

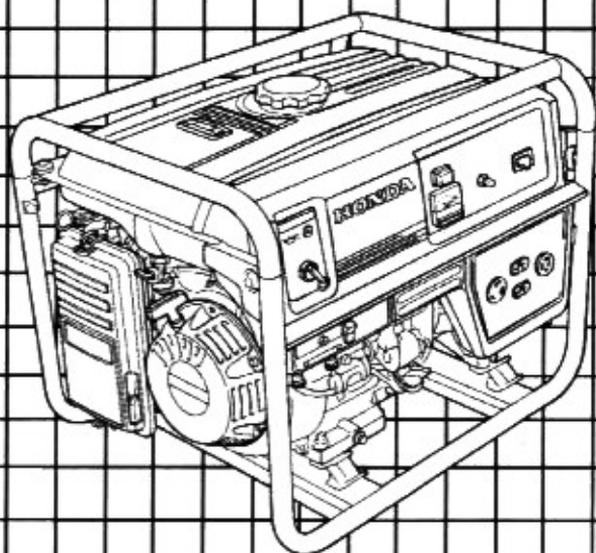
**HONDA**

**Power**

**Equipment**

# Owner's Manual

**EM3500X • EM3500SX**





---

Thank you for purchasing a Honda generator.

This manual covers operation and maintenance of EM3500SX/EM3500X generators. 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.

No part of this publication may be reproduced without written permission.

This manual should be considered a permanent part of the generator and remain with the generator when sold.

Pay special attention to statements preceded by the following words:

**⚠ DANGER:** Indicates severe personal injury or death will result if instructions are not followed.

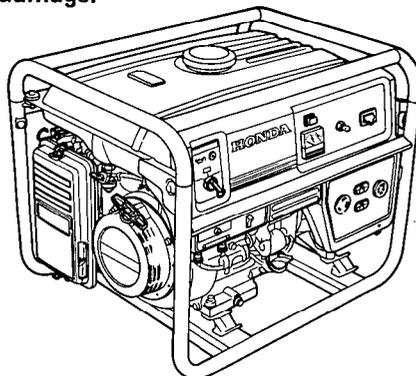
**⚠ WARNING** Indicates a strong possibility of severe personal injury or loss of life if instructions are not followed.

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



# CONTENTS

---

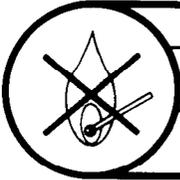
## CONTENTS

1. GENERATOR SAFETY .....	3
2. COMPONENT IDENTIFICATION .....	6
3. PRE-OPERATION CHECK .....	8
4. STARTING THE ENGINE .....	12
5. GENERATOR USE .....	17
6. STOPPING THE ENGINE .....	24
● High altitude operation .....	25
7. MAINTENANCE .....	26
8. TRANSPORTING/STORAGE .....	35
9. TROUBLESHOOTING .....	37
10. WIRING DIAGRAM .....	39
11. SPECIFICATIONS .....	41
12. INSTALLATION OF OPTIONAL PARTS .....	42
13. WARRANTY SERVICE .....	48

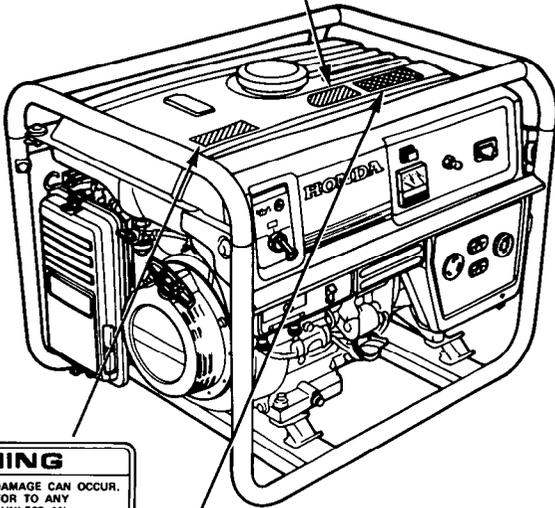
## **▲ WARNING**

- Place the generator on a firm, level surface: avoid loose sand or snow. If the generator is tilted or overturned, fuel spillage may result. Also, if the generator is overturned or sinks into a soft surface, sand, dirt, or water may enter the generator.
- To prevent fire hazards and to provide adequate ventilation, keep the generator at least 1 meter (3 feet) away from buildings and other equipment during operation. Do not place flammable objects close to the generator.
- Know how to stop the generator quickly, and understand the operation of all the controls. Never permit anyone to operate the generator without proper instructions.
- Do not allow children to operate the generator. Keep children and pets away from the area of operation.
- The generator is a potential source of electrical shocks if misused. Do not operate the generator in rain or snow. Do not let the generator get wet, and do not operate it with wet hands.
- Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks where the generator is refueled or where gasoline is stored. Refuel in a well-ventilated area with the engine stopped.
- Exhaust gas contains poisonous carbon monoxide. Avoid inhalation of exhaust gases. Never run the engine in a closed garage or confined area.
- 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 not. Let the engine cool before storing the generator indoors.
- Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to backfeed into the utility lines. Such backfeed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system.

Read these labels before you operate the generator.



- CHECK FOR SPILLED FUEL OR FUEL LEAKS  
STOP ENGINE BEFORE REFUELING
- CONTROLER D'UI Y A NI FUIE NI ESSENCE  
REPANDUE SUR L'APPAREIL  
ARRETER LE MOTEUR AVANT DE REFAIRE LE PLEIN
- INSPECCIONAR PARA COMBUSTIBLE DERRAMADO  
O ESCAPE  
PARAR MOTOR ANTES DE ECHAR



**⚠ WARNING**  
ELECTROCUTION OR PROPERTY DAMAGE CAN OCCUR.  
DO NOT CONNECT THIS GENERATOR TO ANY  
BUILDING'S ELECTRICAL SYSTEM UNLESS AN  
ISOLATION SWITCH HAS BEEN INSTALLED  
BY A LICENSED ELECTRICIAN.  
READ OWNER'S MANUAL CAREFULLY.

**WARNING DO NOT USE INDOORS. EXHAUST GAS CONTAINS POISONOUS CARBON MONOXIDE.**

**ATTENTION NE PAS UTILISER DANS UN ENDROIT FERME A CAUSE DU RISQUE D'EMPOISONNEMENT DU GAZ.**

**ATENCION NO LO USE EN LUGARES CERRADOS PORQUE EL MONOXIDE DE CARBONO ES VENENOSO.**

**EM3500SX** HONDA MOTOR CO., LTD.

MADE IN JAPAN (A)

**CAUTION**

■ BE SURE TO FILL CRANKCASE WITH RECOMMENDED OIL BEFORE USING.  
FOR DETAILED EXPLANATION, SEE THE OWNER'S MANUAL.

**AC**

VOLTAGE 120/240V  
FREQUENCY 60Hz  
RATED OUTPUT 3.0kVA  
MAX. OUTPUT 3.5kVA  
PHASE 1Ø

**DC**

VOLTAGE 12V  
CURRENT 8.3A

FUEL GASOLINE  
(PETROL)

**EM3500X** HONDA MOTOR CO., LTD.

MADE IN JAPAN (A)

**CAUTION**

■ BE SURE TO FILL CRANKCASE WITH RECOMMENDED OIL BEFORE USING.  
FOR DETAILED EXPLANATION, SEE THE OWNER'S MANUAL.

