.

(1) Engine switch



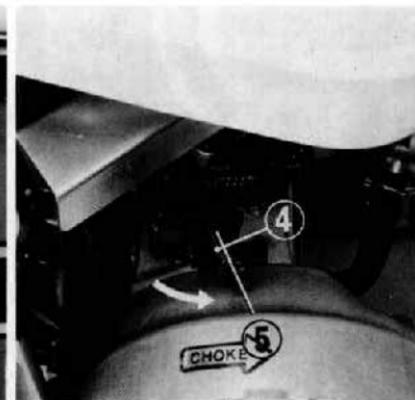
(2) Fuel valve

(3) "ON" position



(4) Choke lever

(5) "CLOSE" position



4. Raise the throttle lever slightly.
5. Pull the starter rope lightly until resistance is felt, then pull briskly.

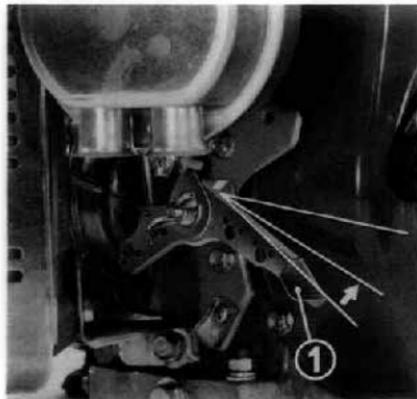
NOTE:

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

6. Open the choke gradually as the engine warms up.

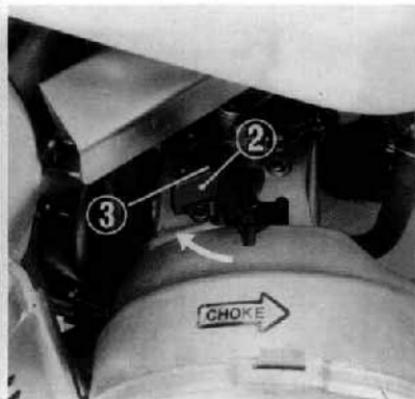
7. Move the throttle to the normal position and tighten the wing nut.
8. Make sure the pilot lamp comes on. If not, the filament may be burnt out.

(1) Throttle lever



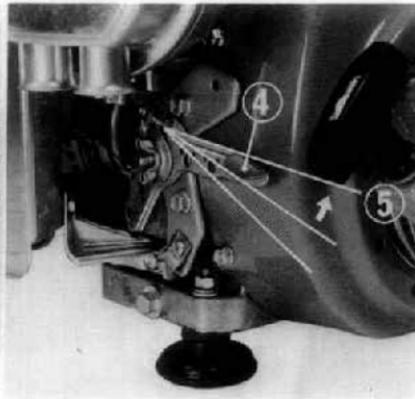
(2) Choke lever

(3) "OPEN" position



(4) Throttle lever

(5) "NORMAL" position



Stopping the Engine

Reduce engine speed to an idle before stopping the engine. Shutting off abruptly from high speed operation can cause flooding and difficult starting.

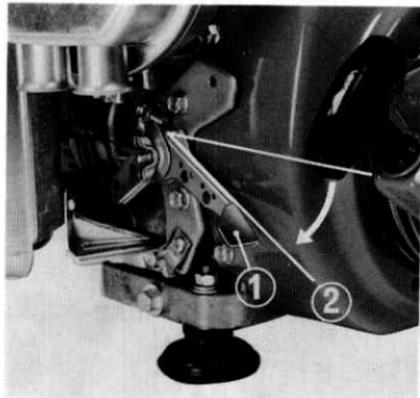
1. Turn the current adjusting knob to **MINIMUM**. Move the throttle to **"LOW"**. Allow the engine to idle 1–2 minutes.
2. Turn the engine switch and fuel valve **"OFF"**.

NOTE:

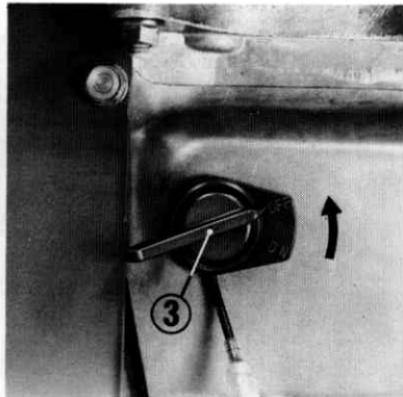
To stop the engine in an emergency, turn the engine switch **"OFF"**.

