Honda Motor Europe Ltd.

EM2300

OWNER'S MANUAL

Original Instructions

POWERED by HONDA

Thank you for purchasing a generator powered by Honda.

This manual covers operation and maintenance of the EM2300 generator.

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

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

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:

⚠WARNING 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.

⚠WARNING

Generators powered by Honda are 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.

- The illustrations herein are mainly based on: B type
- The illustrations may vary according to the type

CONTENTS

1. SAFETY INSTRUCTIONS

IMPORTANT SAFETY INFORMATION

Generators powered by Honda 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 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.

Never attempt to modify the generator. It can cause an accident as well as damage to the generator and appliances.

- Do not connect an extension to the muffler
- Do not modify the intake system
- Do not adjust the governor
- Do not remove the control panel
- Do not change the wiring of the control panel

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.

Be sure to observe the instructions in this manual for how to use the generator and maintenance information. Ignoring or improperly following the instructions can cause an accident such as an electric shock, and the condition of the exhaust gas may deteriorate.

Obey all applicable laws and regulations where the generator is used. Gasoline and Oil is toxic. Follow the instructions provided by each manufacturer before use.

Place the generator on a firm level place before operation.

Do not operate the generator with any cover removed. You may get your hand or foot caught in the generator and it may cause accident.

Consult your authorized Honda dealer for disassembly and service of the generator that are not covered in this manual.

Carbon Monoxide Hazards

Exhaust contains poisonous carbon monoxide, a colorless, odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death.

If you run the generator in an area that is confined, or even partially enclosed area, the air you breathe could contain a dangerous amount of exhaust gas.

Never run your generator inside a garage, house, or near open windows or doors.

Electric Shock Hazards

The generator produces enough electric power to cause a serious shock or electrocution if misused.

Using a generator or electrical appliance in wet conditions, such as rain or snow, or near a pool or sprinkler system, or when your hands are wet, could result in electrocution.

Keep the generator dry.

If the generator is stored outdoors, unprotected from the weather, check all of the 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.

If you get an electric shock, consult a doctor and have medical treatment immediately.

Fire and Burn Hazards

Do not use the generator in areas with a high risk of fire.

The exhaust system gets hot enough to ignite some materials.

– Keep the generator at least 1 meter (3 feet) away from buildings and other equipment during operation.
– Do not enclose the generator in any structure.
– Keep flammable materials away from the generator.

Some parts of the internal combustion engine are hot and may cause burns. Pay attention to the warnings on 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.

Do not pour the water directly on the generator to put out the fire when it occurs. Use an appropriate fire extinguisher specially designed for electric fire or oil fire.

If you inhale fumes produced by an accidental fire with the generator, consult a doctor and have medical treatment immediately.

Refuel With Care

Gasoline is extremely flammable, and gasoline vapor can explode.
Allow the engine to cool if the generator has been in operation.

Refuel only outdoors in a well ventilated area with the engine off.

Do not refuel during operation.

Do not overfill the fuel tank.

Never smoke near gasoline, and keep other flames and sparks away.
Always store gasoline in an approved container.

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

Explosion proof

This generator is not compliant with explosion proof.

Disposal

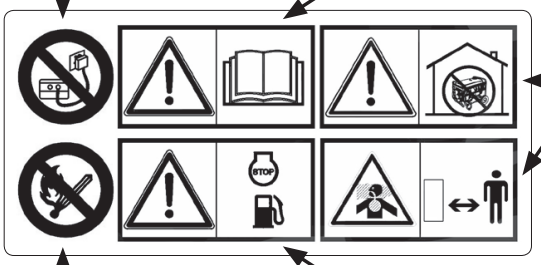
To protect the environment, do not dispose of the used generator, battery, engine oil, etc. carelessly by leaving them in the waste. Observe the local laws or regulations or consult your authorized Honda generator dealer to dispose of these parts.

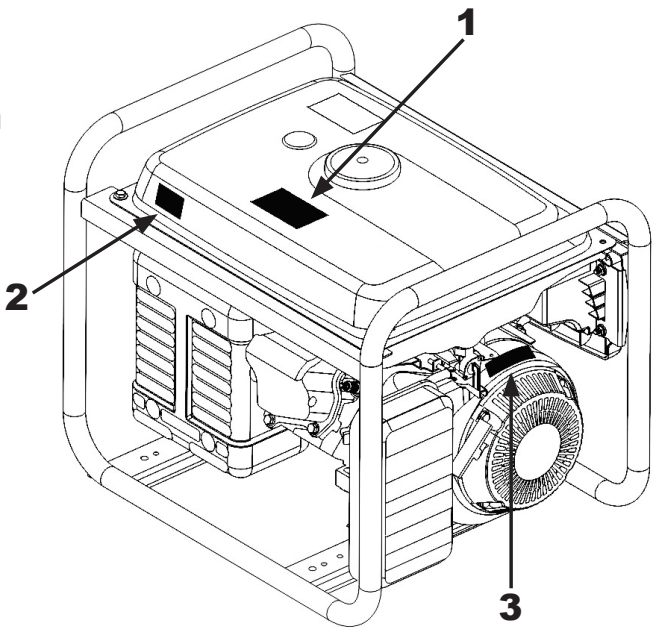
Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

2. 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.

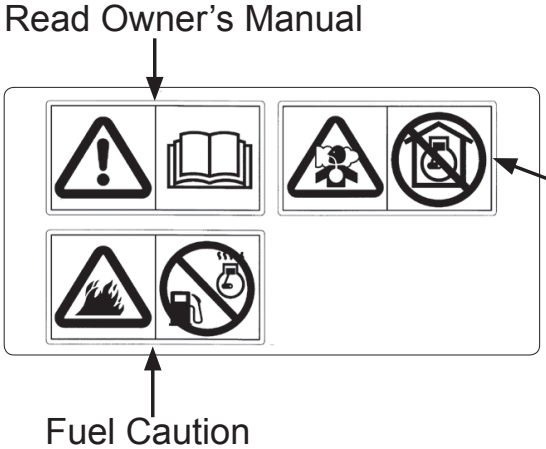
1.

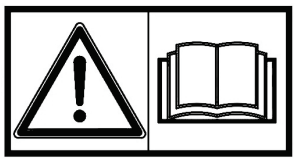




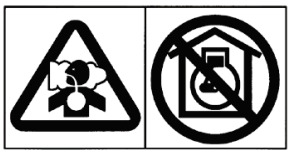
2.

3.





- Honda generators are 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.