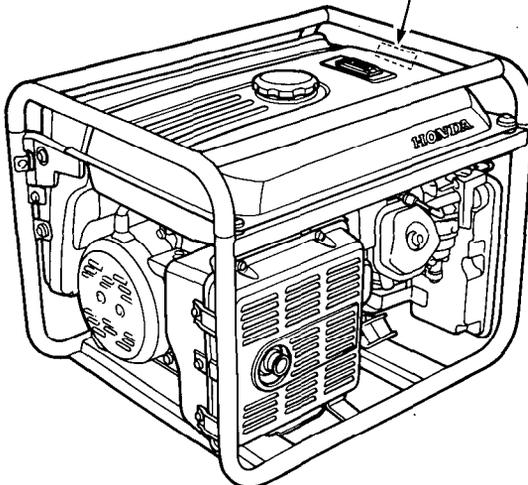
**AC**

VOLTAGE 120/240V  
FREQUENCY 60Hz  
RATED OUTPUT 3.0kVA  
MAX. OUTPUT 3.5kVA  
PHASE 1Ø

**DC**

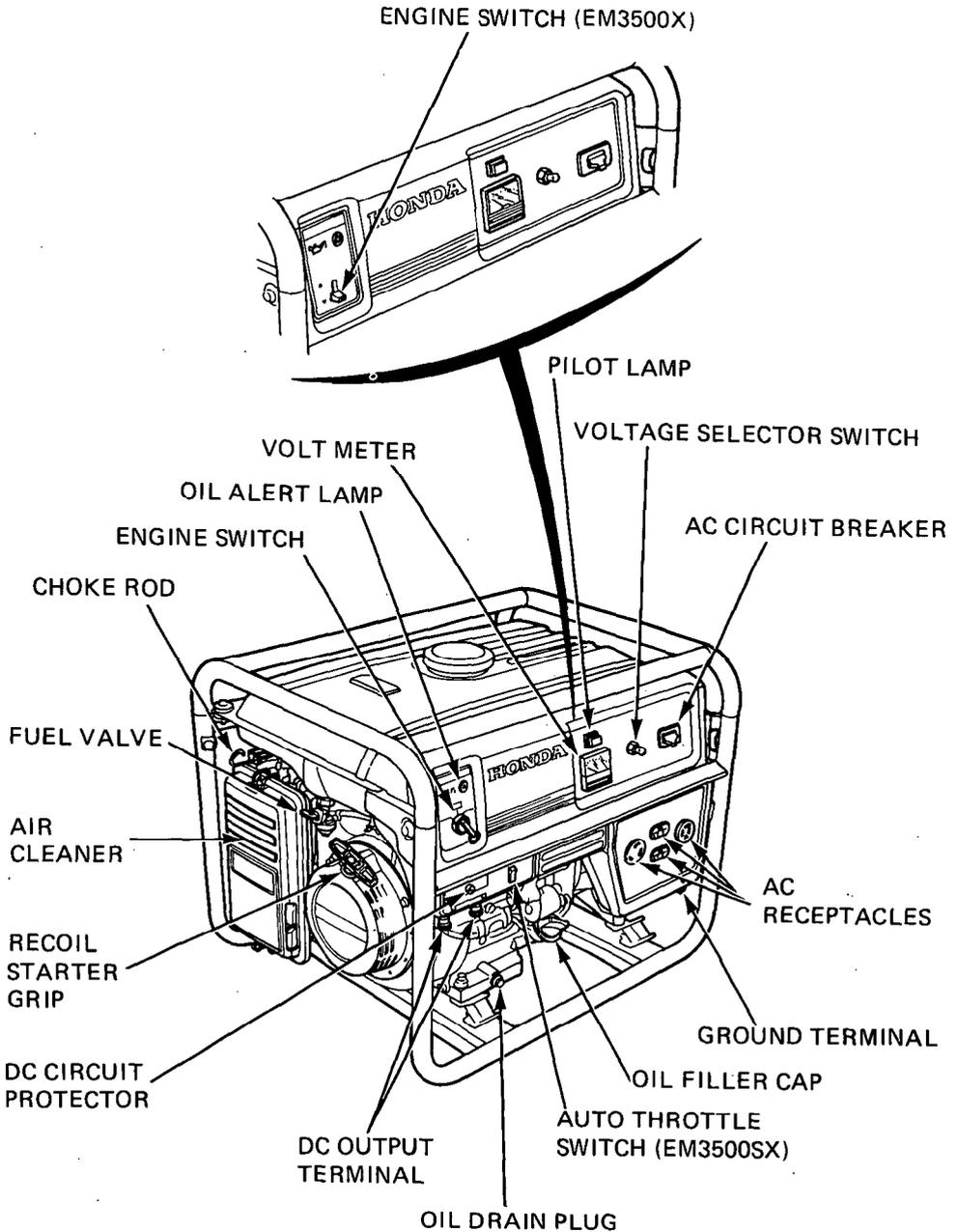
VOLTAGE 12V  
CURRENT 8.3A

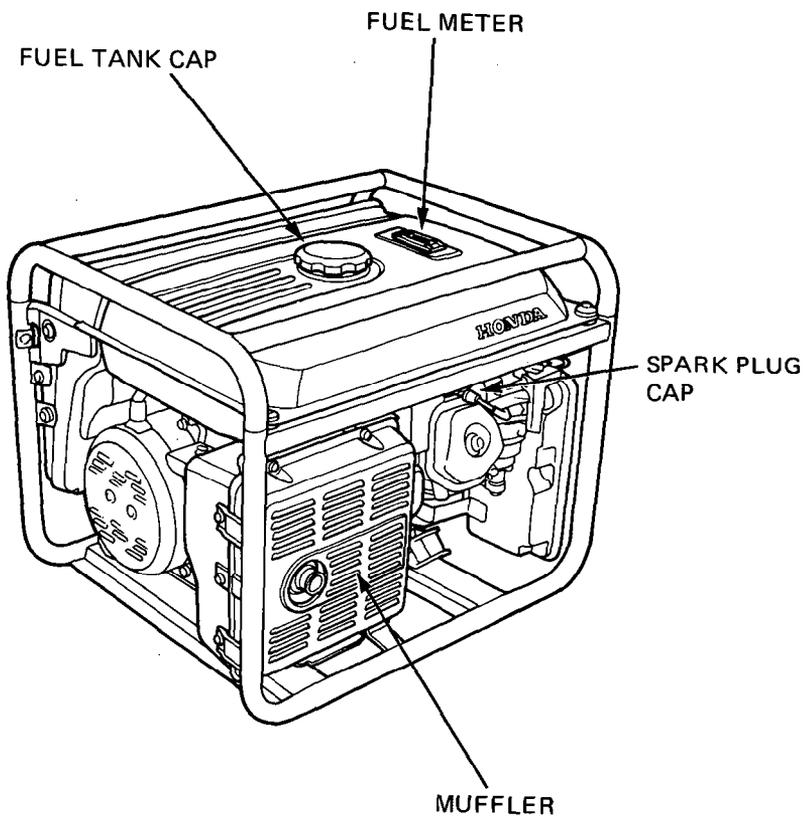
FUEL GASOLINE  
(PETROL)



## 2. COMPONENT IDENTIFICATION

---





### 3. PRE-OPERATION CHECK

**CAUTION:** Check the generator on a level surface with the engine stopped.

#### 1. Engine Oil

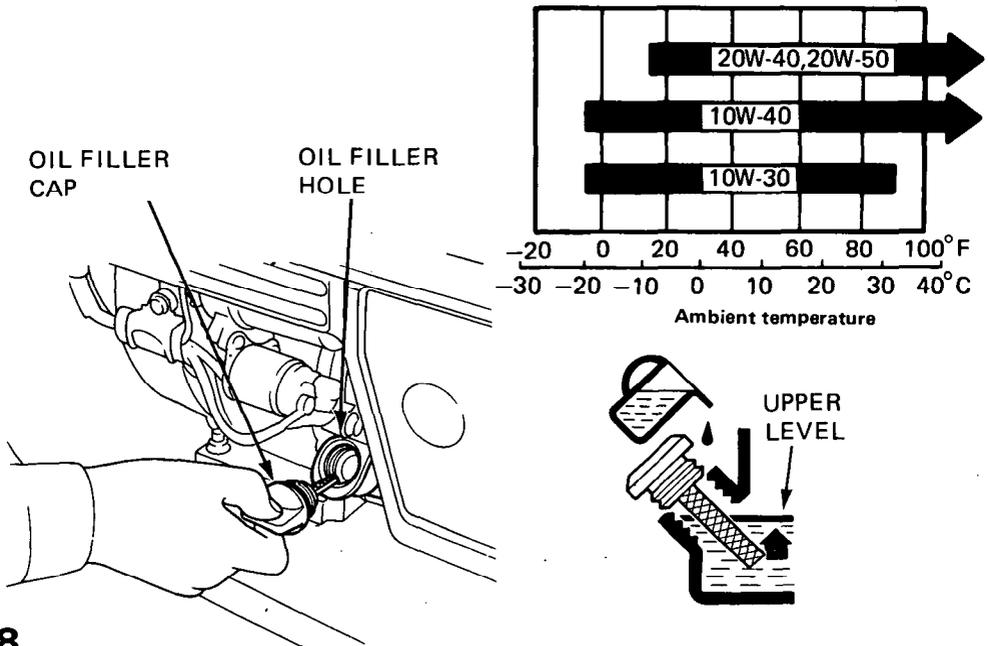
**CAUTION:** Engine oil is a major factor affecting performance and service life. Non-detergent and 2-stroke engine oils are not recommended.

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

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 and check the oil level.
2. If the level is low, fill to the top of the oil filler neck with the recommended oil.

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



## 2. Fuel

Check the fuel meter and refill the tank if the fuel level is low.

Your engine is designed to use any gasoline that has a pump octane number ( $\frac{R+M}{2}$ ) of 86 or higher, or that has a research octane number of 91 or higher. Gasoline pumps at service station normally display the pump octane number.

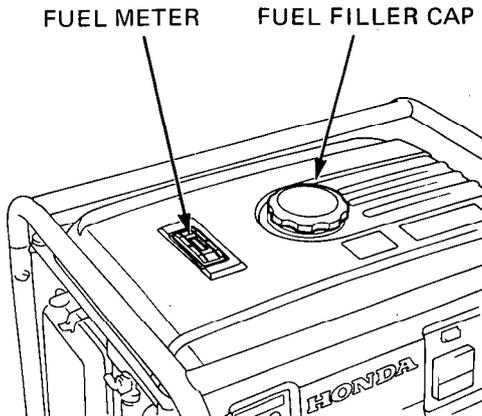
We recommend that you use unleaded fuel because it produces fewer engine and spark plug deposits and extends the life of exhaust system components.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt, dust or water in the fuel tank. Use of a lower octane gasoline can cause persistent "pinging" or heavy "spark knock" (a metallic rapping noise) which, if severe, can lead to engine damage.

**CAUTION:** If "spark knock" or "pinging" occurs at a steady engine speed under normal load, change brands of gasoline. If spark knock or pinging persists, consult your authorized Honda dealer. Failure to do so is considered misuse, and damage caused by misuse is not covered by Honda's Limited Warranty.

Occasionally you may experience light spark knock while operating under heavy loads. This is no cause for concern, it simply means your engine is operating efficiently.

**Fuel tank capacity: 17.0 ℓ (4.5 US gal)**



---

**▲ 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 (there should be no fuel in the filler neck). After refueling, make sure the 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.**

## **GASOLINES CONTAINING ALCOHOL**

If you decide to use a gasoline containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other containing methanol. Do not use gasohol that contains more than 10% ethanol. Do not use gasoline containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

### **NOTE:**

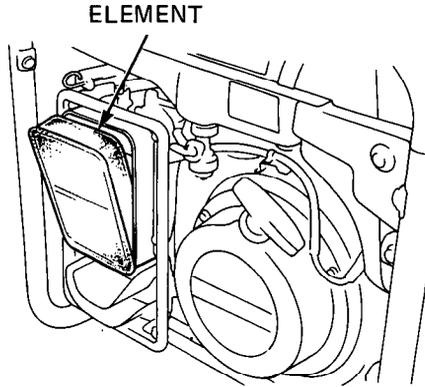
- Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty. Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.
- Before buying fuel from an unfamiliar station,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

---

### 3. Air Cleaner

Check the air cleaner elements to be sure they are clean and in good condition. Clean or replace the elements if necessary (page 29).

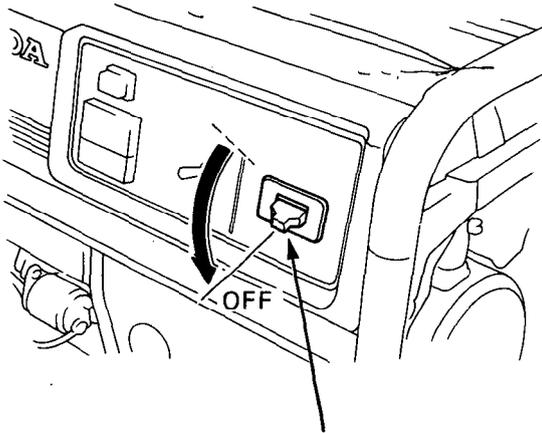
**CAUTION:** Never run the engine without the air cleaner. Rapid engine wear will result.



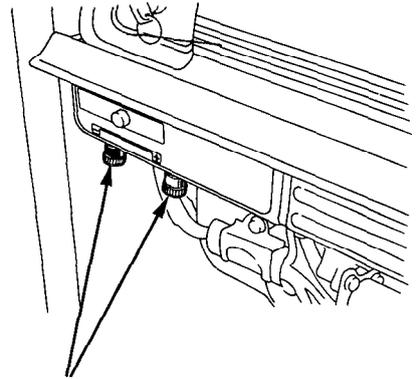
## 4. STARTING THE ENGINE

---

1. Make sure that the AC circuit breaker is in the OFF position, and that nothing is connected to the DC terminals.  
The generator may be hard to start if a load is connected.