(1) Throttle lever

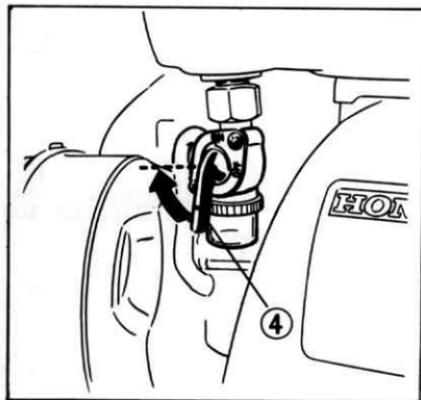
(2) "LOW" position



(3) Engine switch



(4) Fuel valve



BATTERY CHARGING

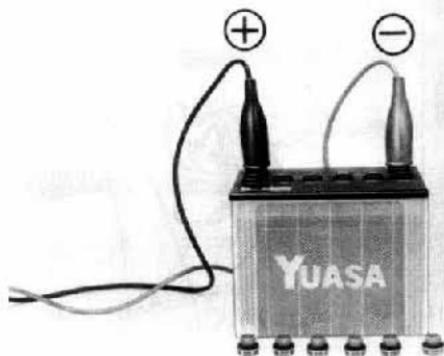
NOTE:

When the generator is to be used for purposes other than battery charging, a battery must be included in the system. See your Honda Generator dealer for details.

1. Connect the charging cord to the battery: red to positive, black to negative.

WARNING

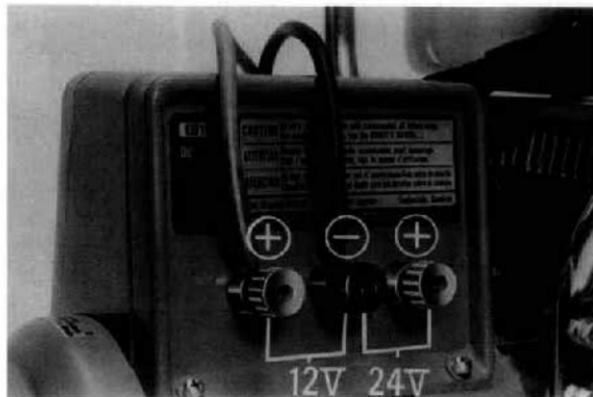
To prevent sparking near the battery, do not allow the generator-ends of the cord to contact one another when connecting the cord at the battery.



CAUTION

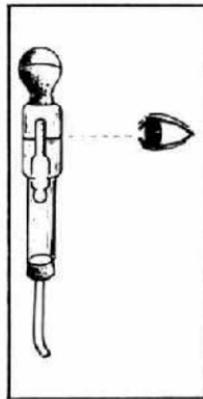
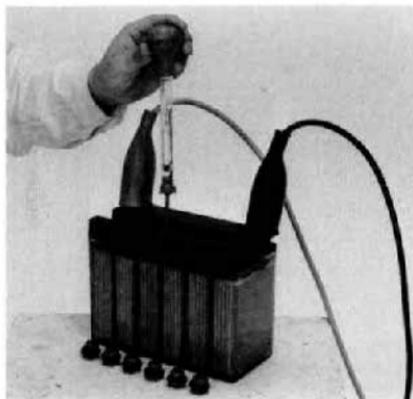
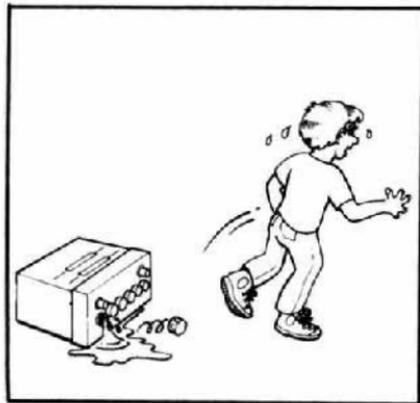
Do not reverse polarity. Serious damage to the generator and/or battery may occur.

