



# Generator

## OWNER'S MANUAL



Read this manual carefully before operating your Yamaha generator.

# EF4500iSE

*CO SENSOR*

LIT-19626-02-84

7XF-28199-15 ■



**WARNING:** This product can expose you to chemicals including engine exhaust, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).



**Read this manual carefully before operating your Yamaha generator. This manual should stay with this generator if it is sold.**

# INTRODUCTION

Congratulations on your purchase of your new Yamaha Generator.

This manual will provide you with a good basic understanding of the operation and maintenance of this generator.

If you have any questions regarding the operation or maintenance of your generator, please consult a Yamaha dealer.

**EF4500iSE**

**OWNER'S MANUAL**

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**Printed in Japan**

**P/N LIT-19626-02-84**

# IMPORTANT MANUAL INFORMATION

Particularly important information is distinguished in this manual by the following notations.



**This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.**



## **WARNING**

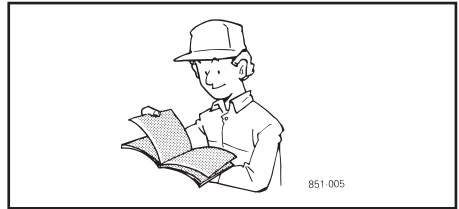
A **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## **NOTICE**

A **NOTICE** indicates special precautions that must be taken to avoid damage to the generator or other property.

## **TIP**

A **TIP** provides key information to make procedures easier or clearer.



## **! WARNING**

**PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY BEFORE OPERATING THE GENERATOR.**

## **TIP**

- Yamaha continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your generator and this manual. If there is any question concerning this manual, please consult a Yamaha dealer.
- This manual should be considered a permanent part of this generator and should remain with this generator when resold.

\* Product and specifications are subject to change without notice.

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## **SAFETY INFORMATION**

- This generator is not designed for on-board use. Do not use it while installed on the vehicle.
- Do not modify the generator or use it with its parts removed.
- Do not allow children to operate the generator.
- Do not place any obstacles on the generator.

### **Exhaust Fumes are Poisonous**

- Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.
- NEVER use inside a home or garage, EVEN IF doors and windows are open.
- Only use OUTSIDE and far away from windows, doors, and vents with engine exhaust directed away from any structures.

## **Carbon Monoxide Poisoning**

- CO gas is toxic and can cause serious injury or death.
- Get fresh air and seek medical care immediately, if you are suspected to be inhaled carbon monoxide.
- Early symptoms of carbon monoxide exposure include headache, fatigue, shortness of breath, nausea, and dizziness and so on. Continued exposure to carbon monoxide can cause loss of muscular coordination, loss of consciousness, and then result in death.
- This generator is equipped with the CO SENSOR system that automatically stops the engine before the surrounding carbon monoxide concentration increases to a dangerous concentration.
- Do not remove or modify the CO SENSOR system.
- Make sure that the CO SENSOR system works correctly.
- The CO SENSOR cannot prevent all danger associated with or caused by carbon monoxide. Pay careful attention to the location of the generator.
- If the CO SENSOR stopped the generator, relocate the generator and address symptoms of carbon monoxide poisoning prior to restart the generator.
- Install battery-operated or plug-in carbon monoxide alarms to alert you to potentially dangerous levels of carbon monoxide in accordance with the alarm's instructions.

## **Fuel is Highly Flammable and Poisonous**

- Always turn off the engine when refuelling.
- Never refuel while smoking or in the vicinity of an open flame.
- Take care not to spill any fuel on the engine or muffler when refuelling.
- Do not leave the generator inside the vehicle or in the trunk.
- If you swallow any fuel, inhale fuel vapor, or allow any to get in your eye(s), see your doctor immediately. If any fuel spills on your skin or clothing, immediately wash with soap and water and change your clothes.
- When operating or transporting the generator, be sure it is kept upright. If it tilts, fuel may leak from the carburetor or fuel tank.

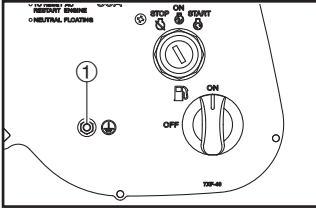
## **Engine and Muffler May be Hot**

- Place the generator in a place where pedestrians or children are not likely to touch the generator.
- Avoid placing any flammable materials near the exhaust outlet during operation.
- In order to prevent overheating, ensure adequate airflow by keeping the generator at least 1 m (3 ft) from objects or other equipment.
- Do not operate the engine with a dust cover or other objects covering it.
- When covering the generator, be sure to do so only after the engine and muffler have completely cooled down.



## Electric Shock Prevention

- Never operate the engine in rain or snow.
- Never touch the generator with wet hands or electrical shock will occur.
- When the connected electric device is grounded (earthed), always ground (earth) the generator.
- Connect the ground (earth) terminal to a ground source. In order to prevent electrical shock, the generator must be grounded when using an electrical device with a ground plug.



① Ground (earth) terminal

## Connection Notes

- Avoid connecting the generator to commercial power outlet.
- Avoid connecting the generator in parallel with any other generator.

- ① Correct  
② Incorrect

## Connection

### WARNING

Before the generator can be connected to a building's electrical system, a licensed electrician must install an isolation (transfer) switch in the building's main fuse box. The switch is the connection point for generator power and allows selection of generator or main line power to the building. This will prevent the generator from charging the main power line (backfeeding) when the main power supply has failed or has been turned off for line repair. Backfeeding can electrocute or injure line maintenance personnel. Also, generator and building electrical system damage can occur when normal operating power returns if unit is used without an isolation switch.

## Extension Cord Notes

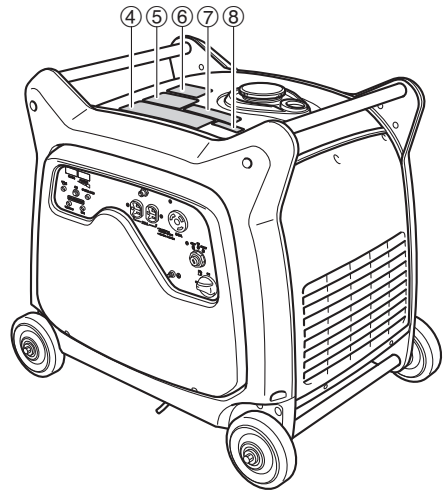
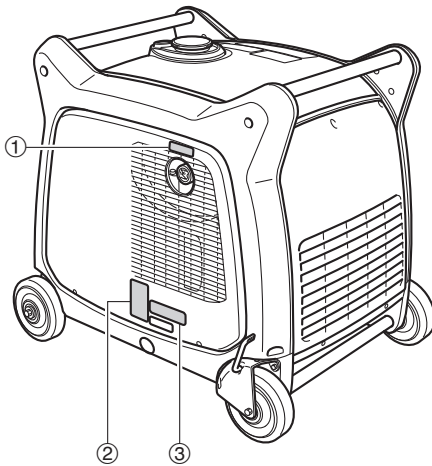
Extension cords should be protected by a tough flexible rubber sheath (IEC 245) or the equivalent to withstand mechanical stresses.

## LOCATION OF IMPORTANT LABELS

Please read the following labels carefully before operating this generator.

### TIP

Maintain or replace safety and instruction labels, as necessary.



①

### ⚠ WARNING

- The exhaust and the area around the exhaust become hot when operating, which can lead to severe burns and fire.

7XF-28176-\*\*

②

### OIL



### YAMAHA EF4500iSE

AC OUTPUT	60Hz
RATED	4.0kW
	120V 33.3A
PHASE	SINGLE
POWER FACTOR	1
INSULATION CLASS	B
FUEL	GASOLINE
RATED REVOLUTION	2600rpm
RATED AMBIENT TEMPERATURE	40°C

YAMAHA MOTOR POWERED PRODUCTS CO.,LTD.  
MADE IN JAPAN

7XF-24164-\*\*

③

**EMISSION CONTROL INFORMATION**  
YAMAHA MOTOR CO.,LTD.

THIS ENGINE MEETS U.S. EPA EXH / EVP REGS FOR \*\*\*\*.

EMISSION COMPLIANCE PERIOD : \*\*\* HOURS

EF : \*\*\*\*\*,\*\*\*\*\*

DISPLACEMENT : \*\*\*CC

EVP AF : \*\*\*\*\*



YAMAHA

EM

**Not certified  
for sales  
in CALIFORNIA.**

④

**⚠ WARNING**

- Read the owner's manual and all labels before operating.
- Only operate in well-ventilated areas.
- Exhaust gas contains poisonous carbon monoxide.
- Gasoline is highly flammable and explosive.  
Serious burns and/or injury could occur if ignited.  
Always turn off the engine when refuelling.  
Never refuel while smoking or in the vicinity of an open flame.  
Immediately wipe off spilled fuel with a clean, dry, soft cloth.  
Do not overfill the fuel tank over the red level.  
Be careful not to leak gasoline before starting the engine
- Do not operate near flammable materials.
- Electrocutation can occur if generator is used in rain, snow, or near water. Keep this unit dry at all times.
- Never touch the generator with wet hands or electrical shock will occur.
- Do not modify the generator or use it with its parts removed.
- Electrocutation 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.  
Refer to the owner's manual.
- When operating the generator:  
Never place a partition or other barrier around the generator.  
Do not cover the generator with a box.  
Do not place any objects on the generator.  
Direct generator exhaust away from any windows, doors, or vents.
- Be sure carbon monoxide (CO) detectors are installed indoors.

