Honda EG4000CX·EG5000CX EG6500CX·EG6500CXS

OWNER'S MANUAL

Original instructions

MANUAL DE EXPLICACIONES

Manual original

دليل المالك

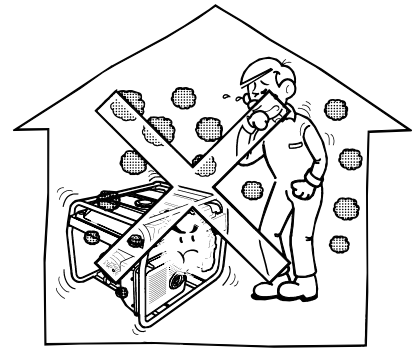
التعليمات الأصلية

CONTENTS

The illustrations herein are mainly based on: RH type
- The illustration may vary according to the type.

SAFETY

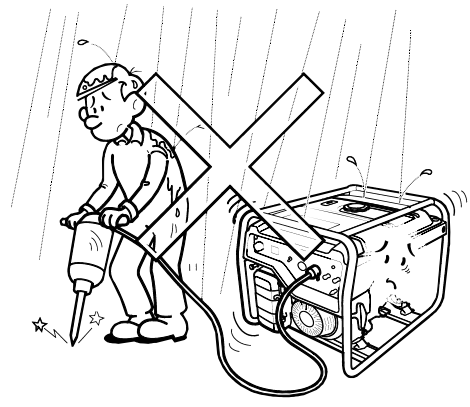
DO NOT USE INSIDE HOUSE!



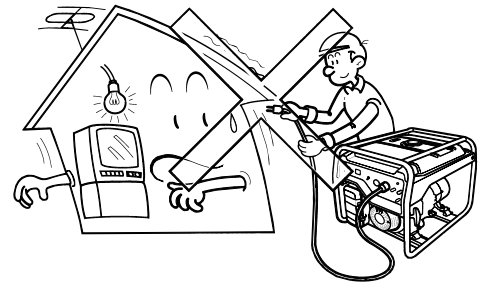
DO NOT USE IN WET CONDITIONS!

- Do not use in the rain or snow.
- Do not use near a pool or sprinkler system.
- Do not use when your hands are wet.

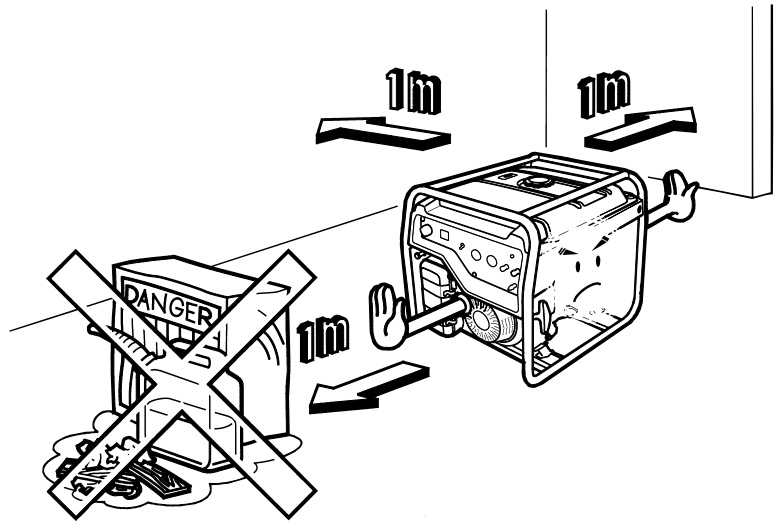
KEEP THE GENERATOR DRY.



DO NOT CONNECT TO HOUSEHOLD CIRCUIT!

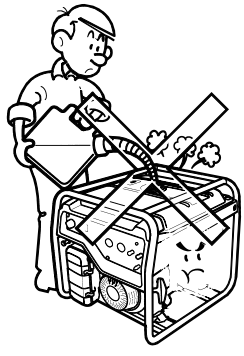


KEEP AWAY FROM FLAMMABLE MATERIALS!

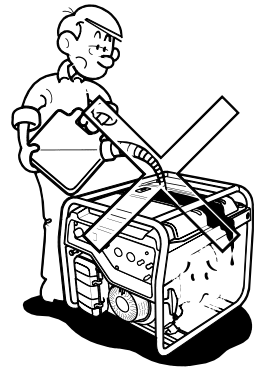


WHEN REFUELING:

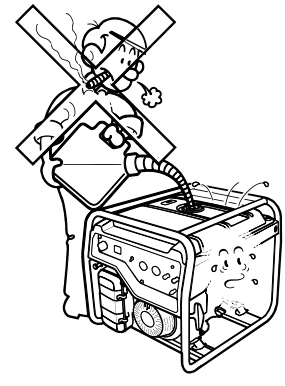
STOP ENGINE!



DO NOT SPILL!



NO SMOKING!



PRE-OPERATION CHECK

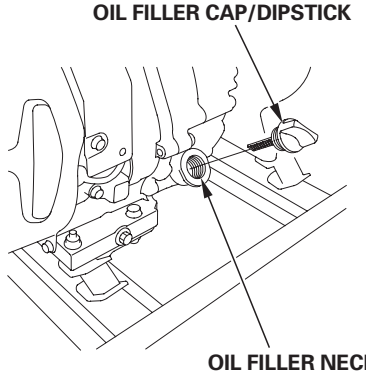
1. ENGINE OIL LEVEL

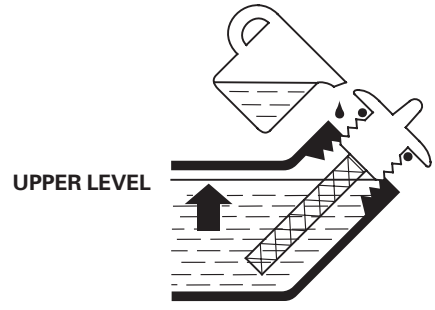
Check the engine oil level with the generator on a level surface and the engine stopped.

Recommended oil:
4-STROKE MOTOR OIL SAE 10W-30
API Service category SE or later

1. Remove the oil filler cap/dipstick and check the oil level.

2. If the oil level is low, add the recommended oil to the edge of the oil filler neck.





3. Install the oil filler cap securely.

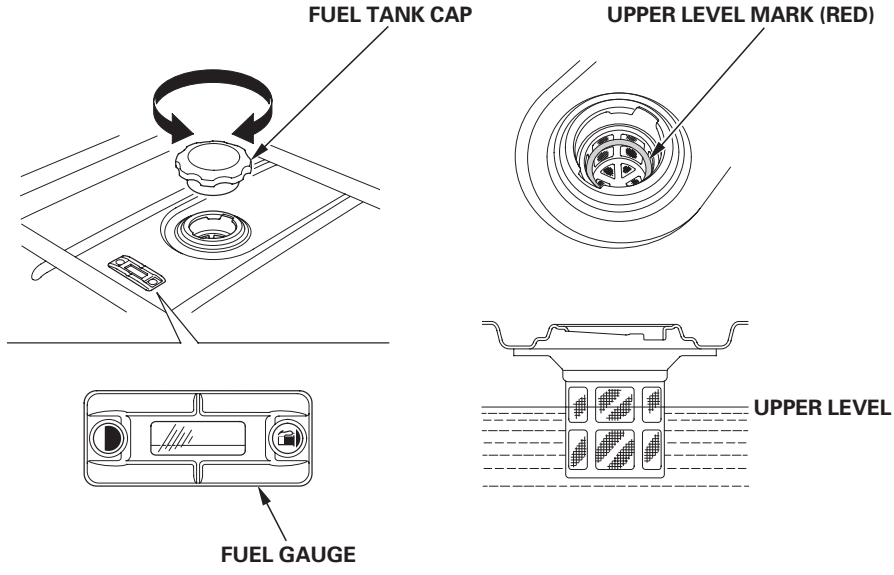
2. FUEL LEVEL

Never use an oil/gasoline mixture or dirty gasoline.