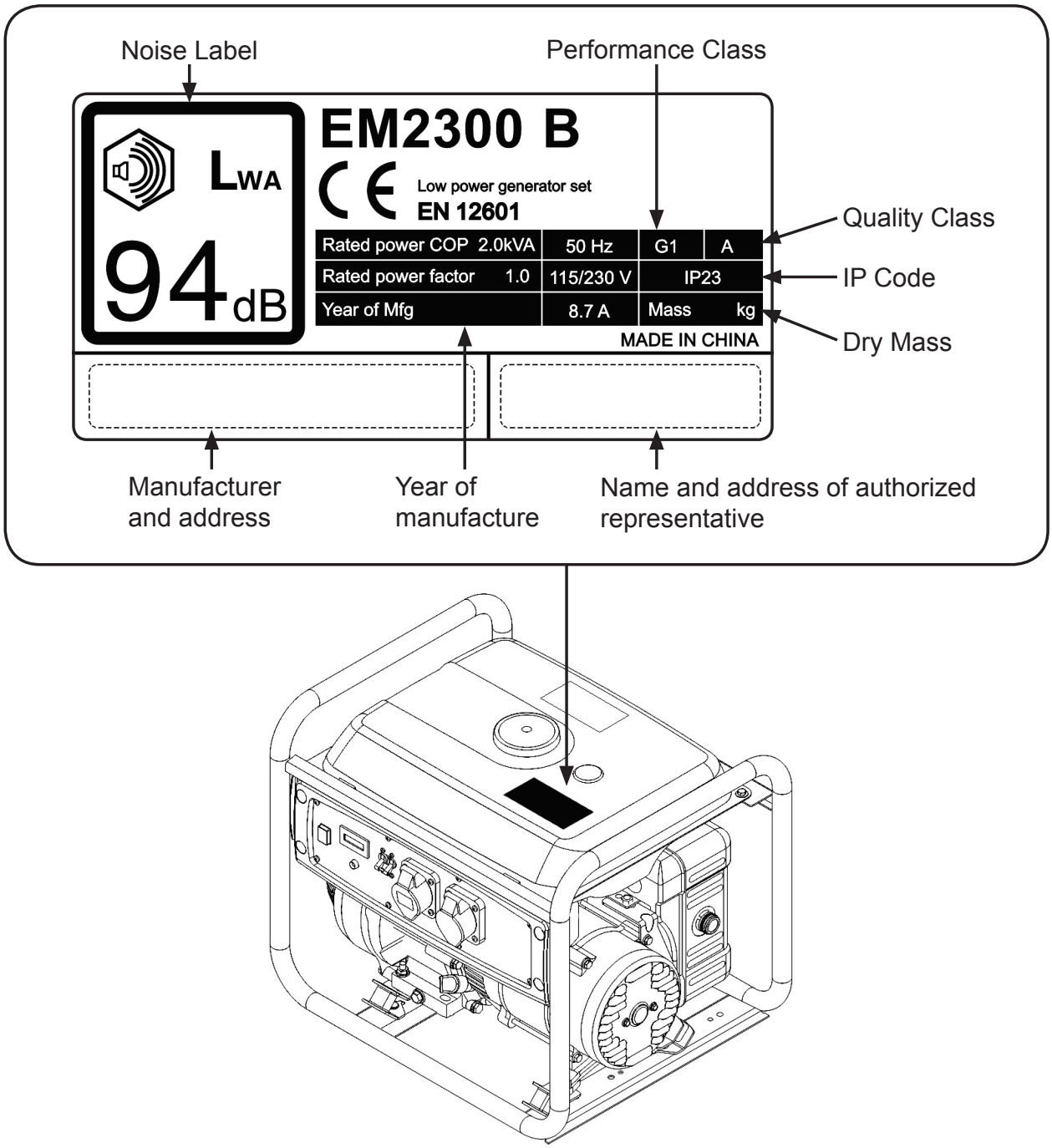
- Exhaust contains poisonous carbon monoxide, a colorless, odorless gas. Breathing carbon monoxide can cause loss of consciousness and may lead to death.
- If you run the generator in an area that is confined, or even partially enclosed area, the air you breathe could contain a dangerous amount of exhaust gas.
- Never run your generator inside a garage, house or near open windows or doors.

- 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.

- Gasoline is highly flammable and explosive. Turn the engine off and let it cool before refueling.

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

CE Mark and Noise Label Locations

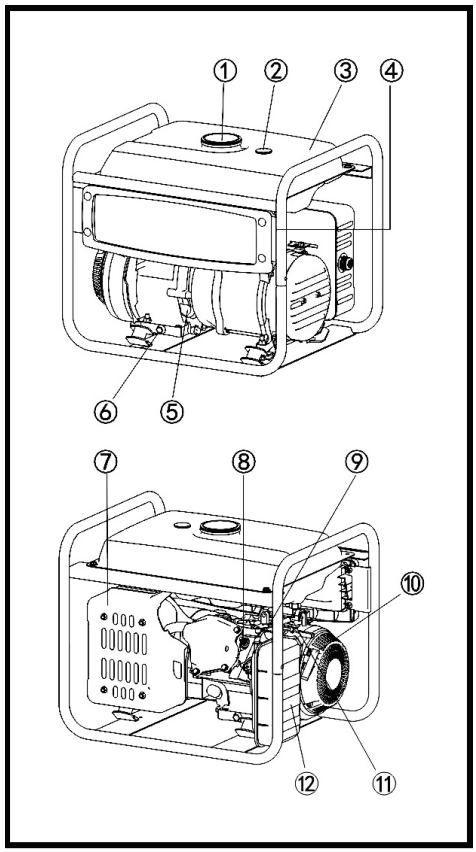


Name and address of manufacturer and authorized representative are written in the “EC Declaration of Conformity” CONTENT OUTLINE in this Owner’s Manual.

3. COMPONENT IDENTIFICATION

Control Function - Illustration

1. Fuel tank cap
2. Oil level indicator
3. Fuel tank
4. Ground Terminal
5. Dipstick
6. Oil drain plug
7. Muffler
8. Spark plug
9. Choke adjustment lever
10. Recoil starter
11. Fuel valve lever
12. Air filter cover



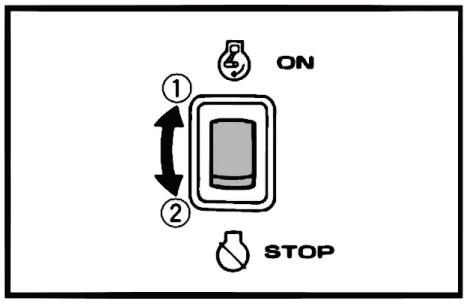
Record the frame serial number and the engine serial number in the spaces below. You will need these serial numbers when ordering parts.

Frame serial number : _____

Engine serial number : _____

Engine Panel Switch

The engine switch located on the panel controls the ignition system :

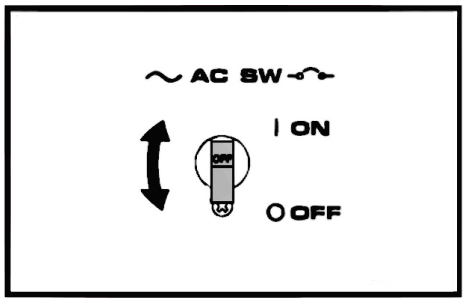


1. Ignition circuit is ON.
   The engine can be started.
2. Ignition circuit is OFF.
   The engine will not run.

CAUTION:
After starting the engine, keep your hands away from the switch immediately.