2. Connect the negative cord to the black generator terminal, and the positive cord to the 12V or 24V red terminal.



WARNING

- * Batteries generate hydrogen gas which can be highly explosive. Do not smoke or allow flames or sparks near a battery, especially while charging it.
- * Battery electrolyte contains sulphuric acid. Protect your eyes, skin and clothing. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed. **ANTIDOTE:** External: Flush with water. Internal: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call a physician immediately.



3. Check the electrolyte specific gravity. For an accurate indication, do not test specific gravity immediately after adding water to the cell or during initial recharging.
 - A. Remove the filler caps and fill a hydrometer with electrolyte until the float moves freely.
 - B. Read the specific gravity scale at the fluid surface.

C. Since specific gravity varies according to temperature, use the chart below to determine the appropriate "fully charged" range for your battery.

For example:

At 25°C (77°F), a fully-charged battery would have a specific gravity of between 1.257–1.277.

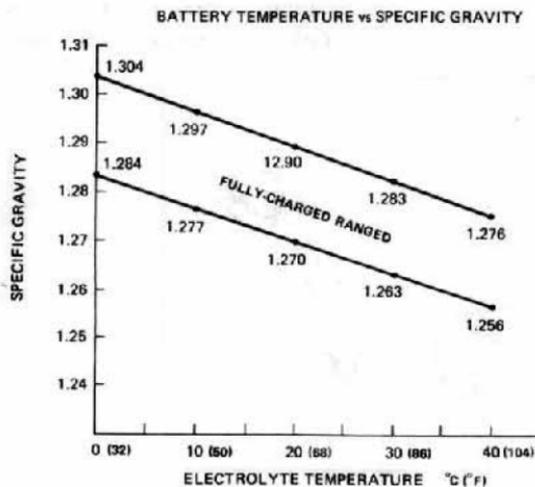
4. Determine the charging current. Normally, it should be 1/10 of the battery's capacity.

For example:

A battery rated at 32AH should be charged at 3.2A.

NOTE:

Charging time may be reduced by increasing the charging current to 1/3–1/2 of the battery's capacity.



CAUTION

- * *Stop charging if the electrolyte temperature exceeds 45°C (117°F). Battery damage may result.*
- * *To avoid overloading the engine, do not load the generator with more than 40A. (If current flow is more than 40A, the current limiter will shut off current temporarily to protect the generator. When amperage drops to below 40A, current will be restored automatically.)*

MAINTENANCE

Periodic maintenance is important to keep the generator in the best operating condition. To ensure a long service life, follow the maintenance schedule on page 19.

WARNING

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 only 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 PERIOD Perform at every indicated month or operating hour intervals, which- ever occurs first.		Daily	First 1 month or 20 Hrs. operating	Every 3 months or 50 Hrs. operating	Every 6 months or 150 Hrs. operating	Every one year or 300 Hrs. operating
ITEM						
Engine oil	Inspection	○				
	Change		○		○	
Air cleaner element	Inspection	○				
	Cleaning			○ (1)		
Fuel filter cleaning					○	
Spark plug maintenance					○	
Ignition timing adjustment						○ (2)
Valve clearance adjustment						○ (2)
Combustion chamber and valve cleaning						○ (2)
Fuel tube inspection (Replace if necessary)						○

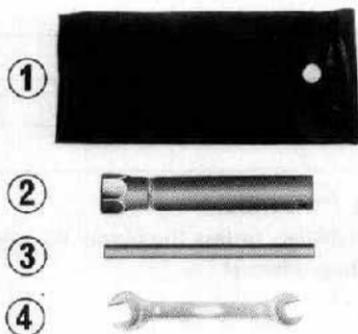
NOTE (1): When used in dusty areas, service the air cleaner more frequently.

(2): These items should be serviced by an authorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.

Tool Kit

The tools supplied are necessary for performing some periodic maintenance, simple adjustments and repairs. Always keep the kit with the generator.