Fuel tank capacity: 24.0 L

1. Check the fuel level.

2. If the fuel level is low, fill the fuel to the upper level.

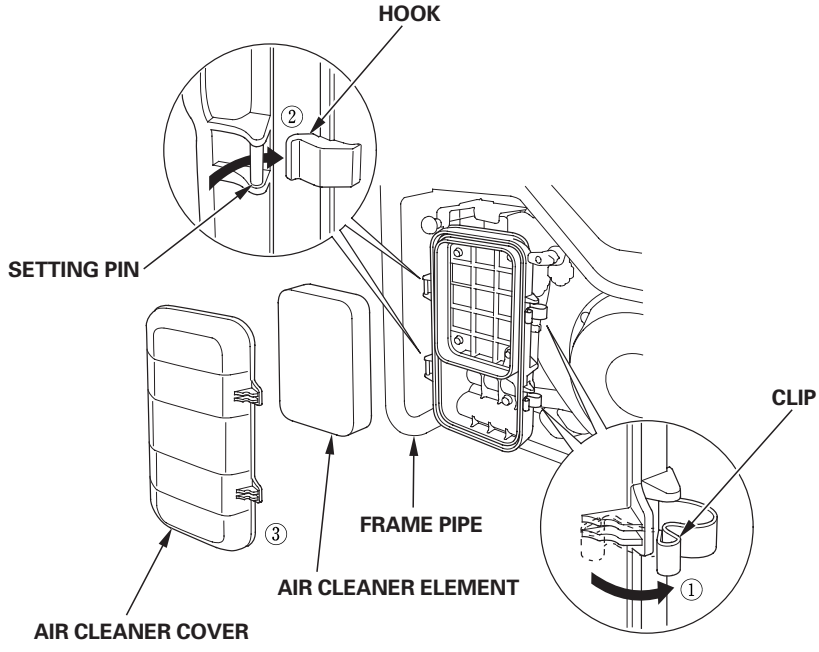


3. After filling, install the fuel tank cap securely.

PRE-OPERATION CHECK

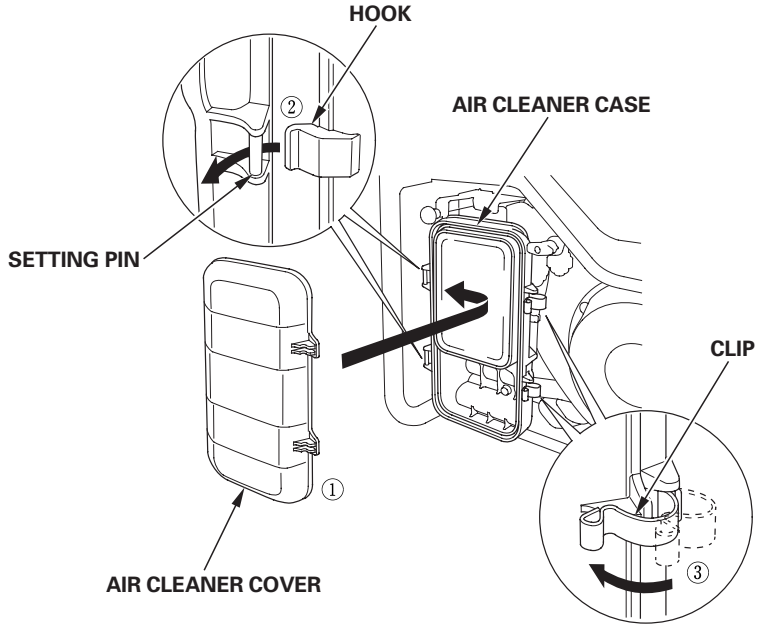
3. AIR CLEANER

1. Remove the air cleaner cover taking care not to damage it.
   ①Unsnap the air cleaner cover clips and pull the air cleaner cover.
   ②Free the hooks from the setting pins.
   ③Remove to the right side of the frame pipe.

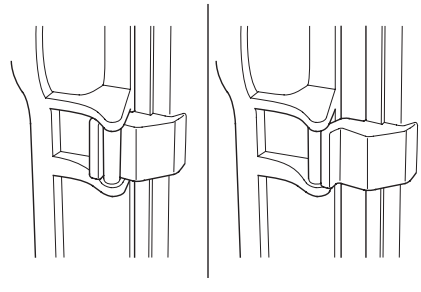


2. Check the air cleaner element to be sure it is clean and in good condition. Clean or replace the air cleaner element if necessary (see page 22).

3. Reinstall the air cleaner cover.
   ①Place the air cleaner cover over the air cleaner case.
   ②Set the hooks to the setting pins securely.
   ③Push the air cleaner cover to lock the clips.



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



PRE-OPERATION CHECK

BATTERY SERVICE (electric starter type only)

Your generator's engine charging system charges the battery while the engine is running. However, if the generator is only used periodically, the battery must be charged monthly to maintain the battery service life.

⚠WARNING

- **The battery contains sulfuric acid (battery fluid), which is highly corrosive and poisonous. Getting battery fluid in your eyes or on your skin can cause serious burns.**
- **Wear protective clothing and eye protection when working near the battery.**
- **KEEP CHILDREN AWAY FROM THE BATTERY.**

Emergency Procedures

Eyes — Flush with water from a cup or other container for at least fifteen minutes. (Water under pressure can damage the eye.) Call a physician immediately.

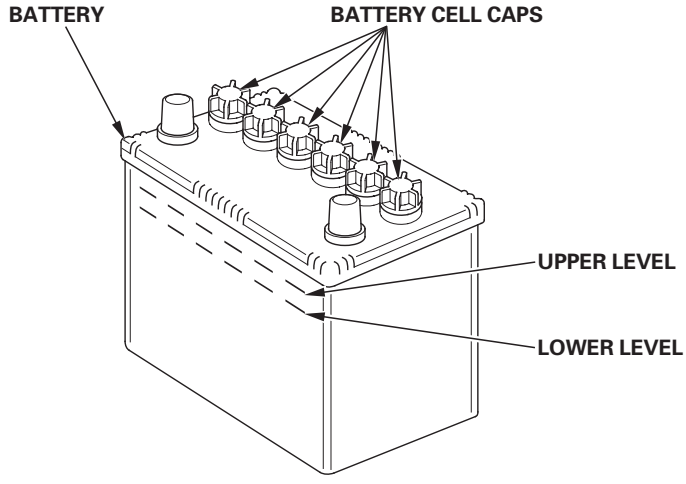
Skin — Remove contaminated clothing. Flush the skin with large quantities of water. Call a physician immediately.

Swallowing — Drink water or milk. Call a physician immediately.

The battery fluid level must be kept between the UPPER and LOWER level marks. If the battery fluid level is below the LOWER level, sulfation and battery plate damage will occur.
If rapid loss of battery fluid is experienced, or if your battery seems to be weak causing slow operation of the starter motor, see your authorized Honda generator dealer.