AC Circuit Breaker

The AC Circuit breaker (non-fuse breaker) will shut off automatically when the load exceeds the generator rated output.



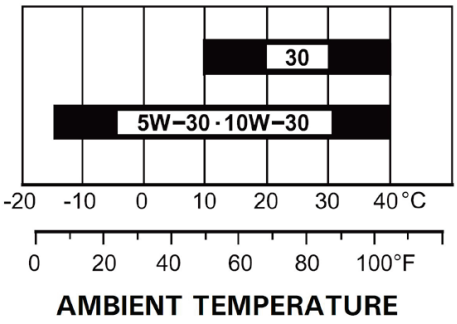
1. I “ON”
2. O “OFF”

CAUTION:
Control the load within the generator rated output when the AC circuit breaker shuts off. If the AC circuit breaker shuts off again, ask your authorized Honda dealer for help.

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 before each use.



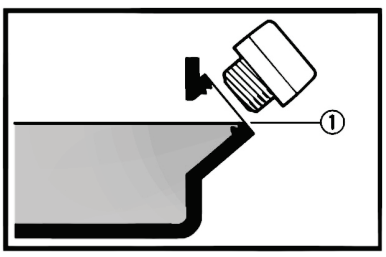
CAUTION:
Using non detergent oil or 2-stroke engine oil could shorten the engine's service life.

Use 4-stroke motor oil that meets or exceeds the requirements for API service category SE or later (or equivalent). Always check the API service label on the oil container to be sure it includes the letters SE or later (or equivalent).
Read the instruction on the oil container before use.
SAE 10W-30 is recommended for general, all-temperature use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

1. Remove the oil filler cap/dipstick and wipe the dipstick clean.
2. Check the oil level by inserting the dipstick in the filler hole without screwing it in.
3. If the oil level is low, fill with the recommended oil to the upper limit (1) on the oil filler cap/dipstick.
4. Reinstall the oil filler cap/dipstick securely.

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.



1. Upper limit : Oil level

2.Check the fuel level.

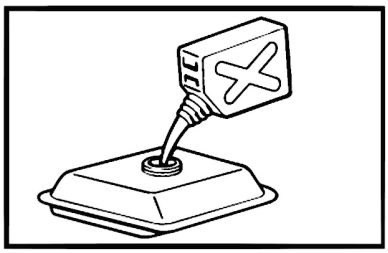
Check the fuel gauge. If the fuel level is low, refuel the fuel tank until the level as specified. After refueling, tighten the fuel tank cap securely.

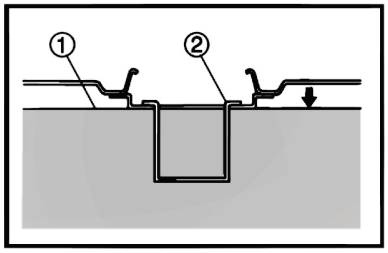
Use automotive unleaded gasoline with a Research Octane Number of 93 or higher.
Never use stale or contaminated gasoline or an oil/gasoline mixture.
Avoid getting dirt or water in the fuel tank.

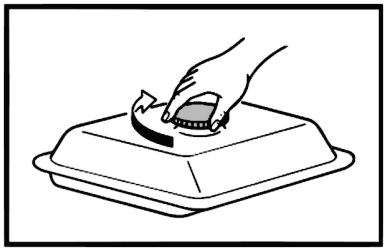
⚠WARNING

- **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, as it may overflow after the fuel heats up and expands (1). There should be no fuel above the upper level (2) on the fuel strainer. After refuelling, make sure the fuel tank 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 30 days.
Using contaminated gasoline can seriously damage the engine (caburetor 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 12)
- Use fresh and clean gasoline
- To slow deterioration, keep gasoline in a certified fuel container
- If long storage (more than 30 days) is foreseen, drain fuel tank and carburetor (see page 27)

Gasolines Containing Alcohol

If you decide to use a gasoline containing alcohol (gasohol), be sure its 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 more than 5% methanol (methyl or wood alcohol) and that does not also contain co-solvents and corrosion inhibitors for methanol.

NOTE:

- Fuel system damage or engine performance problems resulting from the use of gasoline that contains more alcohol than recommended is not covered under the warranty.
- Before buying gasoline from an unfamiliar station, first determine if the gasoline contains alcohol. If it does, find out the type and percentage of alcohol used.

If you notice any undesirable operating symptoms while using a particular gasoline, switch to a gasoline that you know contains less than the recommended amount of alcohol.

3.Check the air filter.

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

Unsnap the two air cleaner cover clips, remove the air cleaner cover, and remove the air cleaner element.

Clean or replace the element if necessary (see page 23).

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

5. STARTING 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.

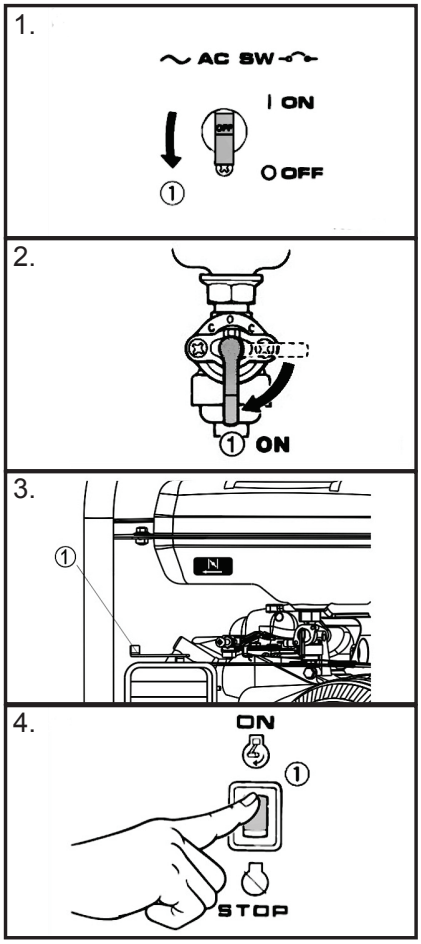
Before starting the engine, disconnect any load from the AC receptacle.

1. Make sure that the AC circuit breaker is in the OFF position. The generator may be hard to start if a load is connected.
2. Turn the fuel valve lever to “ON”.

   I “ON”
3. Pull the choke adjustment lever to the left

   NOTE: It may not be necessary to shut down the choke when starting a warm engine.
4. Turn the engine switch “ON”

   Start the engine: slowly pull the recoil starter until it is engaged, and then pull it quickly.
5. Turn the choke adjustment lever back to the running position (turn right) after starting.
6. Allow the engine to get warm before placing the generator under load.