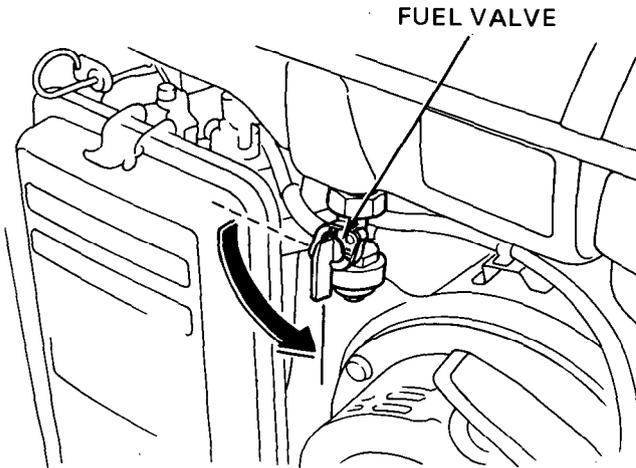


AC CIRCUIT BREAKER

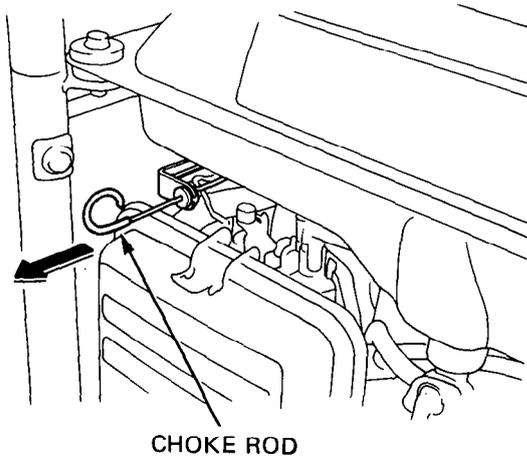


DC TERMINALS

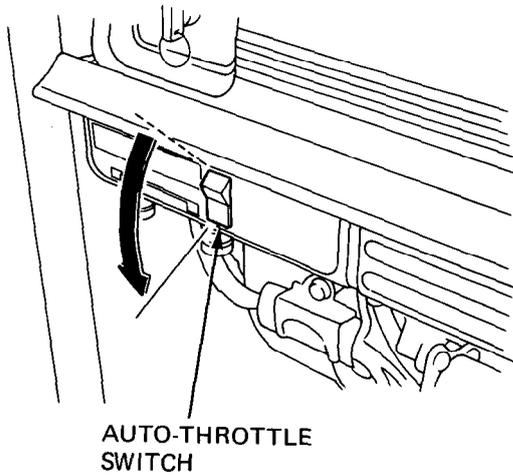
2. Turn the fuel valve to the ON position.



3. Pull the choke rod out to the CLOSE position. (EM3500X only)



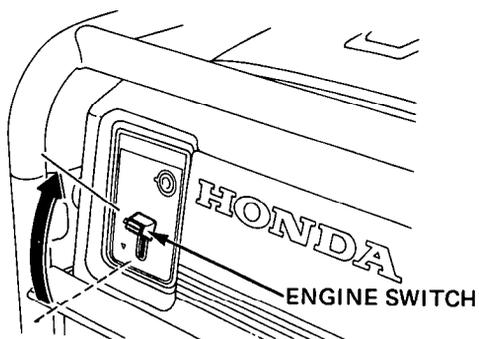
4. Make sure the auto-throttle switch is in the OFF position, or more time will be required for warm up. (EM3500SX only)



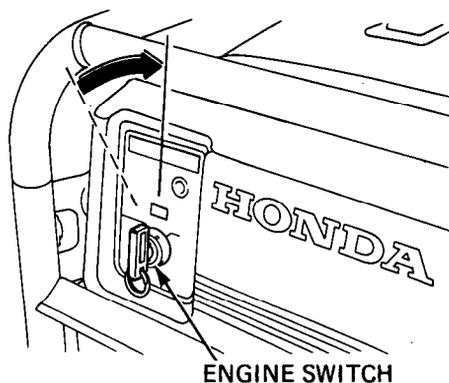
## 5. Start the engine

- With recoil starter:

Turn the engine switch to the ON position.



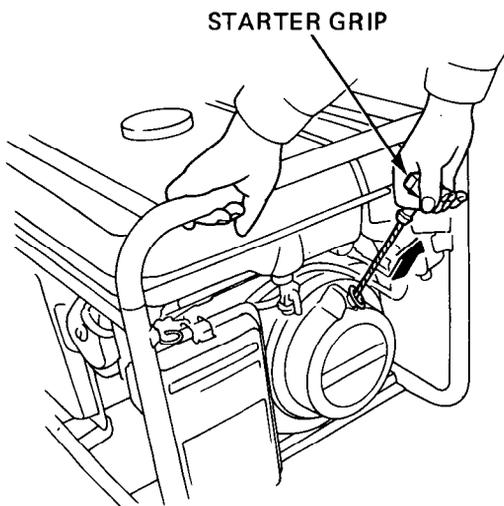
(EM3500X)



(EM3500SX)

Pull the starter grip lightly until resistance is felt, then pull briskly.

**CAUTION:** Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

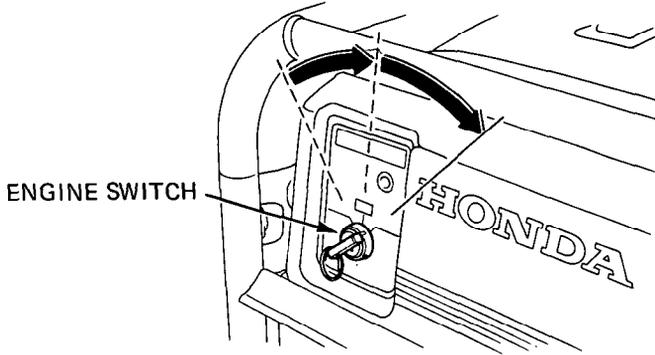


- With electric starter (EM3500SX only):

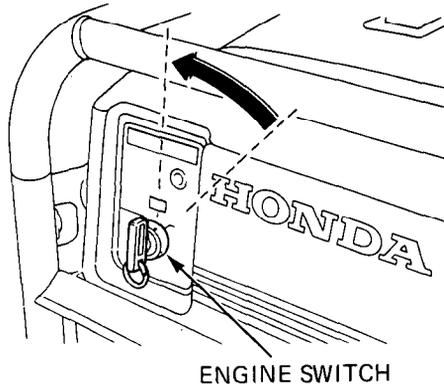
Turn the engine switch to the START position and hold it there until the engine starts.

**NOTE:**

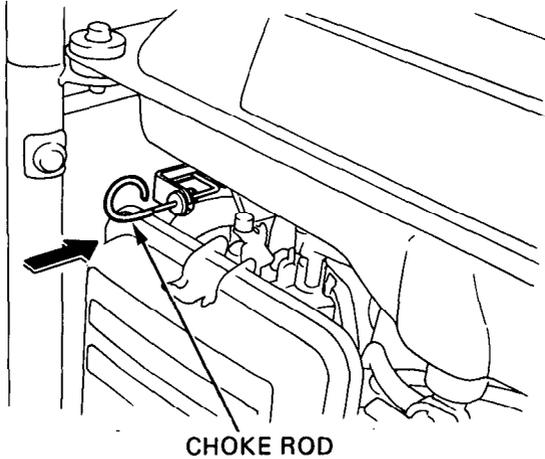
- Do not use the electric starter for more than 5 seconds at a time. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.
- If a relay box is attached for remote control operation, make sure the switch on the relay box is turned off, or the engine will not start.
- If the speed of the starter motor drops after a period of time, it is an indication that the battery should be recharged.



6. When the engine starts, allow the engine switch to return to the ON position.

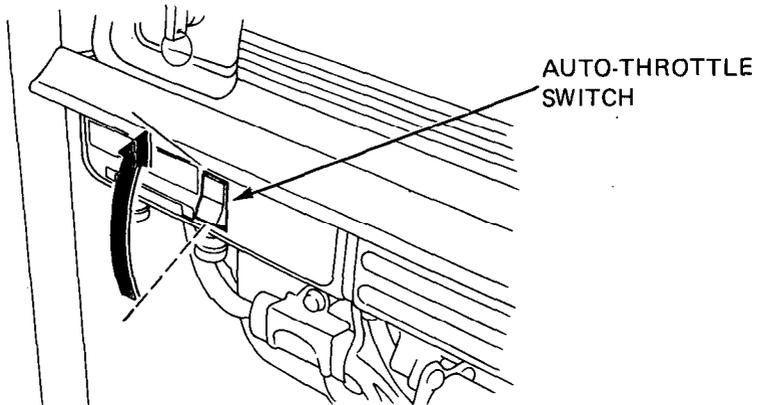


- 
7. Push the choke rod to the OPEN position as the engine warms up.  
(EM3500X only)



8. If you wish to use the auto-throttle system, turn the auto-throttle switch to the AUTO position after the engine has warmed up for 2 or 3 minutes.  
(EM3500SX only)

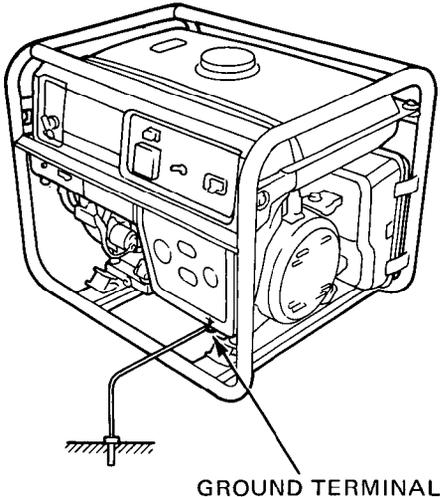
**NOTE:** The choke is operated automatically whenever a battery is connected to the generator's starting circuit.



## 5. GENERATOR USE

### ▲ WARNING

- To prevent electrical shock from faulty appliances, the generator should be grounded. Connect a length of heavy wire between the ground terminal and the ground source.
- Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to backfeed into the utility lines. Such backfeed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system.



### CAUTION:

- Limit operation requiring maximum power (3,500VA) to 30 minutes. For continuous operation, do not exceed the rated power of 3,000VA. In either case, the total wattage of all appliances connected must be considered.
- Most appliance motors require more than their rated wattage for startup.
- Do not exceed the current limit specified for any output.

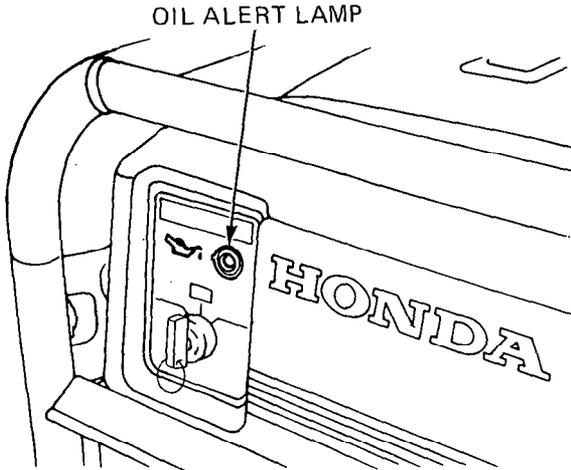
NOTE: You can determine an appliance's VA (volt amp) rating by multiplying its required voltage by the amount of current (amps) it draws.

---

## 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 falls below a safe limit, the Oil Alert system will automatically shut down the engine (the engine switch will remain in the ON position).

If the Oil Alert system shuts down the engine, the Oil Alert lamp will flash when you operate the starter, and the engine will not run. If this occurs, add engine oil (P. 8).



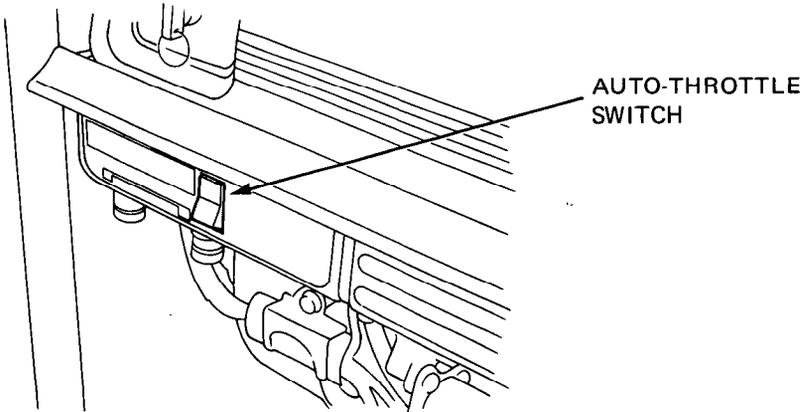
---

## Auto-throttle System (EM3500SX only)

With the switch in the AUTO position, engine speed is automatically reduced to an idle when all loads are turned off or disconnected. When appliances are turned on or reconnected, the engine resumes the rated speed. At OFF, the auto-throttle system does not operate.