7XF-24162-\*\*

⑤

**⚠ DANGER****Using a generator indoors CAN KILL YOU IN MINUTES.****Generator exhaust contains carbon monoxide.****This is a poison you cannot see or smell.****NEVER use inside a home or garage, EVEN IF doors and windows are open.****Only use OUTSIDE and far away from windows, doors, and vents.**

7CG-24877-\*\*

⑥

**⚠ AUTOMATIC SHUTOFF - YOU MUST:****MOVE GENERATOR TO AN OPEN, OUTDOOR AREA. POINT EXHAUST AWAY. DON'T RUN GENERATOR IN ENCLOSED AREAS (E.G. NOT IN HOUSE OR GARAGE) .****MOVE TO FRESH AIR AND GET MEDICAL HELP IF SICK, DIZZY OR WEAK.**

- If the generator stops while the CO SENSOR is activated, it cannot be started again for about 5 minutes.

7XF-2815R-\*\*

⑦

**CO SENSOR**

- Refer to the AUTOMATIC SHUTOFF label and the owner's manual.
- When you start the generator, the "WARNING" and "ERR" indicators will flash 5 times. If not, discontinue use immediately and have it inspected at a service shop.

**⚠ DANGER**

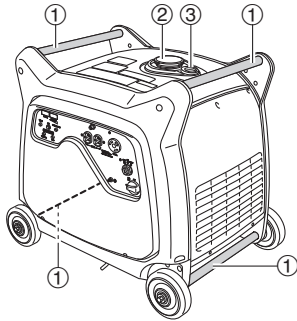
- Do not remove or modify the CO SENSOR system. CO gas is toxic and can cause serious injury or death.

7XF-2815P-\*\*

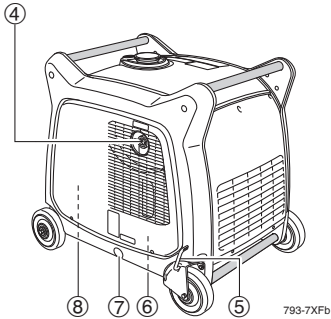
⑧

**NOTICE****Use the specified spark plug only.  
Specified plug:BPR4ES(NGK)**

## DESCRIPTION

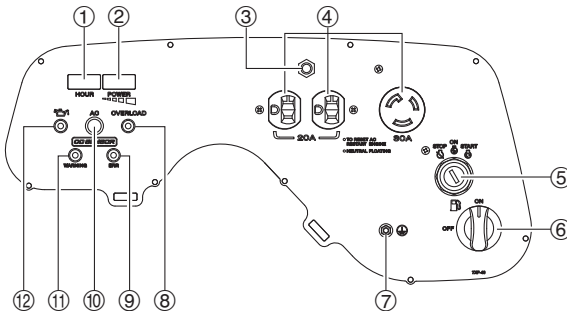


- ① Carrying handles (shaded)
- ② Fuel tank cap
- ③ Fuel level gauge
- ④ Muffler
- ⑤ Caster lock lever
- ⑥ Oil filler cap
- ⑦ Oil drain plug
- ⑧ Battery

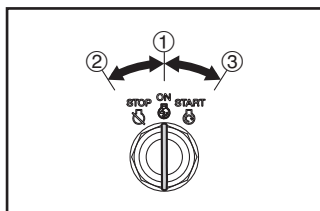


793-7XFb

## Control Panel



- ① Hour meter
- ② Power meter
- ③ AC protector
- ④ AC receptacle
- ⑤ Engine switch
- ⑥ Fuel cock knob
- ⑦ Ground (earth) terminal
- ⑧ Overload indicator light (Red)
- ⑨ ERR (Error) indicator light (Orange)
- ⑩ AC pilot light (Green)
- ⑪ WARNING indicator light (Red)
- ⑫ Oil warning light (Red)



## CONTROL FUNCTION

### Engine Switch

The engine switch controls the ignition system.

#### ① "ON"

Ignition circuit is switched on.

The engine can be started.

#### ② "STOP"

Ignition circuit is switched off.

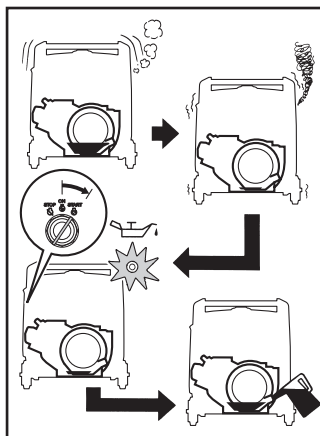
The engine will not run.

#### ③ "START"

Starting circuit is switched on.

The starter motor starts and the engine can be started.

After starting the engine, take your hand off the switch immediately.



### Oil Warning Light (Red)

When the oil level falls below the lower level, the oil warning light comes on and then the engine stops automatically. Unless you refill with oil, the engine will not start again.

#### TIP

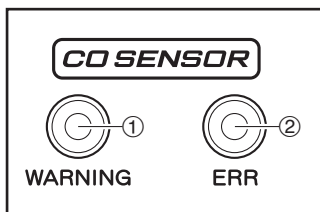
If the engine stalls or does not start, turn the engine switch to "START". If the oil warning light comes on, the engine oil is insufficient. Add oil and restart.

## CO SENSOR

The CO SENSOR is a system that automatically stops the engine before the surrounding CO concentration exceeds a certain level.

### WARNING

- Do not remove or modify the CO SENSOR system.
- The CO SENSOR cannot prevent all danger associated with or caused by carbon monoxide. Pay careful attention to the location of the generator.
- Do not spray any organic solvent on the CO SENSOR.



There are two indicator lights in relation to the CO SENSOR.

- ① WARNING indicator light (Red)
- ② ERR (Error) indicator light (Orange)

#### WARNING indicator light (Red)

If the CO SENSOR detects a high carbon monoxide concentration, the engine will stop and the WARNING indicator light will flash for approximately 5 minutes.

### WARNING

Continuous use of the generator in areas with high concentrations of carbon monoxide can cause serious health hazards due to carbon monoxide poisoning. If you are in the same area as the generator, evacuate the area immediately. Get fresh air and seek medical attention immediately, if you feel sick or suspect you have inhaled carbon monoxide. Ventilate the area or space where the generator is located.

If the engine is stopped by the CO SENSOR system, change the operating location of the generator to well-ventilated area.

**TIP**

---

- Place the generator so that the muffler is pointed in the same direction as the wind is blowing, and the exhaust gas is directed away from buildings, other structures, or vehicles.
  - Avoid placing the generator near devices that emit carbon monoxide, such as other generators.
- 



**WARNING**

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- **Do not operate the generator in an enclosed or partly enclosed area such as a garage.**
  - **Do not enclose or cover the generator with boards or a tent, even if it is outside and away from of a building.**
- 

While this indicator light is flashing and the CO SENSOR is activated, the engine cannot be restarted for approximately 5 minutes. Restarting the generator is possible only after the WARNING indicator light is turned off.

### ERR (Error) indicator light (Orange)

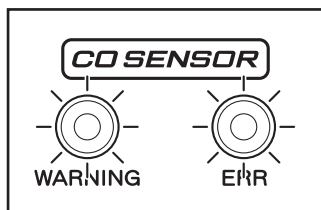
If the CO SENSOR detects a system malfunction or service life over, the engine will stop automatically and the ERR (Error) indicator will come on approximately 5 minutes.

### **TIP**

---

- The CO SENSOR has a limited service life and must be replaced when it no longer functions. The battery is non-replaceable battery.
  - The generator stopping period and storage period are also in the useful service life of the CO SENSOR.
  - The lithium battery adopted on this sensor contains perchlorate, a toxic substance controlled in perchlorate Best Management Practices (BMP) regulations passed by the California legislature. When you discard the lithium battery in California, USA, please follow the related regulations in advance.  
Perchlorate material-special handling may apply, see [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)
  - Consult a Yamaha dealer for the CO SENSOR replacement.
-





#### On starting the engine

Each indicator light flashes 5 times upon starting. When starting the engine, make sure that each indicator light flashes 5 times.

#### **! WARNING**

- If the indicator lights do not flash 5 times upon starting, discontinue generator use immediately and consult a Yamaha dealer. The CO SENSOR system may be malfunctioning.
- If the CO SENSOR WARNING indicator light (red) is flashing, immediately clear the area of all people and animals while moving the generator to an open, outdoor area. Once the generator is relocated to a well-ventilated area, it can be restarted after 5 minutes. Be sure to point the exhaust away from people and buildings. Thoroughly ventilate the location where the generator had stopped.
- If the CO SENSOR system is malfunctioning, it cannot warn you of potential high concentrations of carbon monoxide. Move the generator to a well-ventilated location and consult a Yamaha dealer.
- While the CO SENSOR is activated, the engine cannot be restarted for approximately 5 minutes. Relocate the generator and address symptoms of carbon monoxide poisoning prior to restart the generator.

