

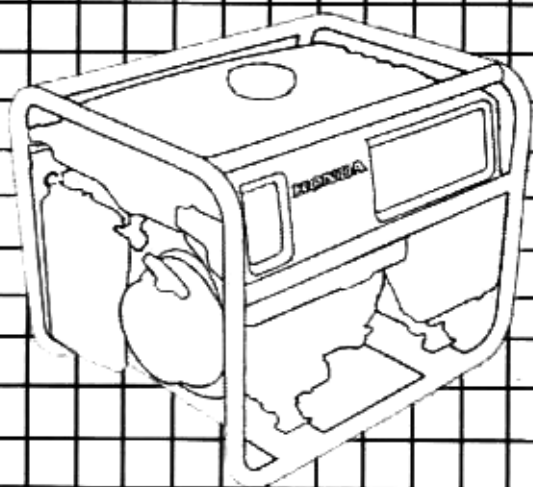
HONDA

Power

Equipment

Owner's Manual

EM5000SX • EM5000X



Thank you for purchasing a Honda generator.

This manual covers operation and maintenance of EM5000SX/EM5000X 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.

NOTE: This generator is equipped with a U.S.D.A. qualified spark arrester which requires periodic maintenance to ensure its effectiveness. It is illegal in some areas to operate an engine without a spark arrester. Check local laws and regulations.

CONTENTS

CONTENTS

1. GENERATOR SAFETY	3
2. COMPONENT IDENTIFICATION	7
3. PRE-OPERATION CHECK	9
4. STARTING THE ENGINE	13
5. GENERATOR USE	18
6. STOPPING THE ENGINE	25
• High altitude operation	26
7. MAINTENANCE	27
8. TRANSPORTING/STORAGE	36
9. TROUBLESHOOTING	38
10. WIRING DIAGRAM	40
11. SPECIFICATIONS	42
12. INSTALLATION OF OPTIONAL PARTS	43
13. WARRANTY SERVICE	49

1. GENERATOR SAFETY

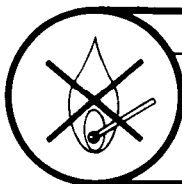
⚠ WARNING

- Place the generator on a firm, level surface; avoid loose sand or snow. If the generator is tilted or overturned, fuel spillage and a fire may result.
- 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.
- Children and pets must be kept away from the area of operation due to a possibility of electric shock or burns from hot components.
- Know how to stop the generator quickly, and understand the operation of all the controls. Never permit anyone to operate the generator without proper instruction.
- 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.
- Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the refueling area or where gasoline is stored.
- Do not overfill the fuel tank. After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Fuel vapor or spilled fuel may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure may cause loss of consciousness and may lead to death.
- 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.
- 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.

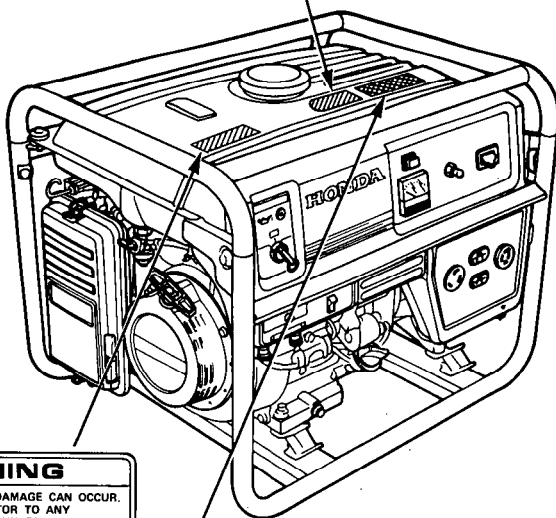
Such backfeed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system.

CAUTION: Equipment damage and corrosion from sand, dirt, and water may occur if the generator is overturned or sinks into a soft surface.

Read these labels before you operate the generator.



■ CHECK FOR SPILLED FUEL OR FUEL LEAKS
STOP ENGINE BEFORE REFUELING
■ CONTRÔLER QU'IL N'Y A NI FUITE NI ESSENCE
REPAQUÉE SUR L'APPAREIL
ARRÊTER 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 FERMÉ À CAUSE
DU RISQUE D'EMPOISONNEMENT DU GAZ.

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

EM5000SX 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 4.5kVA
MAX. OUTPUT 5.0kVA
PHASE 1Ø

DC

VOLTAGE 12V
CURRENT 8.3A

FUEL GASOLINE
(PETROL)

EM5000X 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.