CAUTION:
- **The starter grip can be drawn back very quickly before you release it. This may pull your hand forcefully toward the engine and cause an injury.**
- **Do not allow the starter grip to snap back. Return it slowly by hand.**
- **Do not let the starter rope rub against the generator body, or the rope will wear out prematurely.**

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 meters (5,000 feet) above sea level, have your authorized Honda dealer perform these carburetor modifications.

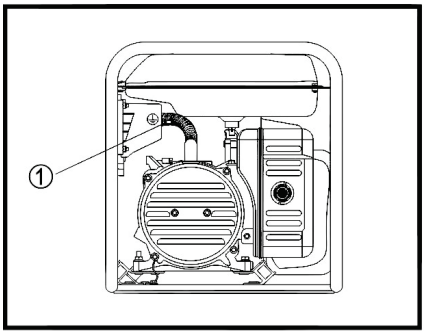
Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 300 meter (1,000 foot) increase in altitude. The affect of altitude on the horsepower will be greater than this if no carburetor modification is made.

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.

NOTE:
Carburetor adjustments should be performed by an authorized Honda dealer equipped with professional knowledge and equipment to ensure the accuracy.

6. GENERATOR USE

The generator produces enough electric power to cause a serious shock or electrocution if misused.
Be sure to ground the generator when the connected appliance is grounded.

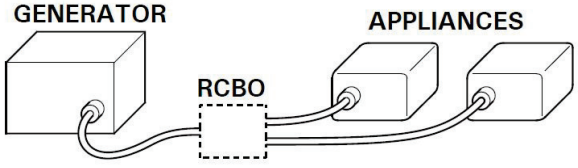


To ground the terminal of the generator, use a copper wire with same or larger diameter than the cord of the connected appliance.

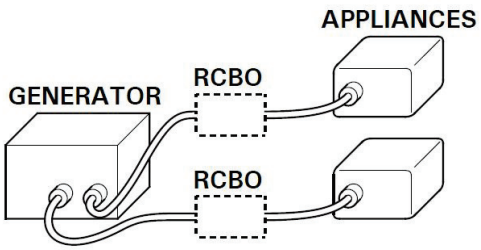
Use extension cord set with ground conductor when connecting an appliance with ground conductor.

Connect a RCBO (Residual current circuit breaker with overload protection) of 30 mA ground fault detection and cut-off of less than 0.4 seconds at more than 30 A of output current, if you are using two or more appliance.

Follow the instructions provided by each RCBO manufacturer before use.



Connecting with one RCBO



Connecting with two RCBO

⚠WARNING

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.

CAUTION:

- **Do not exceed the current limit specified for any one receptacle.**
- **Do not modify or use the generator for other purposes than it is intended for.**
- **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 (200 feet) for cables of 1.5mm2 (0.0023 in2) and 100 m (330 feet) for cables of 2.5 mm2 (0.0039 in2). 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.**

⚠WARNING

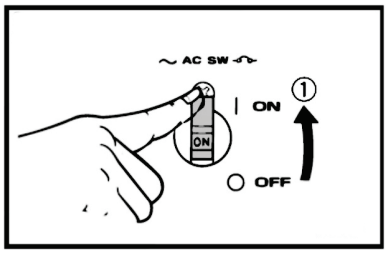
- **Do not connect the generator in parallel with other generator sets**
- **If the generator is stored outdoors, unprotected from the weather, check all of the electrical components on the control panel before each use. Moisture or ice can cause a malfunction or short circuit in electrical components that could result in electrocution.**
- **Do not alter the internal wiring of the generator.**
- **Do not alter the engine settings: the voltage and frequency of the generator output are directly linked to the engine speed; these settings are adjusted in the factory.**
- **This generating set is not recommended for use with sensitive electronic devices, such as televisions, hi-fis or computers. These devices require a more stable voltage output and can be damaged when connected to this generator.**

NOTE:

- 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:
  EM2300: 2.3kVA
- For continuous operation, do not exceed the rated power.
  Rated power is:
  EM2300: 2.0kVA
- In either case, the total power requirements (VA) of all appliances connected must be considered.

AC Appliances

Plug in AC appliances using below sequence:

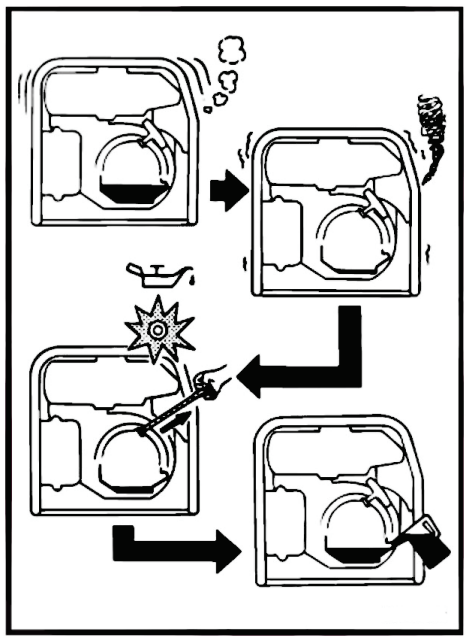


1. Start the engine (see page 15)
2. Confirm the appliance to be used is switched off
3. Plug in the appliance and switch the AC circuit breaker “ON” (1)
4. Turn on the appliance

CAUTION:

- **Substantial overloading will switch off the AC circuit breaker. Marginal overloading may not switch off the AC circuit breaker, but it will shorten the service life of the generator.**
- **Be sure that all appliances are in good working order before connecting them to the generator. Electrical equipment (including lines and plug connections) should not be defective. 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.**
- **Be sure all electric devices are “OFF” before plugging them in, within the rated output of the generator and within the receptacle rated current.**
- **Most portable electrical tools are Class II (double insulation). Equipment that does not meet this standard (tools with metallic casing) has to powered via 3 conductor cable (with an earth conductor) to ensure correct earthing in the event of an electrical fault.**

Oil Alert System



The oil alert system is designed to prevent any risk of damage to the engine caused by insufficient oil in the oil reservoir. As soon as the oil level drops below the safe limit, the oil alert system automatically shuts down the engine (the engine switch remains in the ‘ON’ position). Use of the starter will not restart the engine until the oil level has been topped up.

NOTE: The generator is sold without engine oil in the unit. Put oil before starting.