### NOTE:

- AUTO is recommended to minimize fuel consumption when no load is applied.
- The auto-throttle system will not respond to electrical loads of less than 1 ampere.
- The system is not-effective for use with appliances that require only momentary power. To avoid extended warm-up periods, keep the switch OFF until the engine reaches operating temperature.

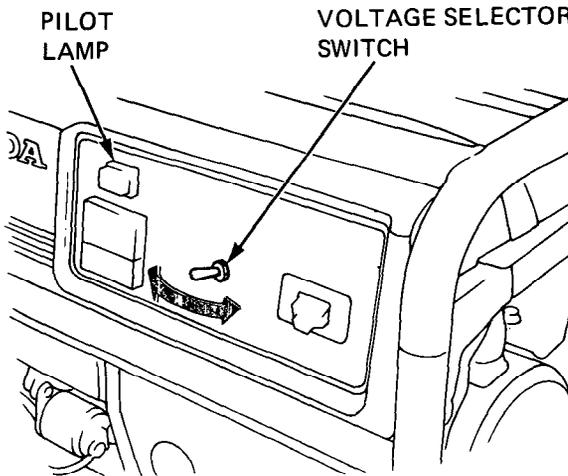


---

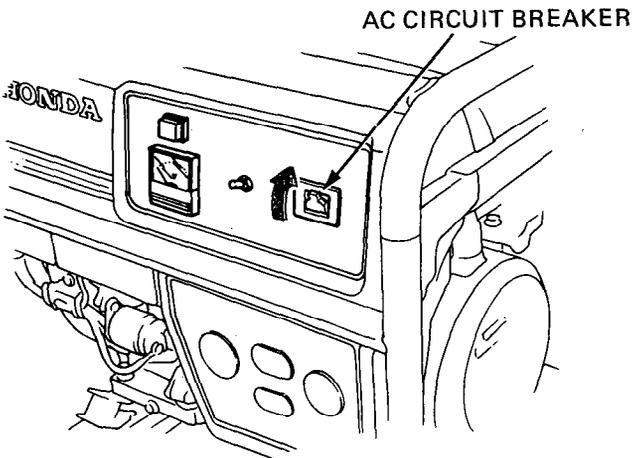
## AC applications

1. Start the engine and make sure the pilot lamp comes on. If not, the filament may be burnt out.
2. Turn the voltage selector switch to either position as required.

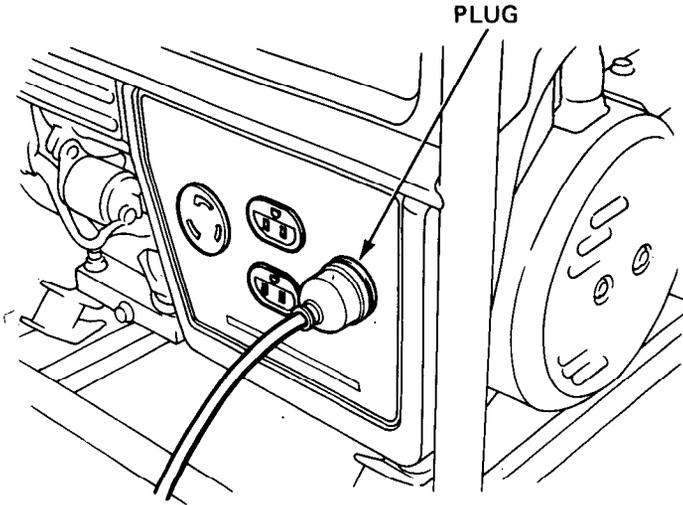
NOTE: With the voltage selector switch in the "120V/240V" position, you can use the 120V and 240V receptacles simultaneously. If you are not using the 240V receptacle, but you require more power from the 120V twist-lock receptacle, then turn the switch to the "120V" position.



3. Switch on the AC Circuit Breaker.



4. Plug in the appliance.



**CAUTION:**

- Be sure that appliances do not exceed the generator's rated load capacity for more than 30 minutes and that they never exceed the maximum load capacity. Substantial overloading will switch off the circuit breaker. Marginal overloading may not switch off the circuit breaker, but it will shorten the service life of the generator.
- If an overloaded circuit causes the AC circuit breaker to switch off, reduce the electrical load on the circuit, and wait a few minutes before resetting the circuit breaker.
- Be sure that all appliances are in good working order before connecting them to the generator. If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn off the circuit breaker and the generator engine switch immediately. Then disconnect the appliance and examine it for signs of malfunction.

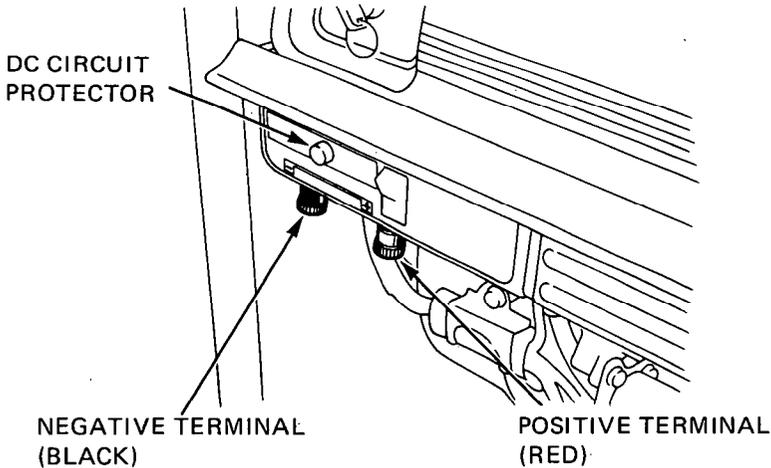
**NOTE:** This generator is equipped with an AVR (Automatic Voltage Regulator) for stable voltage supply.

---

## DC operation

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

1. Connect both charging cables to the battery terminals and connect the positive (+) cable to the generator's positive (+) DC terminal.
2. Start the engine.
3. Carefully connect the negative (–) charging cable to the generator's negative (–) DC terminal.



### CAUTION:

- Be careful to connect the charging cables to the correct battery and generator terminals (positive to positive and negative to negative). If the charging cables are connected positive to negative, it may cause serious battery or generator damage.
- Do not attempt to start an automobile engine with the generator still connected to the battery; this may damage the generator.

---

**⚠ WARNING**

- The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging or using batteries in an enclosed space.
- The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
  - If electrolyte gets on your skin, flush with water.
  - If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.
- Electrolyte is poisonous.
  - If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.
- **KEEP OUT OF REACH OF CHILDREN.**
- To prevent the possibility of creating a spark near the battery, connect charging cables first to the battery, then to the generator. Disconnect cables first at the generator.
- Before connecting charging cables to a battery that is installed in a vehicle, disconnect the vehicle's grounded battery cable. Reconnect the vehicle's grounded battery cable after the charging cables are removed. This procedure will prevent the possibility of a short circuit and sparks if you make accidental contact between a battery terminal and the vehicle's frame or body.

**NOTE:**

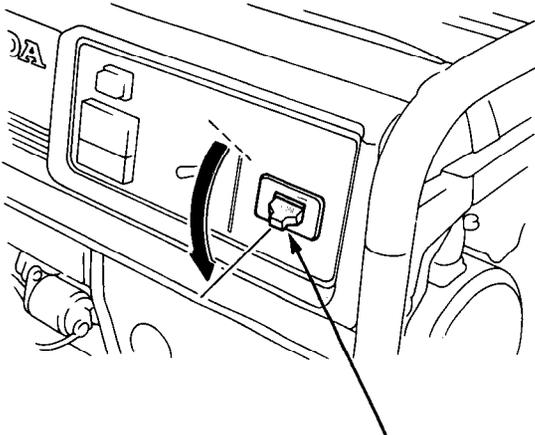
- The DC terminals may be used while the AC power is in use.
- An overloaded DC circuit will trip the DC circuit protector (push button comes out). If this happens, wait a few minutes before pushing the circuit protector to resume operation.

## 6. STOPPING THE ENGINE

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

In normal use:

1. Turn the AC circuit breaker to the OFF position.  
Disconnect DC battery charging cables.

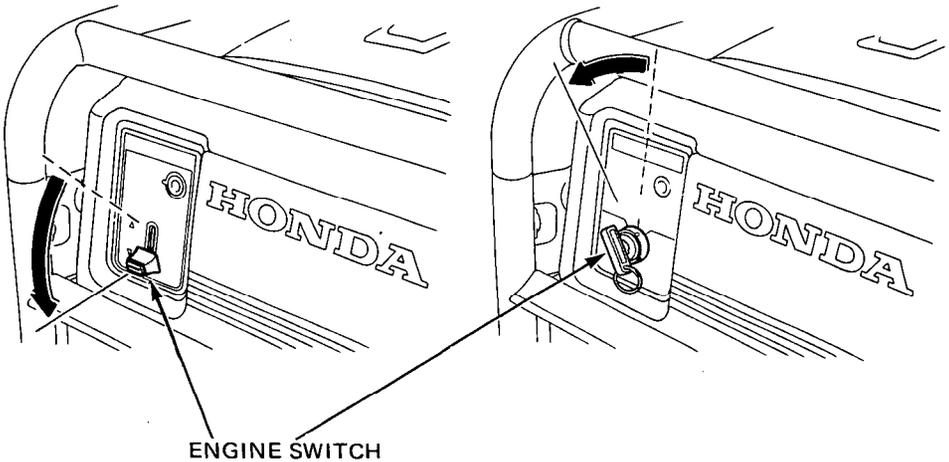


AC CIRCUIT BREAKER

2. Turn the engine switch to the OFF position.

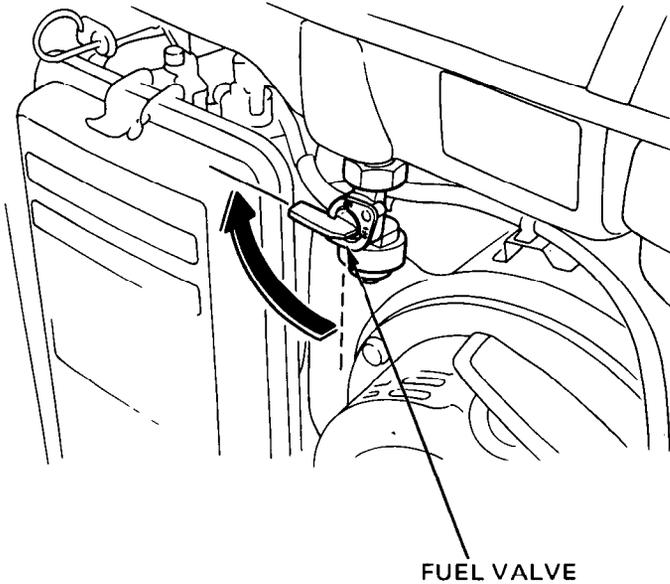
(EM3500X)

(EM3500SX)



ENGINE SWITCH

3. Turn the fuel valve to the OFF position.



● **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 installing a smaller diameter main fuel jet in the carburetor and readjusting the pilot screw. If you always operate the generator at altitudes higher than 6,000 feet above sea level, have your authorized Honda Generator dealer perform these carburetor modifications.

Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 1,000 foot increase in altitude. The affect of altitude on 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.

## 7. MAINTENANCE

---

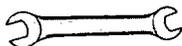
Periodic maintenance and adjustment is necessary to keep the generator in good operating condition. Perform the service and inspection scheduled in the table on the following page.

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

**CAUTION:** Use only genuine Honda parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage the generator.

### Tool Kit

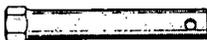
The tools supplied with the generator will help you to perform the owner-maintenance procedures listed on the following page. Always keep this tool kit with the generator.



10 x 12 mm WRENCH



SCREW DRIVER



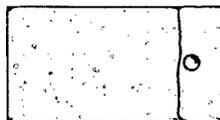
PLUG WRENCH



DRIVER HANDLE



HANDLE BAR



TOOL BAG

## Maintenance Schedule

REGULAR SERVICE PERIOD Perform at every indicated month or operating hour inter- val, 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	•				
	Change		•		•	
Air cleaner	Check	•				
	Clean			• (1)		
Sediment cup	Clean				•	
Spark plug	Clean—Readjust				•	
Spark arrester	Clean				•	
Valve clearance	Check—Readjust					• (2)
Fuel tank and strainer	Clean					• (2)
Fuel line	Check (Replace if necessary)	Every 3 years (2)				

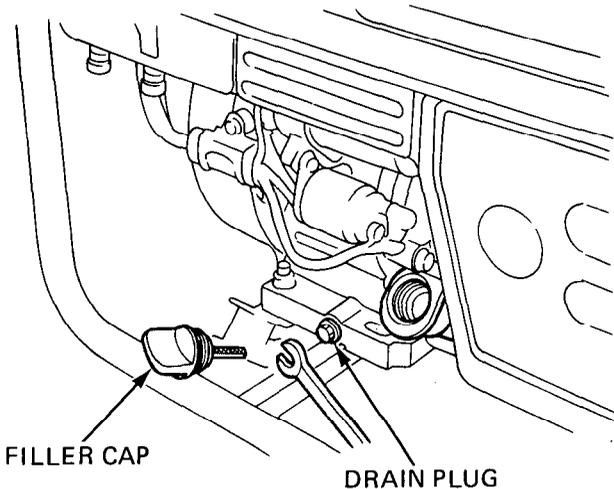
- NOTE: (1) Service more frequently when used in dusty areas.  
 (2) These items should be serviced by an authorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.

## Changing Oil

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

1. Remove the oil filler cap and drain plug to drain the oil.
2. Install the drain plug, and tighten it securely.
3. Refill with the recommended oil (see page 8), and check the oil level.

**OIL CAPACITY: 1.1 l (1.16 US qt )**



**CAUTION:** Used motor oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

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

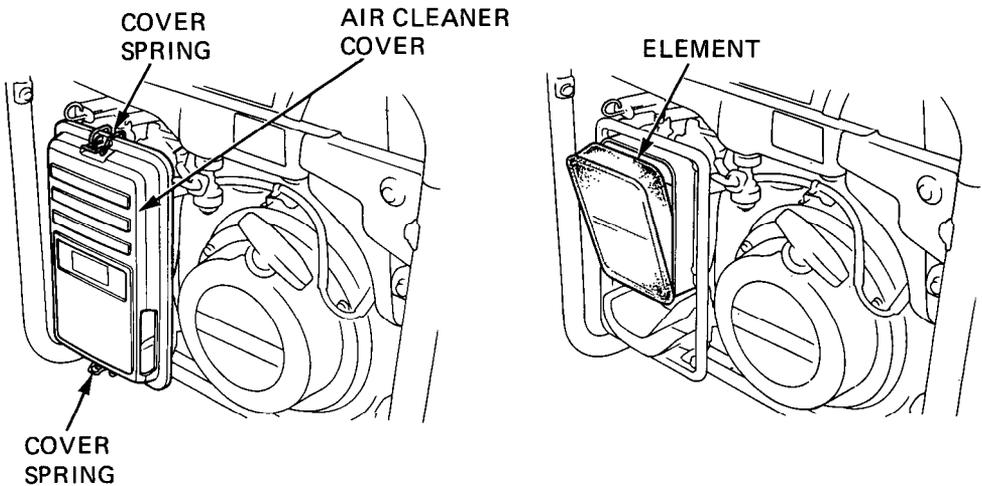
## Air Cleaner Service

A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly (page 27). Service more frequently when operating the generator in extremely dusty areas.

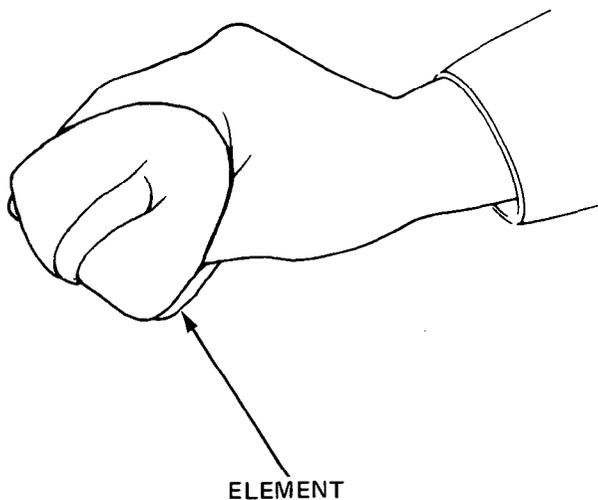
**▲ WARNING** Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.

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

1. Unsnap the air cleaner cover springs, remove the air cleaner cover, and remove the element.



- 
2. Wash the element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly.
  3. Soak the element in clean engine oil and squeeze out the excess oil. The engine will smoke during initial start-up if too much oil is left in the element.
  4. Reinstall the air cleaner element and the cover.

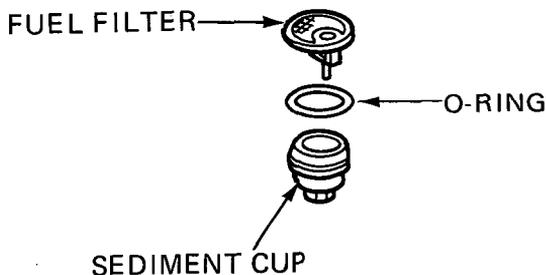
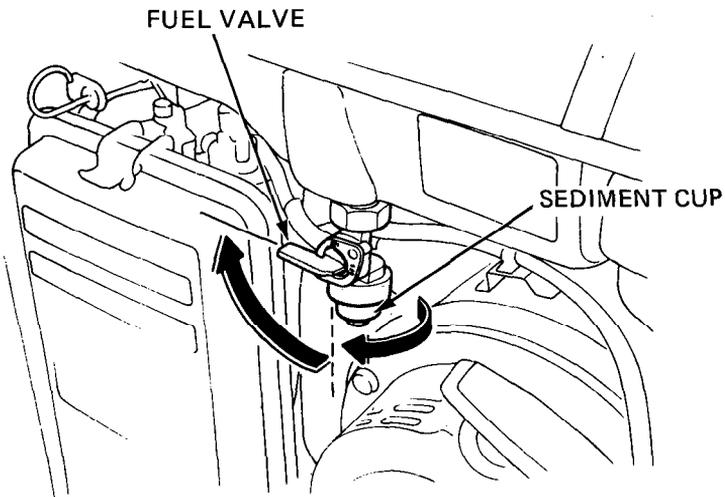


## Sediment Cup Cleaning

The sediment cup 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 sediment cup should be cleaned.

1. Turn the fuel valve to the OFF position. Remove the sediment.
2. Clean the cup and fuel filter thoroughly.
3. Check to be sure the O-ring is in place, and reinstall the sediment cup and fuel filter.

**▲ WARNING** After installing the sediment cup, check for fuel leaks, and make sure the area is dry before starting the engine.



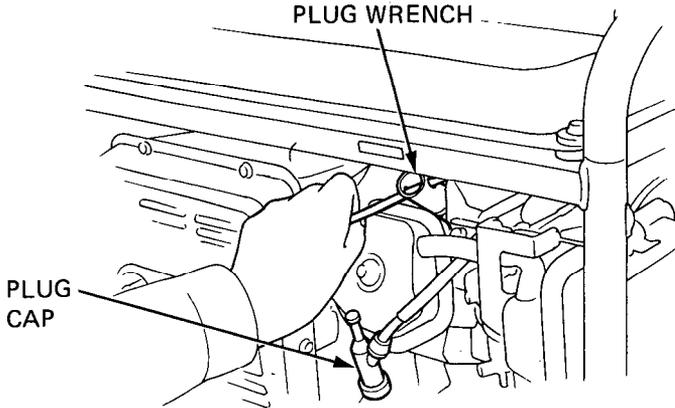
## Spark Plug Service

Recommended spark plug: **BPR-5ES (NGK)**  
**W16EPR-U (ND)**

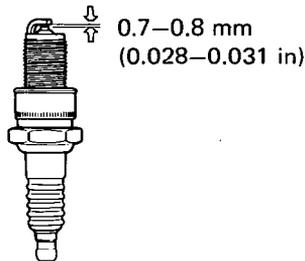
To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

**⚠WARNING** If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.

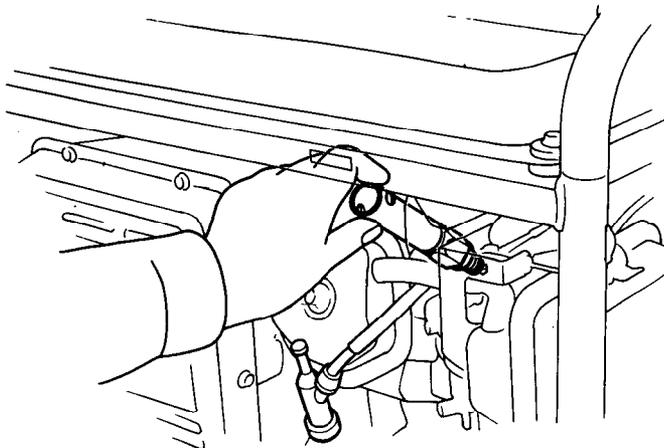
1. Remove the spark plug cap.
2. Clean any dirt from around the spark plug base.
3. Use the wrench supplied in the tool kit to remove the spark plug.



4. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
5. Measure the plug gap with a feeler gauge. The gap should be 0.7–0.8 mm (0.028–0.031 in).



- 
6. Check that the spark plug 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.

**NOTE:** If installing a new spark plug, tighten  $1/2$  turn after the spark plug seats to compress the washer. If reinstalling a used spark plug, tighten  $1/8$ – $1/4$  turn after the spark plug seats to compress the washer.