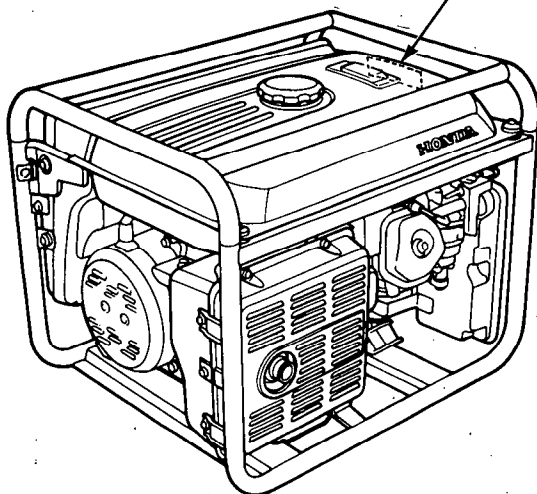
AC

VOLTAGE 120/240V
FREQUENCY 60Hz
RATED OUTPUT 4.5kVA
MAX. OUTPUT 5.0kVA
PHASE 1Ø

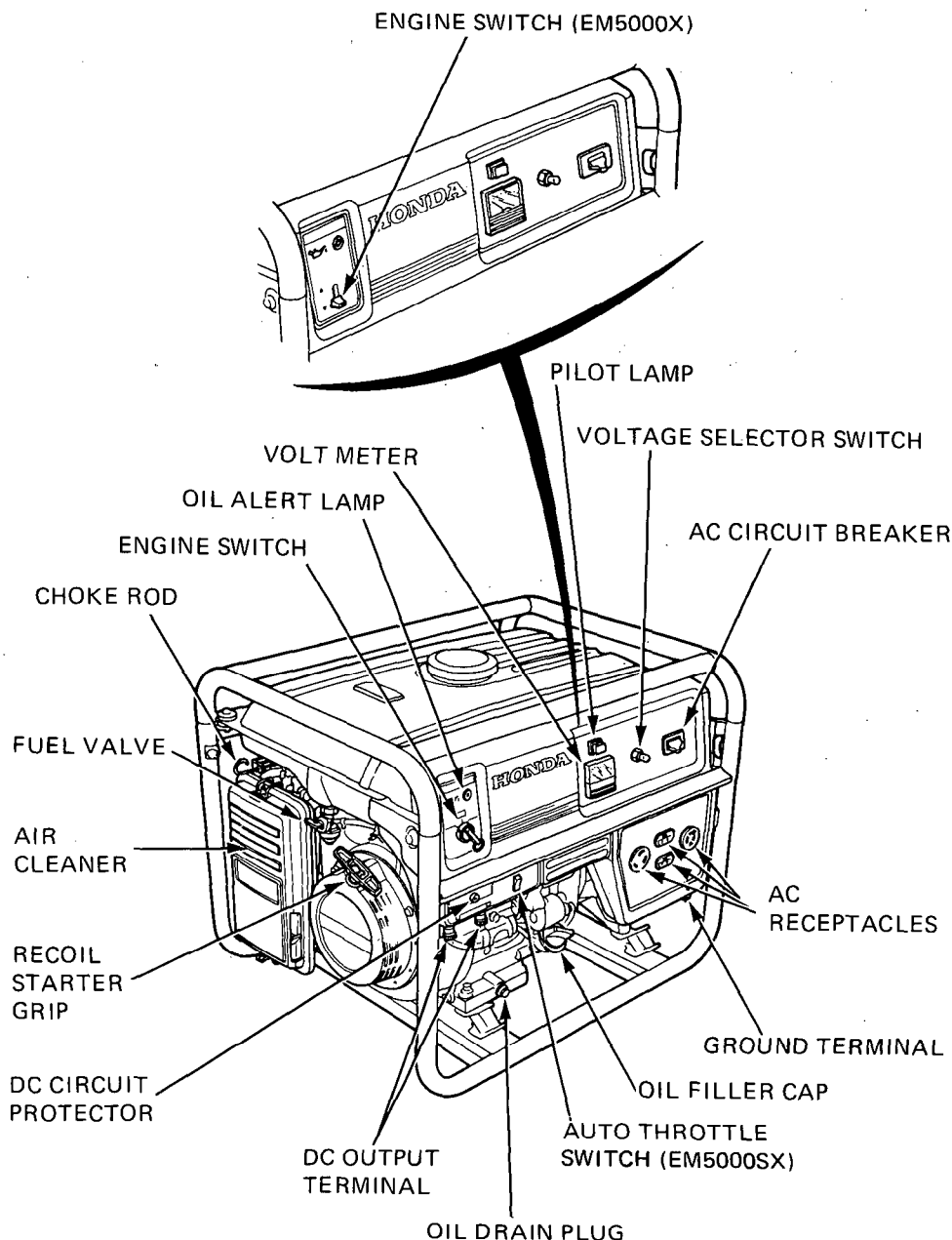
DC

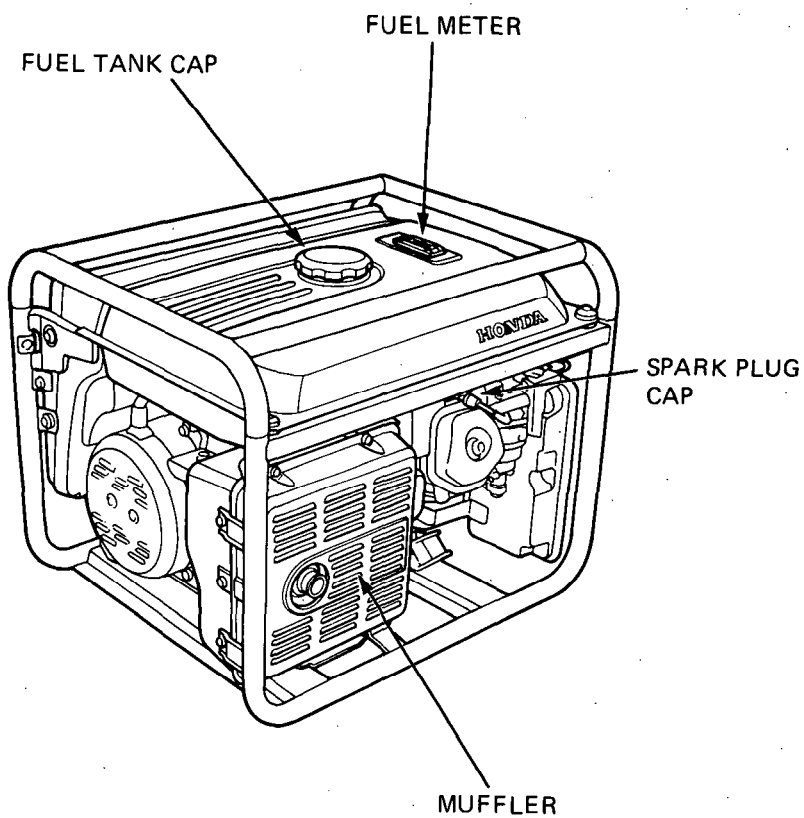
VOLTAGE 12V
CURRENT 8.3A

FUEL GASOLINE
(PETROL)



2. COMPONENT IDENTIFICATION





3. PRE-OPERATION CHECK

Perform the pre-operation check with the generator on a level surface and the engine stopped.

1. Engine Oil

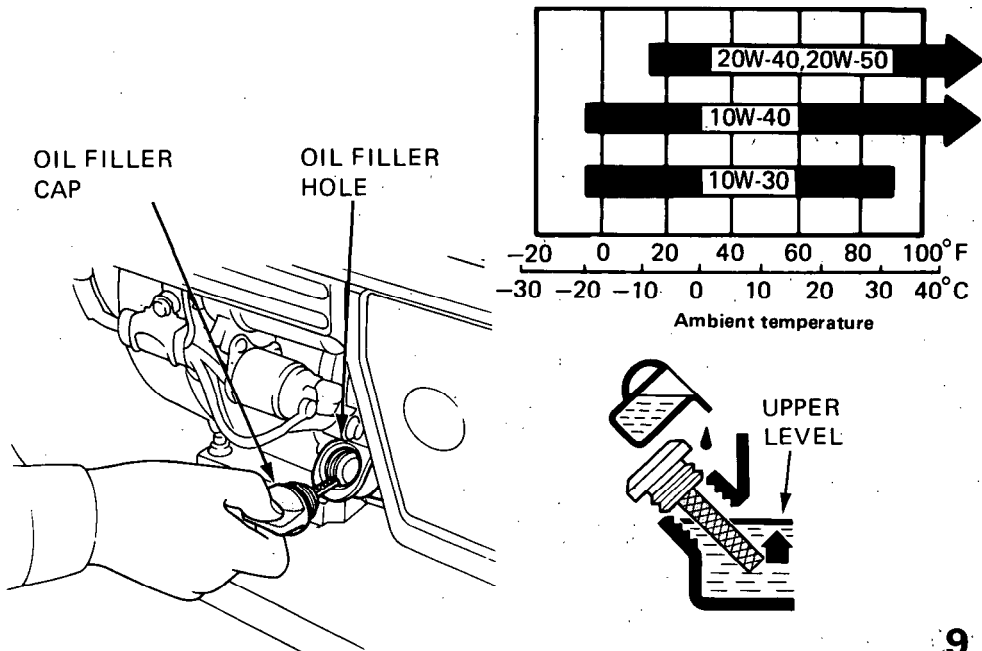
CAUTION: Engine oil is a major factor affecting engine performance and service life. Non detergent oils, castor-based oils, and 2-stroke engine oils are not recommended because they have inadequate lubricating characteristics.

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.

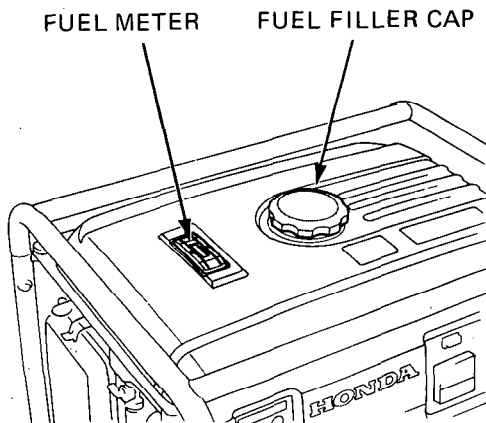
We recommend that you use unleaded fuel because it produces fewer engine and spark plug deposits and extends the life of exhaust system components.

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.

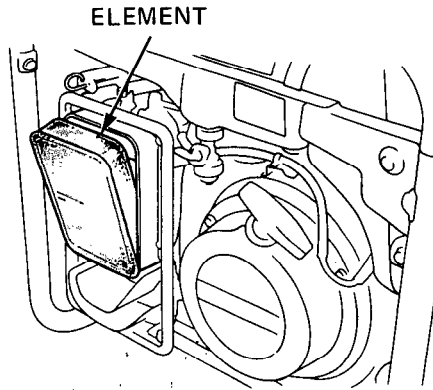
NOTE:

- 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

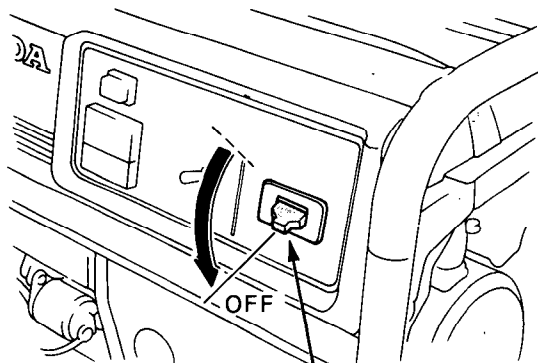
Check the air cleaner elements to be sure they are clean and in good condition. Clean or replace the elements if necessary (page 30).

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

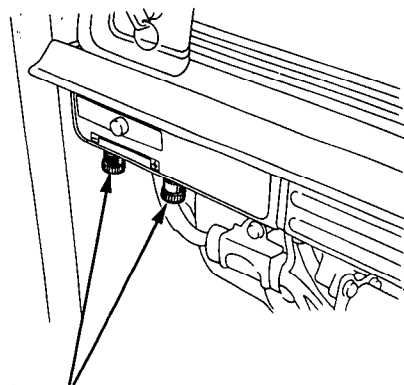


4. STARTING THE ENGINE

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.

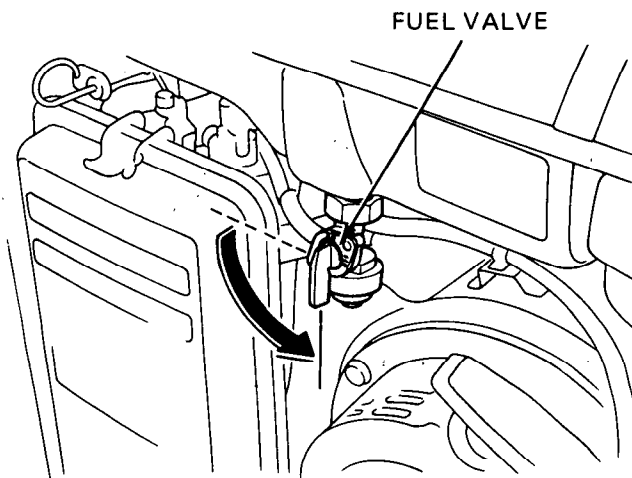


AC CIRCUIT BREAKER

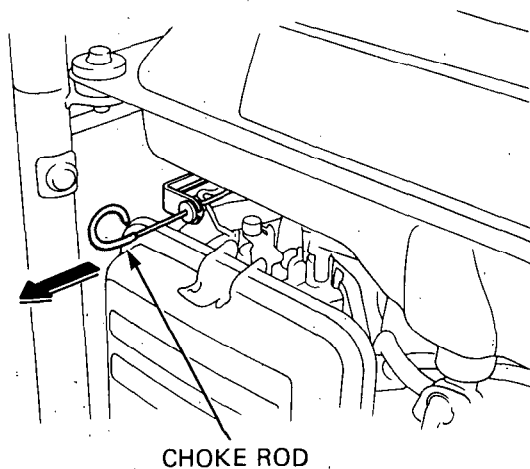


DC TERMINALS

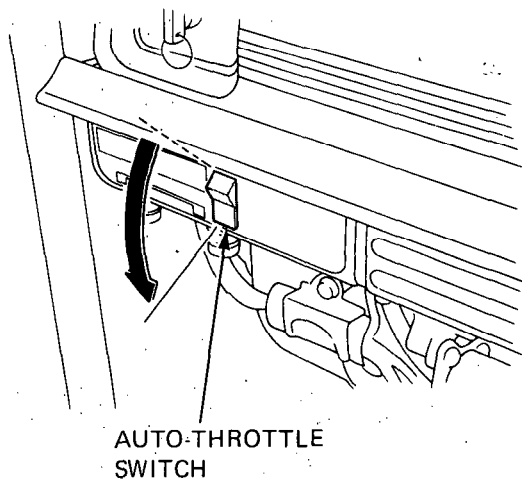
2. Turn the fuel valve to the ON position.



