GENTRON®

Owner's Manual

3500RV/3500W GENERATOR

Please read and save these instructions.

HAVE QUESTIONS OR NEED SERVICE
DO NOT RETURN TO STORE!
PLEASE CALL TOLL FREE: 888.896.6881

www.GentronUSA.com

⚠ DANGER
Carbon Monoxide

Using a generator indoors WILL KILL YOU IN MINUTES.

Carbon Monoxide

Generator exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. If you can smell the generator exhaust, you are breathing CO. But even If you cannot smell
the exhaust, you could be breathing CO.

· NEVER use a generator inside homes, garages, crawlspaces, or other partly enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air.

· ONLY use a generator outdoors and far away from open windows, doors, and vents. These openings can pull in generator exhaust.

Even when you use a generator correctly, CO may leak into the home. ALWAYS use a battery-powered or battery-backup CO alarm in the home.

If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY. See a doctor. You could have carbon monoxide poisoning.

SPECIFICATION

Generator	Model	3500RV	3500W
	Type	Bush Single-phase	
	Voltage Regulate	AVR	
	Frequency Hz	60	60
	Rated AC Voltage V	120V	120V/240V
	Max.AC Output KVA	3.5	3.5
	Rated AC Output KVA	3.0	3.0
Gasoline	Model	JF200	JF200
	Type	OHV Forced Air-cooled 4-stroke	
	Displacement	196cc	196cc
	Max. Output HP/rpm	6.5/3600	6.5/3600
	Fuel	Unleaded Gasoline	
	Fuel Tank Capacity L(Gal)	15(4)	
	Continuous operating hours @ half load	11	11
	Oil	10W-30, SAE 30	
	Oil Capacity	0.6 Liter (0.63 quart)	
	Ignition System	T.C.I.	
	Starting System	Recoil and Electric	
	Operating Noise Level dB(A) 7m	67	
Standard Features	Fuel Gauge	0	0
	Voltmeter	0	0
	AC Circuit Breaker	0	0
	AC Voltage Switch	0	0
Optional Features	DC Output	0	0
	DC Circuit Breaker	0	0
Package Dimension	Overall Dimension LXWXH mm	600X450X470	
	Gross Weight kg	52	56
	Net Weight kg	48	52
	20FT Unit	225	

NOTICE: "0"= WITCH "+"= As Requestment
Specifications subject to change without notice.

IMPORTANT SAFETY INFORMATION

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

WARNING! The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO THIS PRODUCT, BUT MUST BE SUPPLIED BY THE OPERATOR.

GENERAL SAFETY RULES
WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.

2. **Do not operate generators in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Generators create sparks, which may ignite the dust or fumes.

3. **Keep bystanders, children, and visitors away while operating a generator.** Provide barriers or shields as needed.

4. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, and long hair can be caught in moving parts.

5.Generating sets are prohibited to join power system network.

6.Generating sets shall not be used in the surroundings with inflammable and explosive articles.

7.Standard and operation status for gasoline generator sets:
Atmosphere pressure:1013mbar; Intake temperature:20°C
Generating sets installation height is increased by every 1000ft, the output will be decreased by 3.5%;the ambient temperature is exceeded by every above standard temperature, the output will be decreased by 1% around.

IMPORTANT SAFETY INFORMATION

GENERATOR SAFETY

1. Do not overload the generator. Use the correct generator for your application. The correct generator will do the job better and safer at the rate for which it is designed.
2. Do not expose to rain or wet conditions. Water entering a generator will increase the risk of electric shock.
3. Stay alert. Watch what you are doing, and use common sense when operating a generator. Do not use a generator while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the generator may result in serious personal injury.
4. When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These extension cords are rated for outdoor use, and reduce the risk of electric shock.
5. CAUTION! Never run the generator in an enclosed garage or any other type of enclosed structure without a proper, leak-free ventilation shaft. Carbon Monoxide, an odorless, colorless deadly gas may accumulate and cause serious injury or death.
6. Do not use the generator if the Power Switch does not turn it on or off. Any generator that cannot be controlled with the Power Switch is dangerous and must be repaired.
7. Make sure the Power Switch is in its "OFF" position and disconnect the spark plug wire before making any adjustments, changing accessories, or storing the generator. Such preventive safety measures reduce the risk of starting the generator accidentally.
8. Maintain generators with care. Do not use a damaged generator. Tag damaged generators"Do not use" until repaired.
9. Only qualified repair personnel should perform generator service. Service or maintenance performed by unqualified personnel could result in injury.
10. Use the right generator for the job. Do not attempt to force a small generator to do the work of a larger industrial generator. There are certain applications for which this generator was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this generator, and do not use this generator for a purpose for which it was not intended.