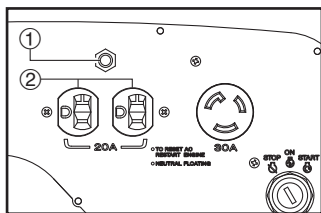
#### **NOTICE**

If you stop the engine in the following situations, the CO SENSOR system may not be able to restart the engine immediately. Wait approximately 15 seconds before restarting the engine.

- By the engine switch.
- By the oil level warning device.
- By running out of gasoline.

#### **TIP**

If the indicator lights come on or flash abnormally, check "TROUBLESHOOTING" (See page 46).



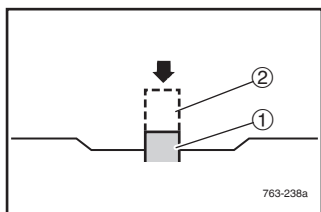
## AC Protector

The AC protector trips when total amount of the two AC receptacle loads exceeds 20 A.

- ① AC protector
- ② AC receptacle

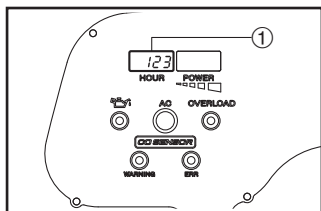
## NOTICE

Reduce the load to within specified the generator rated output if the AC protector turns off. If the turns off again, consult a Yamaha dealer.



Press the switch to "Reset" the AC protector.

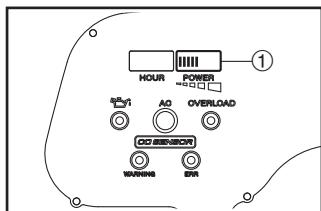
- ① — "Reset"
- ② — "OFF"



## Hour Meter

The hour meter shows the total number of hours the generator has been run.

- ① Hour meter



## Power Meter

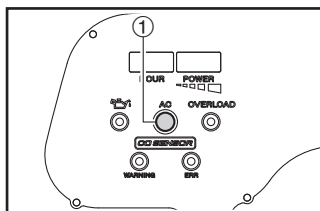
The power meter shows the amount of electric current used by a barmeter.

The generator output is normal when the segments of the barmeter appear.

- ① Power meter

## TIP

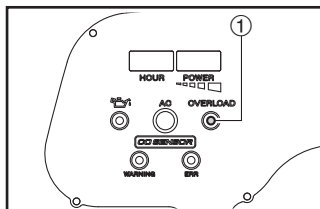
When 10 segments appear, the generator has almost reached its rated output.



### AC Pilot Light (Green)

The AC pilot light comes on when the engine starts and produces power.

- ① AC pilot light (Green)



### Overload Indicator Light (Red)

The overload indicator light comes on when an overload of a connected electrical device is detected, the inverter control unit overheats, or the AC output voltage rises. Then, the AC protector will trip, stopping power generation in order to protect the generator and any connected electric devices. The AC pilot light (Green) will go off and the overload indicator light (Red) will stay on, but the engine will not stop running.

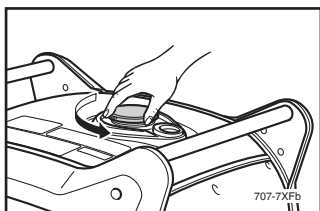
- ① Overload indicator light (Red)

When the overload indicator light comes on and power generation stops, proceed as follows:

1. Turn off any connected electric devices and stop the engine.
2. Reduce the total wattage of connected electric devices within the rated output.
3. Check for blockages in the cooling air inlet and around the control unit. If any blockages are found, remove them.
4. After checking, restart the engine.

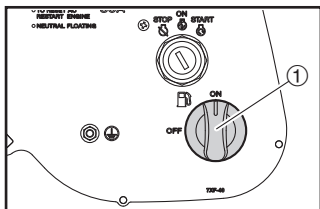
### TIP

The overload indicator light may come on for a few seconds at first when using electric devices that require a large starting current, such as a compressor or a submersible pump. However, this is not a malfunction.



## Fuel Tank Cap

Remove the fuel tank cap by turning it counterclockwise.



## Fuel Cock Knob

The fuel cock supplies fuel from the fuel tank to the carburetor.

The fuel cock has two positions.

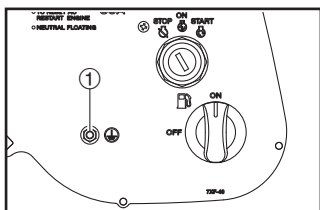
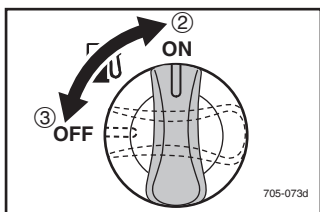
① Fuel cock knob

② “ON”

With the knob in this position, fuel flows to the carburetor. Normal using is done with the knob in this position.

③ “OFF”

With the knob in this position, fuel will not flow. Always turn the knob to this position when the engine is not running.

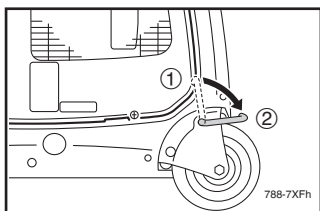


## Ground (Earth) Terminal

Ground (earth) terminal connects the earth line for prevention of electric shock.

When the electric device is grounded, be sure to ground the generator, too.

① Ground (earth) terminal



## Caster Lock Lever

The caster lock lever stops moving the generator.

① “Release”

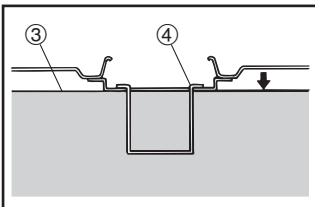
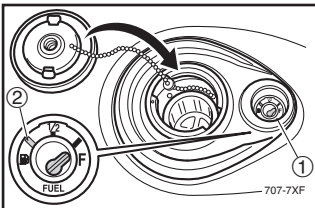
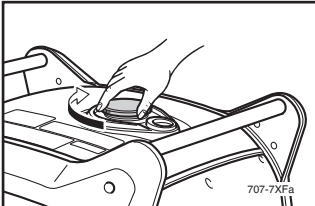
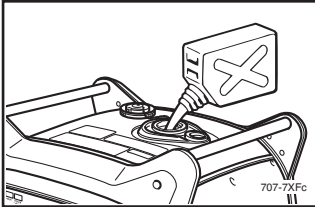
② “Lock”

# PREPARATION

## Fuel

### WARNING

- Fuel is highly flammable and poisonous. Check “SAFETY INFORMATION” (See page 3) carefully before filling.
- Do not overfill the fuel tank, otherwise it may overflow when the fuel warms up and expands.
- Never refuel while smoking or in the vicinity of an open flame.
- Touch a metal surface on the generator before refueling to discharge any static electricity. Sparks could cause fire or explosion.
- After adding fuel, make sure the fuel tank cap is tightened securely.



### NOTICE

- Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts.
- Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts.
- If foreign materials enter the fuel tank, they may clog the fuel line. Be sure the fuel tank filter is installed before adding fuel.

Make sure there is sufficient fuel in the tank.

When refueling, be sure to fill the tank to the bottom edge of the fuel tank filter.

① Fuel level gauge

② Red line

③ Fuel level

④ Fuel tank filter

“F”	Full
Red line ②	Empty

Recommended fuel:

Unleaded gasoline

Fuel tank capacity:

Total:

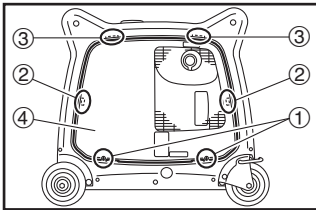
17.0 L (4.49 US gal, 3.74 Imp gal)

Your Yamaha engine has been designed to use regular unleaded gasoline with a pump octane number  $((R + M)/2)$  of 86 or higher, or research octane number of 91 or higher.

## Engine Oil

### NOTICE

**The generator has been shipped without engine oil. Do not start the engine until you have filled it with the sufficient engine oil.**



1. Place the generator on a level surface.

2. Remove the screws.

① Screws

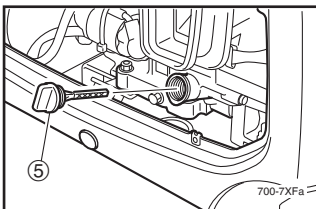
3. Detach the hooks by pulling the rear cover toward you.