3. Pull the choke rod out to the CLOSE position.

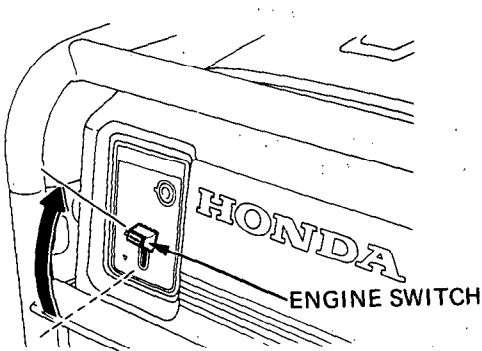


4. Make sure the auto-throttle switch is in the OFF position, or more time will be required for warm up. (EM5000SX only)

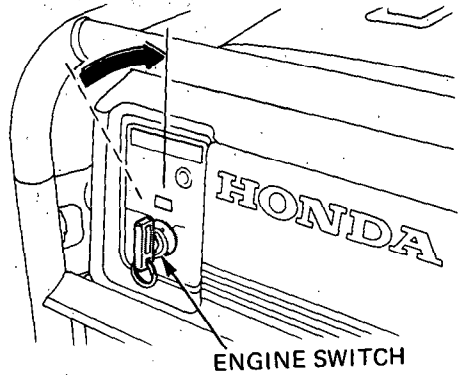


5. Start the engine

- With recoil starter:
Turn the engine switch to the ON position.



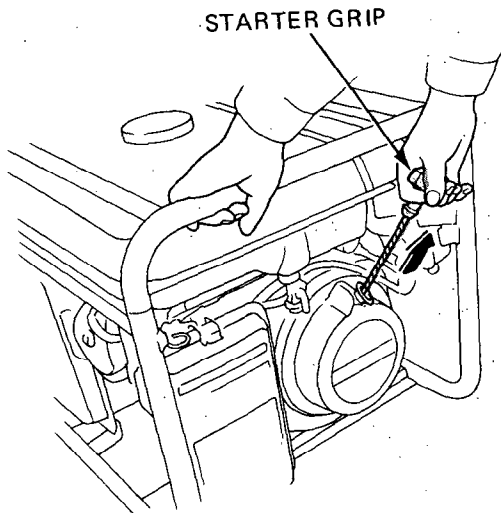
(EM5000X)



(EM5000SX)

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 or housing.

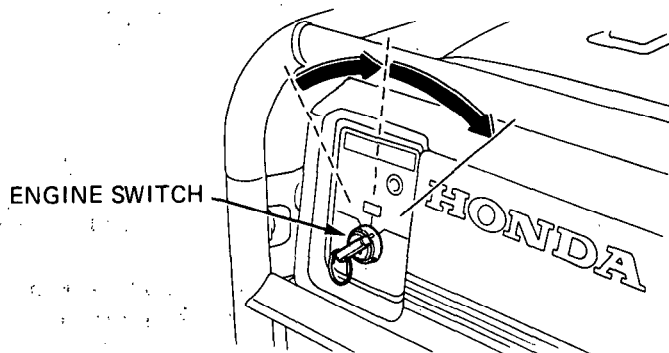


- With electric starter (EM5000SX only):

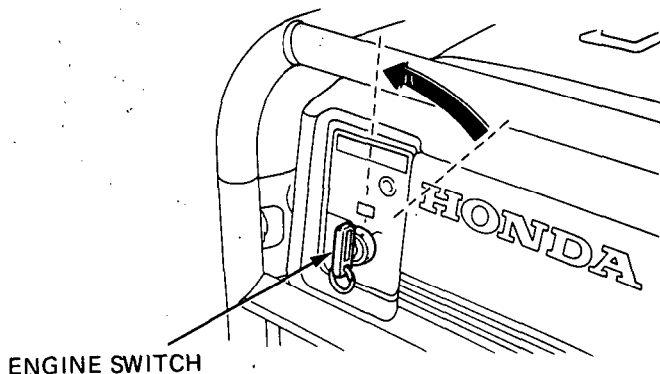
Turn the engine switch to the START position and hold it there until the engine starts.

NOTE:

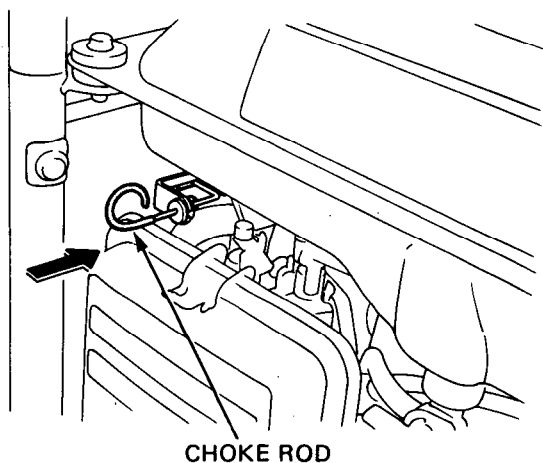
- Do not use the electric starter for more than 5 seconds at a time. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.
- If the generator is equipped with a remote control kit, make sure the switch on the relay box is turned off, or the engine will 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.

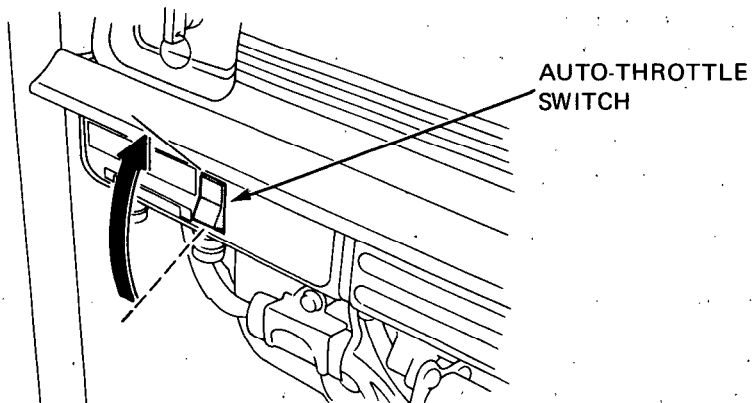


7. Push the choke rod to the OPEN position as the engine warms up.



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. (EM5000SX only)

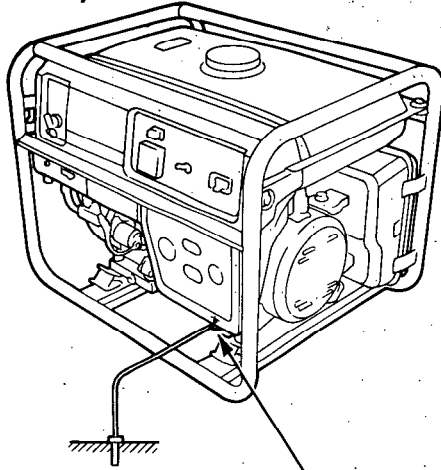
NOTE: When a battery is connected for electric starting, choke operation is automatic, but you can override the automatic choke by manually pulling the choke rod. If the choke is closed manually, you must also push in the choke rod manually to allow the choke to open.



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:

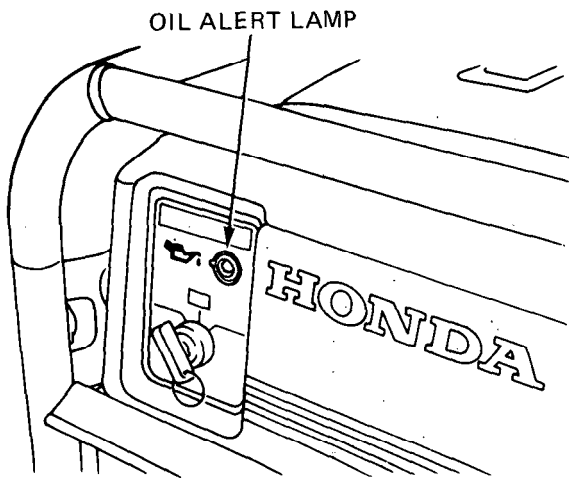
- Limit operation requiring maximum power (5.0 kVA) to 30 minutes. For continuous operation, do not exceed the rated power of 4.5 kVA. In either case, be sure to consider the total power requirements of all connected appliances.
- Most appliance and power tool motors require more than the rated operating current for start-up. To match appliance power needs to generator capability, allow a sufficient generator power reserve to accommodate motor start-up requirements.
- Do not exceed the current limit specified for any one receptacle.