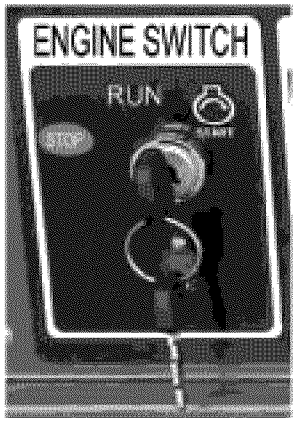
INSTALLATION PROCEDURES

1. **WARNING!** Before using the Generator, read and understand the Engine manufacturer's Operation, Maintenance, and Parts manual. Also, read the safety precautions in this manual.These should always be followed to reduce the risk of personal injury and damage to equipment.
2. Ensure installation meets all applicable safety, and local and national electrical codes. Have installation performed by a qualified, licensed electrician and building contractor.
3. If the generator is installed indoors, exhaust fumes must be piped out of the building using leak-free, heat-resistant piping. Pipes and silencer should not be made of any flammable materials, nor should they be installed near any flammable materials. Generator exhaust fumes must be within legal limits, including all local codes and ordinances.
4. If the generator is installed outdoors, it must be weatherproofed and should be soundproofed. It should not be run outdoors without protection to the Generator and wiring conduit.
5. Never lift the Generator using the engine or alternator lifting lugs. Connect lifting equipment to the Frame of the Generator. Before lifting the Generator, ensure the lift rigging and supporting structure are in good condition, and are rated to lift such a load.
6. The supporting floor/ground surface should be level, and strong enough to safely hold the weight of the Generator. If the floor/ground surface is not level, strong cross members should be placed under the full length of the Generator Frame at its low side.
7. For trailer installation, the Generator should be mounted on the center point of the trailer, overthe wheels.

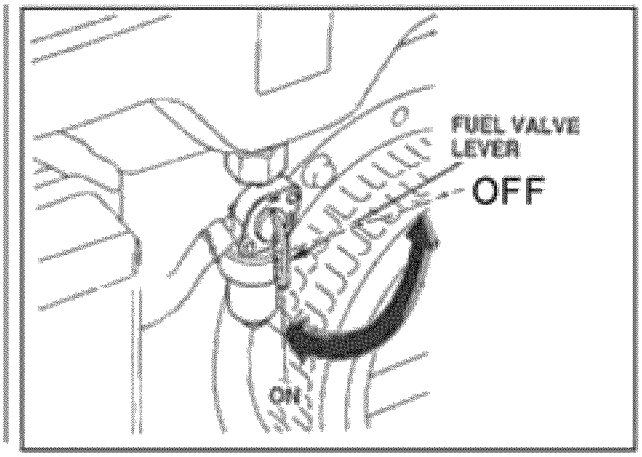
OPERATION

STARTING THE ENGINE

1. Turn the Engine Switch to the RUN position. The engine switch enables and disables the ignition system.
   STOP: To stop the engine.
   RUN: To run the engine.



2. The fuel valve is located between the fuel tank and carburetor. When the valve lever is in the ON position, fuel is allowed to flow from the fuel tank to the carburetor. Be sure to return the fuel valve lever to the OFF after stopping the engine.

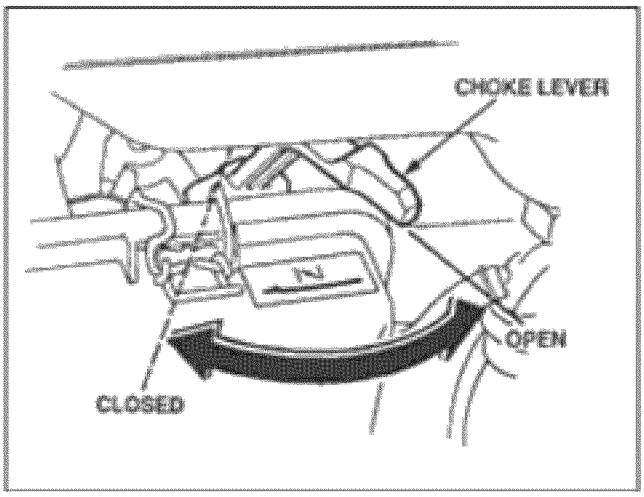


3. To start a cold engine, move the choke lever to the CLOSED position. To restart a warm engine, leave the choke lever in the OPEN position.

   The choke lever opens and closes the choke valve in the carburetor.

   The CLOSED position enriches the fuel mixture for starting a cold engine.

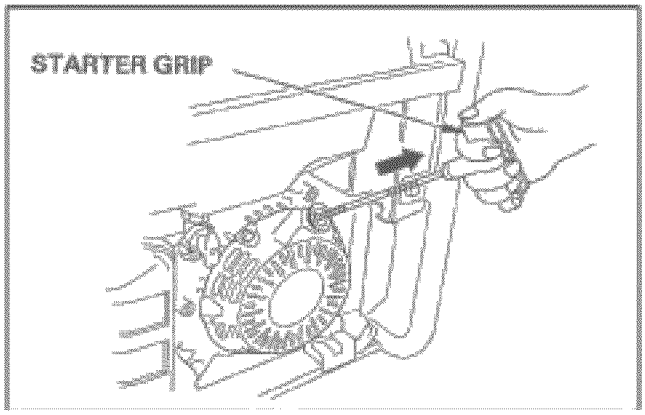
   The OPEN position provides the correct fuel mixture for operation after starting, and for restarting a warm engine.



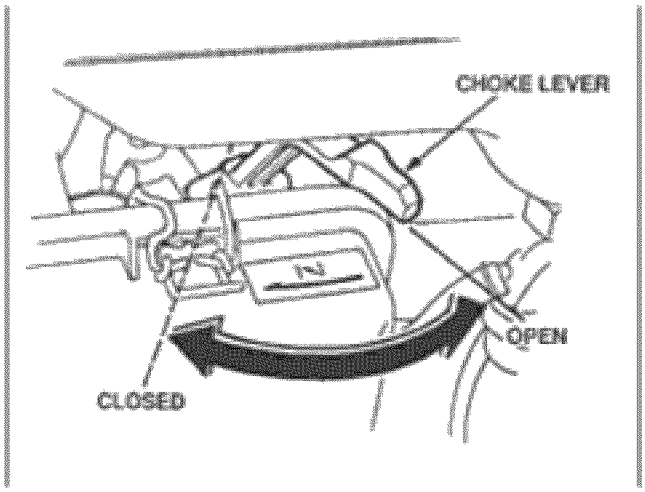
4. Operate the RECOIL STARTER:

   Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.