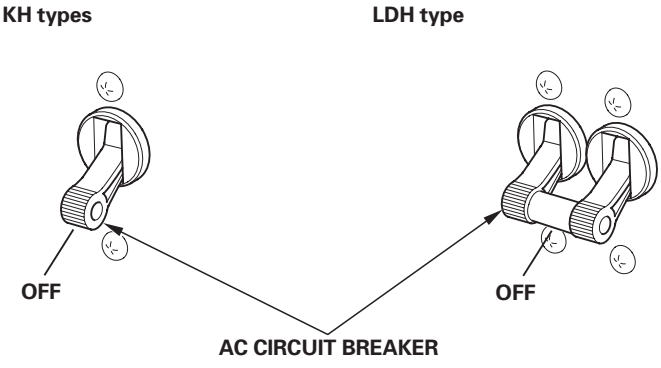
1. Locate the battery. Check the battery fluid level with the generator on a level surface. Remove the battery cell caps.
2. Inspect the battery fluid level of each cell.
   The battery fluid level must be kept between the UPPER and LOWER level marks, and battery fluid should cover all the plates.
3. If any plates are not covered, remove the battery and add distilled water as necessary.

   For battery installation, refer to the Battery Tray Kit (see page 32).

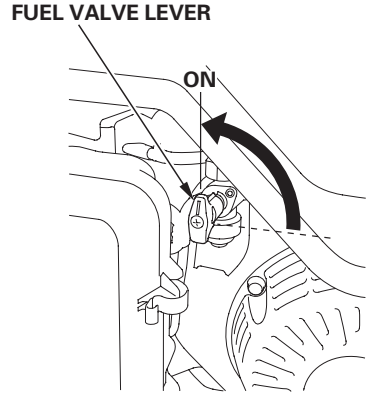


STARTING THE ENGINE

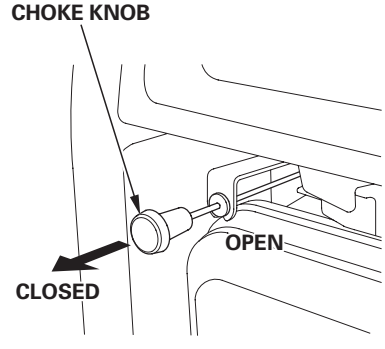
1. Make sure that the AC circuit breaker is in the OFF position.



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



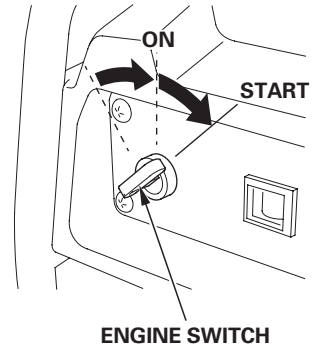
3. Move the choke knob to the CLOSED position.
   To restart the warm engine, leave the choke knob in the OPEN position.



4. Start the engine.

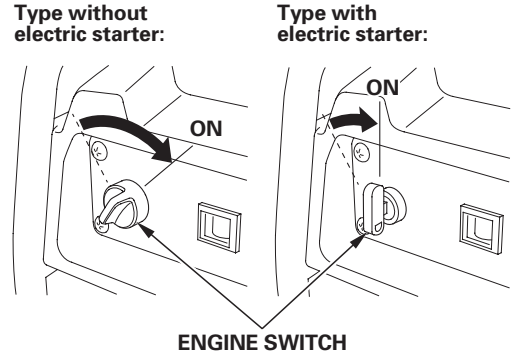
- Using the electric starter:

  Turn the engine switch to the START position, and hold it there until the engine starts. When the engine starts, release the key, allowing the switch to return to the ON position.



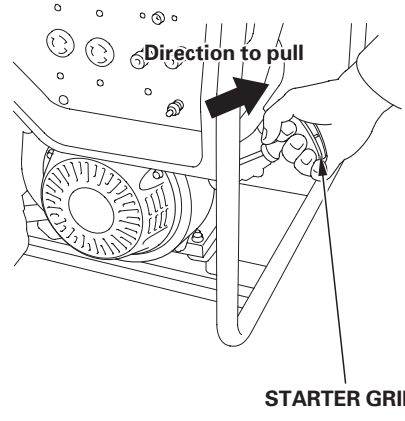
- Using the recoil starter:

  a. Turn the engine switch to the ON position.



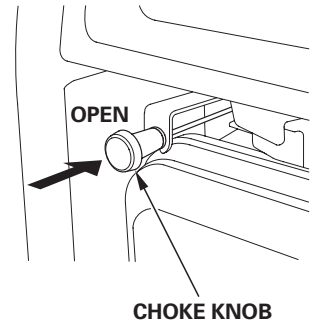
  b. Pull the starter grip lightly until you feel resistance, then pull briskly in the direction of the arrow as shown.

  CAUTION:
  Do not allow the starter grip to snap back. Return it slowly by hand.



STARTING THE ENGINE

5. If the choke knob was moved to the CLOSED position, move to the OPEN position as the engine warms up.



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

If the engine stops and will not restart, check the engine oil level (see page 4) before troubleshooting in other areas.

Automatic Engine Stop Function

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

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

Abnormal Voltage Detection Function
The engine will automatically stop during generation when it detects abnormal voltage.

If the engine stops, inspect the amount of engine oil, and a while, then try to restart the engine. When the engine will not start at all, take your generator to the dealer.

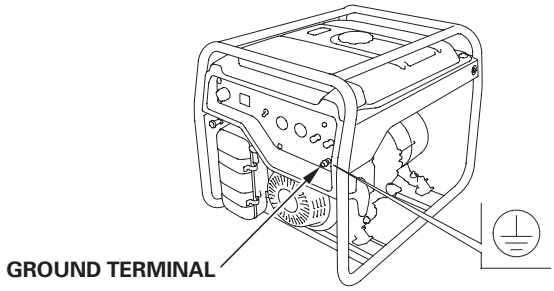
To keep the generator always in top mechanical and electrical condition, observe the following.

- Combined load of the connected apparatus must not exceed the rated capacity of the generator.
  Rated capacity:

EG4000CX	: 3.2 kVA (MH, RH, KH types)
	: 3.6 kVA (LDH type)
EG5000CX	: 4.0 kVA (MH, RH, KH types)
	: 4.5 kVA (SH, LDH types)
EG6500CX·EG6500CXS	: 5.0 kVA (MH, RH, KH types)
	: 5.5 kVA (SH, LDH types)

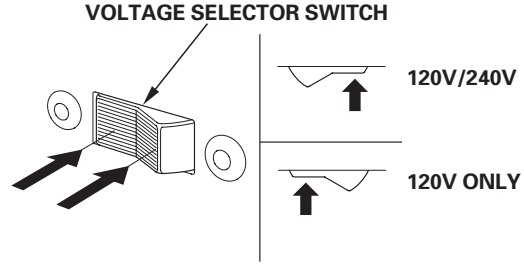
⚠WARNING

To prevent electrical shock from faulty appliances, the generator should be grounded.