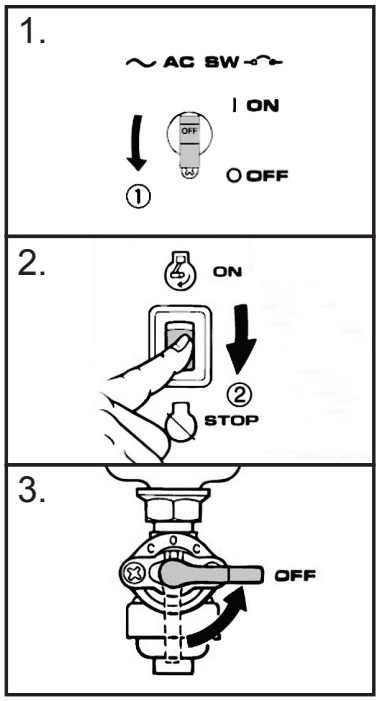
7. STOPPING THE ENGINE

CAUTION:
Before stopping the engine, make sure all electric devices plugged into the generator are turned OFF.

Stop the engine using below sequence:

1. Turn the circuit breaker to “OFF“
2. Turn the engine switch to “STOP“
3. Turn the fuel valve lever to “OFF“

NOTE: When storing your generator for longer time, please refer to “2. STORAGE” on page 27



8. MAINTENANCE

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.

⚠WARNING

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

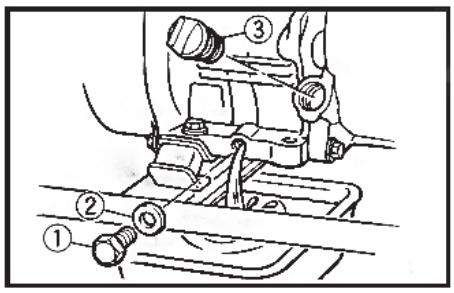
- **Carbon monoxide poisoning from engine exhaust. Be sure there is adequate ventilation whenever you operate the engine.**
- **Burns from hot parts. Let the engine and exhaust system cool before touching.**
- **Injury from moving parts. Do not run the engine unless instructed to do so.**
- **The muffler 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 maintenance.**
- **Use Honda Genuine parts or their equivalent. Use of replacement parts may damage the generator or cause personal injury.**

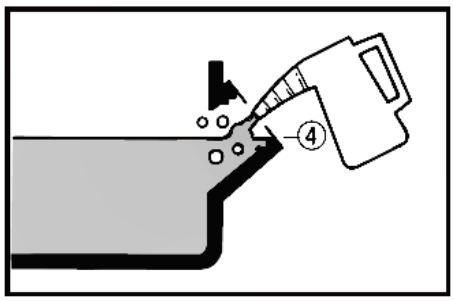
REGULAR SERVICE PERIOD (1) Perform at every indicated month or operating hour interval, whichever comes first.		Each use	First month or 20 Hrs.	Every 3 months or 50 Hrs.	Every 6 months or 100 Hrs.	Every year or 300 Hrs.
ITEM						
Engine oil	Check Level	O				
	Change		O		O	
Air cleaner	Check	O				
	Clean			O (2)		
Sediment cup	Clean				O	
Spark plug	Check-adjust				O	
	Replace					O
Spark arrester	Clean				O	
Valve clearance	Check-adjust					O (3)
Combustion chamber	Clean	After every 500 Hrs. (3)				
Fuel tank and filter	Clean				O (3)	
Fuel tube	Check	Every 2 years (Replace if necessary) (3)				

NOTE: (1) For commercial use, log hours of operation to determine proper maintenance intervals.
(2) Service more frequently when used in dusty areas.
(3) 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.

1. CHANGING OIL

1. Place the machine on a flat surface and run the engine several minutes to heat up the oil. This will assure rapid and complete draining of the oil. Then stop the engine.
2. Clean the peripheral region of oil filler plug and dipstick. Then disassemble the oil filler plug, dipstick and drain plug.
3. Place an oil basin under the engine. Remove the drain plug and allow the fuel to drain completely.
4. Check on the drain plug, sealing washer and O-ring rubber. If damaged, replace it immediately.
   (1) drain plug (2) washer (3) ring
5. Put the drain plug back.
   Torque: 17.6 Nm (13 ft/lbf)
6. Add the correct oil to the reservoir to the full position (4).
7. Put the dipstick and oil filler plug back and lock.





For a new machine, replace the fuel after 20 running hours and maintain it according to the Regular Inspection and Maintenance chart.

Do not let other things get into the crankcase.

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, pour it in a drain or on the ground.

2. AIR CLEANER SERVICE

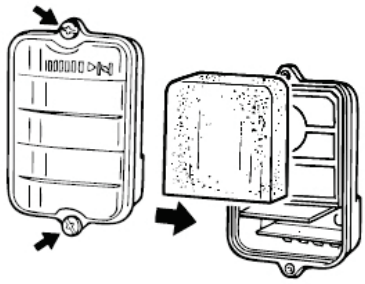
A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the generator in extremely dusty areas.

⚠WARNING

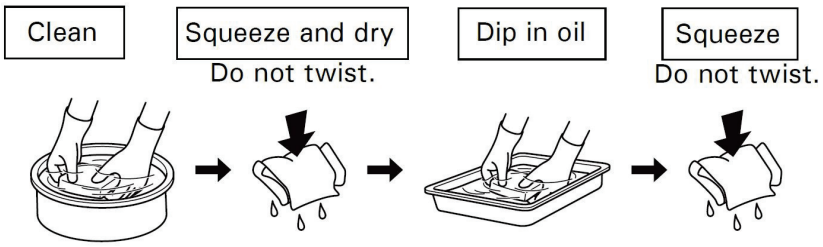
Do not use gasoline or low flash point solvents for cleaning.
They are flammable and explosive under certain conditions.

CAUTION:
Never run the engine without the air cleaner element.
Rapid engine wear will result.

1. Unsnap the two air cleaner cover clips, remove the air cleaner cover,and remove the air cleaner element.



2. Clean in warm soapy water, rinse and allow to dry thoroughly. Or clean in high flash point solvent and allow to dry. Dip the element in clean engine oil and squeeze out all the excess. The engine will smoke during initial startup if too much oil is left in the foam.



Recommended oil for air filter cleaning:
sponge air filter oil or SAE#20 engine oil

3. Reinstall the air cleaner element and the cover.

NOTE:
The surface of the sponge must stick to the air filter closely, without gaps for air leakage.

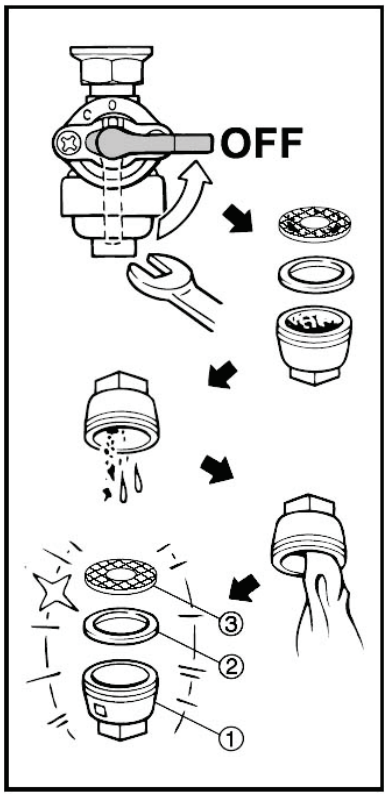
3. FUEL SEDIMENT CUP SERVICE

⚠WARNING

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

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.