   Pulling the starter grip operates the recoil starter to crank the engine.



5. If the choke lever has been moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.



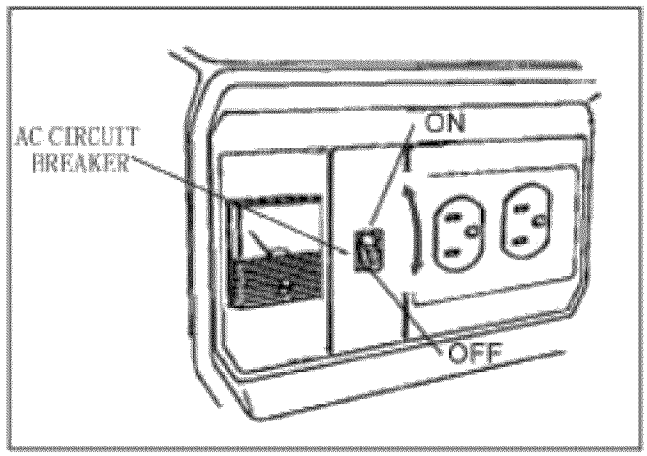
WARNING!

Carbon monoxide gas is toxic. Breathing it can cause unconsciousness and even kill you. Avoid any areas or actions that expose you to carbon monoxide.

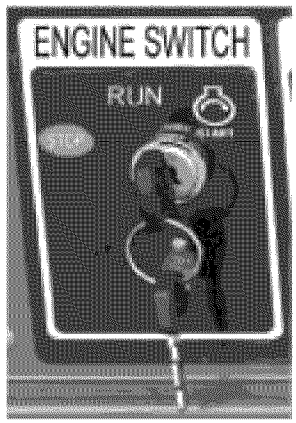
OPERATION

STOPPING THE ENGINE

1. Remove any load from receptacle and turn off circuit breaker.

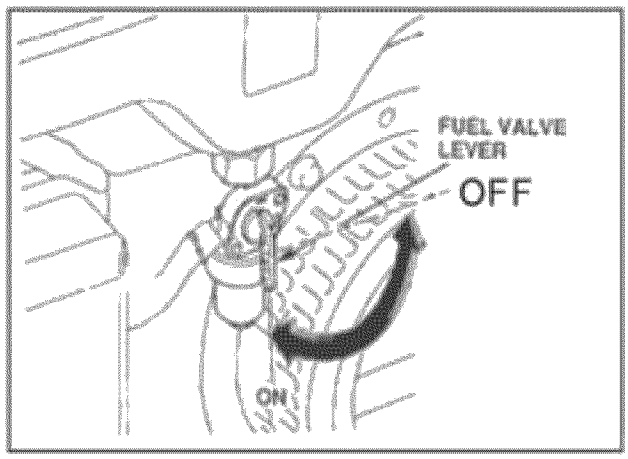


2. Turn the engine switch to STOP position.



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

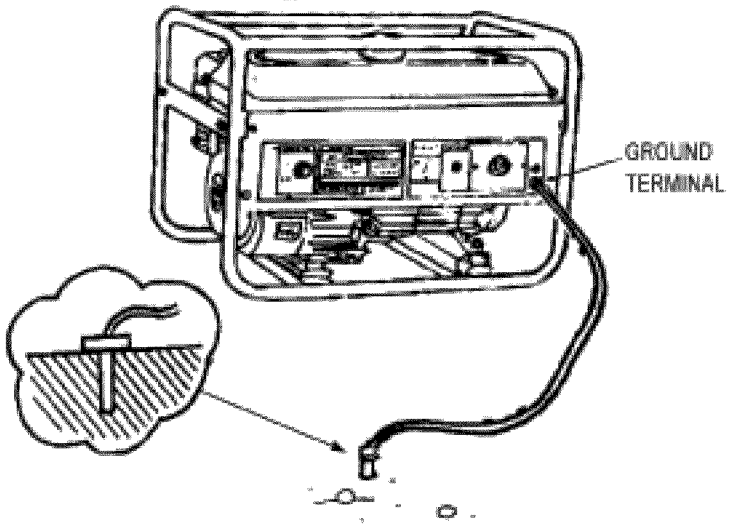
   When the engine is not in use, leave the fuel valve lever in the OFF position to prevent carburetor flooding and to reduce the possibility of fuel leakage.