② Hooks

4. Disengage the projections on the rear cover by pulling down the cover, and then remove the rear cover.

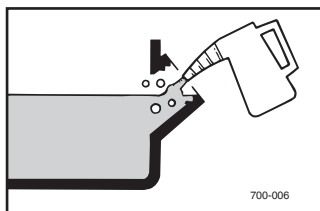
③ Projections

④ Rear cover

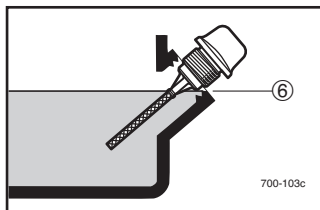


5. Remove the oil filler cap.

⑤ Oil filler cap



6. Fill the specified amount of the recommended engine oil, and then install and tighten the oil filler cap.



⑥ Correct level

Recommended engine oil:

Recommended oil brand:

YAMALUBE

Available oil grade:

API SE type or higher JASO MA or MB

Available viscosity index:

10W-30 or 10W-40

Engine oil quantity:

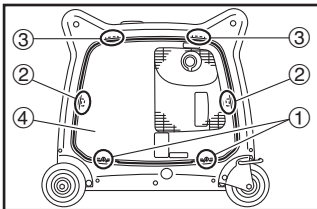
1.3 L (1.37 US qt, 43.95 oz)

7. Install the rear cover and tighten the screws.

## Battery Preparation (See page 39)

### **WARNING**

- Electrolyte is poisonous and dangerous since it contains sulfuric acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and always shield your eyes when working near batteries. In case of contact, administer the following FIRST AID.
  - **EXTERNAL:** Flush with plenty of water.
  - **INTERNAL:** Drink large quantities of water or milk and immediately call a physician.
  - **EYES:** Flush with water for 15 minutes and seek prompt medical attention.
- Batteries produce explosive hydrogen gas. Therefore, keep sparks, flames, cigarettes, etc., away from the battery and provide sufficient ventilation when charging it in an enclosed space.
- **KEEP THIS AND ALL BATTERIES OUT OF THE REACH OF CHILDREN.**



1. Remove the screws.

① Screws

2. Detach the hooks by pulling the rear cover toward you.

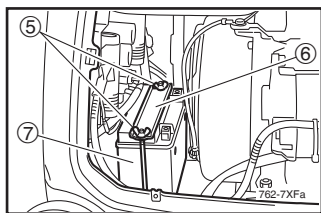
② Hooks

3. Disengage the projections on the rear cover by pulling down the cover, and then remove the rear cover.

③ Projections

④ Rear cover





4. Remove the wing nuts and battery plate.

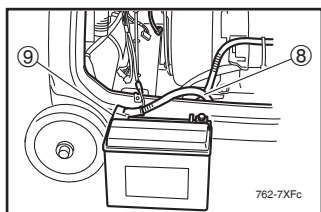
- ⑤ Wing nuts
- ⑥ Battery plate

5. Remove the battery.

- ⑦ Battery

6. Fill the battery with the electrolyte.

Refer to the instruction sheet included with the electrolyte for filling instructions.

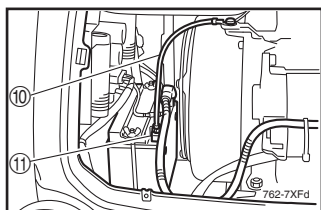


7. Connect the positive lead (Red) to the positive (+) battery terminal.

- ⑧ Positive lead (Red)
- ⑨ Positive (+) battery terminal

8. Install the battery onto the tray.

9. Install the battery plate and tighten the wing nuts.



10. Connect the negative lead (Black) to the negative (-) battery terminal.

- ⑩ Negative lead (Black)
- ⑪ Negative (-) battery terminal

11. Install the rear cover and tighten the screws.

## PRE-OPERATION CHECK



**If any item in the pre-operation check is not working properly, have it inspected and repaired before operating the generator.**

---

The condition of a generator is the owner's responsibility. Vital components can start to deteriorate quickly and unexpectedly, even if the generator is unused.

### **TIP**

---

Pre-operation checks should be made each time the generator is used.

---

### **Pre-Operation Check**

#### **Fuel (See page 16)**

- Check fuel level in fuel tank.
- Refuel if necessary.

#### **Fuel Line**

- Check fuel hose for crack or damage.
- Replace if necessary.

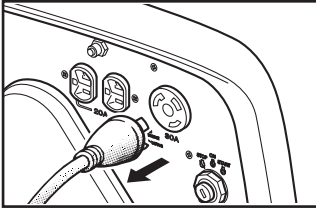
#### **Engine Oil (See page 17)**

- Check oil level in engine.
- If necessary, add recommended oil to specified level.
- Check generator for oil leakage.

#### **Abnormal Running Conditions**

- If any abnormal running conditions are observed, please consult a Yamaha dealer.

## OPERATION

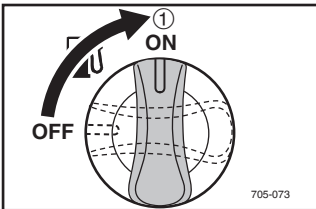


### **WARNING**

- Never operate the engine in a closed area or it may cause unconsciousness and death within a short time. Operate the engine in a well ventilated area.
- Before starting the engine, do not connect any electric devices.
- Clean dust, dirt or water off the receptacle before use.

### **NOTICE**

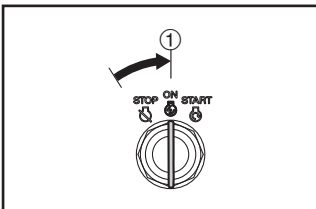
The generator has been shipped without engine oil. Do not start the engine until you have filled it with the sufficient engine oil.




### **Starting The Engine**

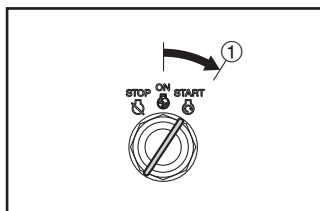
1. Turn the fuel cock knob to "ON".

① "ON"



2. Turn the engine switch to "ON".

①  "ON"

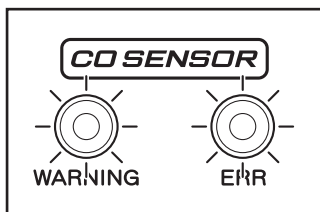


3. Turn the engine switch to “START”.  
Take your hand off the switch immediately after the engine starts.

① “START”

### NOTICE

If the engine fails to start, release the switch, wait a few seconds, then try again. Each attempt should be as short as possible to preserve the battery. Do not crank the engine more than 5 seconds on any one attempt.



4. When turning the engine switch to “START”, make sure that both the red and orange indicators are flashing.

### NOTICE

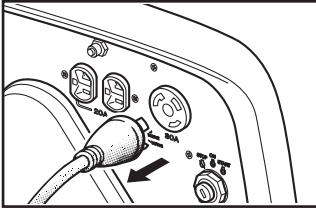
If either of them does not flash, consult a Yamaha dealer since the CO SENSOR system is most likely malfunctioning.

## Stopping The Engine

### TIP

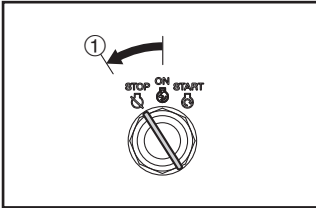
After the engine is stopped the engine cannot be restarted for approximately 15 seconds.

1. Turn off any electric devices.
2. Disconnect any electric devices.



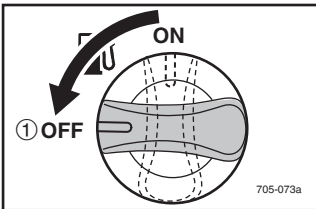
3. Turn the engine switch to "STOP".

① ⏻ "STOP"



4. Turn the fuel cock knob to "OFF".

① "OFF"



## Connection Alternating Current (AC)



### WARNING

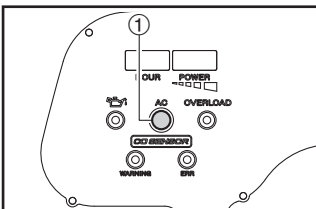
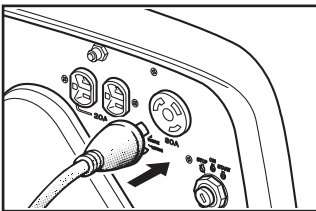
Be sure any electric devices are turned off before plugging them in.

### NOTICE

- Be sure all electric devices including the lines and plug connections are in good condition before connection to the generator.
- Be sure the total load is within generator rated output.
- Be sure the receptacle load current is within receptacle rated current.

### TIP




- Make sure to ground (earth) the generator. When the electric device is grounded, be sure to ground the generator, too.
- The power output lead of the portable generator (stator winding) is insulated from the frame and ground pin of the AC receptacles. Therefore, an electric device that requires grounding through the AC receptacle when plugged in to one of the output leads might not operate correctly.



1. Start the engine.
  2. Plug in to the AC receptacle.
  3. Make sure the AC pilot light is on.
- ① AC pilot light (Green)
4. Turn on any electric devices.