1. Turn the engine switch to the STOP position.
2. Turn the fuel valve lever to the OFF position. Remove the sediment cup and O-ring.
3. Clean the sediment cup in non-flammable or high flash point solvent.
4. Reinstall the new O-ring and sediment cup.
5. Turn the fuel valve lever to the ON position and check for leaks.



⚠WARNING

After installing the sediment cup, be sure to tighten it securely. Check for fuel leaks and make sure the area is dry before starting the engine.

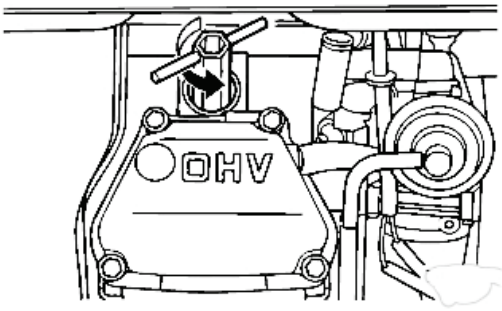
4. SPARK PLUG SERVICE

Recommended spark plugs:

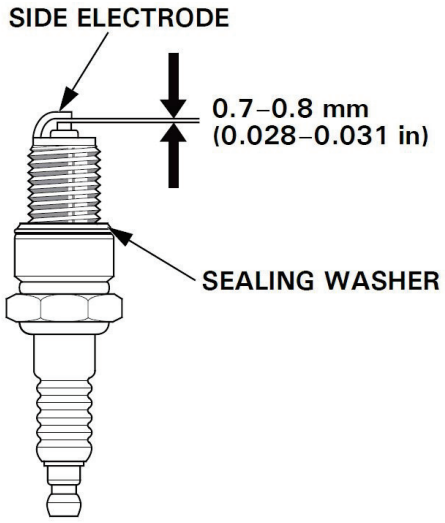
BPR6ES (NGK)
W20EPR-U (DENSO)

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

CAUTION:
If the engine has been running, the muffler will be very hot.
Be careful not to touch the muffler.



1. Remove the spark plug cap.
2. Clean any dirt from around the spark plug base.
3. Use a spark plug wrench to remove the spark plug.
4. Visually inspect the spark plug. Discard it if the insulator is cracked, chipped or fouled. Clean the spark plug with a wire brush if it is to be reused.
5. Measure the plug gap with a feeler gauge. Correct as necessary by carefully bending the side electrode.
   The gap should be:
   0.7–0.8 mm (0.028–0.031 in)
6. Make sure that the sealing washer is in good condition, and thread the spark plug in by hand to prevent cross-threading.
7. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.
   Torque: 20Nm (14.7 ft/lb)
8. Reinstall the spark plug cap on the spark plug securely.



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.

9. TRANSPORTING/STORAGE

1. TRANSPORTING

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 to STOP.

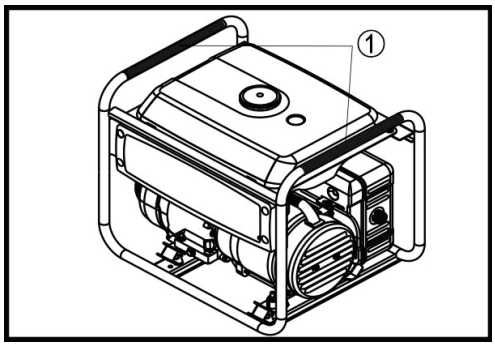
The fuel valve lever should be turned OFF.

⚠WARNING

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.**

CAUTION:
Be sure to lift up the generator by utilizing the holding part (1)



2. STORAGE

1. Turn the fuel valve lever to the OFF position.
2. Place a suitable gasoline container below the carburetor, and use a funnel to avoid spilling fuel.
3. Loosen the carburetor drain screw and drain the gasoline from the carburetor.