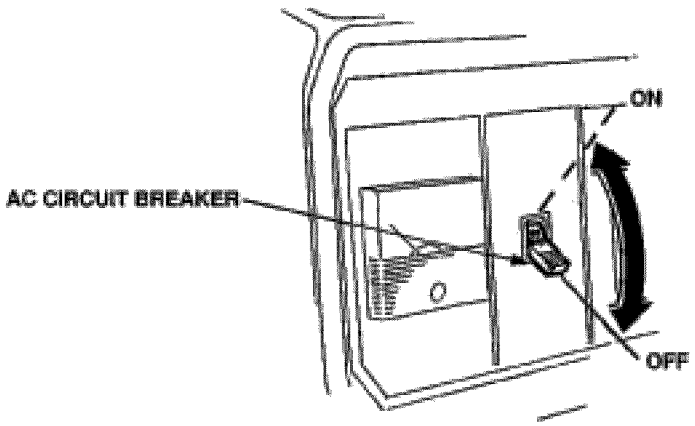
USAGE OF GENERATOR

⚠ Warnig

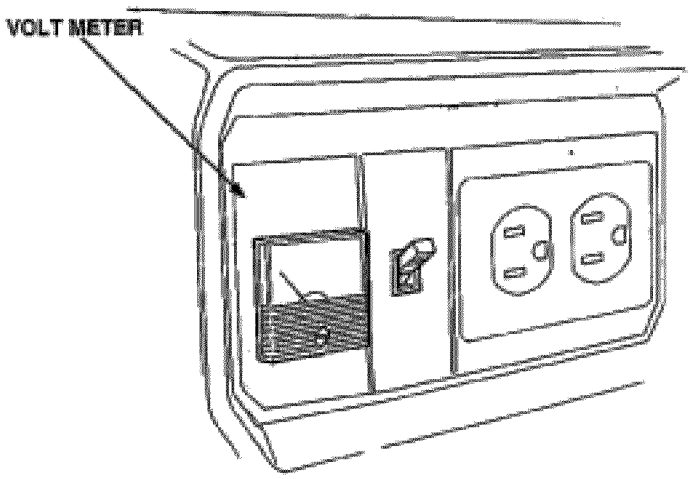
1. **Ground Terminal**
   The gernerator ground terminal is connected to the frame of the generater, the metal non-current carrying parts of the generator, and the ground terminals of each receptacle.
   Before using the ground terminal, consult a qualified electrician, electrical inspector or local agency having jurisdiction for local codes or ordinances that apply to the intended use of the generator.



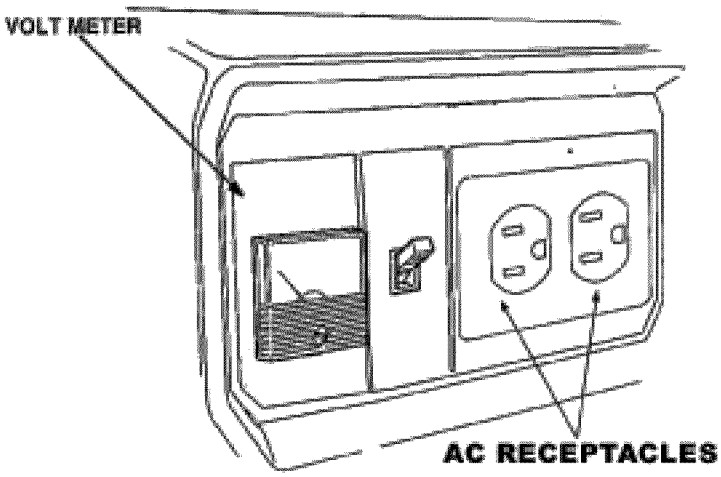
2. **Circuit Breaker**
   The circuit breaker will automatically switch OFF if there is a short circuit or a significant overload of the generator at the receptacle. If the circuit breaker is switched OFF automatically, check that the applicance is working properly and does not exceed the rated load capacity of the circuit before switching the circuit breaker ON again.
   The circuit breaker may be used to switch the generator power ON or OFF.



3. **Volt Meter**
   The volt meter displays the voltage the generator is producing.



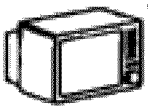
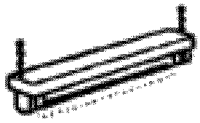
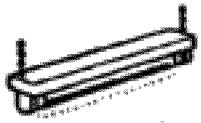
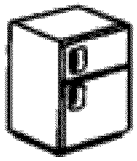
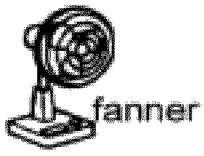
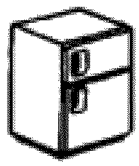
4. **AC Operation**
   1. Start the engine
   2. Switch ON the AC circuit breaker.
   3. Plug in the appliance.
      Most motorized appliances require more than their rated wattage for startup.
   4. Make sure that the voltmeter indicates the specified voltage.



Do not exceed the current limit specified for any one receptacle. If an overloaded circuit causes the AC circuit breaker to switch OFF, reduce the electrical load on the circuit, wait a few minutes and then reset the circuit breaker.

USAGE OF GENERATOR

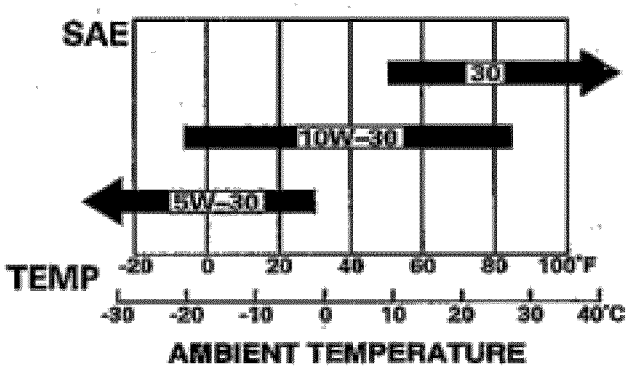
5.Electric equiment, especially engine produces strong current when being started. The table below offers reference when you connect those installation to generator.