AC Application

1. LDH type only:
   Turn the voltage selector switch to either 120V only or 120V/240V position as required.

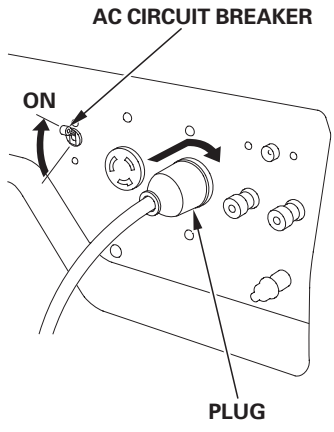


2. Start the engine.

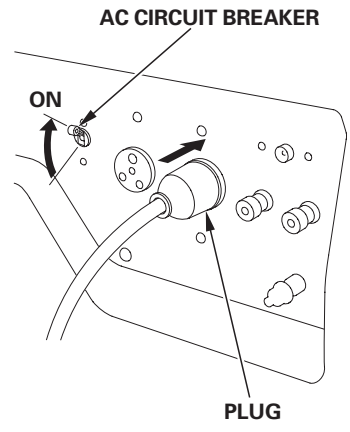
GENERATOR USE

3. Turn the AC circuit breaker to the ON position.
   Confirm that the appliance to be used is switched off, and plug in the appliance.

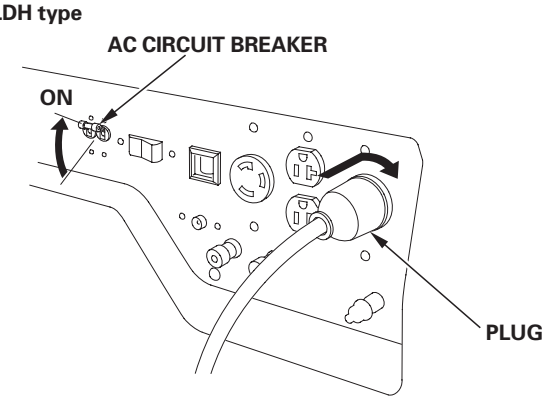
SH, RH, KH types



MH type



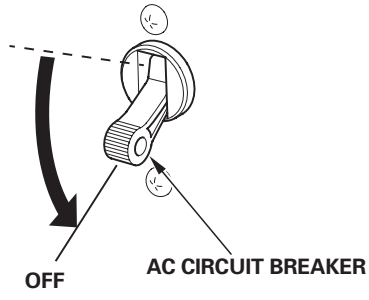
LDH type



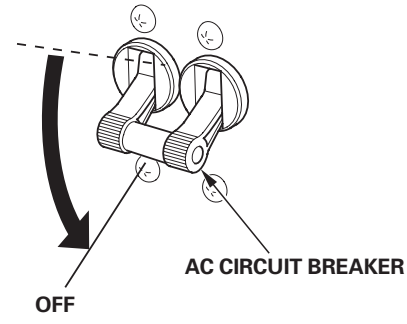
4. Turn on the equipment to be used.

An overloaded AC circuit will switch off the AC circuit breaker.
If this happens, reduce the load on the circuit, and wait a few minutes before switching on.

SH, MH, RH, KH types



LDH type

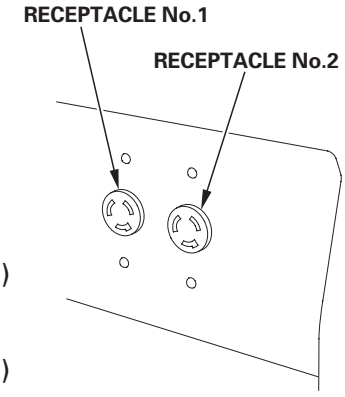


GENERATOR USE

AC Receptacle Selection

SH, RH, KH types

Make sure the load on any receptacle does not exceed its available power shown below and the total load does not exceed the total current available.

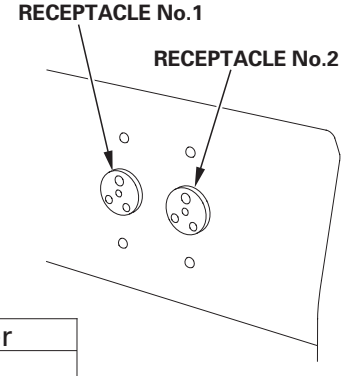


Total Current Available:
SH type: 20.5 A (EG5000CX)
25.0 A (EG6500CX·EG6500CXS)
RH, KH types: 14.5 A (EG4000CX)
18.2 A (EG5000CX)
22.7 A (EG6500CX·EG6500CXS)

Receptacles	Available power
1	20 A
2	20 A

MH type

Make sure the load on any receptacle does not exceed its available power shown below and the total load does not exceed the total current available.

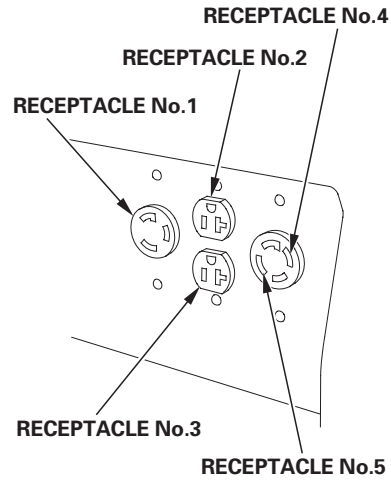


Total Current Available:
14.5 A (EG4000CX)
18.2 A (EG5000CX)
22.7 A (EG6500CX·EG6500CXS)

Receptacles	Available power
1	16 A
2	16 A

LDH type

Receptacle No.4 and No.5 comprise one 240V receptacle with two powered terminals.
This generator is equipped with two power generating circuits. When the voltage selector switch is in the 120V/240V position, each of the two power producing circuits supplies power to specific receptacles.



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

Total Current Available:
30.0 A (EG4000CX)
37.5 A (EG5000CX)
45.8 A (EG6500CX·EG6500CXS)

Receptacles	Available power
1	30 A
2	20 A
3	20 A
4	20 A
5	None

When the voltage selector switch is in the 120V/240V position, you must balance the load. Divide the load between the two sets of receptacles.

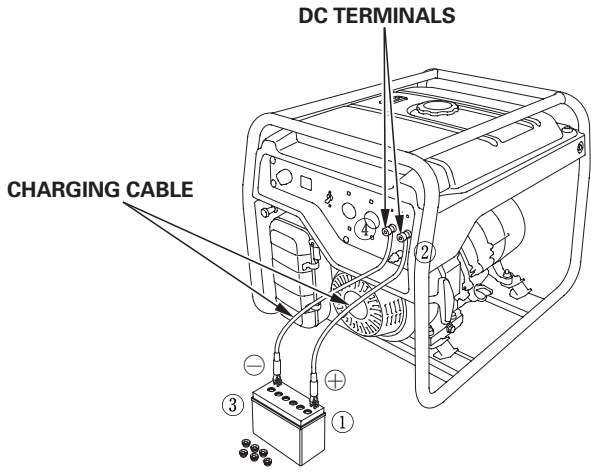
Set of Receptacles	Total Current Available
1＋3＋4	15.0 A (EG4000CX) 18.8 A (EG5000CX) 22.9 A (EG6500CX·EG6500CXS)
2＋5	

GENERATOR USE

DC Application

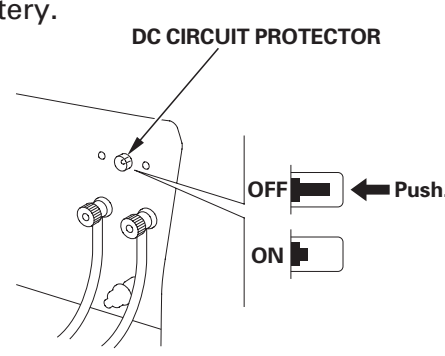
The DC terminals may be used for charging 12 volt automotive-type batteries only.