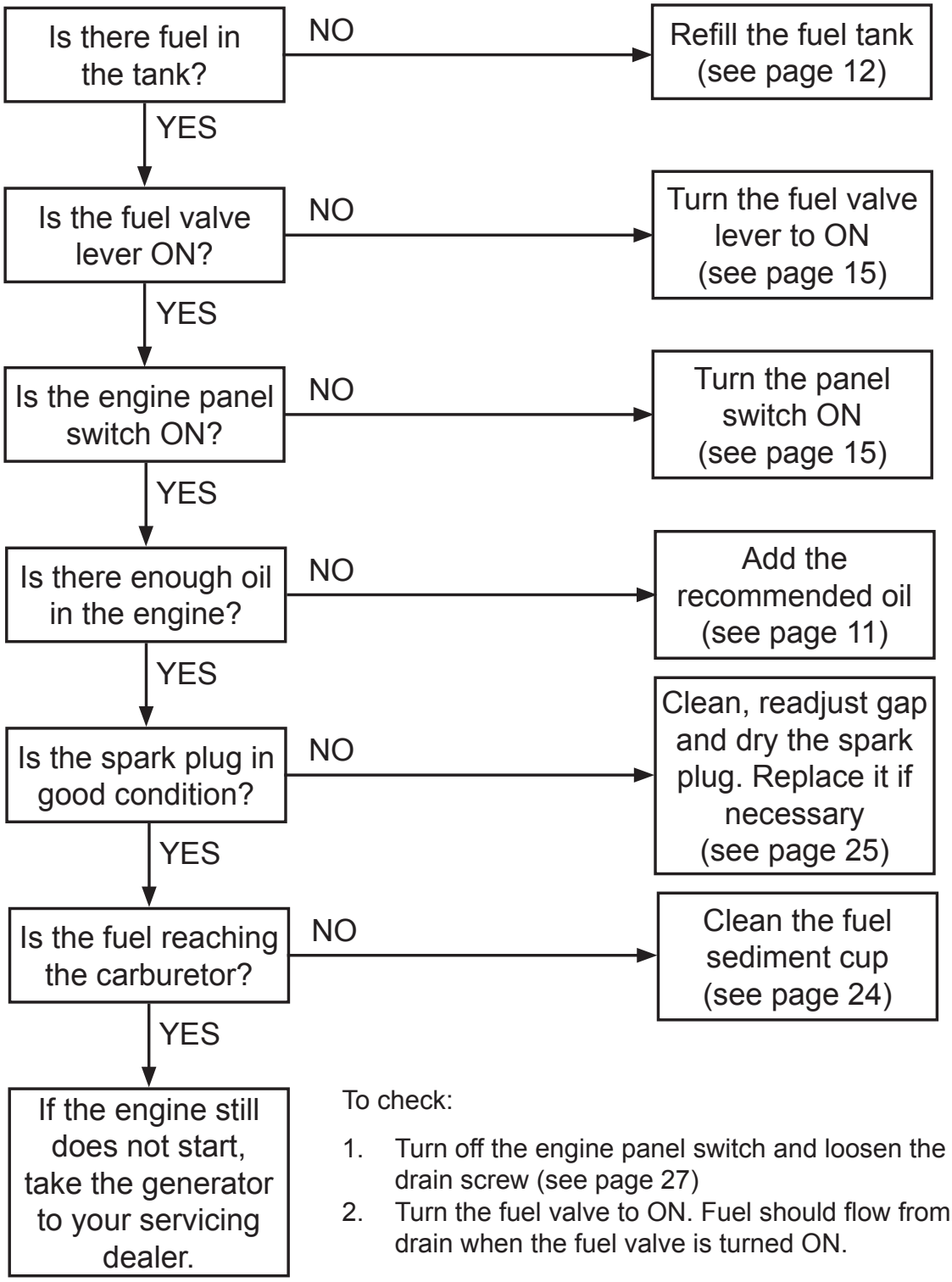
⚠WARNING

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.

4. After all the gasoline has drained into the container, tighten the drain screw securely.
5. Place a suitable gasoline container below the sediment cup, and use a funnel to avoid spilling fuel.
6. Remove the sediment cup (see page 24), and then turn the fuel valve lever to the ON position.
7. Allow the gasoline to drain completely, and then reinstall the sediment cup (see page 24).
8. Change the engine oil (see page 22).
9. Remove the spark plug, and pour about a tablespoon of clean engine oil into the cylinder. Turn the engine several revolutions slowly with the recoil starter to distribute the oil, then reinstall the spark plug.
10. 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.
11. Store the generator in clean area.

10. TROUBLESHOOTING

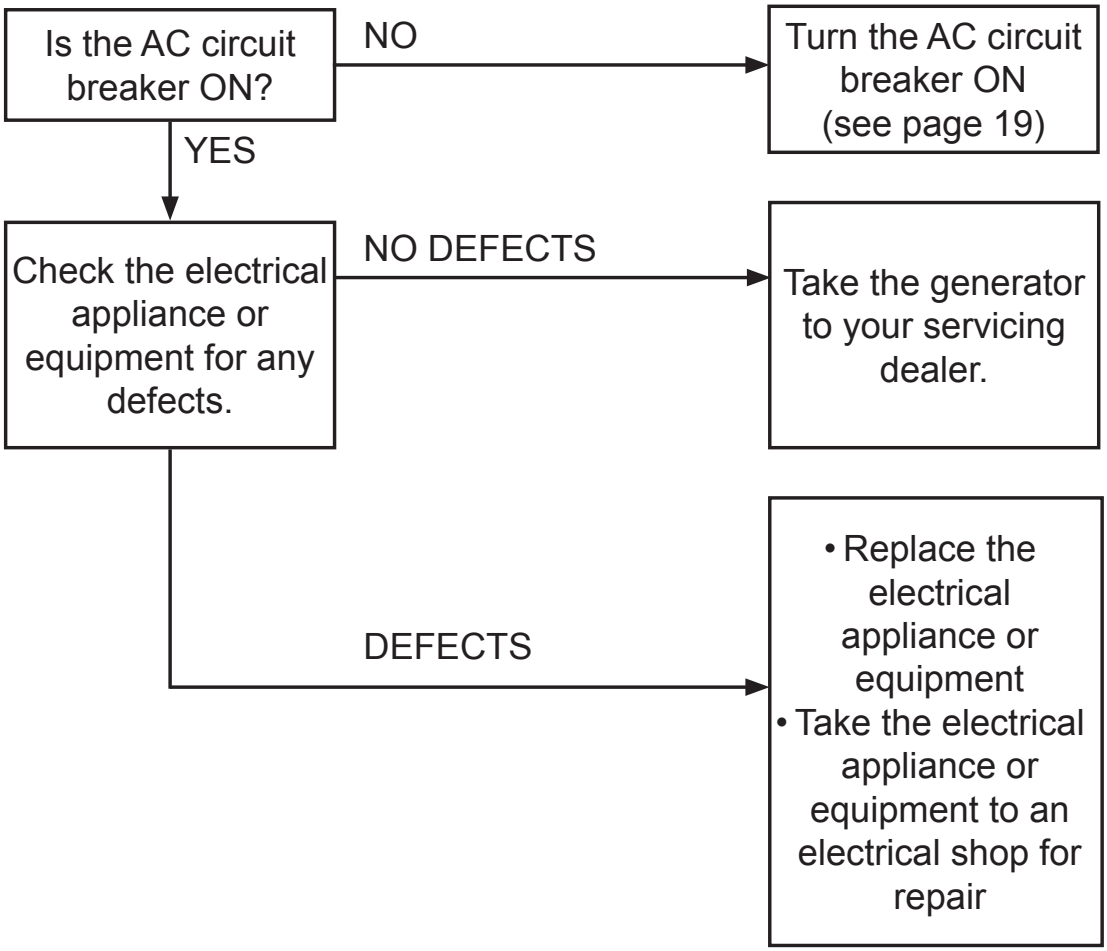
When the engine will not start :



To check:

1. Turn off the engine panel switch and loosen the drain screw (see page 27)
2. Turn the fuel valve to ON. Fuel should flow from the drain when the fuel valve is turned ON.

When there is no electricity at the AC receptacles :

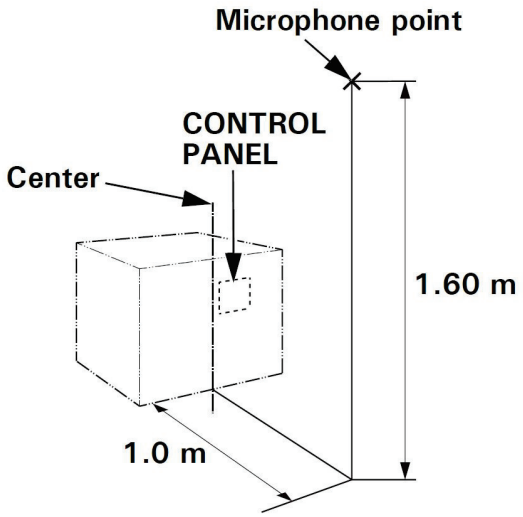


11. SPECIFICATIONS

Specifications

Model - Type	EM2300 B
Rated Frequency (Hz)	50
Rated Power (kVA)	2.0
Rated Voltage (V)	115/230
Phase	Single
Power Factor (cosφ)	1.0
Insulation Level	B
DC Output	NO
Engine Model	Honda GX160H
Engine Type	Forced air-cooled, 4-stroke, OHV, Transistor
Displacement (cc)	163
Cylinder diam. x stroke (mm)	68x45
Compression Ratio	8.5:1
Starting System	Recoil
Lubricating Oil Capacity (L)	0.58
Fuel Tank Capacity (L)	12 (Full)
Noise Level (dB)	94
Net Weight (kg)	40.0
Measurement (mm)(LxWxH)	535x430x450