Patte	Watt		Model installation	Example		
	starting	rated		Installation	startinig	rated
• Incan-descent lamp • heating installa-tino	X1	X1	 Incandescent lamp  TV	 Incandescent lamp 100W	100VA (W)	100VA (W)
• fluores-cent lamp	X2	X1.5	 fluorescent lamp	 40w fluorescent lamp	80VA (W)	60VA (W)
•Engine -starting installation	X3-5	X2	 fridge  fanner	 fridge 150W	450-750VA (W)	300VA (W)

Engine oil

NOTICE **Engine oil is a major factor affecting engine performance and service life. Non-detergent and 2-stroke engine oils will damage the engine and are not recommended.**

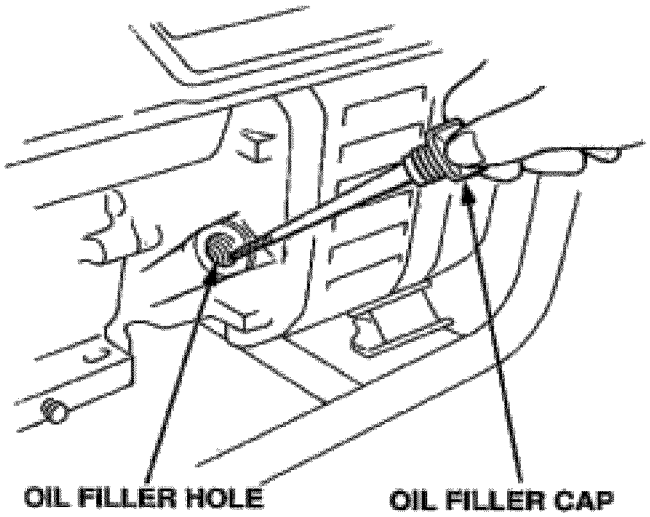
Check the oil level BEFORE EACH USE with the generator on a level surface with the engine stopped.

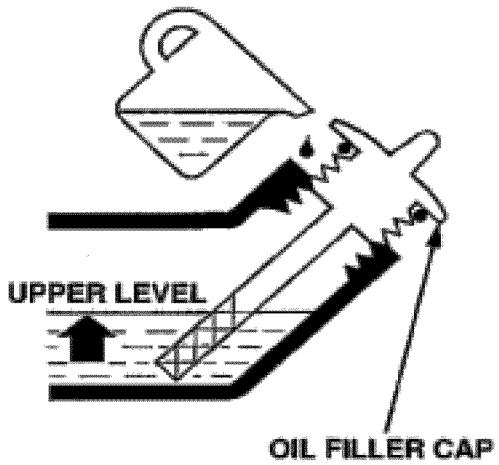


Use **JD** 4-stroke oil, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for Service Classification SG, SF/CC, CD. Motor oils classified SG, SF/CC, CD will show this designation on the container.

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 wipe the dipstick clean.
2. Check the oil level by inserting the dipstick into the filler neck without screwing it in.
3. If the level is low, add the recommended oil to the upper mark on the dipstick.





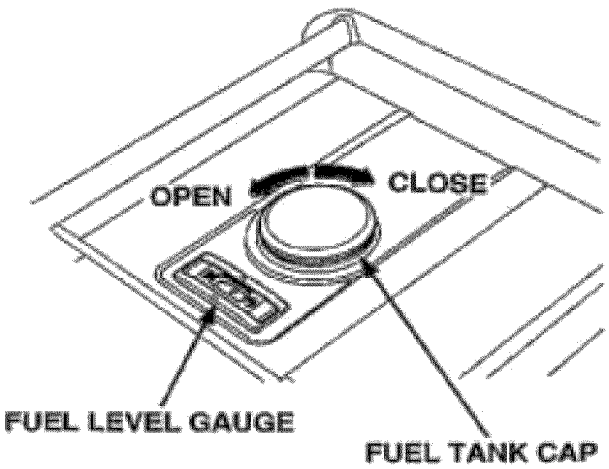
Fuel Recommendation

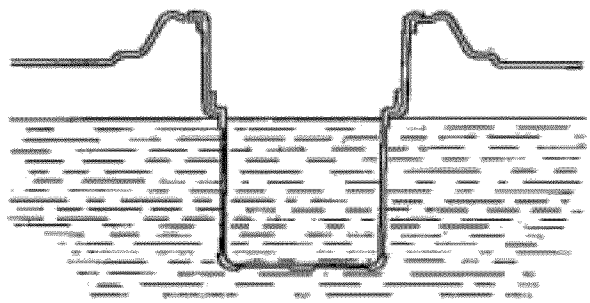
1. Check the fuel level gauge.
2. Refill the tank if the fuel level is low. Do not fill above the shoulder of the fuel strainer.

⚠ 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.**

Fuel tank capacity: 15.0 liters / 4 gallons





Use gasoline with a pump octane rating of 86 or higher

We recommend unleaded gasoline because it produces fewer engine and spark plug deposits and extends exhaust system life.

Never use stale or contaminated gasoline or oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

Periodic maintenance and adjustment is necessary to keep the generator in good operating condition. Perform the service and inspection at the intervals shown in the Maintenance schedule below.

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

NOTICE Use only genuine JD parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage the generator.

MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD Performed at every indicated month or operating hour interval, whichever comes first. / ITEM		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	o				
	Change		o		o	
Air cleaner	Check	o				
	Clean			o (1)		
Sediment Cup	Clean				o	
Spark pulg	Check-Clean				o	
Spark Arrester	Clean				o	
Valve clearance	Check-Adjust					o (2)
Fuel tank and strainer	Clean					o (2)
Fuel line	Check (Replace if necessary)	Every 2 years (2)				