1. Connect the charging cable to the DC terminals and battery terminals in numerical order as shown.
   ①to positive (+) battery terminal
   ②to positive (+) DC terminal
   ③to negative (−) battery terminal
   ④to negative (−) DC terminal



2. Start the engine and charge the battery.

NOTE:
An overloaded DC circuit will trip the DC circuit protector (push button comes out).
If this happens, check the short circuit of counter connection and wait a few minutes before pushing the circuit protector.



STOPPING THE ENGINE

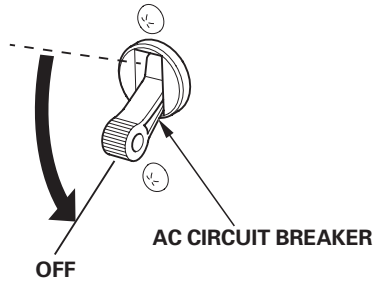
In emergency, turn the engine switch to the OFF position.

In normal use:

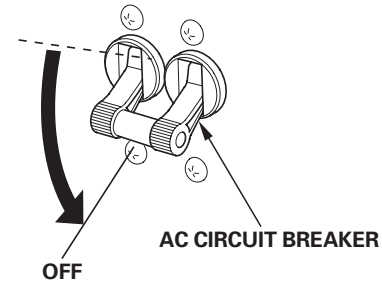
1. Switch off the connected appliance and pull off the plug.

2. Turn the AC circuit breaker to the OFF position.

SH, MH, RH, KH types

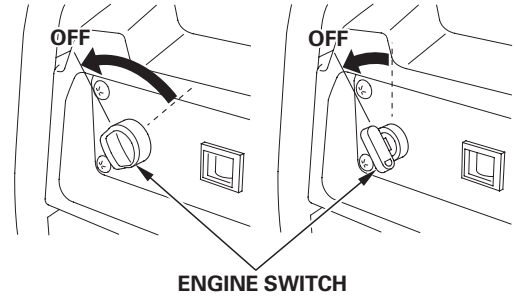


LDH type

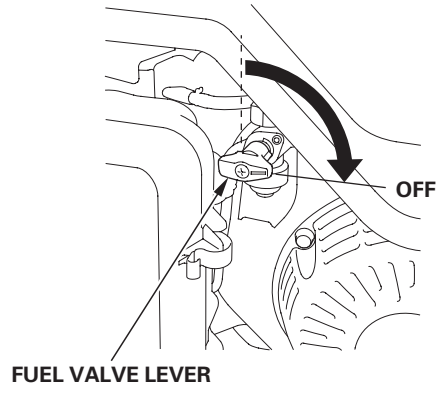


3. Turn the engine switch to the OFF position.

Type without electric starter: **Type with electric starter:**



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



MAINTENANCE

Maintenance Schedule

REGULAR SERVICE PERIOD(3) Perform at every indicated month or operating hour interval, whichever comes first. / ITEM		Each use	First month or 20 hrs.	Every 3 months or 50 hrs.	Every 6 months or 100 hrs.	Every years or 300 hrs.	Page
Engine oil	Check level	○					4
	Change		○		○		21
Air cleaner	Check	○					22
	Clean			○(1)			22
Sediment cup	Clean				○		25
Spark plug	Check-adjust				○		24
	Replace					○	24
Valve clearance	Check-adjust					○(2)	—
Combustion chamber	Clean	After every 500 hrs. (2)					—
Fuel tank & filter	Clean					○(2)	—
Fuel tube	Check	Every 2 years (Replace if necessary) (2)					—
Battery fluid check (electric starter type only)	Check	○					8

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

Tools

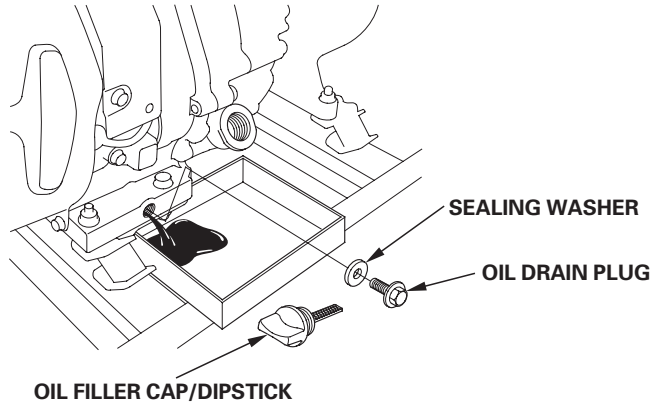
A box wrench and wrench handle are supplied with the generator. Use the supplied tools to perform maintenance tasks. Using an incorrect tool may damage the generator.

Power Plug

This generator is bundled with power plugs corresponding to the number of outlets equipped on the generator. (except MH type)

ENGINE OIL CHANGE

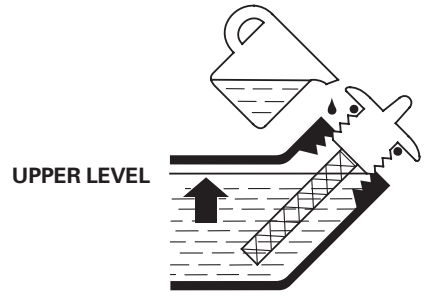
1. Remove the oil filler cap/dipstick and oil drain plug to drain the oil.



2. Install the oil drain plug, and tighten it securely.

3. Fill to the upper level with the recommended oil (see page 4).

Engine oil capacity:
1.1 L

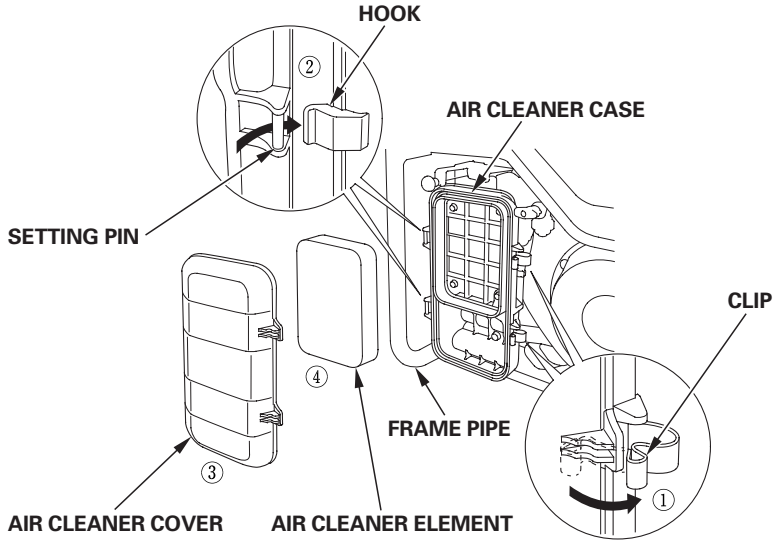


4. Reinstall the oil filler cap/dipstick securely.

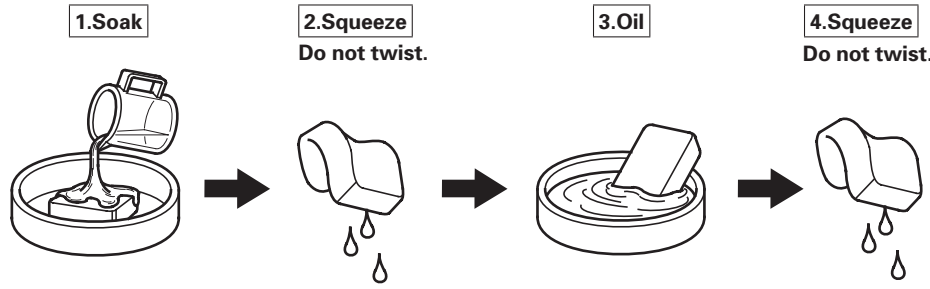
MAINTENANCE

AIR CLEANER SERVICE

1. Remove the air cleaner cover taking care not to damage it.
   ①Unsnap the air cleaner cover clips and pull the air cleaner cover.
   ②Free the hooks from the setting pins.
   ③Remove to the right side of the frame pipe.
   ④Remove the air cleaner element from the air cleaner case and clean it.