- (1) Tool bag
- (2) Plug wrench
- (3) Plug wrench handle
- (4) 10x12 mm wrench

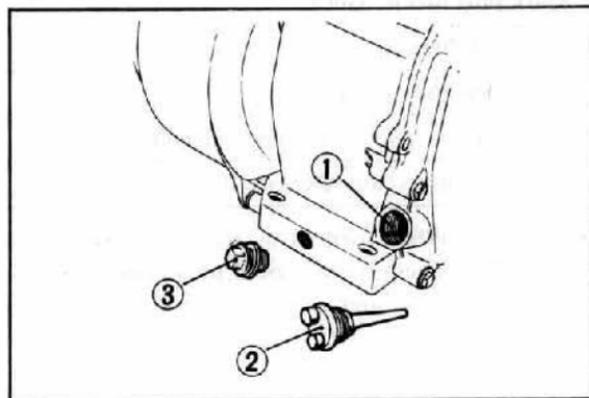


Changing Oil

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

1. Remove the drain plug and filler cap and drain the oil. Retighten the plug securely.
2. Refill with the recommended oil (p.8) and check the level.

- (1) Oil filler hole
- (2) Oil filler cap
- (3) Drain plug



Air Cleaner Service

A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly.

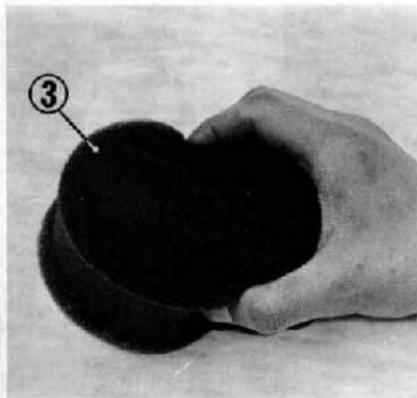
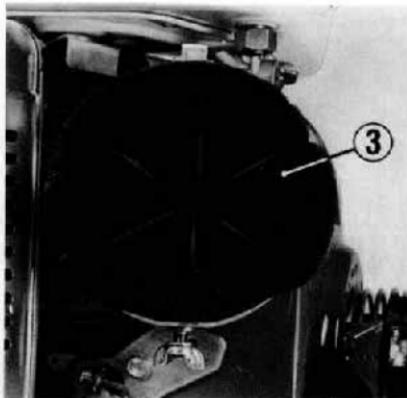
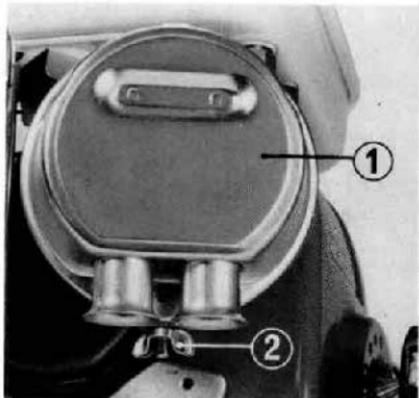
WARNING

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

1. Loosen the wing nut to remove the cover; remove the element.
2. Wash the element in a non-flammable or high flashpoint solvent and dry it thoroughly.
3. Soak the element in clean engine oil and squeeze out the excess.

- (1) Air cleaner cover
(2) Wing nut

- (3) Element

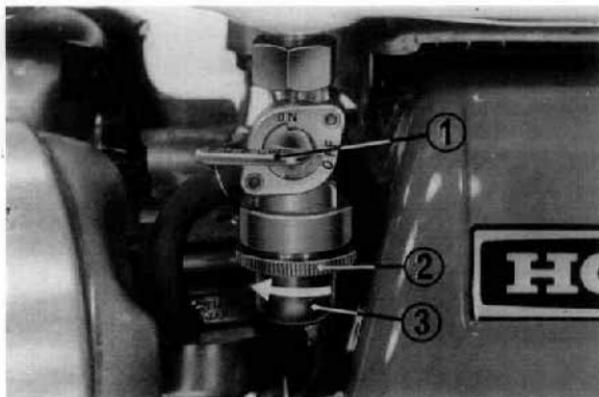


Fuel Filter Service

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

1. Turn the fuel valve "OFF". Remove the ring nut and filter cup.
2. Clean the cup thoroughly. Use a cloth to remove sediment.
3. Re-assemble. Do not damage the rubber gasket.