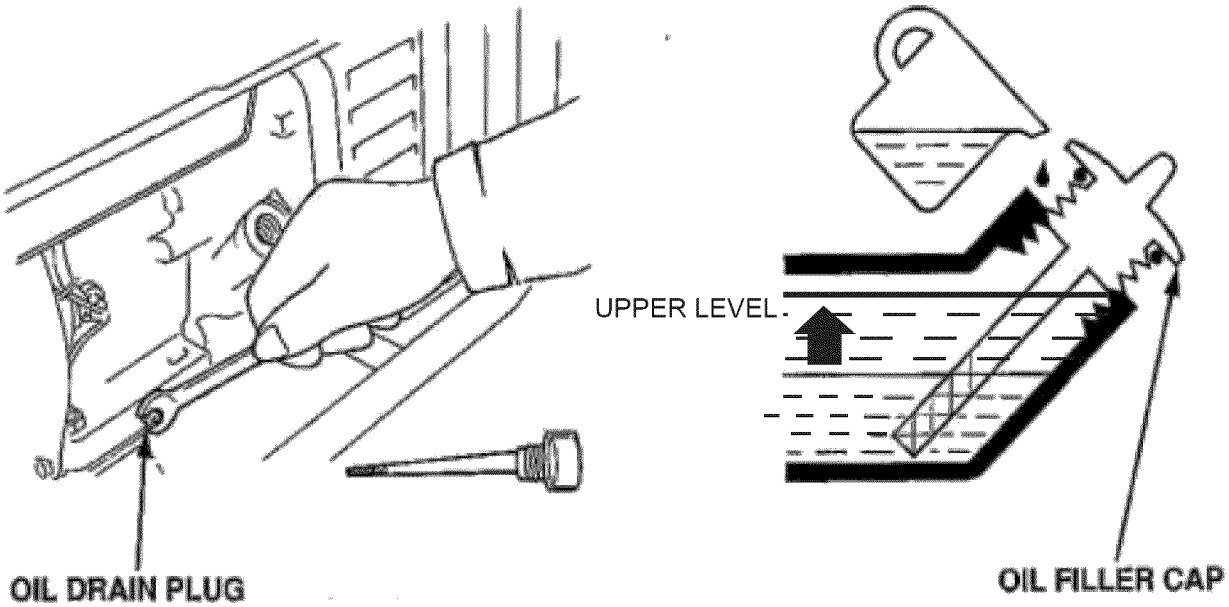
(1) Service more frequently when used in dusty areas.
(2) For professional commercial use, log hours of operation to determine proper maintenance intervals.

Engine oil change

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

1. Remove the drain plug and sealing washer, oil filler cap, and drain the oil.
2. Reinstall the drain plug and sealing washer. Tighten the plug securely.
3. Refill with the recommended oil (see page 10) and check the oil level.

Oil capacity: 0.6 ℓ (0.63 US qt, 0.52 Imp 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.

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 or recycling center for reclamation. Do not throw it in the trash or pour it on the ground.

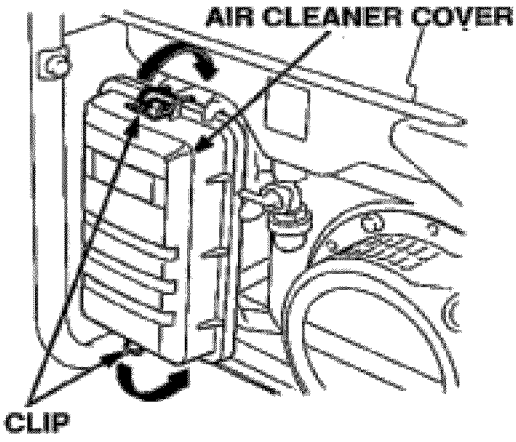
Air cleaner service

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

⚠ WARNING Using gasoline or flammable solvent to clean the filter element can cause a fire or explosion. Use only soapy water or nonflammable solvent.

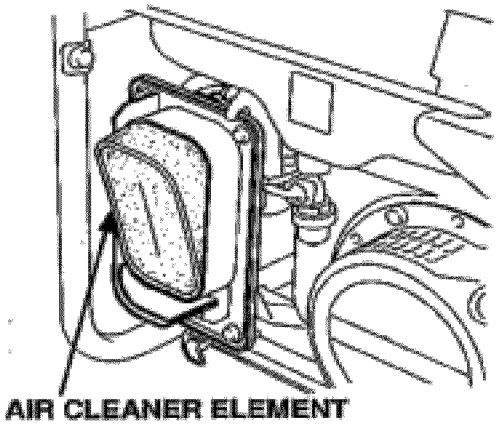
NOTICE Never run the generator without the air cleaner. Rapid engine wear will result.

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

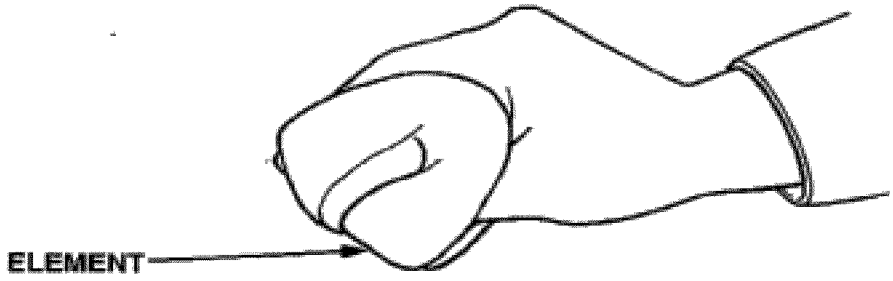


2. Wash the element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly.

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.