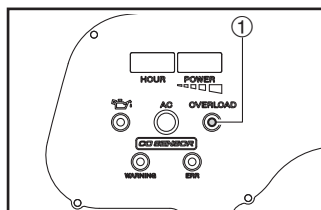
## Application Range

When using the generator, make sure the total load is within rated output of a generator. Otherwise, generator damage may occur.

AC			
Power factor	1	0.8–0.95	0.4–0.75 (Efficiency 0.85)
	–4000 W	–3200 W	–1360 W

## Approximate Wattages of Common Tools or Equipment

Tools	Wattage	Equipment	Wattage
Chain saw	1000–1800	Space heater	1500
Circular saw	1200–1600	Hot plate	1200
Sanders	250–1500	Crock pot	1200
Router	100–1500	Television	250
Leaf blower	1000–1400	Lights	250
Shop vacuum	700–1400	Fan	100
Drill (depends on size)	250–1200		
String trimmer	600–1100		
Paint sprayer	500–1000		
Miter saw	500–1000		
Hedge clippers	300–1000		
Planer	300–900		



### TIP

- “\_” means below.
- Application wattage indicates when each device is used by itself.
- The overload indicator light comes on when total wattage exceeds the application range. (See page 14 for more details.)

① Overload indicator light (Red)

## **NOTICE**

---

- **Do not overload.** The total load of all electrical appliances must not exceed the supply range of the generator. Overloading could result in damage to the generator.
  - **When supplying precision equipment, electronic controllers, PCs, electronic computers, microcomputer-based equipment or battery chargers, keep the generator a sufficient distance away to prevent electrical interference from the engine. Also ensure that electrical noise from the engine does not interfere with any other electrical devices located near the generator.**
  - **If the generator is to supply medical equipment, advice should first be obtained from the equipment manufacturer, a medical professional or hospital.**
  - **Some electrical appliances or general-purpose electric motors have high starting currents, that may exceed the total capacity of your Yamaha generator. Consult the equipment manufacturer for further advice.**
- 

## **High Altitude Operation**

This engine may require a high altitude carburetor kit to ensure correct engine operation at altitudes above 4000 ft. (1219 meters). If you operate your engine at altitudes above 4000 ft. (1219 meters) consistently, have your local Yamaha dealer perform the necessary carburetor modification. This engine should be operated in its original configuration below 4000 ft. (1219 meters) as damage may occur if high altitude carburetor kit is installed and operated below 4000 ft. (1219 meters).



## PERIODIC MAINTENANCE

Safety is an obligation of the owner. Periodic inspection, adjustment and lubrication will keep your generator in the safest and most efficient condition possible. The most important points of generator inspection, adjustment, and lubrication are explained on the following pages.



### WARNING

If you are not familiar with maintenance work, have a Yamaha dealer do it for you.

AE00403

### Maintenance Chart



### WARNING

Stop the engine before starting maintenance work.

### NOTICE

Use only Yamaha specified genuine parts for replacement. Ask an authorized Yamaha dealer for further information.

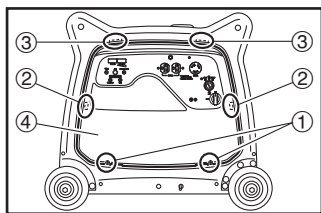
Item	Routine	Pre-operation check	Every	
			6 months or 100 Hr	12 months or 300 Hr
Spark plug	<ul style="list-style-type: none"><li>• Check condition.</li><li>• Clean and replace if necessary.</li></ul>		✓	
Fuel	<ul style="list-style-type: none"><li>• Check fuel level and leakage.</li></ul>	✓		
Fuel hose	<ul style="list-style-type: none"><li>• Check fuel hose for cracks or damage.</li><li>• Replace if necessary.</li></ul>	✓		
Engine oil	<ul style="list-style-type: none"><li>• Check oil level in engine.</li></ul>	✓		
	<ul style="list-style-type: none"><li>• Replace.</li></ul>		✓(*1)	
Air filter element	<ul style="list-style-type: none"><li>• Check condition.</li><li>• Clean.</li></ul>		✓(*2)	
Muffler screen	<ul style="list-style-type: none"><li>• Check condition.</li><li>• Clean and replace if necessary.</li></ul>		✓	
Spark arrester	<ul style="list-style-type: none"><li>• Check condition.</li><li>• Clean and replace if necessary.</li></ul>		✓	
Fuel tank filter	<ul style="list-style-type: none"><li>• Clean and replace if necessary.</li></ul>			✓

Item	Routine	Pre-operation check	Every	
			6 months or 100 Hr	12 months or 300 Hr
Crankcase breather hose	<ul style="list-style-type: none"> <li>• Check breather hose for cracks or damage.</li> <li>• Replace if necessary.</li> </ul>			✓
Cylinder head	<ul style="list-style-type: none"> <li>• Decarbonize cylinder head.</li> <li>• More frequently if necessary.</li> </ul>	After every 500 Hrs.		
Valve clearance	• Check and adjust when engine is cold.			★
Idle speed	• Check and adjust idle speed.			★
Fittings / fasteners	<ul style="list-style-type: none"> <li>• Check all fittings and fasteners.</li> <li>• Correct if necessary.</li> </ul>			★
Visual inspection for potential damage		✓		

\*1 ....Initial replacement of the engine oil is after one month or 20 hours of operation.

\*2 ....The air filter element needs to be replaced more frequently when using in unusually wet or dusty areas.

★ ....Since these items require special tools, data and technical skills, have a Yamaha dealer perform the service.



## Spark Plug Inspection

The spark plug is an important engine component, which should be checked periodically.

1. Remove the screws.

① Screws

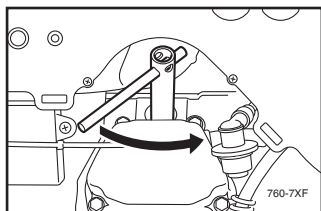
2. Detach the hooks by pulling the front cover toward you.

② Hooks

3. Disengage the projections on the front cover by pulling down the cover, and then remove the front cover.

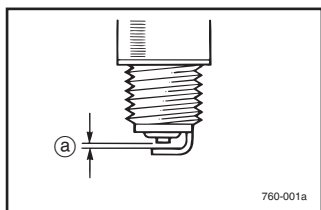
③ Projections

④ Front cover



4. Remove the spark plug cap and then remove the spark plug.

5. Check for discoloration and remove the carbon. The porcelain insulator around the center electrode of spark plug should be a medium-to-light tan color.



6. Check the spark plug type and gap.

Standard spark plug:

BPR4ES (NGK)

Spark plug gap:

0.7–0.8 mm (0.028–0.031 in)

① Gap

## TIP

The spark plug gap should be measured with a wire thickness gauge and, if necessary, adjusted to specification.

7. Install the spark plug.

Spark plug torque: 20 N·m (2.0 kgf·m, 15 lb·ft)
--

**TIP** \_\_\_\_\_

If a torque wrench is not available when installing a spark plug, a good estimate of the correct torque is 1/4–1/2 turn past finger tight. However, the spark plug should be tightened to the specified torque as soon as possible.

---

8. Install the spark plug cap.
9. Install the front cover and tighten the screws.

## Carburetor Adjustment

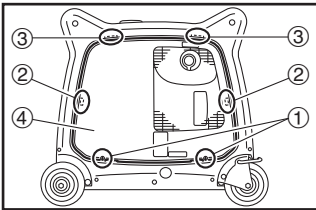
The carburetor is a vital part of the engine. Adjusting should be left to a Yamaha dealer with the professional knowledge, specialized data, and equipment to do so properly.

## Engine Oil Replacement



### WARNING

**Avoid draining the engine oil immediately after stopping the engine. The oil is hot and should be handled with care to avoid burns.**



1. Place the generator on a level surface and warm up the engine for several minutes. Then stop the engine.

2. Remove the screws.

① Screws

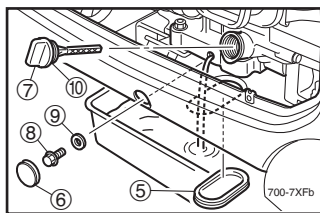
3. Detach the hooks by pulling the rear cover toward you.

② Hooks

4. Disengage the projections on the rear cover by pulling down the cover, and then remove the rear cover.

③ Projections

④ Rear cover



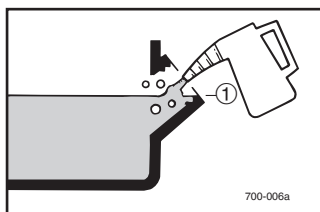
5. Remove the rubber cap, rubber plug and the oil filler cap.