NOTE: Appliance and power tool manufacturers usually list rating information near the model number or serial number.

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. 9).

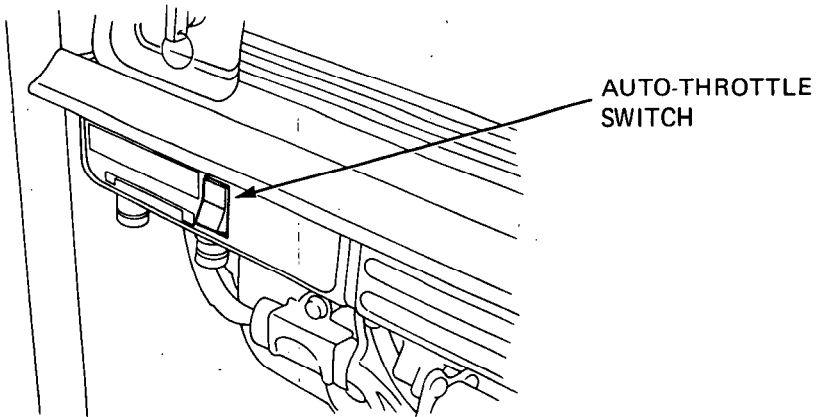


Auto-throttle System (EM5000SX only)

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:

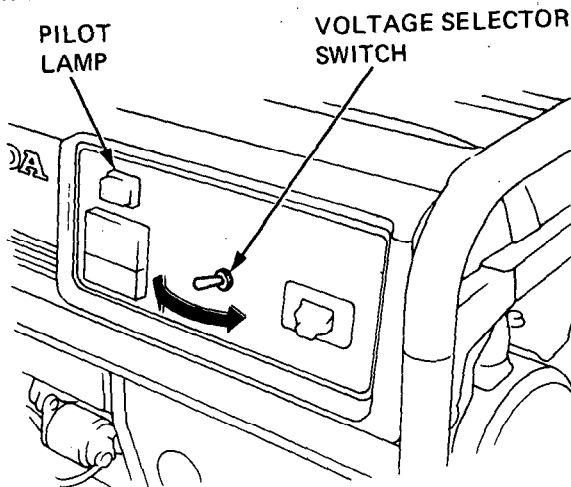
- AUTO is recommended to minimize fuel consumption when no load is applied.
- The auto-throttle system will not respond to electrical loads of less than 1 ampere.
- The system is not-effective for use with appliances that require only momentary power. To avoid extended warm-up periods, keep the switch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



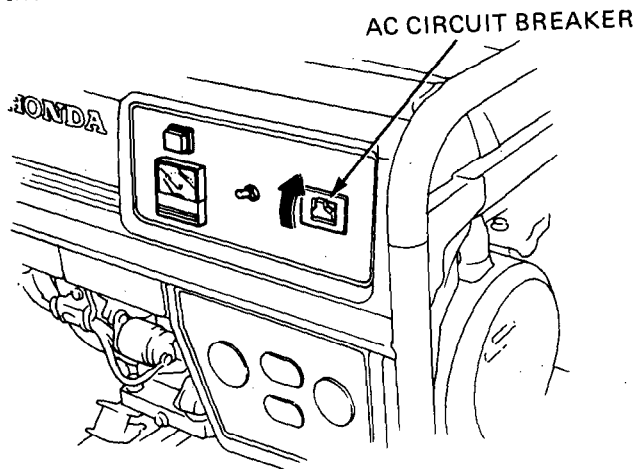
AC applications

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.

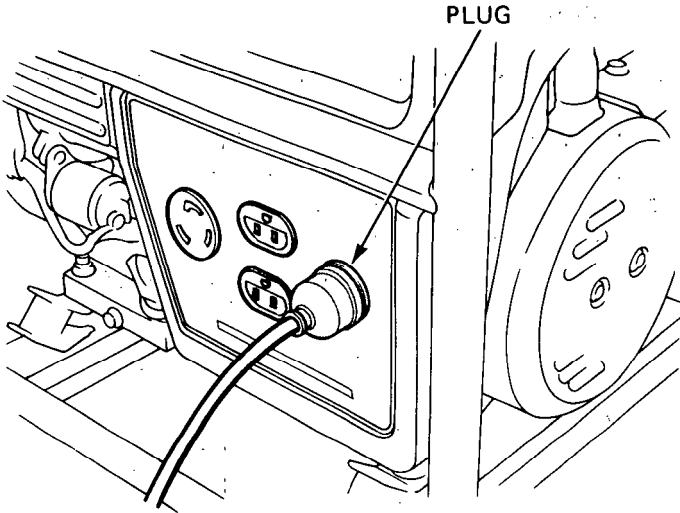
NOTE: With the voltage selector switch in the "120V/240V" position, you can use the 120V and 240V receptacles simultaneously. If you are not using the 240V receptacle, but you require more power from the 120V twist-lock receptacle, then turn the switch to the "120V" position.



3. Switch on the AC Circuit Breaker.



4. Plug in the appliance.



CAUTION:

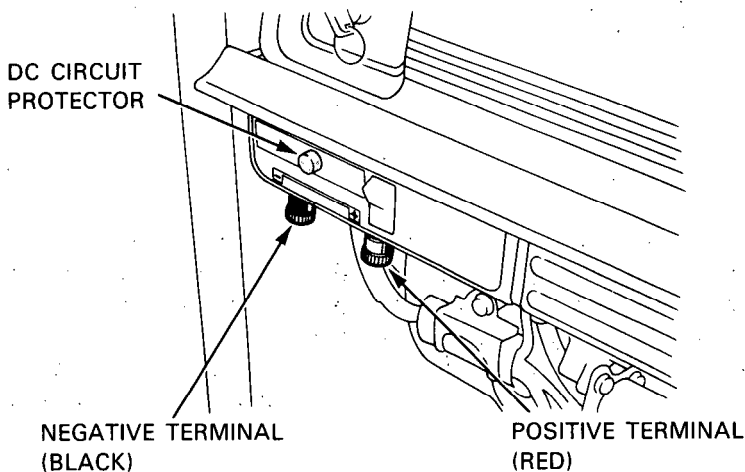
- Be sure that appliances do not exceed the generator's rated load capacity for more than 30 minutes and that they never exceed the maximum load capacity. Substantial overloading will switch off the circuit breaker. Marginal overloading may not switch off the circuit breaker, but it will shorten the 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 to the generator's negative (–) DC terminal.



⚠ 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.

⚠ WARNING

- **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.**
- **Never lean over the battery when making connections.**
- **Never attempt to charge a frozen battery. The battery could rupture and explode. If you suspect that a battery may be frozen, remove the vent caps and check the fluid. If there seems to be no fluid, or if you see ice, do not attempt to charge the battery until the fluid thaws.**

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.**

NOTE:

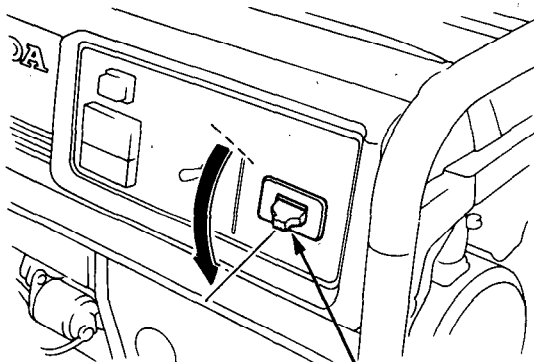
- **The DC terminals may be used while the AC power is in use.**
- **An overloaded DC circuit will trip the DC circuit protector (push button comes out). If this happens, wait a few minutes before pushing the circuit protector to resume operation.**

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.

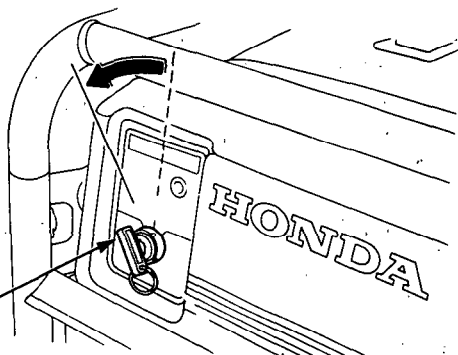
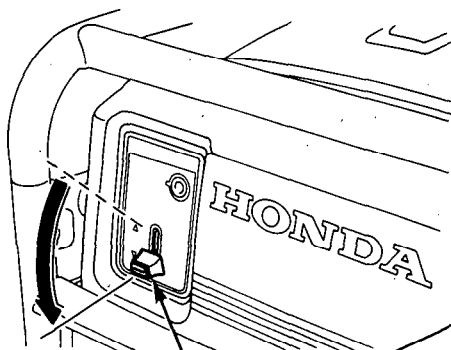


AC CIRCUIT BREAKER

2. Turn the engine switch to the OFF position.

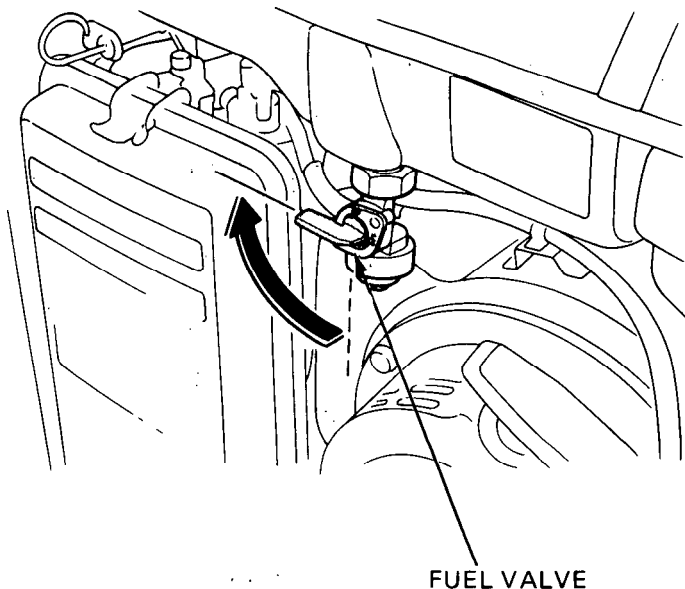
(EM5000X)

(EM5000SX)



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 contains poisonous carbon monoxide; exposure may cause loss of consciousness and may lead to death.