**CAUTION:**

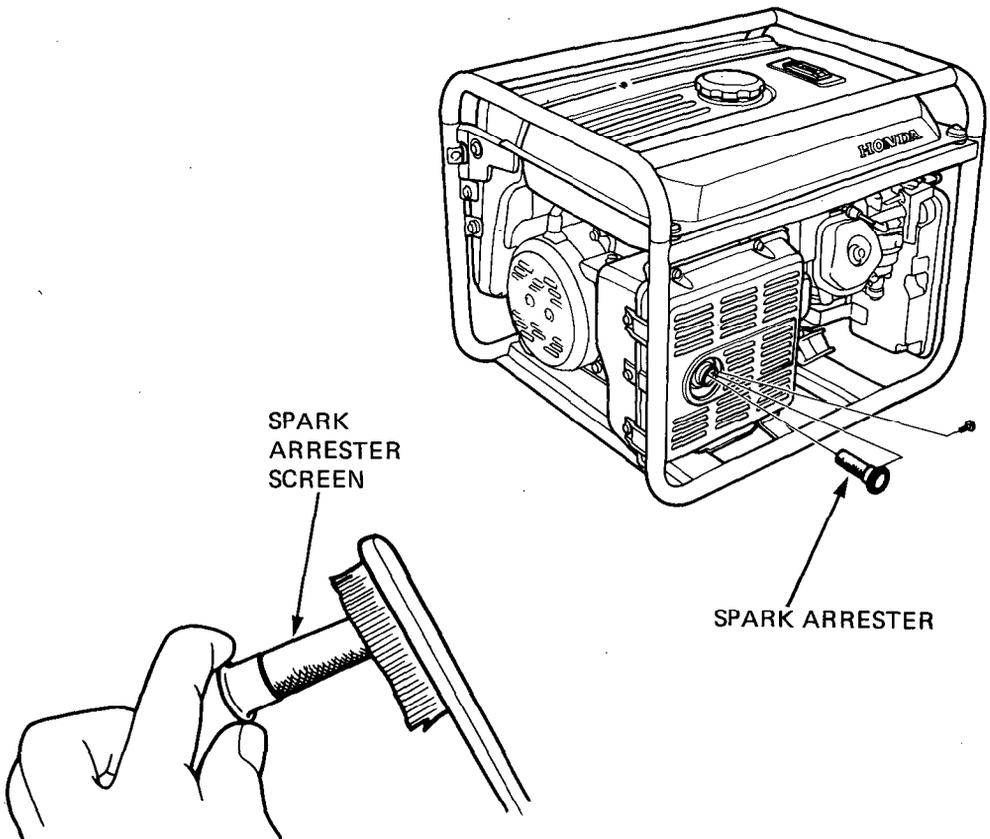
- The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and could damage the engine.
- Never use spark plugs which have an improper heat range. Use only the recommended spark plugs or equivalent.

## Spark Arrester Maintenance

**▲ WARNING** If the generator has been running, the muffler will be very hot. Allow it to cool before proceeding.

**CAUTION:** The spark arrester must be serviced every 100 hours to maintain its efficiency.

1. Remove the screw by the exhaust port of the muffler and remove the spark arrester.
2. Use a brush to remove carbon deposits from the spark arrester screen. Inspect the screen for breaks or tears and replace it if necessary.
3. Install the spark arrester in the reverse order of removal.

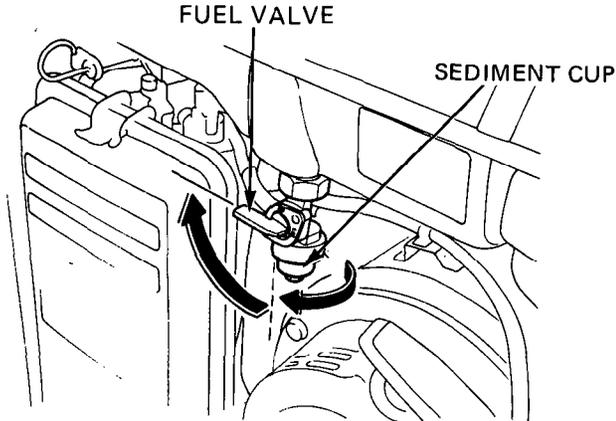


## 8. TRANSPORTING/STORAGE

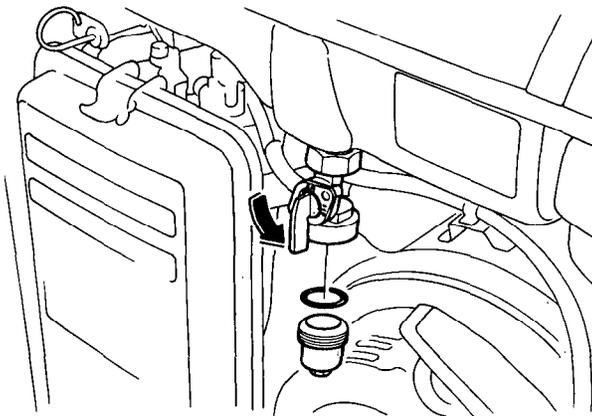
**⚠ WARNING** When transporting the engine, turn the engine switch and the fuel valve to the OFF position, and keep the engine level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

Before storing the unit for an extended period:

1. Be sure the storage area is free of excessive humidity and dust.
2. Drain the fuel –
  - a. With the fuel valve OFF, remove and empty the sediment cup.



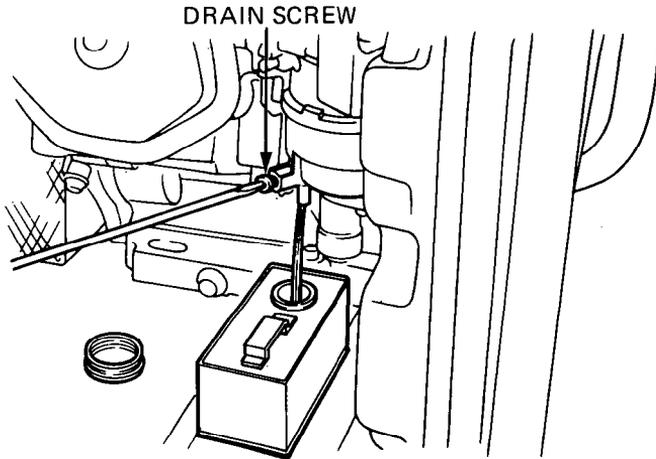
- b. Turn the fuel valve ON, and drain the gasoline in the fuel tank into a suitable container.
- c. Replace the sediment cup and tighten securely.



---

d. Drain the carburetor by loosening the drain screw. Drain the gasoline into a suitable container.

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



3. Change the engine oil.
4. Remove the spark plug, and pour about a tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil, then reinstall the spark plug.
5. Slowly pull the starter grip until resistance is felt. At this point, the position is coming up on its compression stroke and both the intake and exhaust valves are closed. Storing the engine in this position will help to protect it from internal corrosion.
6. Cover the engine to keep out dust.
7. Once a month, recharge the battery. (EM3500SX)

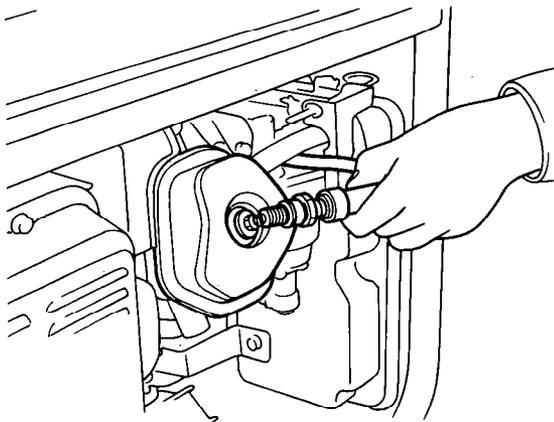
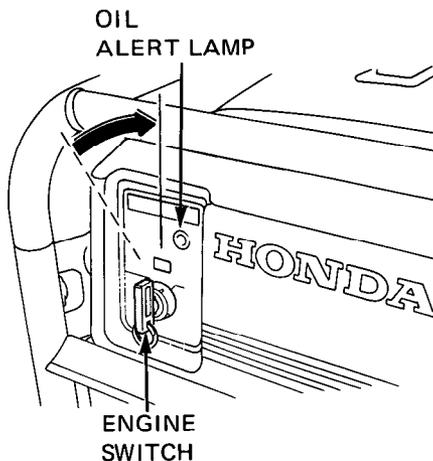
## 9. TROUBLESHOOTING

### A. When the engine will not start:

1. Is the engine switch on?
2. Does the oil alert lamp flash when the starter is pulled?
3. Is there enough fuel?
4. Are all loads disconnected from the AC receptacles?
5. Is there a spark at the spark plug?
  - a. Remove the spark plug cap. Clean any dust from around the spark plug base, then remove the spark plug.
  - b. Install the spark plug in the plug cap.
  - c. Turn the engine switch on.
  - d. Grounding the side electrode to any engine ground, pull the recoil starter to see if sparks jump across the gap.

**▲ WARNING** Be sure there is no spilled fuel near the spark plug. Spilled fuel may ignite. Perform this test in a well ventilated area.

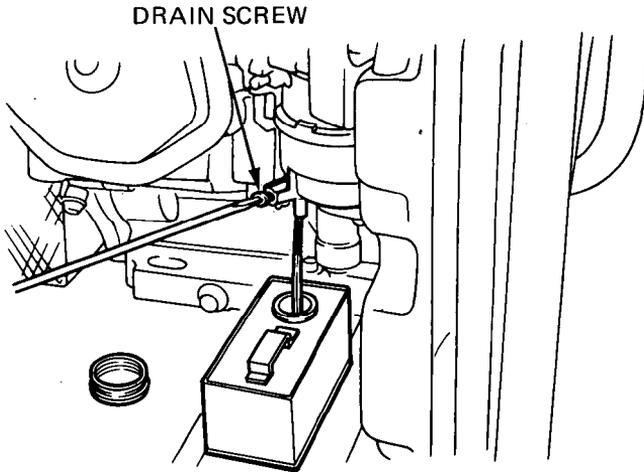
- e. If there are no sparks, replace the plug.
- f. If the new spark plug does not spark, take the generator to an authorized Honda dealer.



6. Is gasoline reaching the carburetor?

To check, place a suitable container under the drain tube, turn the fuel valve on and loosen the drain screw. Fuel should flow out freely. If OK, try to start the engine according to the instructions.

**WARNING** If any fuel is spilled, make sure the area around the spark plug and the generator is dry before starting the engine. Fuel vapor or spilled fuel may ignite.



7. If the engine still does not start, take the generator to an authorized Honda dealer.

B. When the engine starts but stops immediately;

1. Check the oil alert lamp.

If the oil alert lamp flashes when the starter is pulled, check the engine oil level and fill with the recommended oil.