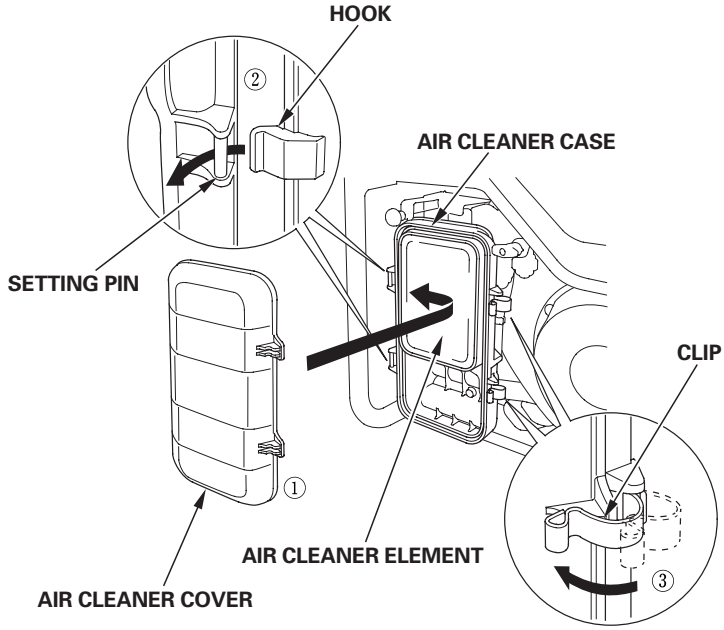


Wash the air cleaner element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flashpoint solvent. Allow the air cleaner element to dry thoroughly. Soak the air cleaner element in clean engine oil and squeeze out the excess oil. The engine will smoke during initial startup if too much oil is left in the air cleaner element.

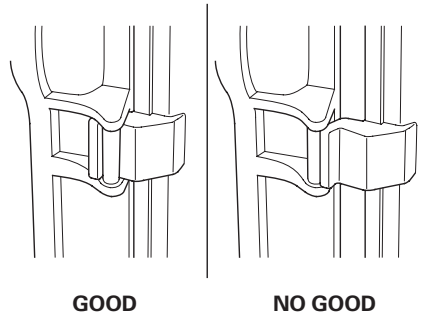


2. Install the air cleaner element to the air cleaner case.

3. Reinstall the air cleaner cover.
   ①Place the air cleaner cover over the air cleaner case.
   ②Set the hooks to the setting pins securely.
   ③Push the air cleaner cover to lock the clips.



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



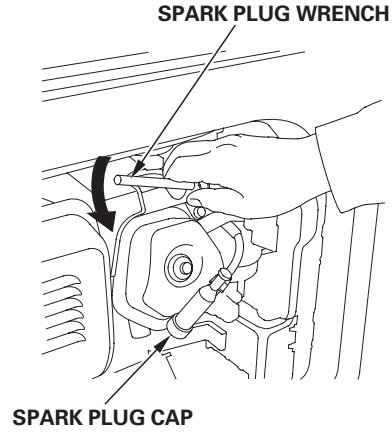
MAINTENANCE

SPARK PLUG SERVICE

Recommended spark plug: BPR5ES (NGK)

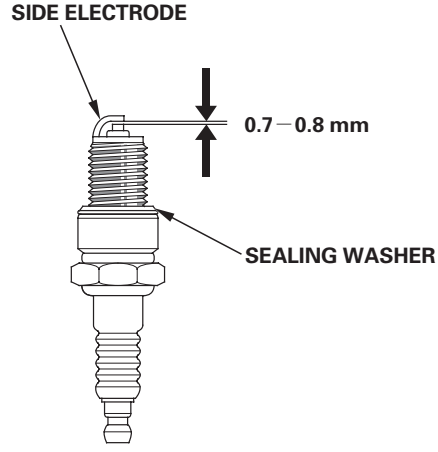
CAUTION:
Never use a spark plug with an improper heat range.

1. Remove the spark plug cap and then remove the spark plug using a spark plug wrench.



2. Clean the spark plug with a wire brush.

3. Measure the plug gap. Correct as necessary by bending the side electrode.
   Spark plug gap:
   0.7 – 0.8 mm



4. Install the spark plug carefully by hand, to avoid cross-threading.

5. After the spark plug is seated, tighten with a spark plug wrench to compress the sealing washer.
   Used spark plug: Tighten the spark plug 1/8 to 1/4 turn after being seated.
   New spark plug: Tighten the spark plug 1/2 turn after being seated.

6. Install the spark plug cap.

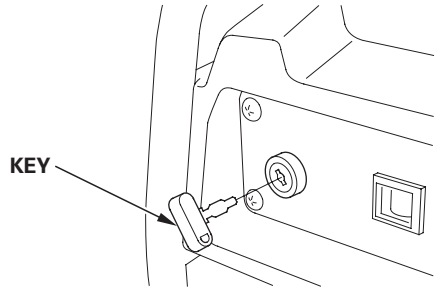
SEDIMENT CUP CLEANING

⚠WARNING

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

1. Type with electric starter:
   Turn the engine switch to the OFF position and remove the key.

   Type without electric starter:
   Turn the engine switch to the OFF position.

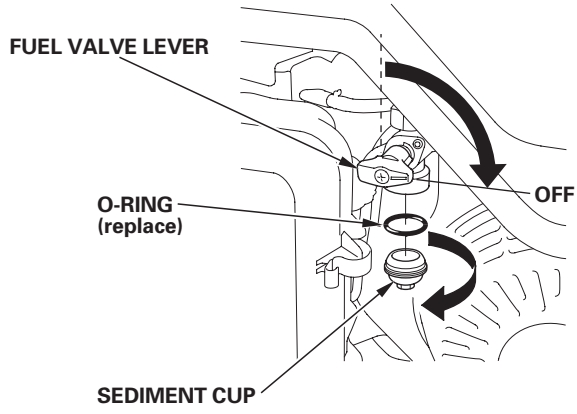


2. Turn the fuel valve lever to the OFF position.

3. Remove the sediment cup and O-ring.

4. Clean the sediment cup.

5. Reinstall the new O-ring and sediment cup securely.



MAINTENANCE

FUSE (electric starter type only)

If the fuse is blown, the starter motor won't operate.

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

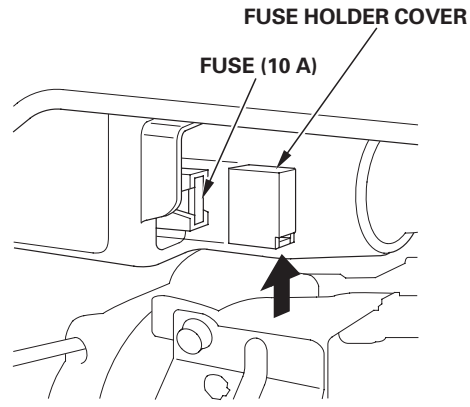
1. Turn the engine switch to the OFF position and remove the key before checking or replacing the fuse.