- ⑤ Rubber cap
- ⑥ Rubber plug
- ⑦ Oil filler cap
- ⑧ Oil drain bolt
- ⑨ Gasket
- ⑩ O-ring

6. Place an oil pan under the engine. Remove the oil drain bolt so that the oil can be completely drained.

7. Check the oil drain bolt, gasket, oil filler cap and O-ring. Replace them if damaged.

8. Install the oil drain bolt.



Oil drain bolt torque:  
30 N·m (3.0 kgf·m, 22 lb·ft)

9. Add engine oil to the correct level.

- ① Correct level

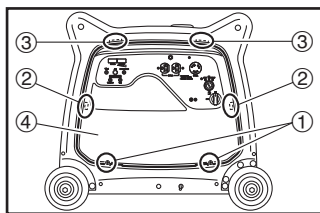
Recommended engine oil:  
Recommended oil brand:  
YAMALUBE  
Available oil grade:  
API SE type or higher JASO MA or MB  
Available viscosity index:  
10W-30 or 10W-40  
Engine oil quantity:  
1.3 L (1.37 US qt, 43.95 oz)

### NOTICE

**Be sure no foreign material enters the crankcase.**

10. Install the oil filler cap, the rubber cap and the rubber plug.

11. Install the rear cover and tighten the screws.



## Air Filter

1. Remove the screws.

① Screws

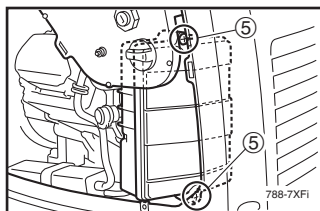
2. Detach the hooks by pulling the front cover toward you.

② Hooks

3. Disengage the projections on the front cover by pulling down the cover, and then remove the front cover.

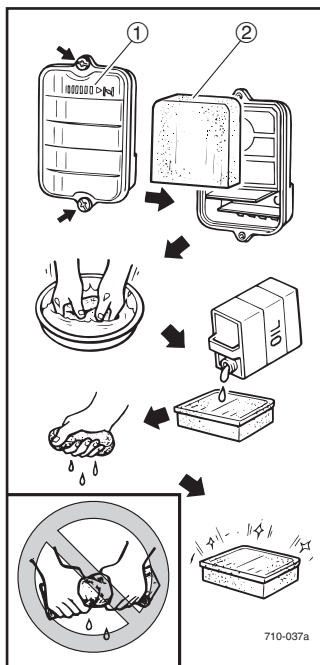
③ Projections

④ Front cover



4. Remove the screws.

⑤ Screws



5. Remove the air filter case cover and foam element.

- ① Air filter case cover
- ② Foam element

6. Wash the foam element in white kerosene and dry it.

### **WARNING**

**Never use white kerosene while smoking or in the vicinity of an open flame.**

7. Oil the foam element and squeeze out excess oil. The foam element should be wet but not dripping.

Recommended oil:  
Foam-air-filter oil  
or  
engine oil (See page 33)

### **NOTICE**

**Do not wring out the foam element when squeezing it. This could cause it to tear.**

8. Insert the foam element into the air filter case.

### **NOTICE**

**The engine should never run without the foam element; excessive piston and cylinder wear may result.**

### **TIP**

Be sure the foam element sealing surface matches the air filter so there is no air leak.

9. Install the air filter case cover and tighten the screws.

10. Install the front cover and tighten the screws.



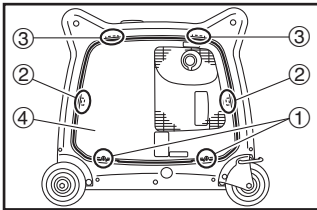
## Muffler Screen and Spark Arrester



### WARNING

The engine and muffler will be very hot after the engine has been run.

Avoid touching the engine and muffler while they are still hot with any part of your body or clothing during inspection or repair.



1. Remove the screws.

① Screws

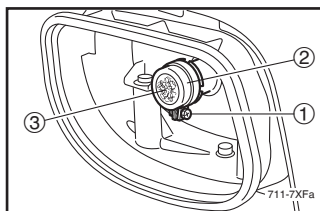
2. Detach the hooks by pulling the rear cover toward you.

② Hooks

3. Disengage the projections on the rear cover by pulling down the cover, and then remove the rear cover.

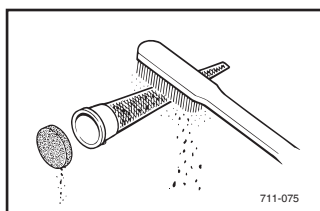
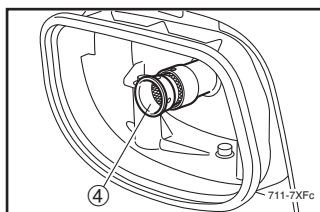
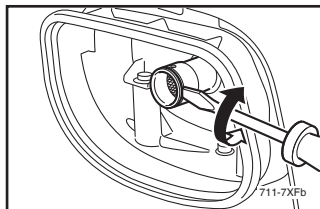
③ Projections

④ Rear cover



4. Loosen the bolt and then remove the muffler cap, the muffler screen and spark arrester.

- ① Bolt
- ② Muffler cap
- ③ Muffler screen
- ④ Spark arrester

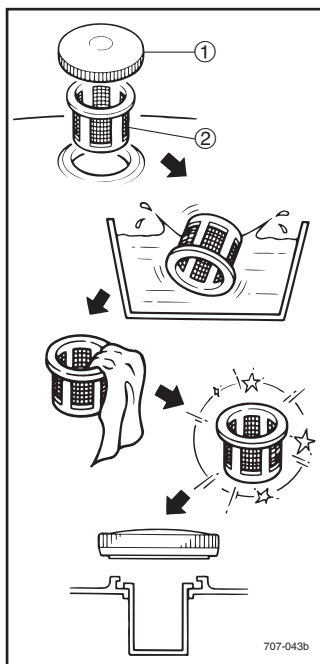
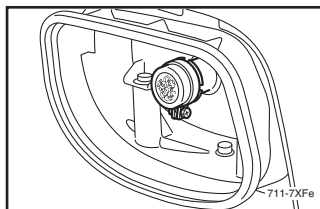
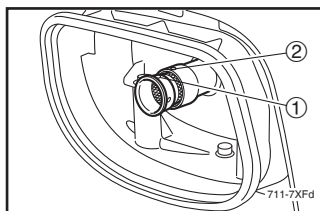


5. Remove the carbon deposits on the muffler screen and spark arrester using a wire brush.

#### **NOTICE**

**When cleaning, use the wire brush lightly to avoid damaging or scratching of the muffler screen and spark arrester.**

6. Check the muffler screen and spark arrester. Replace them if damaged.



7. Install the spark arrester.

### TIP

Align the spark arrester lump to the hole in the muffler pipe.

- ① Spark arrester lump
- ② Hole

8. Install the muffler screen and the muffler cap, then tighten the bolt.

9. Install the rear cover and tighten the screws.

## Fuel Tank Filter

### ⚠ WARNING

Never use the gasoline while smoking or in the vicinity of an open flame.

1. Remove the fuel tank cap and fuel tank filter.

- ① Fuel tank cap
- ② Fuel tank filter

2. Clean the fuel tank filter with gasoline. Replace it if damaged.
3. Wipe the fuel tank filter and insert it.
4. Install the fuel tank cap.

### ⚠ WARNING

Be sure the fuel tank cap is tightened securely.

## Battery

This generator is equipped with a VRLA (Valve Regulated Lead Acid) battery. There is no need to check the electrolyte or to add distilled water.



### WARNING

- **Electrolyte is poisonous and dangerous since it contains sulfuric acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and always shield your eyes when working near batteries. In case of contact, administer the following FIRST AID.**
  - **EXTERNAL:** Flush with plenty of water.
  - **INTERNAL:** Drink large quantities of water or milk and immediately call a physician.
  - **EYES:** Flush with water for 15 minutes and seek prompt medical attention.
- **Batteries produce explosive hydrogen gas. Therefore, keep sparks, flames, cigarettes, etc., away from the battery and provide sufficient ventilation when charging it in an enclosed space.**
- **KEEP THIS AND ALL BATTERIES OUT OF THE REACH OF CHILDREN.**

## To Charge The Battery

Have a Yamaha dealer charge the battery as soon as possible if it seems to have discharged.

### NOTICE

**To charge a VRLA battery, a special (constant-voltage) battery charger is required. Using a conventional battery charger will damage the battery. If you do not have access to a constant-voltage battery charger, have a Yamaha dealer charge your battery.**

## Recommended Battery

Recommended battery: Capacity: 12 V/18 Ah
--

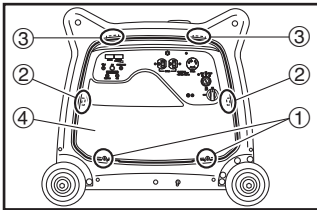
## Fuse Replacement

### **WARNING**

Be sure to use specified fuse. A wrong fuse will cause electrical system damage and A FIRE HAZARD.

### **NOTICE**

Be sure the engine switch is turned to “STOP” to prevent accidental short circuiting.



1. Remove the screws.

① Screws

2. Detach the hooks by pulling the front cover toward you.

② Hooks

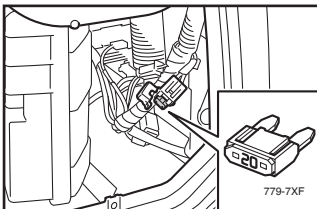
3. Disengage the projections on the front cover by pulling down the cover, and then remove the front cover.