2. Re-start the engine.

C. No electricity at the AC receptacles:

1. Is the AC circuit breaker on?

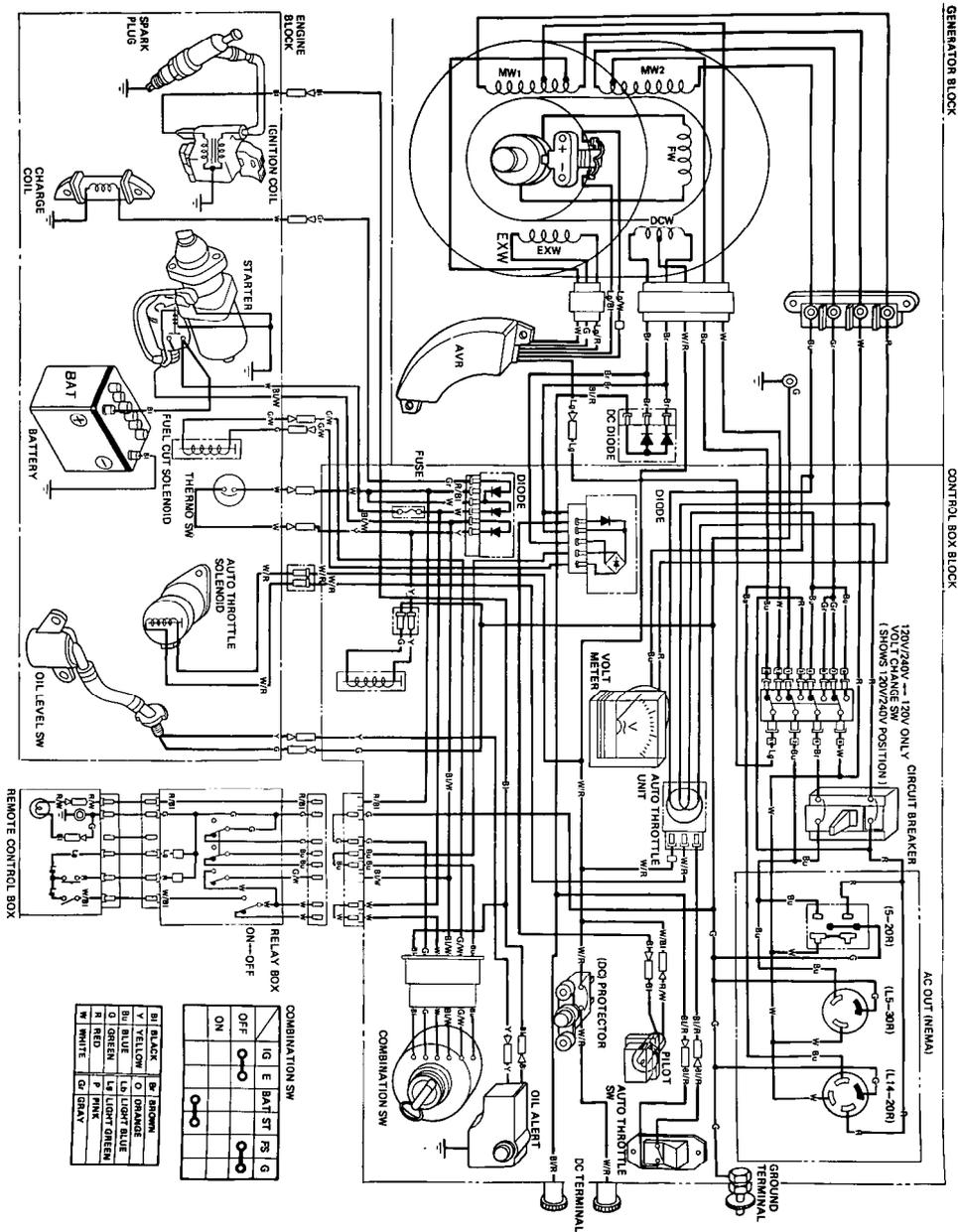
2. Check the electrical appliance or equipment for any defects.

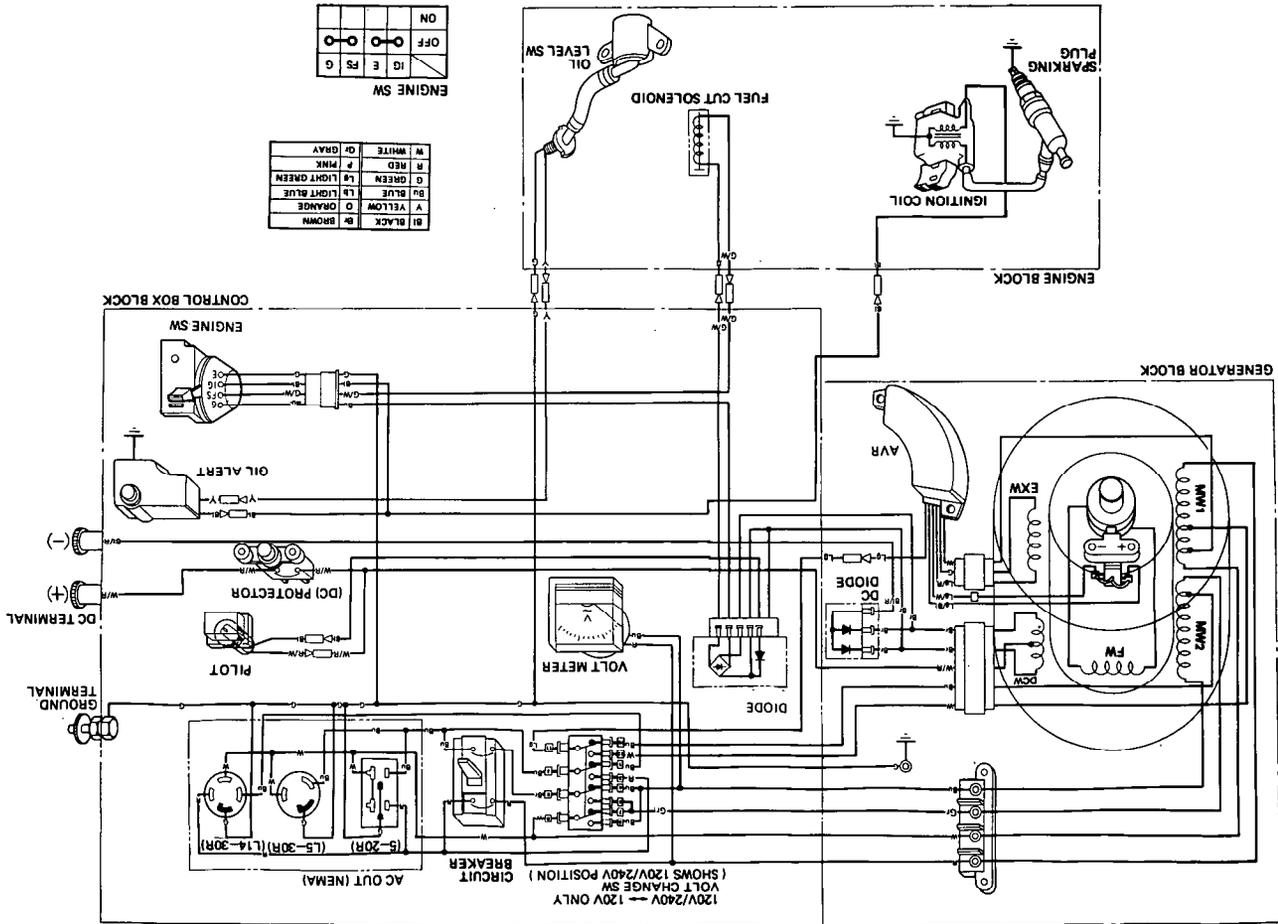
D. No electricity at the DC terminals.

1. Is the DC circuit breaker on?

# 10. WIRING DIAGRAM

(EM3500SX)





# 11. SPECIFICATIONS

## Dimensions

Model	EM3500SX	EM3500X
Power equipment description code	EA6	
Length x Width x Height	605 x 495 x 485 mm (23.8 x 19.5 x 19.1 in)	
Dry weight	65 kg (143.3 lb)	62 kg (136.7 lb)

## Engine

Model	GX240
Engine type	4-stroke, overhead valve, single cylinder
Displacement (Bore x Stroke)	242 cc (14.8 cu in) [73 x 58 mm (2.9 x 2.3 in)]
Compression ratio	8.2 : 1
Engine speed	3,600 r.p.m.
Cooling system	Forced air
Ignition system	Transistorized magneto
Oil capacity	1.1 ℓ (1.16 US qt)
Fuel tank capacity	17.0 ℓ (4.5 US gal)
Spark plug	BPR-5ES (NGK), W16EPR-U (ND)

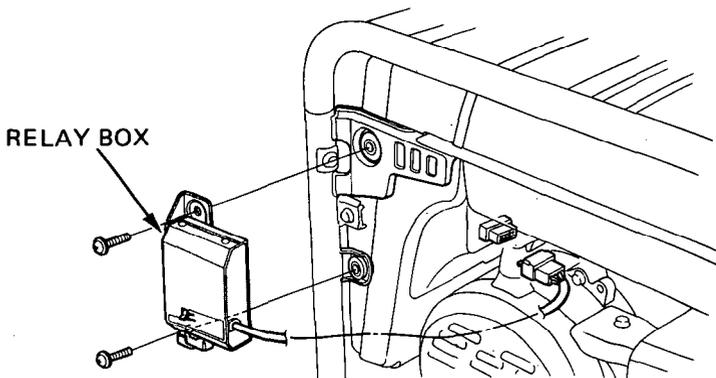
## Generator

Model		EM3500SX	EM3500X
Type		A	
AC output	Rated voltage	120/240V	
	Rated frequency	60 Hz	
	Rated ampere	25/12.5A	
	Rated output	3,000 VA	
	Maximum output	3,500 VA	
DC output		Only for charging 12V automotive batteries. Maximum charging output = 8.3A	

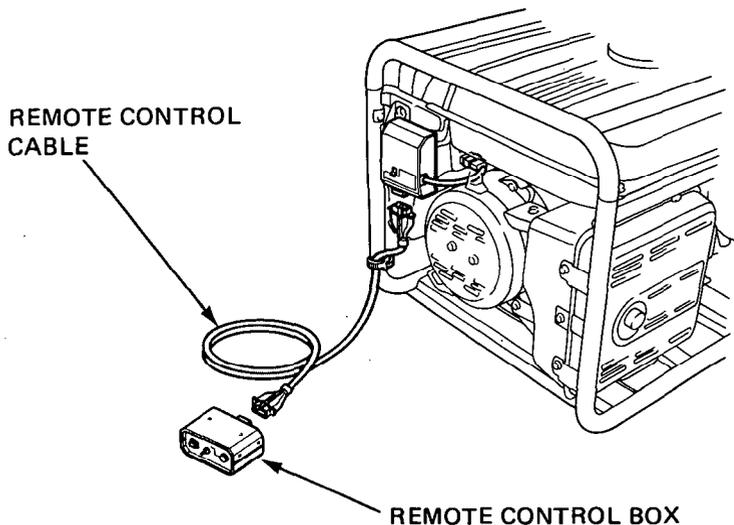
## 12. INSTALLATION OF OPTIONAL PARTS

### Remote Control Kit (EM3500SX only)

1. Install the relay box on the right side of the generator.
2. Remove the 8P connector from the back of the control box and connect the relay box connector instead.

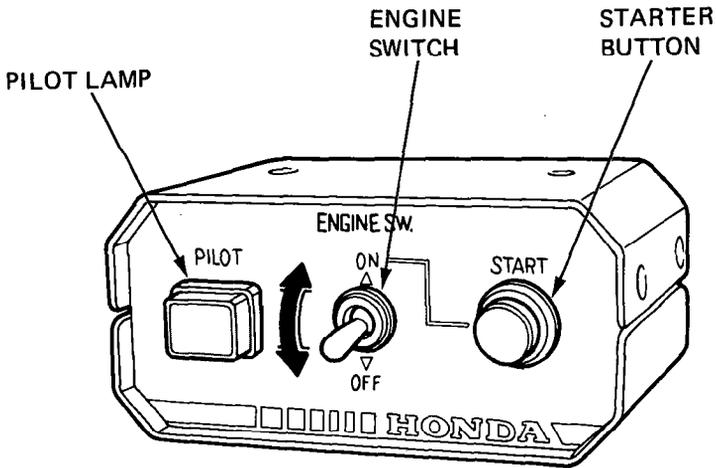


3. Connect the remote control cable to the remote control and relay box.



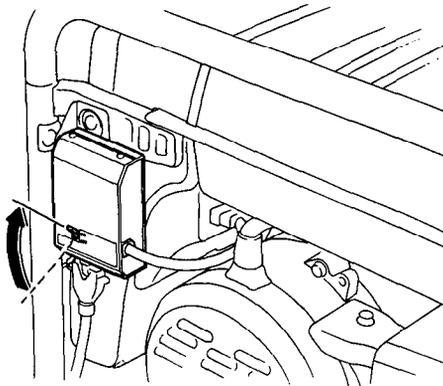
NOTE: Connect the blind connector when not using the remote control.