2. Remove the fuse holder cover and pull the fuse out.

3. Replace the fuse with a fuse of the same type and rating.
   Specified fuse: 10 A

   NOTICE

   Never use a fuse with a different rating from that specified. Serious damage to the electrical system or fire may result.

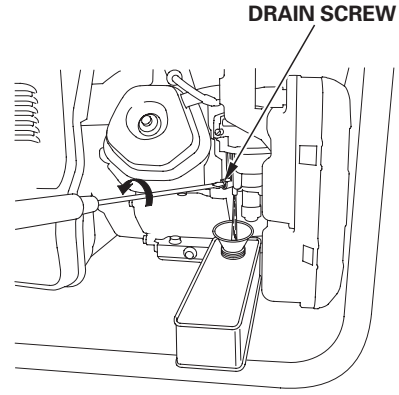


4. Install the fuse holder cover in the reverse order of removal.

⚠WARNING

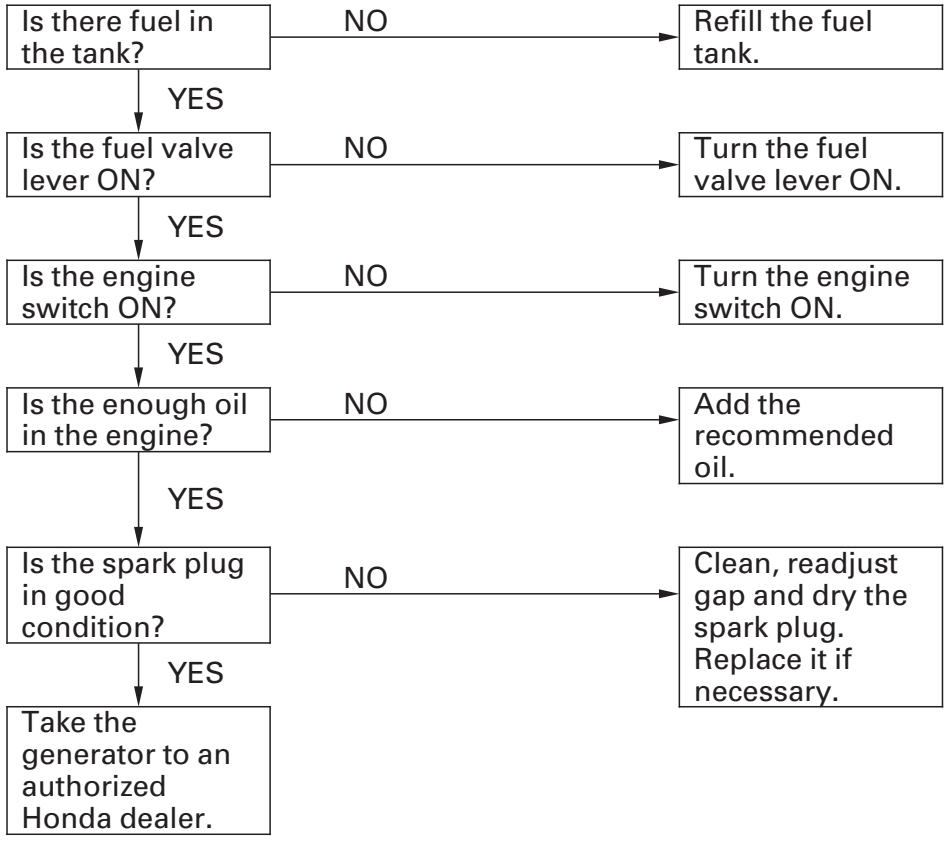
Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in the area.

1. Drain the fuel from the fuel tank.
2. Loosen the drain screw and drain the carburetor.
3. Change the engine oil (see page 21).
4. Slowly pull the starter grip until resistance is felt.
5. Store the generator in clean area.

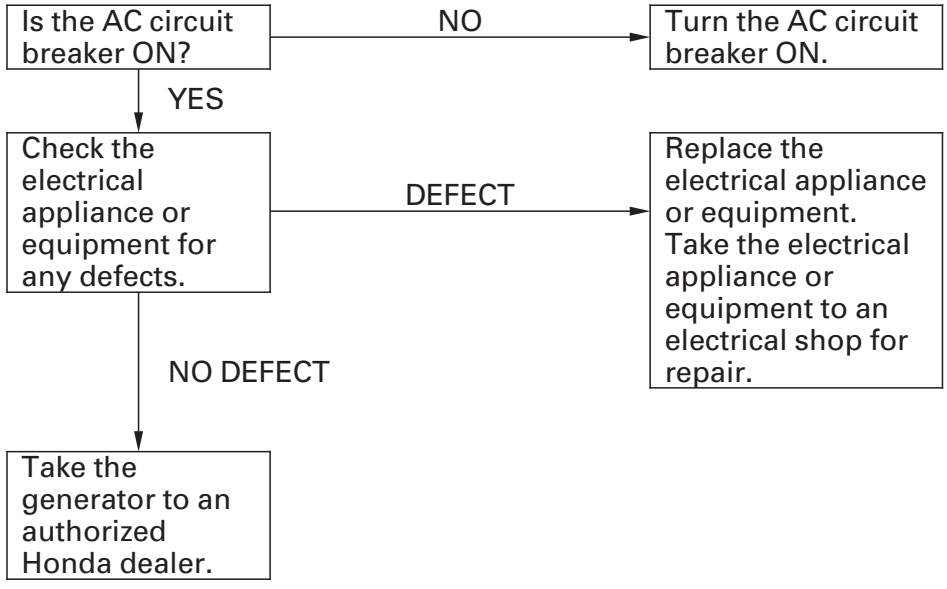


TROUBLESHOOTING

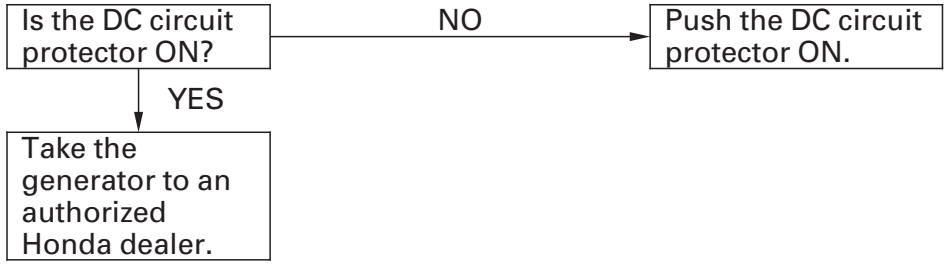
When the engine will not start:



No electricity at the AC receptacles:

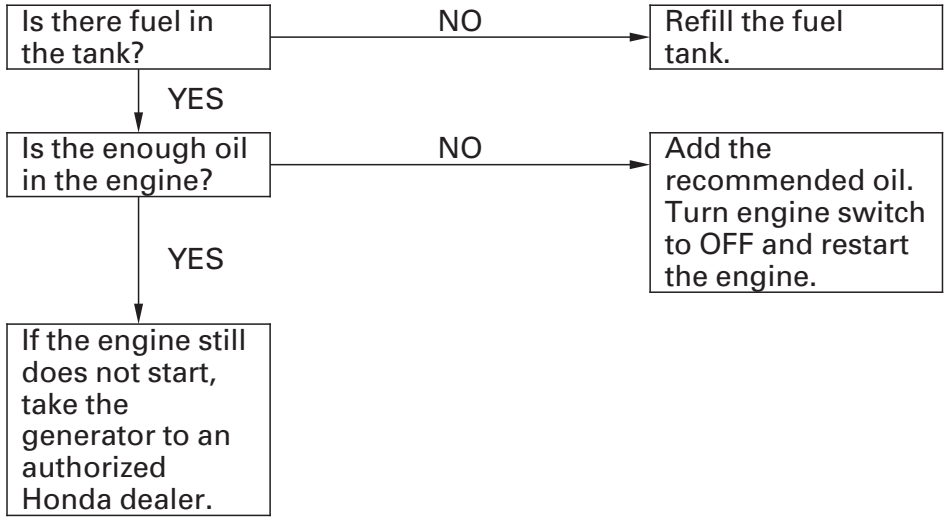


No electricity at the DC terminals:



TROUBLESHOOTING

When the engine is stopped:



SPECIFICATIONS

Model		EG4000CX			
Type		LDH	MH	RH	KH
AC output	Rated voltage	120 V/240 V	220 V		
	Rated frequency	60 Hz	50 Hz		
	Rated current	30.0 A/15.0 A	14.5 A		
	Rated output	3.6 kVA	3.2 kVA		
	Maximum output	4.0 kVA	3.6 kVA		
DC output	Rated voltage	12 V			
	Rated current	8.3 A			

Model		EG5000CX				
Type		SH	LDH	MH	RH	KH
AC output	Rated voltage	220 V	120 V/240 V	220 V		
	Rated frequency	60 Hz		50 Hz		
	Rated current	20.5 A	37.5 A/18.8 A	18.2 A		
	Rated output	4.5 kVA		4.0 kVA		
	Maximum output	5.0 kVA		4.5 kVA		
DC output	Rated voltage	12 V				
	Rated current	8.3 A				

Model		EG6500CX·EG6500CXS				
Type		SH	LDH	MH	RH	KH
AC output	Rated voltage	220 V	120 V/240 V	220 V		
	Rated frequency	60 Hz		50 Hz		
	Rated current	25.0 A	45.8 A/22.9 A	22.7 A		
	Rated output	5.5 kVA		5.0 kVA		
	Maximum output	6.5 kVA		5.5 kVA		
DC output	Rated voltage	12 V				
	Rated current	8.3 A				

INSTALLATION OF KIT PARTS

STANDARD KIT PARTS

EG6500CXS
Electric starter type:

Battery Tray Kit

1. Install the battery guard pipe on the frame.
   Set the battery tray on the battery guard pipe and tighten the bolts.

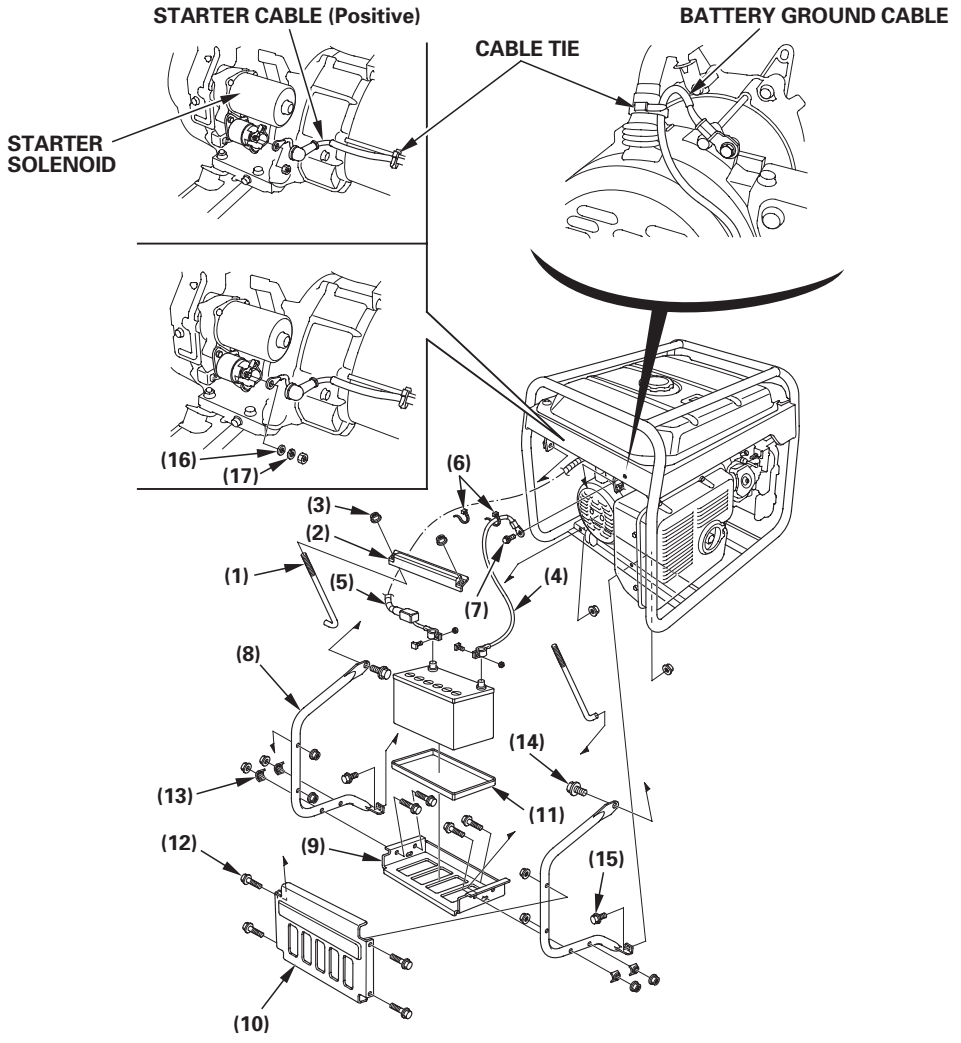
2. Route the starter cable under the tank and connect it to the starter solenoid.

3. Connect the battery ground cable to the generator rear housing.

4. Set the battery on the battery tray and secure with the battery set bolt.
   Connect the starter cable to the battery positive (+) terminal first, then to the negative (−) terminal. When disconnecting, disconnect at the battery negative (−) terminal first.

5. Install the battery guard plate on the battery guard pipe.

INSTALLATION OF KIT PARTS



(1) BATTERY SET BOLT	2	(9) BATTERY TRAY	1
(2) BATTERY SET PLATE	1	(10) BATTERY GUARD PLATE	1
(3) 6 mm FLANGE NUT	12	(11) BATTERY BOX	1
(4) BATTERY GROUND CABLE	1	(12) 6×30 mm FLANGE BOLT	8
(5) STARTER CABLE	1	(13) WASHER	8
(6) CABLE TIE	2	(14) 8×12 mm FLANGE BOLT	2
(7) 6×12 mm BOLT	1	(15) 6×12 mm FLANGE BOLT	2
(8) BATTERY GUARD PIPE	2	(16) WASHER	(1)
		(17) SPRING WASHER	(1)

INSTALLATION OF KIT PARTS

OPTIONAL KIT PARTS

Four Wheel Kit Installation

1. Install the lock plate and four wheels on the wheel shaft using the plain washers and split pins.

NOTE:
Install the front wheel shaft on the front side nearest the engine.

2. Install the wheel shaft assembly on the generator using eight 8 × 16 mm hex bolts.