③ Projections

④ Front cover

4. Replace the fuse with one of proper amperage.

Specified fuse: 20 A



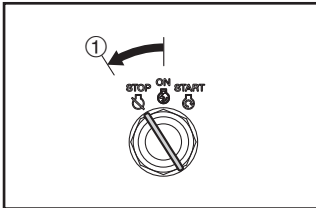
### **TIP**

If the fuse immediately blows again, consult a Yamaha dealer.

5. Install the front cover and tighten the screws.

## STORAGE

Long term storage of your generator will require some preventive procedures to guard against deterioration.



### Drain The Fuel

1. Turn the engine switch to “STOP”.

① “STOP”

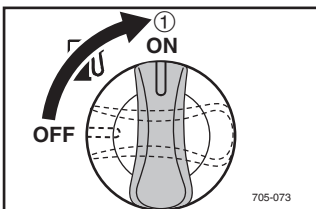
2. Remove the fuel tank cap and the fuel tank filter. Extract the fuel from the fuel tank into an approved gasoline container using a commercially available handsiphon. Then, install the fuel tank filter and the fuel tank cap.

### WARNING

**Fuel is highly flammable and poisonous. Check “SAFETY INFORMATION” (See page 3) carefully.**

### NOTICE

**Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts.**



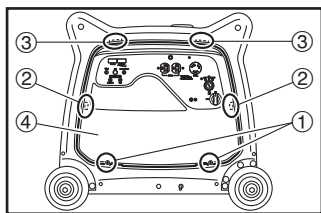
3. Turn the fuel cock knob to “ON”.

① “ON”

4. Start the engine and leave it run until it stops. The engine stops in approximately 20 minutes time by running out of fuel.

### TIP

- Do not connect with any electrical devices. (unloaded operation)
- Duration of the running engine depends on the amount of the fuel left in the tank.



5. Remove the screws.

① Screws

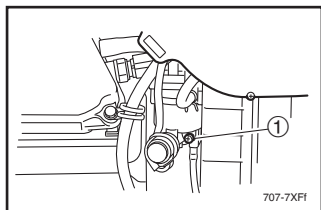
6. Detach the hooks by pulling the front cover toward you.

② Hooks

7. Disengage the projections on the front cover by pulling down the cover, and then remove the front cover.

③ Projections

④ Front cover



8. Drain the fuel remaining in the carburetor into an approved container by loosening the drain screw on the carburetor float chamber.

① Drain screw

9. Tighten the drain screw.

10. Turn the engine switch to "OFF".

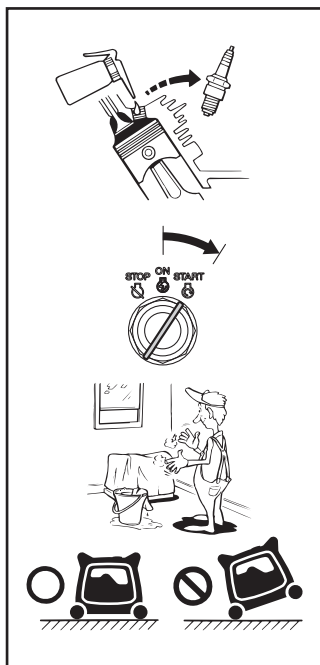
11. Turn the fuel cock knob to "OFF".

12. Install the front cover and tighten the screws.



13. Tighten further if any screws, bolts and nuts are loose.

14. Store the generator in a dry, well-ventilated place, with the cover placed over it.



## Engine

Perform the following steps to protect the cylinder, piston ring, etc. from corrosion.

1. Remove the spark plug cap and spark plug, pour about one tablespoon of engine oil (See page 33) into spark plug hole and reinstall the spark plug only.
2. Turn the engine switch to “START” and crank the engine several seconds with ignition off to coat the cylinder walls with oil.
3. Clean exterior of the generator and apply a rust inhibitor.

### NOTICE

**Do not spray any organic solvent on the CO SENSOR.**

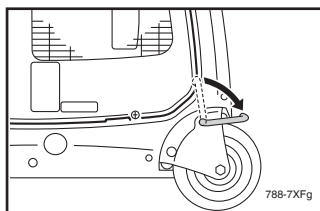
4. Store the generator in a dry, well-ventilated place, with the cover placed over it.

### NOTICE

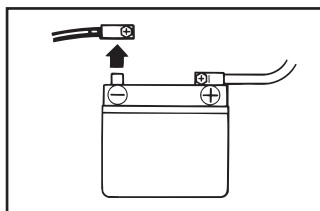
**Do not use a plastic cover as a dust cover. Rust and corrosion will occur since a non porous cover will trap moisture around the engine.**

**Besides, the CO SENSOR reacts to HC (hydrocarbon) contained in gasoline, reducing its sensitivity. Therefore, if the generator is stored in an airtight cover, such as a plastic cover, the gasoline remaining in the generator will vaporize and fill with HC, reducing the sensitivity of the CO SENSOR.**

5. The generator must remain in a vertical position when stored, carried or operated.
6. The caster lock lever should be in the “Lock” when stored or operated.







## Battery

1. Remove the battery.
2. Store the battery in a cool, dark and dry place and charge it once a month.

Do not store the battery in an excessive cold or warm place [i.e., less than 0 °C (30 °F) or more than 30 °C (90 °F)].



## WARNING

- **Disconnect the negative lead (Black) first, then the positive lead (Red) from the battery.**
- **Connect the positive lead (Red) first, then the negative lead (Black) to the battery when installing the battery.**

## TROUBLESHOOTING

### Engine Won't Start

#### 1. Fuel systems

No fuel supplied to combustion chamber.

- No fuel in tank .... Supply fuel.
- Fuel in tank .... Fuel cock knob to "ON".

#### ① "ON"

- Clogged fuel line .... Clean fuel line.
- Clogged carburetor .... Clean carburetor.

#### 2. Engine oil system

Insufficient

- Oil level is low .... Add engine oil.

#### 3. Electrical systems

- Engine switch to "START".

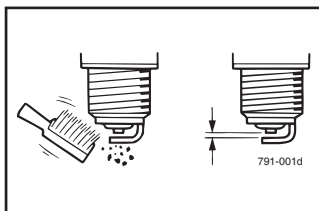
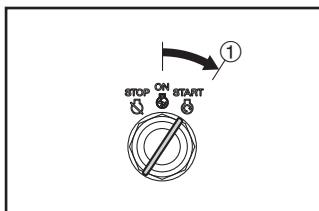
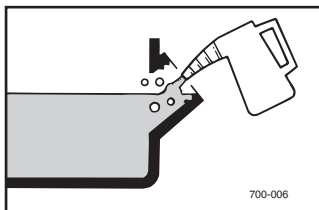
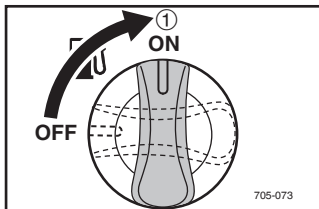
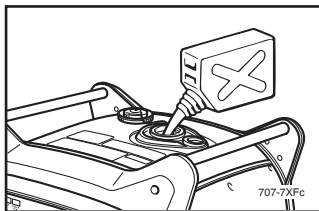
#### ① "START"

Poor spark

- Spark plug dirty with carbon or wet .... Remove carbon or wipe spark plug dry.
- Faulty ignition system .... Consult a Yamaha dealer.

### Generator Won't Produce Power

- Safety device (AC protector) to "OFF" .... Press the AC protector to "Reset".



### CO SENSOR Indicator Lights flash or come on abnormally


If the generator shows any of the following conditions upon starting or during operation, consider your own safety, stop the generator, and then please consult a Yamaha dealer.

Status	Check	Engine
Upon starting	Upon starting, both the "CO SENSOR WARNING indicator light" and the "CO SENSOR ERR (Error) indicator light" do not flash 5 times, or either one does not flash 5 times.	Starts
During operation	During operation, the "CO SENSOR WARNING indicator light" flashes for approximately 5 minutes.	Runs
	During operation, the "CO SENSOR ERR (Error) indicator light" comes on for approximately 5 minutes.	Runs


For any other abnormal operating conditions not covered here, please consult a Yamaha dealer.

A ENGINE DOES NOT START




B	Turn the engine switch to "ON", then turn the engine switch to "START". And check if the starter motor cranks.					
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">C</td> <td style="padding: 2px 5px;">Cranks</td> </tr> </table>	C	Cranks	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">D</td> <td style="padding: 2px 5px;">Does not crank</td> </tr> </table>	D	Does not crank
C	Cranks					
D	Does not crank					



F	Turn the engine switch to "START", and check if the oil warning light comes on.					
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">G</td> <td style="padding: 2px 5px;">Does not come on</td> </tr> </table>	G	Does not come on	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">H</td> <td style="padding: 2px 5px;">Comes on</td> </tr> </table>	H	Comes on
G	Does not come on					
H	Comes on					



L	Turn the engine switch to "START" and check the spark plug for spark strength. (See "WARNING").	<div style="display: flex; align-items: center;">  <div> <p><b>! WARNING</b></p> <ul style="list-style-type: none"> <li>To prevent <b>FIRE HAZARDS</b> be sure fuel is not present in the spark plug area.</li> <li>To prevent <b>FIRE HAZARDS</b> be sure to place the spark plug as far away as possible from the spark plug hole and carburetor area.</li> <li>To prevent <b>ELECTRIC SHOCK</b> do not hold spark plug lead with hand while testing.</li> </ul> </div> </div>				
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">M</td> <td style="padding: 2px 5px;">OK</td> </tr> </table>	M	OK	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">N</td> <td style="padding: 2px 5px;">Does not spark.</td> </tr> </table>	N	Does not spark.
M	OK					
N	Does not spark.					