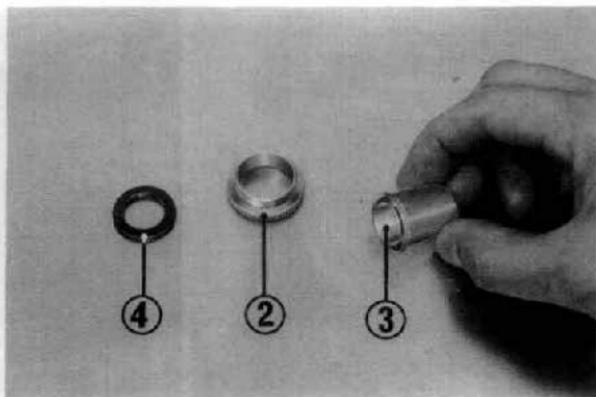
(1) Fuel valve (2) Ring nut (3) Filter cup



WARNING

After installing the filter cup, be sure to tighten the ring nut securely. Check for fuel leaks and make sure the area is dry before starting.

(4) Rubber gasket

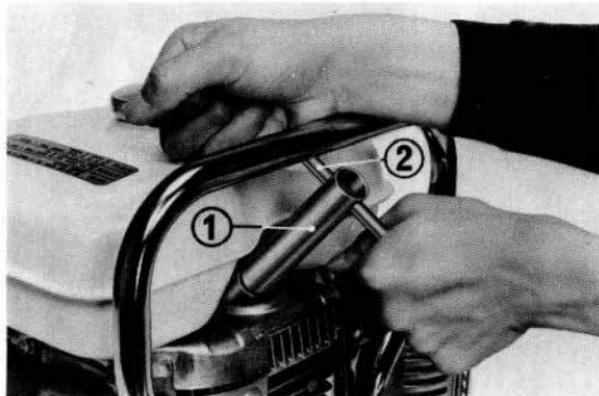


Spark Plug Service

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

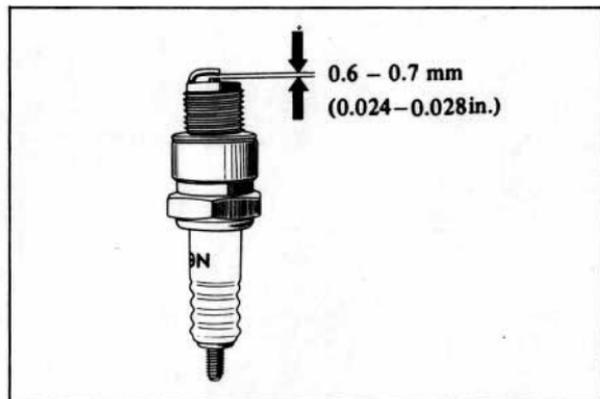
1. Remove the spark plug with the plug wrench.
2. Use a wire brush to remove deposits from the electrodes. Be careful not to damage the electrodes.
3. Check the plug gap with a feeler gauge and correct as necessary.
4. Replace the plug.

- (1) Spark plug wrench
- (2) Plug wrench handle



CAUTION

The spark plug must be securely tightened. An improperly tightened plug can damage the generator.



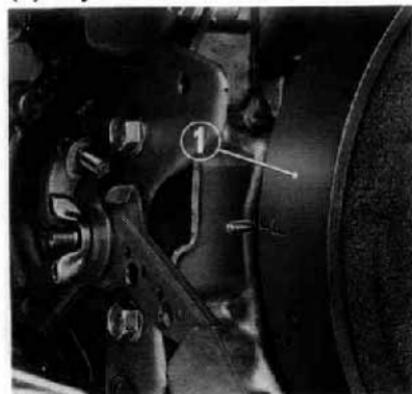
Ignition Timing Adjustment

Check the timing when specified by the periodic maintenance chart. Incorrect ignition timing will cause starting difficulty and loss of power.

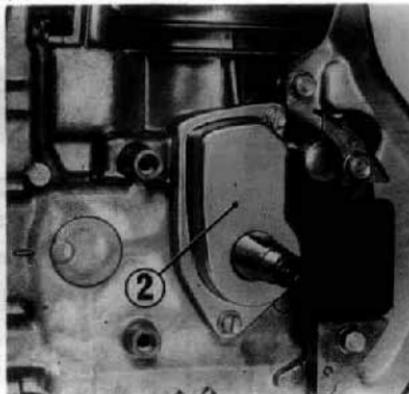
1. Remove the fan cover.
2. Proper timing is determined by correct point opening: Using a commercially available timing tester, rotate the flywheel clockwise and check that the points start to open when the flywheel "F" mark passes the mark on the crankcase.