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



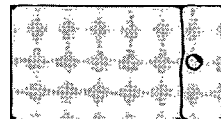
PLUG WRENCH



DRIVER HANDLE



HANDLE BAR



TOOL BAG

Maintenance Schedule

REGULAR SERVICE PERIOD						
ITEM	Perform at every indicated month or operating hour interval, whichever comes first.	Each use	First month or 20 Hrs. (3)	Every 3 months or 50 Hrs. (3)	Every 6 months or 100 Hrs. (3)	Every year or 300 Hrs. (3)
Engine oil	Check level	•				
	Change		•		•	
Air cleaner	Check	•				
	Clean			• (1)		
Sediment cup and fuel valve filter Clean					•	
Spark plug	Clean—Readjust				•	
Spark arrester	Clean				•	
Valve clearance	Check—Readjust					• (2)
Fuel tank, strainer, and tank filter	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.

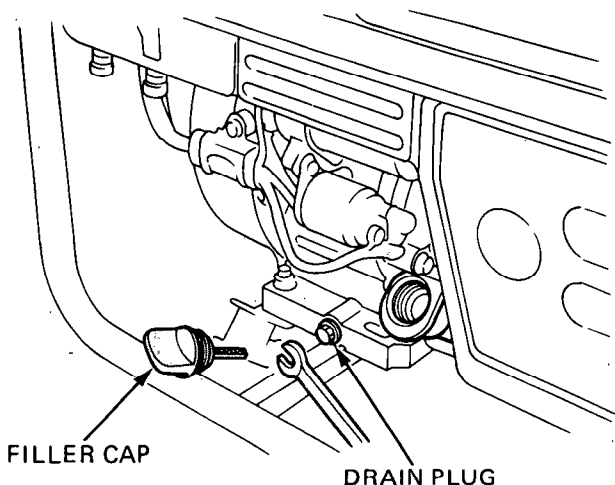
(3) For professional commercial use, log hours of operation to determine proper maintenance intervals.

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 9), 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.

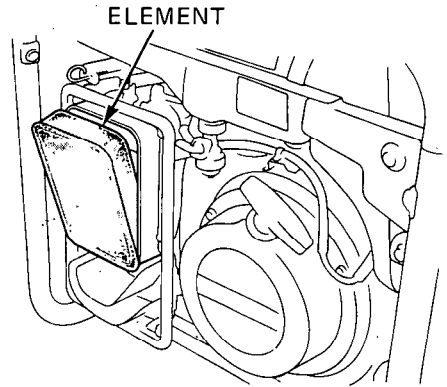
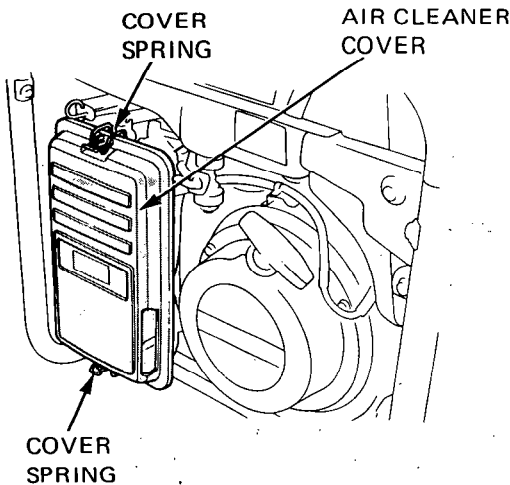
Air Cleaner Service

A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly (page 28). Service more frequently when operating the generator in extremely dusty areas.

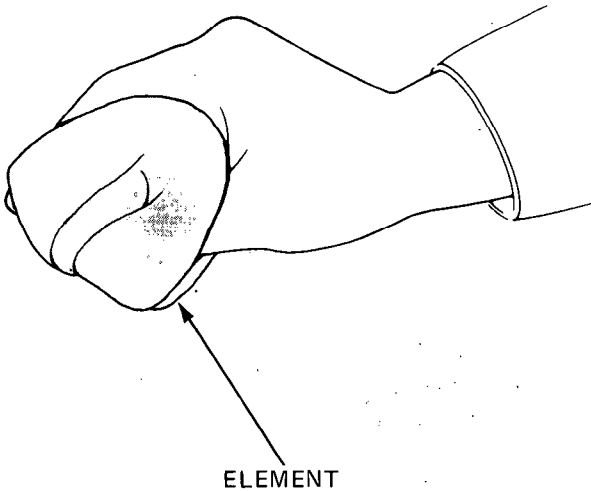
⚠ WARNING Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.

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.



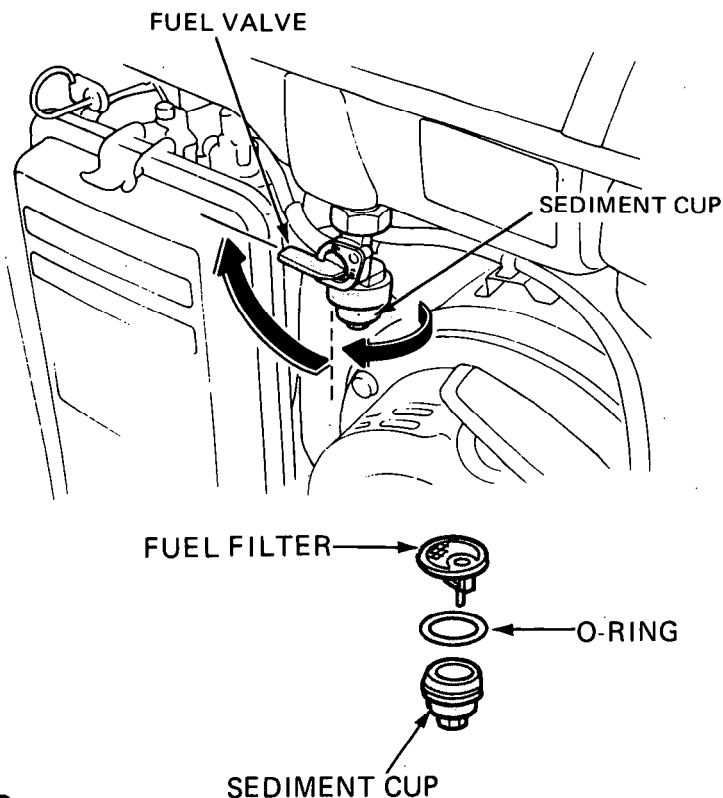
Sediment Cup and Filter Cleaning

The sediment cup and filter prevent 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 and filter should be cleaned.

1. Turn the fuel valve to the OFF position. Remove the sediment cup, O-ring, and filter.
2. Clean the sediment cup, O-ring, and filter in nonflammable or high flash point solvent.
3. Reinstall the filter, O-ring, and sediment cup.

⚠ WARNING

- Gasoline is extremely flammable and is explosive under certain conditions.
- After installing the sediment cup, check for fuel leaks, and make sure the area is dry before starting the engine. Fuel vapor or spilled fuel may ignite.



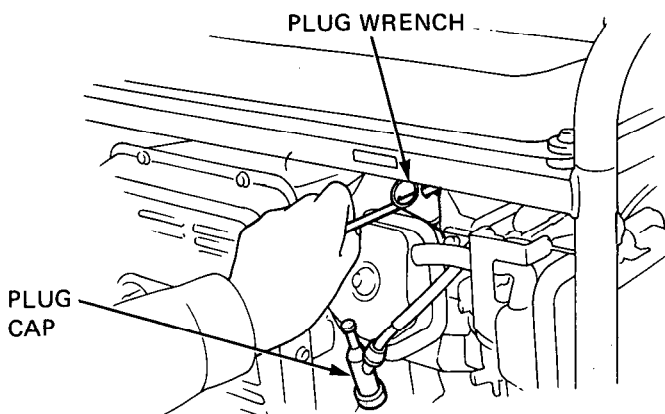
Spark Plug Service

**Recommended spark plug: BPR5ES (NGK)
W16EPR-U (ND)**

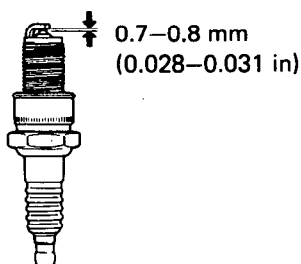
To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

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

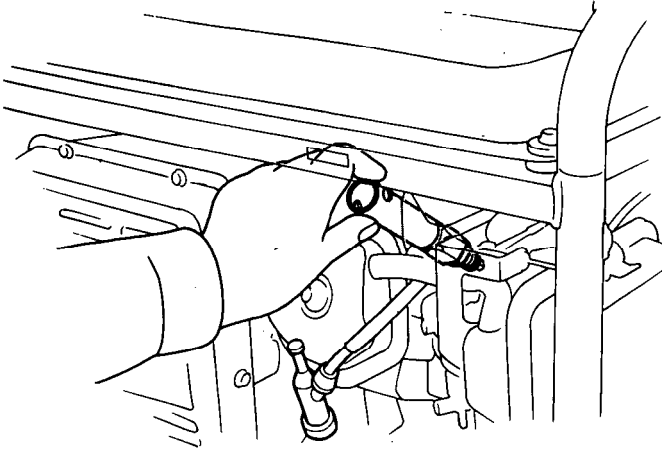
1. Remove the spark plug cap.
2. Clean any dirt from around the spark plug base.
3. Use the wrench supplied in the tool kit to remove the spark plug.