Noise

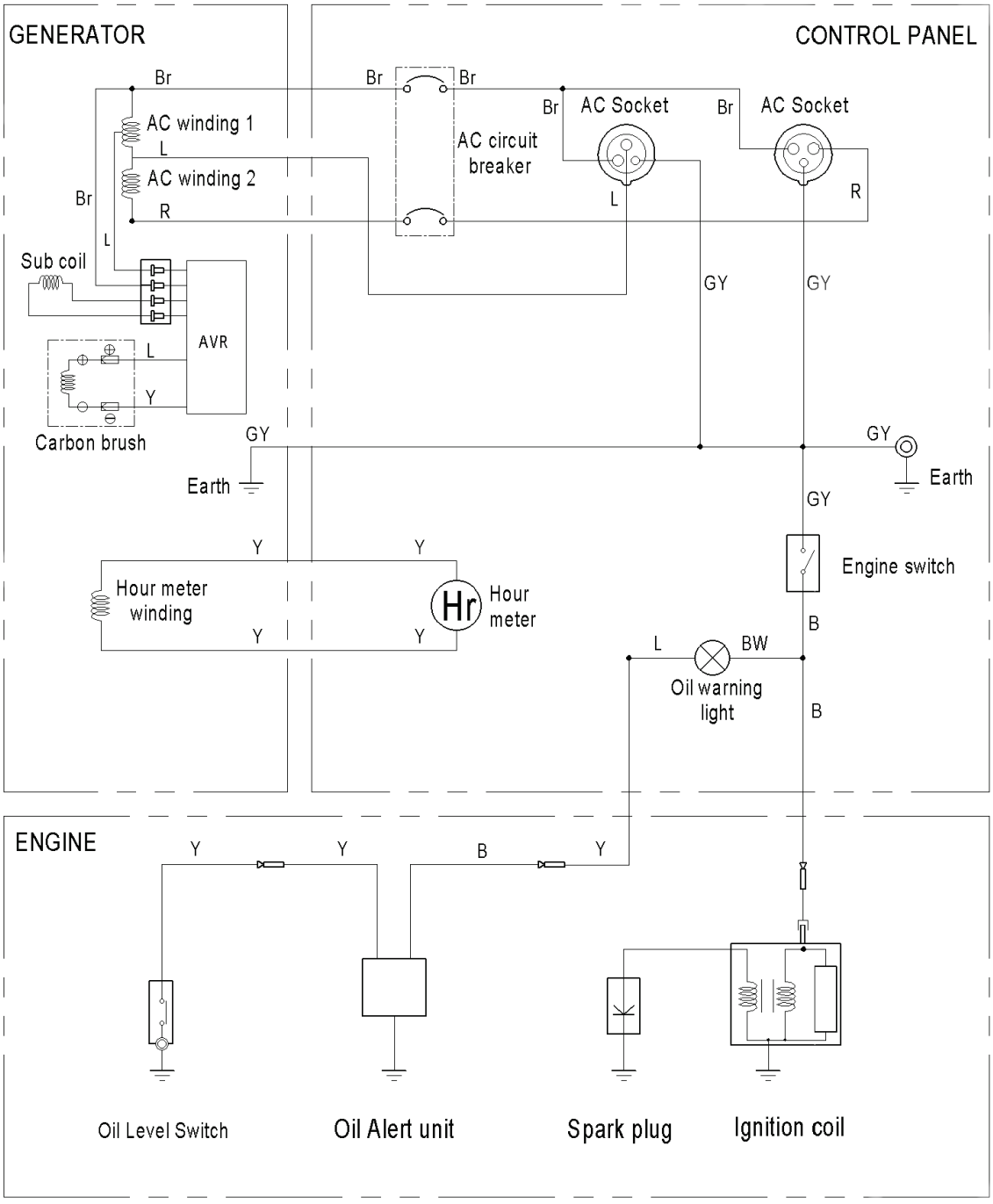
Model	EM2300
Type	B
Sound pressure level at the workstation (2006/42/EC)  	79 dB (A)
Uncertainty	1 dB (A)
Measured sound power level (2000/14/EC, 2005/88/EC)	93 dB (A)
Uncertainty	1 dB (A)
Guaranteed sound power level (2000/14/EC, 2005/88/EC)	94 dB (A)

The figures quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of work-force include the characteristics of the work room, the other sources of noise, etc. i.e. the number of machines and other adjacent processes, and the length of time for which an operator is exposed to the noise. Also the permissible exposure level can vary by country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.

NOTE:
Specifications are subject to change without notice.

12. WIRING DIAGRAM

EM2300 B (50Hz 115/230V)



Wiring color code

Br	Brown	Y	Yellow	BW	Black/White
R	Red	W	White	B	Black
GY	Green/Yellow	L	Blue	G	Green

EC Declaration Of Conformity

1. The undersigned, Peter Neckebroeck, on behalf of the authorized representative, herewith declares that the machinery described below fulfills all the relevant provision of:
   - Directive 2006/42/EC on machinery
   - Directive 2004/108/EC on electromagnetic compatibility
   - Directive 2000/14/EC - 2005/88/EC on outdoor noise

2. Description of the machinery

   a) Product: Generating sets

   b) Function: Producing electrical power

c) Model	d) Type	e) Serial number
EM2300	JSLE	1000001-9999999

3. Manufacturer

   Honda Mindong Generator Co Ltd.
   No 7, Houyou Road
   Fuxing Economic Development Zone,
   Fuzhou City, Fujian Province
   P.R. China

4. Authorized representative and able to compile the technical documentation

   Honda Motor Europe Ltd.
   Cain Road, Bracknell, RG12 1HL
   United Kingdom

5. References to harmonized standards	6. Other standards or specifications
EN 12601:2010	-

7. Outdoor Noise Directive

   a) Measured sound power dB(A): 93 (JSLE)
   b) Guaranteed sound power dB(A): 94 (JSLE)
   c) Noise parameter Pel≤15
   d) Conformity assessment procedure: ANNEX VI
   e) Notified body: AV TECHNOLOGY
   Unit 2, Easter Court
   Europa Boulevard
   Warrington, Cheshire
   WA5 7ZB
   UNITED KINGDOM

8. Done at: Cheshire, United Kingdom
9. Date: 25th November 2015

Peter Neckebroeck
Manager Homologation Department