3. If timing is not correct, remove the starter pulley, fan, flywheel, and point cover.
4. Loosen the 5 mm screw and move the breaker plate to the right or left as required. Retighten the screw and recheck timing.

(1) Flywheel

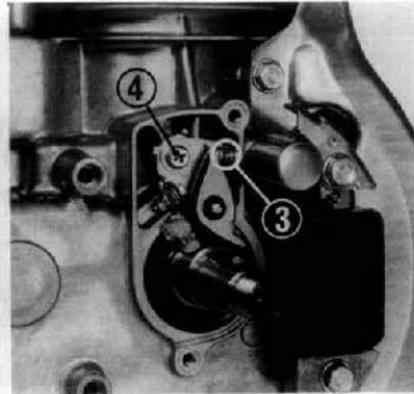


(2) Point cover



(3) Contact breaker points

(4) 5 mm screw



TRANSPORTING/STORAGE

WARNING

Turn the fuel valve "OFF" and keep the generator level when transporting it to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

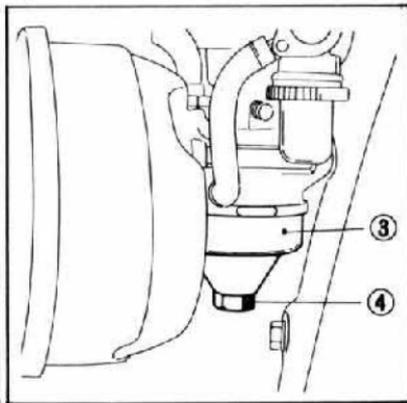
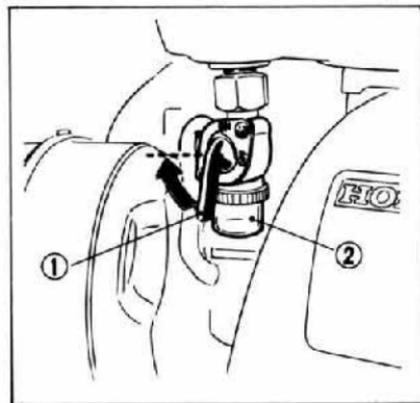
Before storing the unit for an extended period:

1. Drain the fuel.
 - A. Turn the fuel valve "OFF" and disconnect the fuel tube at the carburetor.
 - B. Turn the fuel valve "ON" and drain the

gasoline in the fuel tank into a suitable container.

- C. Loosen the drain bolt and drain the carburetor.
2. To protect the breaker points, valves and combustion chamber from rust, corrosion and dust, set the piston on the compression stroke.
 - A. Pull the starter rope until there is resistance. (The piston is coming up on the compression stroke).
 - B. Align the mark on the starter pulley with the index mark on the fan cover.

(1) Fuel valve (2) Fuel filter cup (3) Carburetor (4) Sealing bolt (5) Marks



TROUBLESHOOTING

A) Difficult Starting –

- (1) Check fuel level
- (2) Check choke position
- (3) Check throttle position; the throttle should be at “LOW”.

B) Current Output –

- (1) Terminal not properly connected
- (2) Faulty diode or current limiter (See your Honda dealer)

C) Low Output –

- (1) Check the battery and cables for defects; check for proper connection at the battery.

WARNING

To avoid shock, do not check these areas while the engine is running.

- (2) Check for correct current; adjust the throttle as required.
- (3) Poor contact at generator terminals
- (4) Battery state of charge is extremely low
- (5) Faulty diode (See your Honda dealer)