R	Check the following	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">S</td> <td style="padding: 2px 5px;">Clogged</td> </tr> <tr> <td style="width: 5%; padding: 2px 5px;">T</td> <td style="padding: 2px 5px;">OK</td> </tr> </table>	S	Clogged	T	OK
S	Clogged					
T	OK					



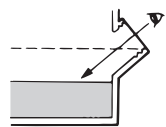
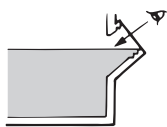
U	Clean or replace	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px 5px;">V</td> <td style="padding: 2px 5px;">OK</td> </tr> <tr> <td style="width: 5%; padding: 2px 5px;">W</td> <td style="padding: 2px 5px;">Engine does not start.</td> </tr> </table>	V	OK	W	Engine does not start.
V	OK					
W	Engine does not start.					



X Consult a Yamaha dealer.

**E** Faulty battery and/or starter motor.  
Consult a Yamaha dealer.

**I** Check engine oil level.



**J** OK

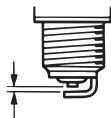
**K** Level low

Consult a  
Yamaha dealer.

Add engine oil.

**O** Check the spark plug.

- Type: BPR4ES
- Gap: 0.7–0.8 mm (0.028–0.031 in)



**P** Incorrect

**Q** OK

Replace or  
adjust gap.

Clean the spark  
plug.

# SPECIFICATIONS

## Dimensions

	Unit	EF4500iSE
Overall length	mm (in)	780 (30.7)
Overall width	mm (in)	616 (24.3)
Overall height	mm (in)	692 (27.2)
Dry weight	kg (lb)	95 (209)

## Engine

	Unit	EF4500iSE
Type		Air cooled 4-stroke gasoline OHV
Cylinder arrangement		Inclined, 1 cylinder
Displacement	cm <sup>3</sup>	357
Bore × Stroke	mm (in)	85.0 × 63.0 (3.35 × 2.48)
Operation hours	Hr	7.4–15.2 (rated load–1/4 load)
Fuel		Unleaded gasoline
Fuel tank capacity	L (US gal, Imp gal)	17.0 (4.49, 3.74)
Engine oil quantity	L (US qt, oz)	1.3 (1.37, 43.95)
Ignition system		TCI
Spark plug:	Type	BPR4ES (NGK)
	Gap	0.7–0.8 (0.028–0.031)
Noise level*	dB/L <sub>WA</sub>	89.5
	dB (A)/7 m	65–68

\* : Noise level is measured when the economy control switch is turned to “ON”.

L<sub>WA</sub> shows the sound power level under the ISO3744 satisfied test conditions.

The noise level in “dB (A) / 7 m” is the arithmetic mean value in four directions measured 7 meters away from each side of the generator.

The noise level may vary in different environments.

## Generator

	Unit	EF4500iSE
AC output		
Rated voltage	V	120
Rated frequency	Hz	60
Rated current	A	33.3
Rated output	kVA	4.0
Safety device: Type		Electronic and Mechanical (bimetal)

## Battery

	Unit	EF4500iSE
Voltage	V	12
Capacity	Ah	18

## CONSUMER INFORMATION

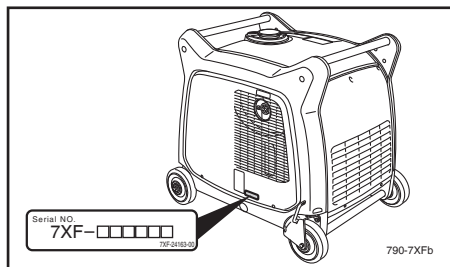
PRI-I.D. NUMBER:

		<b>MODEL</b>
		<input type="text"/>
<b>PRI-I.D. CODE</b>		<b>SERIAL No.</b>
<input type="text"/>		<input type="text"/>

### Identification Number Records

Record your Primary I.D., and serial numbers in the spaces provided, to assist you in ordering spare parts from a Yamaha dealer.

Also record and keep these I.D. numbers in a separate place in case your generator is stolen.



### Generator Identification

The generator serial number is stamped in the location as shown.

#### TIP

The first three digits of these numbers are for model identification; the remaining digits are the unit production number. Keep a record of these numbers for reference when ordering parts from a Yamaha dealer.

## EXHAUST EMISSION CONTROL SYSTEM AND COMPONENTS

Item	Acronym
• CARB. ASSY., LH. & JT., ..... CARBURETOR2	CARB (Carburetor)
• T.C.I. MAGNETO ASSY. & ..... PLUG, SPARK	EI (Electronic Ignition)
• CRANKCASE1 & HEAD, ..... CYLINDER1	PCV (Positive Crankcase Ventilation)
• AIR FILTER ASSY. ....	ACL (Air Cleaner)
• MUFF., 2, CAP, NET, WIRE2 & ARRESTER, SPARK	

The above items and the corresponding acronyms are provided in accordance with U.S. EPA REGULATIONS FOR NEW NONROAD SPARK-IGNITION NONHANDHELD ENGINES and the CALIFORNIA REGULATIONS FOR 1995 AND LATER SMALL OFF-ROAD ENGINES.

The acronyms conform to the latest version of the SAE's recommended practice document J1930, "Diagnostic Acronyms, Terms, and Definitions For Electrical/Electronic System".

It is recommended that these items be serviced by a Yamaha dealer.







① Main coil	<b>Color code</b>	
② Control unit	B	Black
③ AC protector	Br	Brown
④ AC pilot light (Green)	G	Green
⑤ AC receptacle	L	Blue
⑥ Hour meter/power meter	O	Orange
⑦ Ground (earth) terminal	R	Red
⑧ Overload indicator light (Red)	W	White
⑨ Rectifier/regulator	Y	Yellow
⑩ Engine switch	B/R	Black/Red
⑪ Speed limiter assembly	B/W	Black/White
⑫ Rectifier	G/R	Green/Red
⑬ Oil warning light (Red)	G/W	Green/White
⑭ Diode assembly	G/Y	Green/Yellow
⑮ Fuse	L/G	Blue/Green
⑯ Battery	L/R	Blue/Red
⑰ T.C.I. magneto	L/W	Blue/White
⑱ Spark plug	L/Y	Blue/Yellow
⑲ T.C.I. unit	O/W	Orange/White
⑳ Starter relay	R/B	Red/Black
㉑ Starter motor	R/L	Red/Blue
㉒ Oil level gauge	R/W	Red/White
㉓ Fuel cut solenoid valve	Y/W	Yellow/White
㉔ Thermo sensor		
㉕ Throttle motor		
㉖ Auto choke		
㉗ CO SENSOR		
㉘ WARNING indicator light (Red)		
㉙ ERR (Error) indicator light (Orange)		

## YAMAHA EXTENDED SERVICE (Y.E.S.)

Keep your Yamaha Generator protected even after your warranty expires with genuine Yamaha Extended Service (Y.E.S.).

- Y.E.S. is designed and administered by Yamaha Motor Corporation to provide maximum owner satisfaction. You get uninterrupted factory-backed coverage for extra peace of mind.
- Y.E.S. is flexible. You can choose the plan that's right for you: 12 months, 24 months or 36 months coverage.
- Y.E.S. is administered by the same Yamaha people that handle your warranty - and it shows in the comprehensive coverage benefits. There are no hour limitations and Y.E.S. covers manufacturing defects just like your warranty. See a sample contract at your Yamaha dealer and see how comforting uninterrupted factory backed protection can be.
- There are no "out-of-pocket" expenses for covered repairs. Yamaha will never ask you to pay a deductible.
- Nationwide coverage. Y.E.S. coverage is honored at any authorized Yamaha Outdoor Power Equipment Service dealer.
- Y.E.S. coverage is transferable to a new owner if you sell or trade-in. That can make you Yamaha much more valuable.

This excellent Y.E.S. plan coverage is only available to Yamaha owners like you, and only while your Yamaha is still within the Yamaha Limited Warranty period. So visit your authorized Yamaha dealer to get all the facts. He can show you how easy it is to protect your investment with Yamaha Extended Service.


### Special note:

If visiting your dealer isn't convenient, contact Yamaha with your Primary ID number (your frame number). We'll be happy to help you get the Y.E.S. coverage you need.

Yamaha Service Marketing  
P.O. Box 6555  
Cypress, CA 90630  
1-866-YES-EXTD  
(1-866-937-3983)





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