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 may cause engine damage.
- Use only the recommended spark plugs or equivalent. Spark plugs which have an improper heat range may cause engine damage.

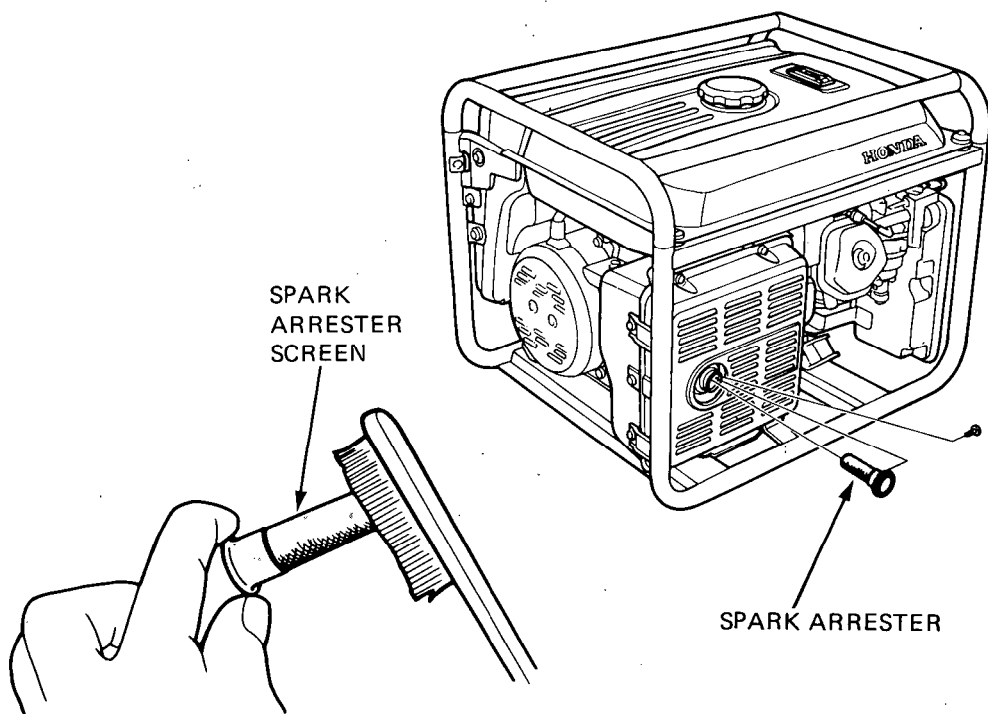
Spark Arrester Maintenance

This generator's U.S.D.A. qualified spark arrester requires periodic maintenance to ensure its effectiveness. It is illegal in some areas to operate an engine without a spark arrester. Check local laws and regulations.

▲ WARNING If the generator has been running, the muffler will be very hot. Allow it to cool before proceeding. Be careful not to touch the muffler while it is hot.

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

1. Remove the 4 mm screw from the side of the muffler exhaust pipe. Use a screwdriver to push in the spark arrester retaining tab on the opposite side of the exhaust pipe, and remove the spark arrester.
2. Clean the carbon deposits from the spark arrester screen with a brush. Check the spark arrester screen for damage. Replace the spark arrester if the screen is torn or punctured.
3. Reinstall the spark arrester, and tighten the screw securely.



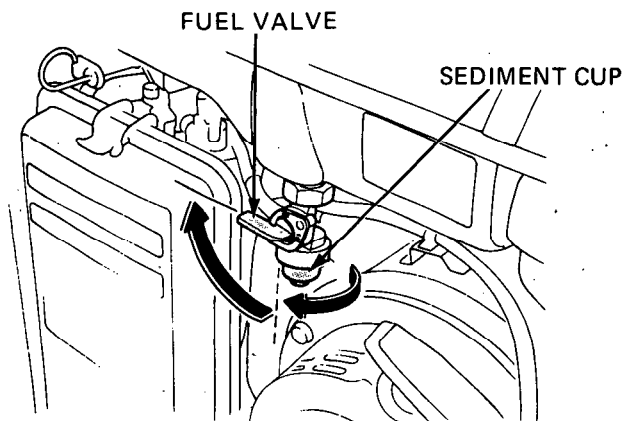
8. TRANSPORTING/STORAGE

⚠ WARNING

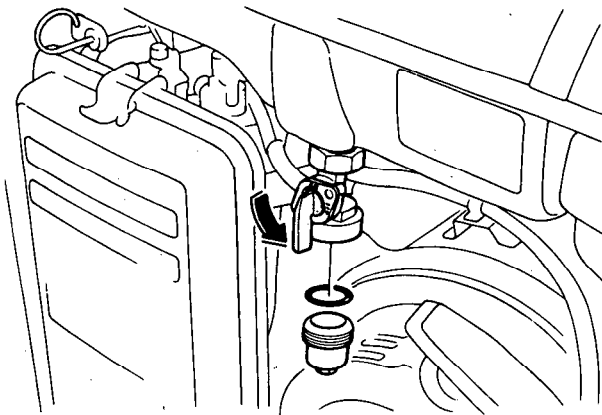
- Let the engine cool before transporting the generator or storing it indoors.
- When transporting the generator, turn the engine switch and the fuel valve to the OFF position, and keep the generator level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

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.

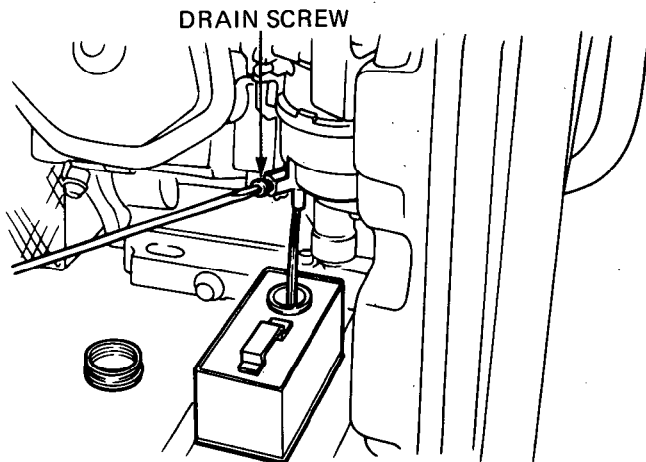


- b. Turn the fuel valve ON, and drain the gasoline in the fuel tank into a suitable container.
- c. Replace the sediment cup and tighten securely.

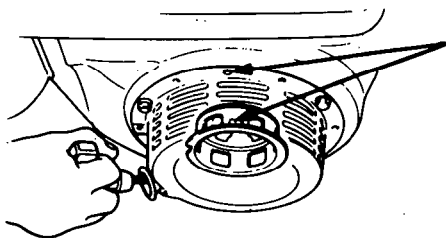


- d. Drain the carburetor by loosening the drain screw. Drain the gasoline into a suitable container.

⚠ WARNING Gasoline is extremely flammable and is explosive under certain conditions. 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.



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.



Align the notch on the starter pulley with the hole at the top of recoil starter.

6. Cover the engine to keep out dust.
7. Once a month, recharge the battery. (EM5000SX)

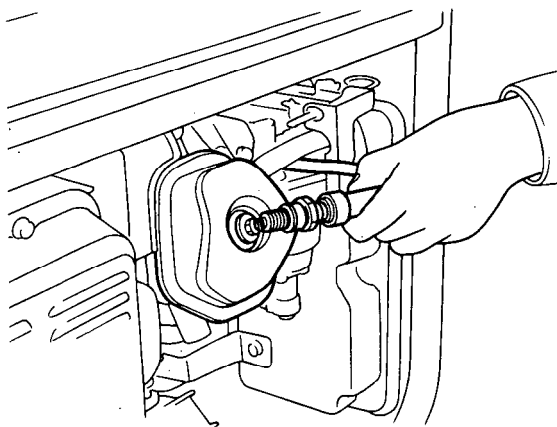
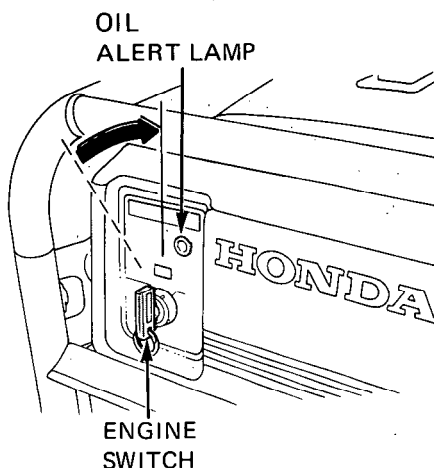
9. TROUBLESHOOTING

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 If any fuel has been spilled, make sure the area is dry before testing the spark plug. Fuel vapor or spilled fuel may ignite. Perform this test in a well-ventilated area.

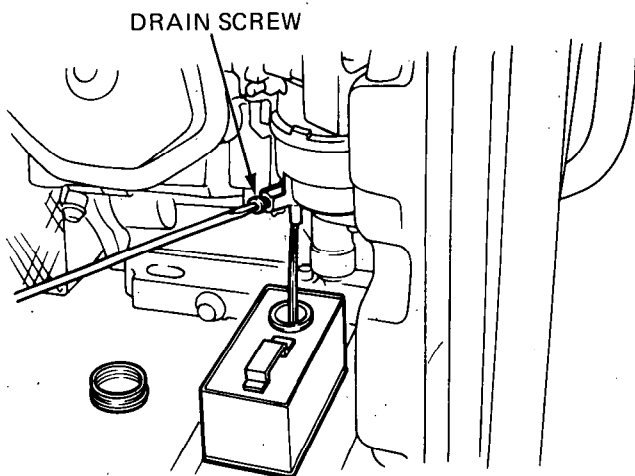
- e. If there are no sparks, replace the plug.
- f. If the new spark plug does not spark, take the generator to an authorized Honda dealer.



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 has been spilled, make sure the area is dry before attempting to start the engine. Fuel vapor or spilled fuel may ignite. Perform this test in a well-ventilated area.



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?

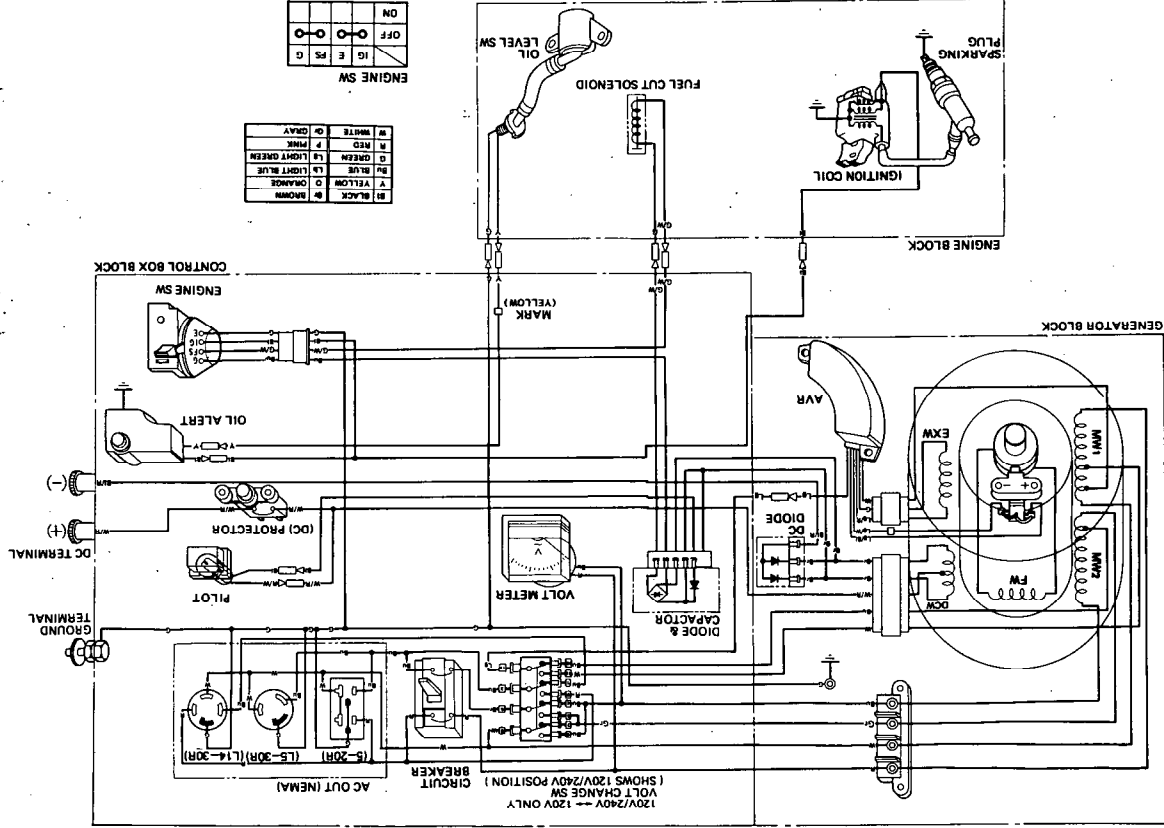
2. Check the electrical appliance or equipment for any defects.

D. No electricity at the DC terminals.

1. Is the DC circuit breaker on?

(EM5000SX)





11. SPECIFICATIONS

Dimensions

Model	EM5000SX	EM5000X
Power equipment description code	EA7	
Length x Width x Height	655 x 510 x 490 mm (25.8 x 20.1 x 19.3 in)	
Dry weight	80 kg (176.4 lb)	78 kg (171.9 lb)

Engine

Model	GX340
Engine type	4-stroke, overhead valve, single cylinder
Displacement (Bore x Stroke)	337 cc (20.6 cu in) [82 x 64 mm (3.2 x 2.5 in)]
Compression ratio	8.0 : 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	®BPR5ES (NGK), W16EPR-U (ND)

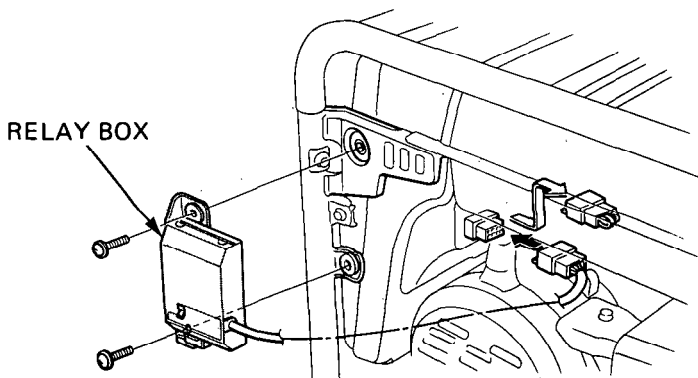
Generator

Model		EM5000SX	EM5000X
Type		A	
AC output	Rated voltage	120/240V	
	Rated frequency	60 Hz	
	Rated ampere	37.5/18.8A	
	Rated output	4,500 VA	
	Maximum output	5,000 VA	
DC output		Only for charging 12V automotive batteries. Maximum charging output = 8.3A	

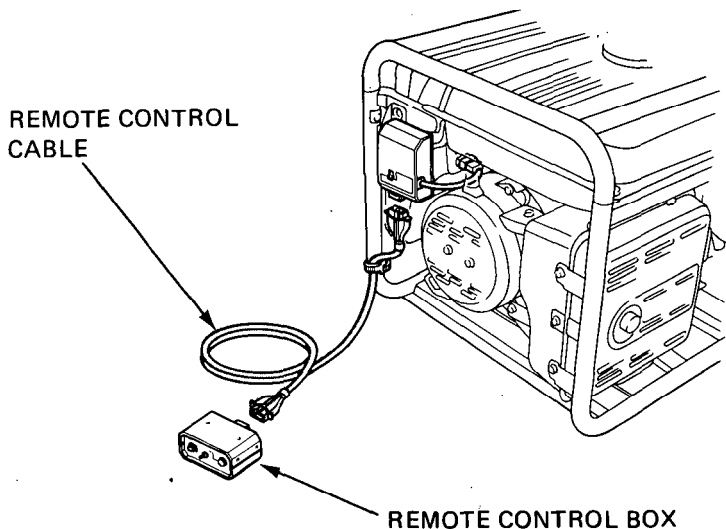
12.INSTALLATION OF OPTIONAL PARTS

Remote Control Kit (EM5000SX only)

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

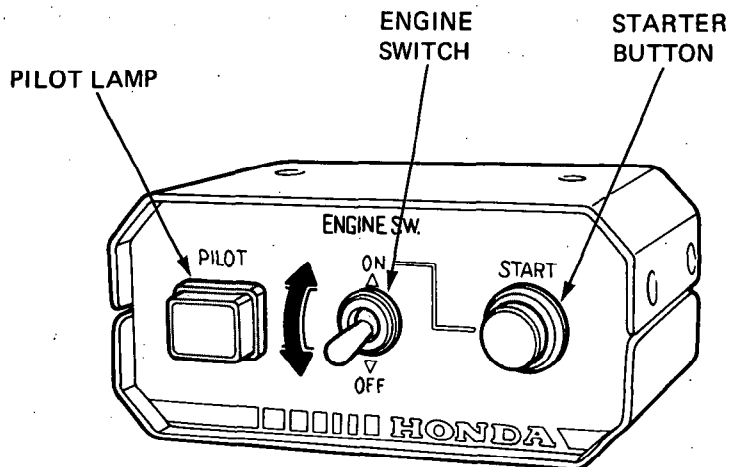


3. Connect the remote control cable to the remote control and relay box.



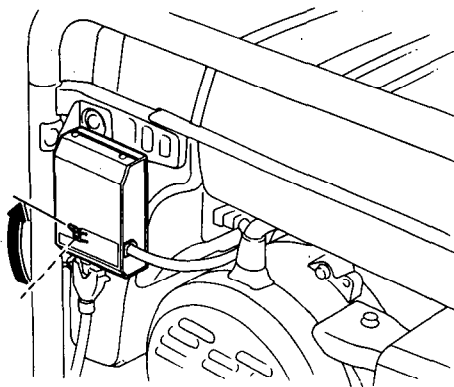
- NOTE:
- Connect the blind connector when not using the remote control.
 - Engine will not start unless the blind connector is connected.

Remote Control Box

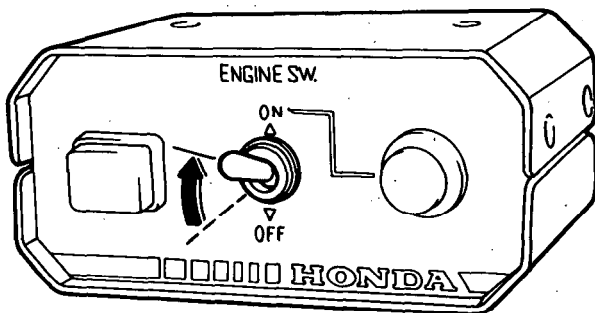


Starting the engine with remote control

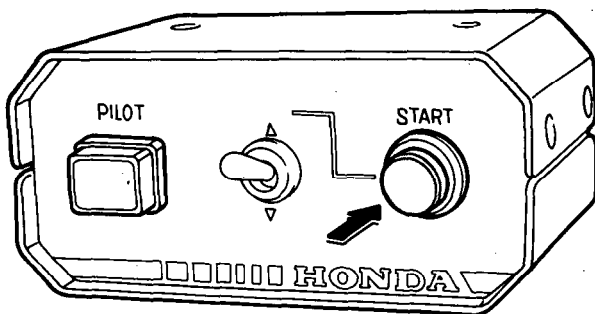
1. Turn the fuel valve to the ON position.
2. Turn the auto-throttle switch to the OFF position.
3. Turn off the engine switch at the generator and remove the key.
4. Turn the relay box switch to the ON position.



-
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.

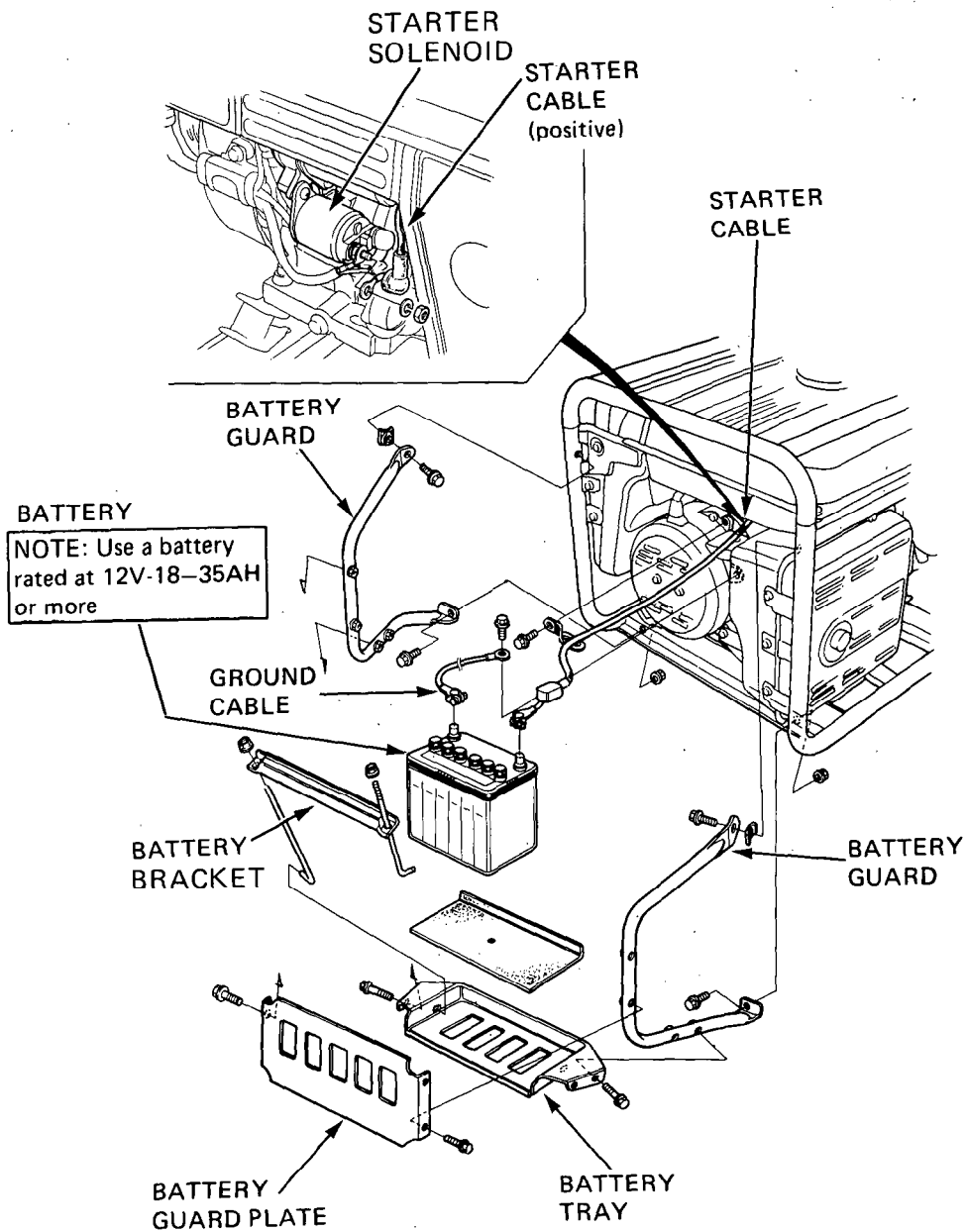


Stopping the engine

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.

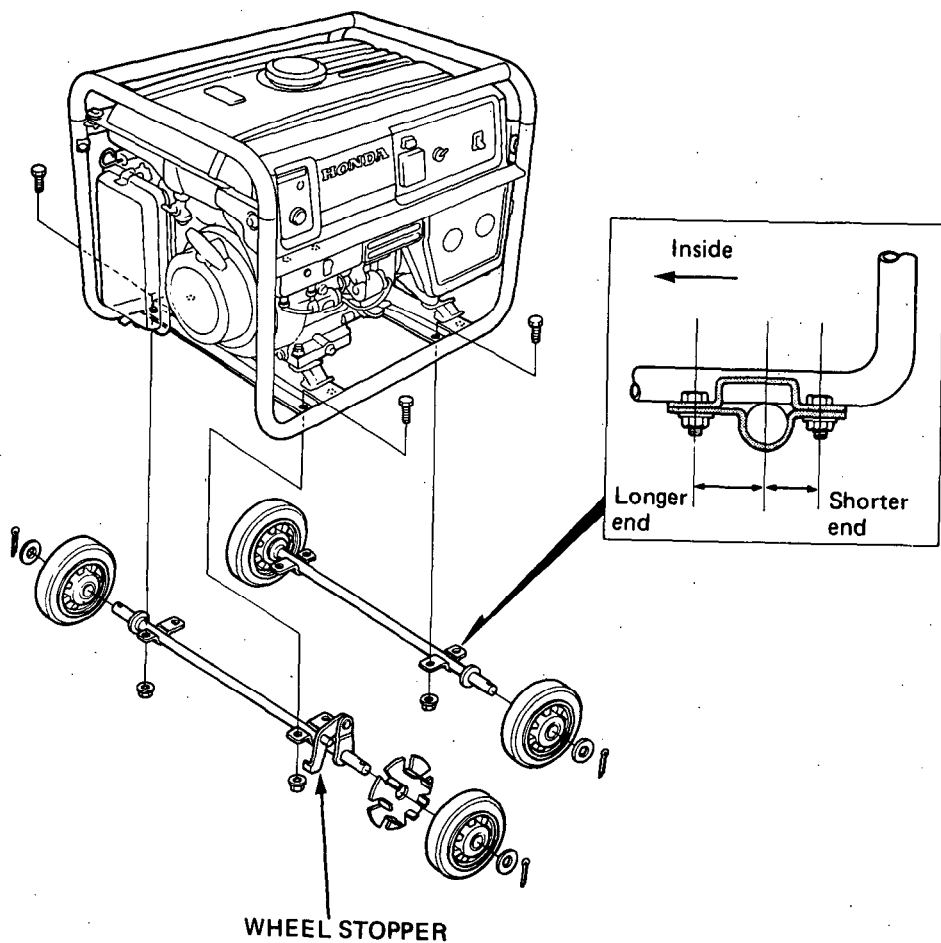
Battery Tray Kit (EM5000SX only)

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

HONDA



Printed on
Recycled Paper

120.2001.08

PRINTED IN U.S.A.

31ZC2612
00X31-ZC2-6120