SPECIFICATIONS

Dimensions and Weight

Length x Width x Height Dry weight	525 x 390 x 450 mm (20.7 x 15.4 x 17.7 in) 36.5 kg (80.5 lb)
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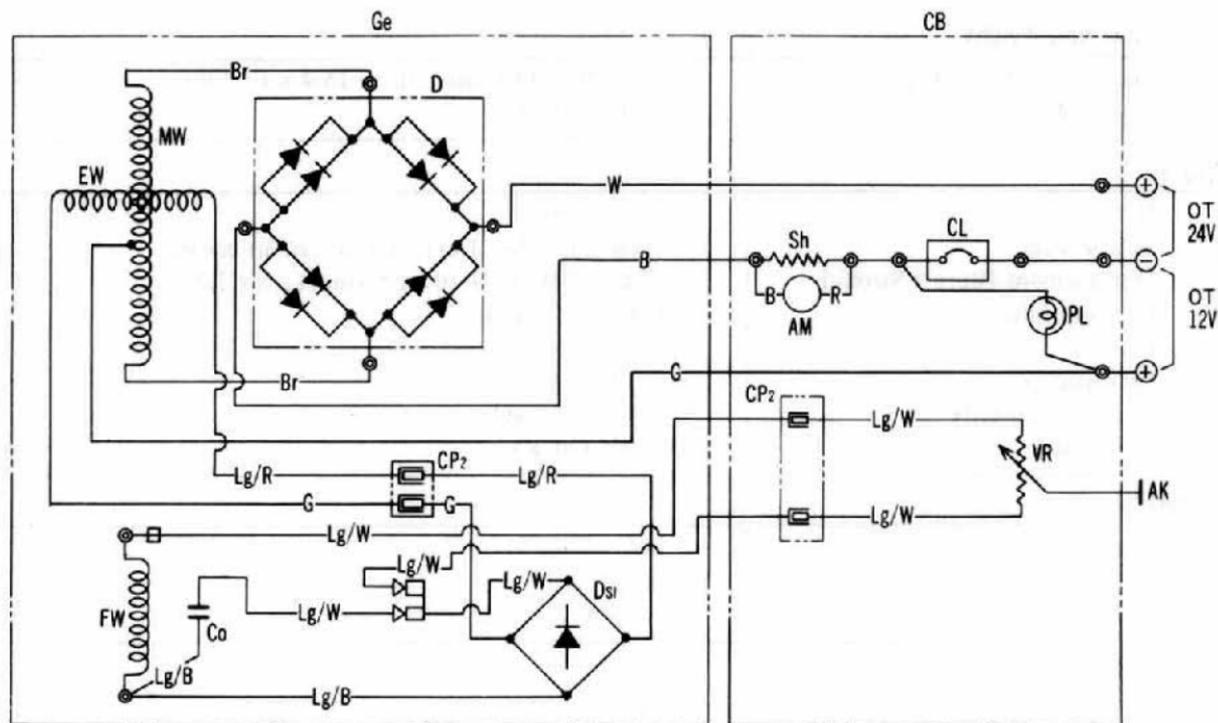
Engine

Model Engine Type Displacement [Bore x Stroke] Ignition timing Ignition Oil capacity Fuel tank capacity Spark plug	Honda G200 4 cycle side valve, 1 cylinder, forced air cooled 197 cc (12.0 cu in) [67 x 56 mm (2.6 x 2.2 in)] BTDC 20° (fixed) Flywheel magneto 0.7ℓ (1.5 US pt) 3.5ℓ (0.93 US gal) BR-4HS (NGK)
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Generator

Rated output Rated current Rated voltage	1.0W 40A 24V, 12V
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WIRING DIAGRAM



	Part Name
AK	Adjusting Knob
AM	Ammeter
CB	Control Box
CL	Current Limiter
Co	Condenser
CP ₂	2P Connector
D	Diode
Ds ₁	Diode
EW	Exciter Winding
FW	Field Winding
Ge	Generator Block
MW	Main Winding
OT	Output Terminal
PL	Pilot Lamp
Sh	Shunt
VR	Variable Resistor

	Color
B	Black
Bl	Blue
Br	Brown
G	Green
Lg	Light Green
R	Red
W	White

MEMO

MEMO

MEMO

Current customer service contact information:

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

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

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

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

Or telephone: (770) 497-6400 M-F, 8:30 am - 5:00 pm EST

When you write or call, please provide the following information:

- Model and serial numbers
- Name of the dealer who sold the Honda power equipment to you
- Name and address of the dealer who services your equipment
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem



HONDA

HONDA MOTOR CO., LTD. TOKYO, JAPAN

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PRINTED IN JAPAN