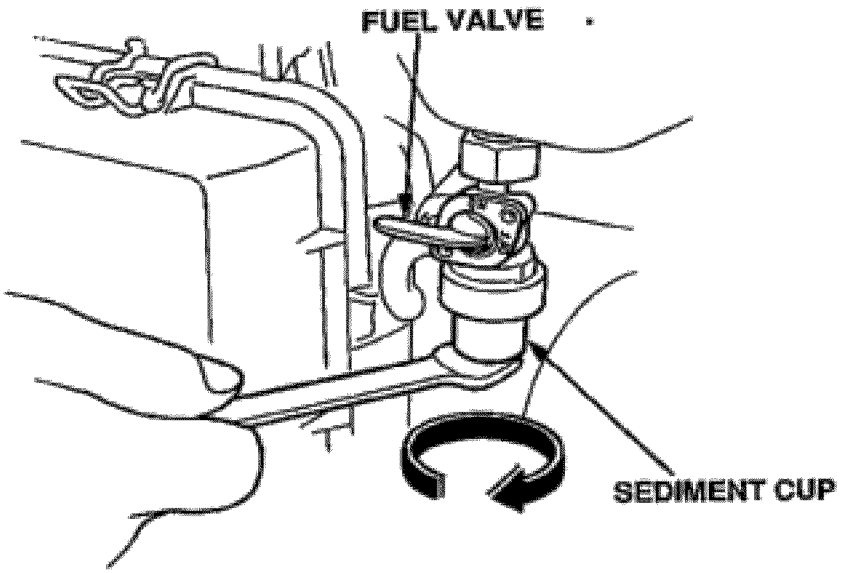
4. Reinstall the air cleaner element and the cover.

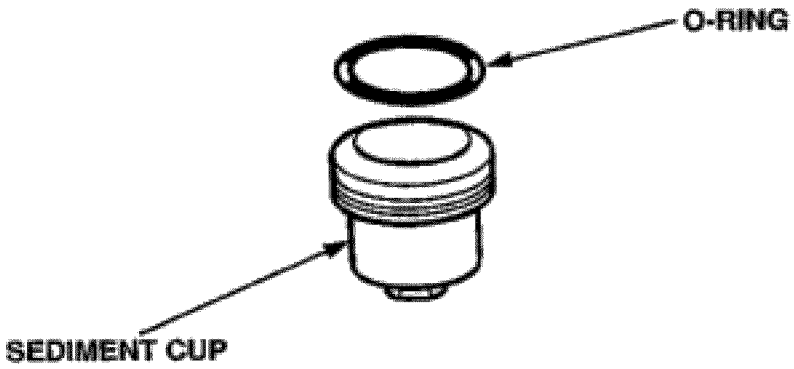


Fuel Sediment Cup Cleaning

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 cup, and O-ring.
2. Clean the sediment cup, and O-ring, in nonflammable or high flash point solvent.
3. Reinstall O-ring, and sediment cup.
4. Turn the fuel valve ON and check for leaks.





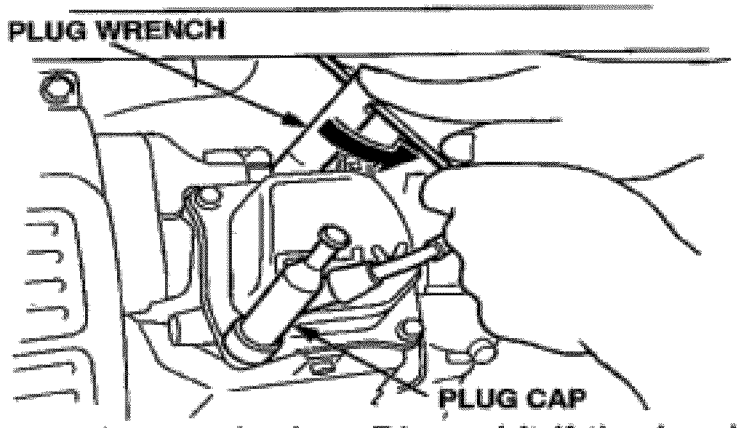
Spark Plug Service

Recommended spark plugs: **BPR6ES (NGK)**
W20EPR-U (NIPPONDENSO)

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

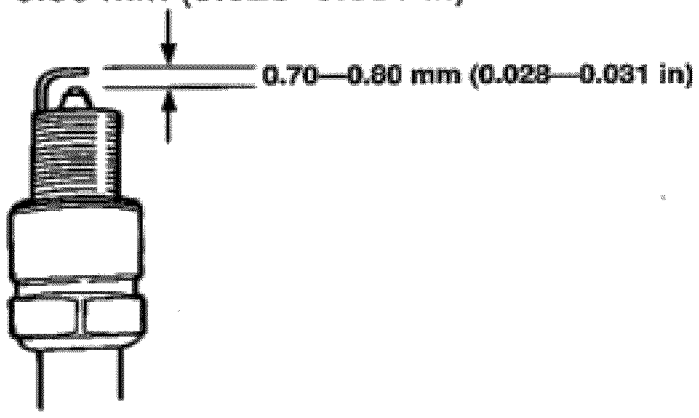
If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.

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.



5. 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.
6. Measure the plug gap with a feeler gauge.
   Correct as necessary by carefully bending the side electrode.

The gap should be: 0.70–0.80 mm (0.028–0.031 in)



7. Check that the spark plug washer is in good condition, and thread the spark plug in by hand to prevent cross-threading.

8. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

   – 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.

NOTICE **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.

TRANSPORTING/STORAGE

When transporting the generator, turn the engine switch and the fuel valve OFF. Keep the generator level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

⚠ WARNING Contact with a hot engine or exhaust system can cause serious burns or fires. Let the engine cool before transporting or storing the generator.

Take care not to drop or strike the generator when transporting. Do not place heavy objects on the generator.