## Remote Control Box

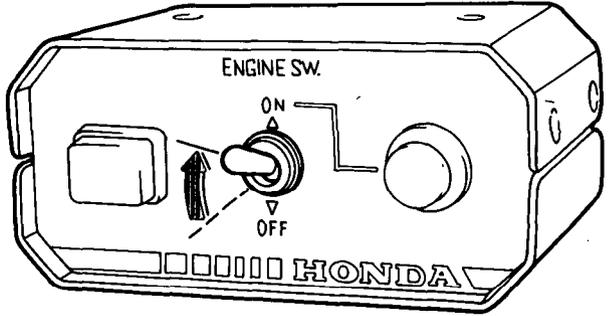


### Starting the engine with remote control

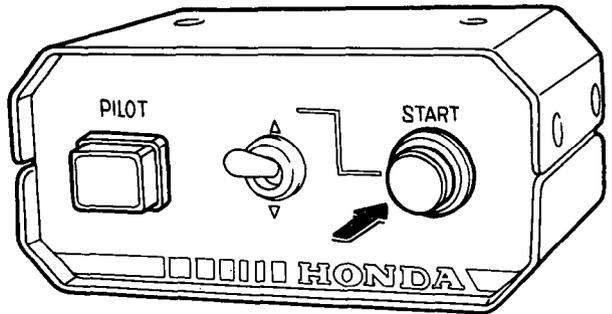
1. Turn the fuel valve to the ON position.
2. Turn the auto-throttle switch to the OFF position.
3. Turn off the engine switch at the generator and remove the key.
4. Turn the relay box switch to the ON position.



5. Turn the engine switch at the remote control box to the ON position.



6. Press the starter button until the pilot lamp comes on.



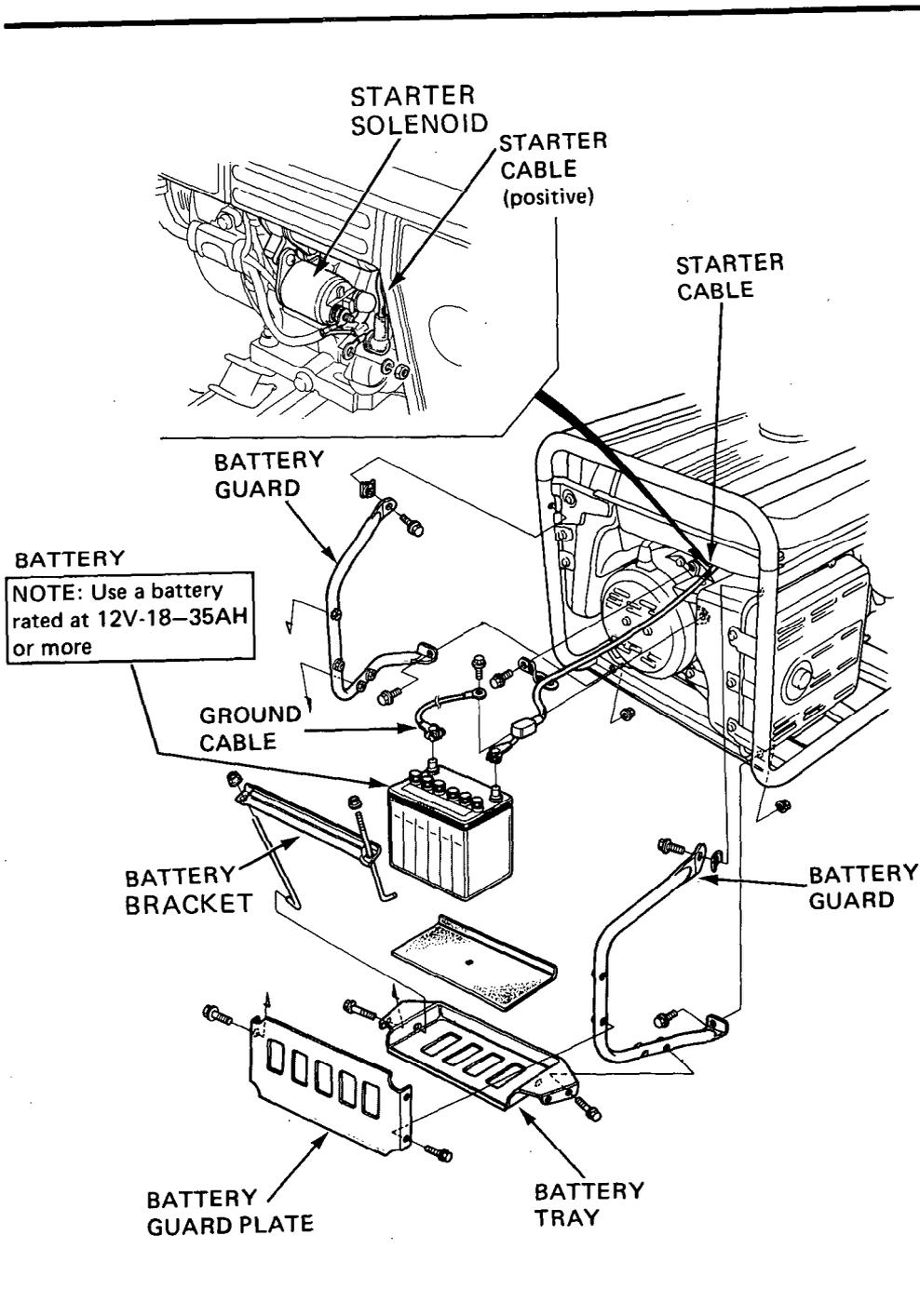
#### Stopping the engine

1. Turn the engine switch at the remote control box to the OFF position.
2. Turn the relay box switch to the OFF position.
3. Turn the fuel valve to the OFF position.

---

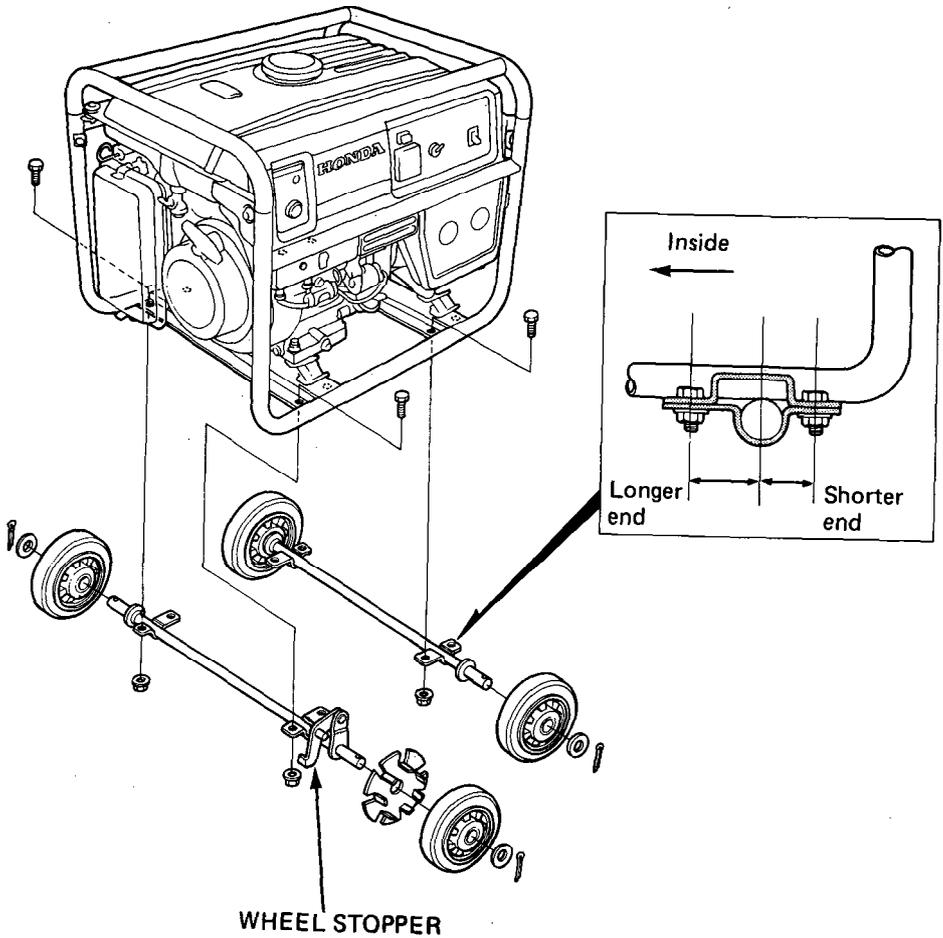
## Battery Tray Kit (EM3500SX only)

1. Install the battery guard on the frame.  
Set the battery tray on the battery guard and tighten the bolts.
2. Route the starter cable under the tank and connect it to the starter solenoid.
3. Connect the ground cable to the generator rear housing.
4. Set the battery on the battery tray and secure with the battery bracket.  
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.



## 4-Wheel Kit Installation

1. Install the four wheels on the axle shaft.
2. Install the axle assembly on the generator using four bolts and nuts.



**NOTE:** Install the shaft with wheel stopper facing engine side.

## 13. WARRANTY SERVICE

---

### Owner Satisfaction

Your satisfaction and goodwill are important to your dealer and to us. All Honda warranty details are explained in the Distributor's Limited Warranty. Normally, any problems concerning the product will be handled by your dealer's service department. If you have a warranty problem that has not been handled to your satisfaction, we suggest you take the following action:

- Discuss your problem with a member of dealership management. Often complaints can be quickly resolved at that level. If the problem has already been reviewed with the Service Manager, contact the owner of the dealership or the General Manager.
- If your problem still has not been resolved to your satisfaction, contact:

American Honda Motor Co., Inc.  
P.O. Box 100021  
Duluth, Georgia 30136-9421  
Telephone: (404) 497-6400

We will need the following information in order to assist you:

- Your name, address, and telephone number
- Product model and serial number
- Date of purchase
- Dealer name and address
- Nature of the problem

After reviewing all the facts involved, you will be advised of what action can be taken. Please bear in mind that your problem will likely be resolved at the dealership, using the dealer's facilities, equipment, and personnel, so it is very important that your initial contact be with the dealer.

Your purchase of a Honda product is greatly appreciated by both your dealer and American Honda Motor Co., Inc. We want to assist you in every way possible to assure your complete satisfaction with your purchase.

---

**MEMO**

---

**MEMO**

---

**MEMO**

---

**MEMO**



**HONDA**

31ZB4030  
00X31-ZB4-0300



Printed on  
Recycled Paper

POM53577-CVR

Kinko's 40.2003.03

PRINTED IN U.S.A.