Before storing the unit for an extended period:

1. Be sure the storage area is free of excessive humidity and dust.
2. Service according to the table below:

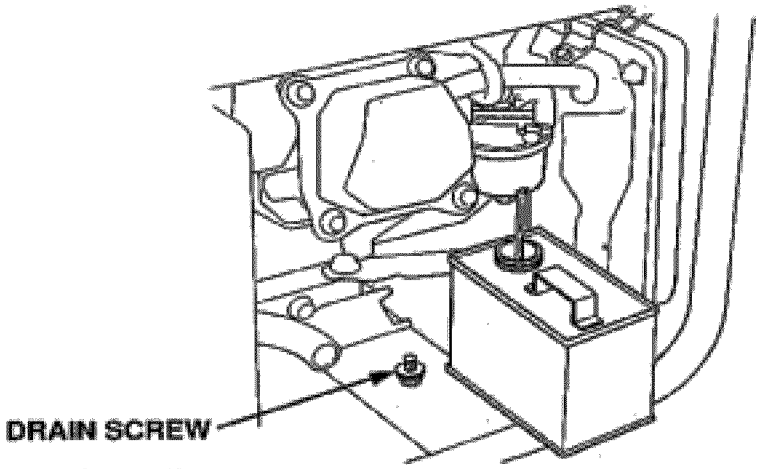
STORAGE TIME	RECOMMENDED SERVICE PROCEDURE TO PREVENT HARD STARTING
Less than 1 month	No preparation required
1 to 2 months	Fill with fresh gasoline and add gasoline conditioner*.
2 months to 1 year	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl Drain the fuel sediment cup
1 year or more	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl Drain the fuel sediment cup Remove the spark plug. Put a tablespoon of engine oil into the cylinder. Turn the engine slowly with the pull rope to distribute the oil. Reinstall the spark plug. Change the engine oil After removal from storage, drain the stored gasoline into a suitable container, and fill with fresh gasoline before starting.

TRANSPORTING/STORAGE

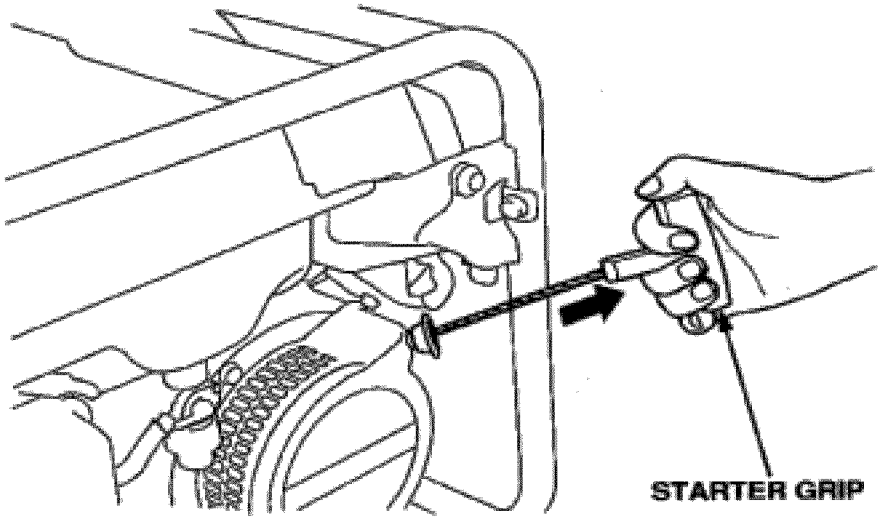
1. Drain the carburetor by loosening the drain screw. Drain the gasoline into a suitable container.

⚠ 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.



2. Change the engine oil
3. 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.
4. Slowly pull the starter grip until resistance is felt. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed. Storing the engine in this position will help to protect it from internal corrosion.



TROUBLESHOOTING

When the engine will not start:

Is there fuel in the tank? — NO → Refill the fuel tank.

YES

Is there enough oil in the engine? — NO → Add the recommended oil.

(The oil alert lamp flashes when cranking the engine.)

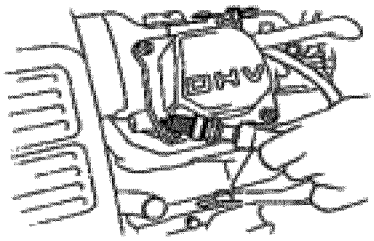
YES

Is there a spark from the spark plug? — NO → Replace the spark plug. — Still NO spark → Take the generator to an authorized **JD** generator dealer.

⚠ WARNING **Be sure there is no spilled fuel around the spark plug. Spilled fuel may ignite.**

To check:

1) Remove the spark plug cap and clean any dirt from around the spark plug.
2) Remove the spark plug and install the spark plug in the plug cap.
3) Set the plug side electrode on the cylinder head.
4) Crank the engine, sparks should jump across the gap.

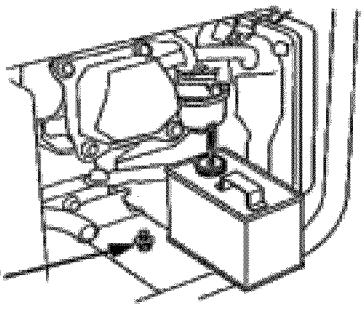


YES

Is the fuel reaching the carburetor? — NO → Clean the fuel sediment cup.

To check:

1) Turn off the engine switch and lossen the drain screw.
2) Fuel should flow from the drain when the fuel valve is turned ON.



YES

If the engine still does not start, take the generator to an authorized **UPC** generator dealer.

No electricity at the AC receptacles: