

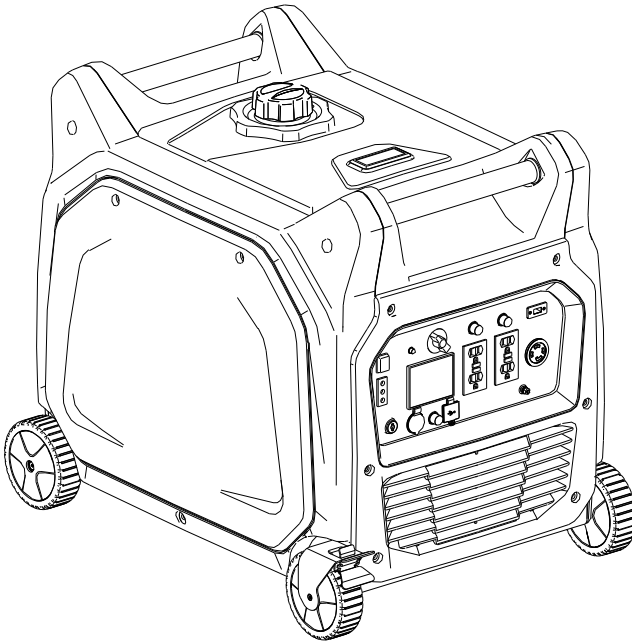


# AIMS POWER™

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## PORTABLE INVERTER GENERATOR

### GEN6600W240VS 120/240V



**IMPORTANT** —READ AND UNDERSTAND THE MANUAL PRIOR TO USING, KEEP MANUAL FOR REFERENCE.

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## WARNING

PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY BEFORE OPERATING THE GENERATOR

## SAFETY INFORMATION

### 1) EXHAUST FUMES ARE POISONOUS

- Never operate the engine in a closed area or it may cause unconsciousness or death within a short period of time. Operate the engine in a well ventilated area.

### 2) FUEL IS HIGHLY FLAMMABLE AND POISONOUS

- Always turn off the engine when refueling.
- Never refuel while smoking or around an open flame.
- Take care not to spill any fuel on the engine or muffler when refueling.
- If you swallow any fuel, inhale fuel vapor, or if fuel vapor comes in contact with your eyes, seek medical assistance 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.

### 3) ENGINE AND MUFFLER MAY BE HOT

- Place the generator in a place where passers-by or children are not likely to touch the generator.
- Avoid placing any flammable materials near the exhaust outlet during operation.
- Keep the generator at least 3 feet from buildings and other equipment, or the engine may overheat.
- Avoid operating the engine with a dust cover.
- Be sure to carry the generator only by its carrying handle.
- Put the generator on the flat ground, allowing the generator to vent heat freely.

### 4) ELECTRIC SHOCK PREVENTION

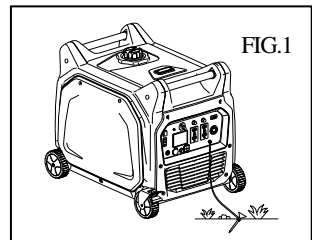
- Never operate the generator in rain or snow.
- Never touch the generator with wet hands or electric shock may occur.
- Be sure to ground (earth) the generator. **FIG.1**

#### NOTE:

Use ground (earth) lead of sufficient current capacity.

Diameter: 0.12mm (0.005 in)/ampere

EX: 10 Ampere -1.2mm (0.055 in)



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## 5) CONNECTION NOTES

- Do not connect the generator to commercial power outlet.
- Do not connect the generator in parallel with any other generator.

## SAFETY SYMBOLS



Caution - The user should be aware of a general hazard.



Dangerous Voltage



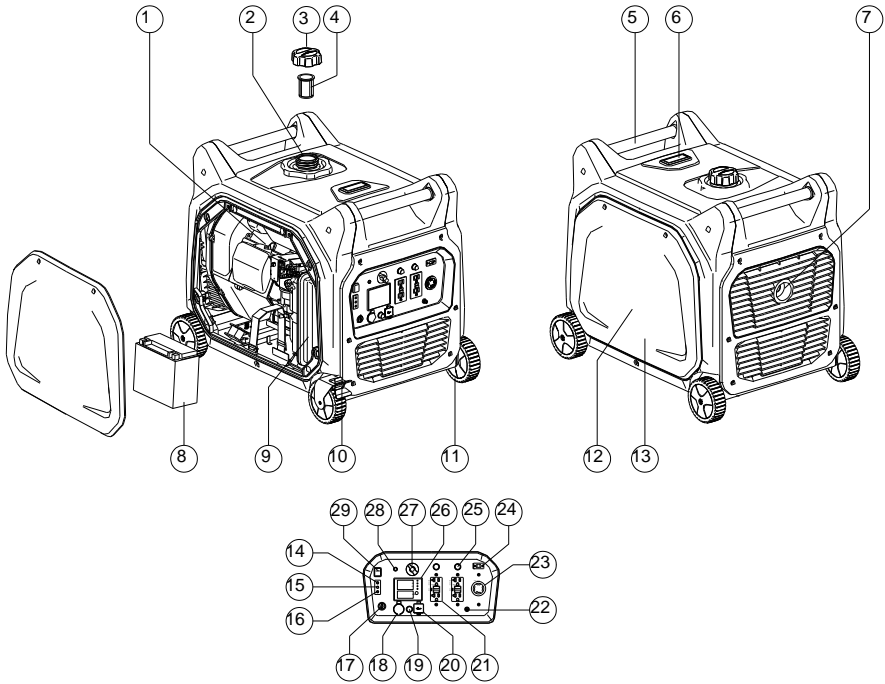
Flammable



Hot Surface - Do not touch.

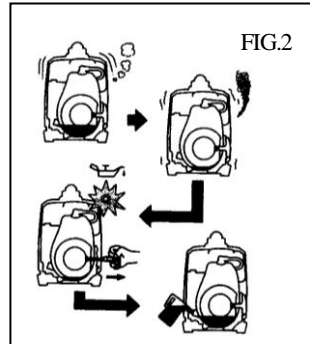
# CONTROL & FEATURES

- (1) Spark plug
- (2) Fuel tank
- (3) Fuel tank cap
- (4) Fuel filter
- (5) Carrying handle
- (6) Fuel level gauge
- (7) Muffler
- (8) Battery
- (9) Air filter
- (10) Brake lever
- (11) Wheel
- (12) Oil filler cap
- (13) Oil drain plug
- (14) AC pilot light
- (15) Overload indicator light
- (16) Oil warning light
- (17) Engine switch
- (18) DC receptacle
- (19) DC protector
- (20) USB Output
- (21) AC receptacle 5-20R GFCI
- (22) Ground (earth) terminal
- (23) AC receptacle L14-30R 120/240V
- (24) Auto gen start
- (25) AC protector
- (26) Voltmeter
- (27) Fuel cock
- (28) Output reset
- (29) Economy control switch



## 1) OIL WARNING SYSTEM

When the oil level falls below the lower level, the engine stops automatically. Unless you refill with oil, the engine will not start again. **FIG.2**



## 2) ENGINE SWITCH

The engine switch controls the ignition system. **FIG.3**

### ① RUN(on)

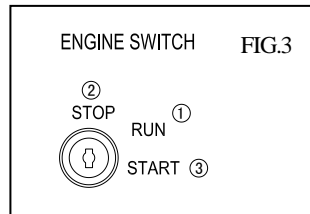
Ignition circuit is switched on. The engine can be started.

### ② STOP

Ignition circuit is switched off. The engine will not run.

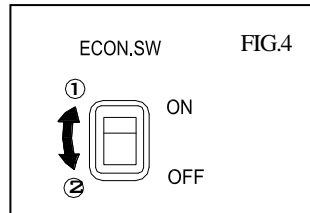
### ③ START

Starting circuit is switched on. The starter motor starts.



## 3) ECONOMY CONTROL SWITCH

When the economy control switch is turned “ON”, the economy feature controls the engine speed according to the connected load. The fuel consumption is more efficient and less noise. **FIG.4**

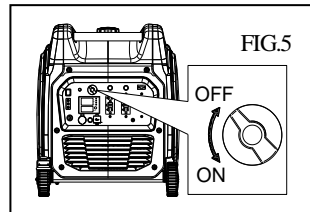


## 4) DC CIRCUIT PROTECTOR

The DC circuit protector turns off automatically when the load exceeds the generator rated output.

### CAUTION:

- Reduce the load to within specified generator's rated output if the DC circuit protector turns off.



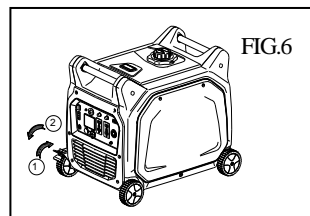
## 5) FUEL COCK

The fuel cock is used to supply fuel from the tank to the carburetor. **FIG.5**

## 6) BRAKE LEVER

The function of brake lever is to protect generator from moving. **FIG.6**

- ① If the brake lever is not on, the generator can move.
- ② If the brake lever is on, the generator can't move.



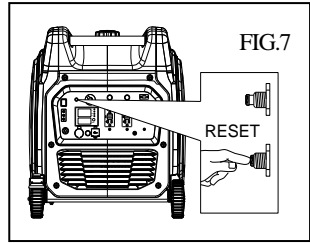
## 7) OUTPUT RESET

Push reset button for 2 seconds, the generator will recover the AC output when the generator stop producing AC output under overload protect. **FIG.7**

**NOTE:** \_\_\_\_\_

Reduce the load on the generator to ensure that the total load is within the generator's rated output power.

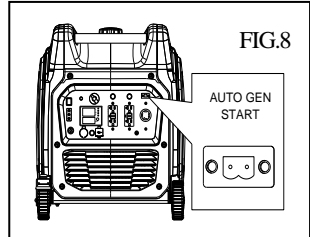
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## 8) AUTO GEN START

The auto gen start controls the ignition system. **FIG.8**

- ① When the circuit of this plug is connected, the starter motor starts and runs the generator.
- ② When the circuit of this plug is disconnected the engine will stop



## PRE-OPERATION CHECK

**NOTE:** \_\_\_\_\_

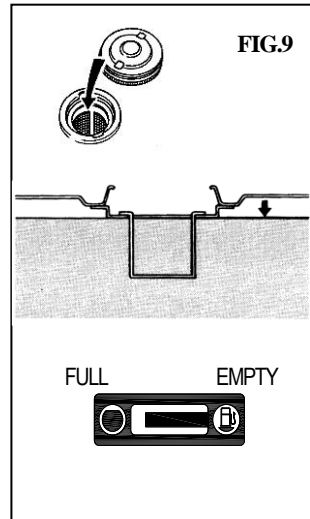
- Pre-operation checks should be made each time the generator is used.
- 

### 1) CHECK ENGINE FUEL

- Make sure there is sufficient fuel in the tank. **FIG.9**
- If fuel is low, refill with unleaded gasoline.
- Be sure to use the fuel filter screen on the fuel filter neck.
- Recommended fuel: Unleaded gasoline.
- Fuel tank capacity: **(see page 15)**

**WARNING:** \_\_\_\_\_

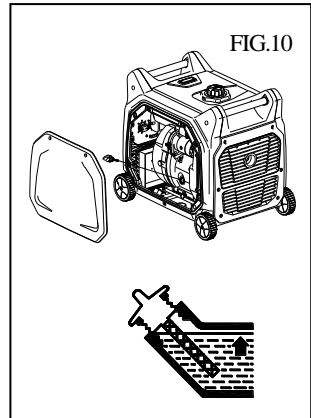
- Do not refill tank while engine is running or hot.
  - Close fuel petcock before refueling.
  - Be careful not to allow dust, dirt, water or other foreign objects into fuel.
  - Do not fill above the top of the fuel filter or it may overflow when the fuel heats up and expands.
  - Wipe off spilled fuel thoroughly before starting engine.
  - Keep away from open flames.
- 



## 2) CHECK ENGINE OIL

Make sure the engine oil is indicated by dip stick at the upper level of the oil filler hole. Add oil as necessary. **FIG.10**

- Remove oil filler cap and check the engine oil level.
- If oil level is below the lower level line, refill with suitable oil to upper level line. Do not screw in the oil filler cap when checking oil level.
- Change oil if dirty.  
Oil capacity: (see page 15)
- Recommended engine oil: 10W-30  
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## 3) GROUND (Earth)

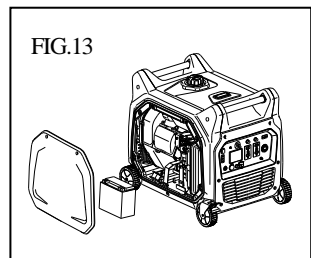
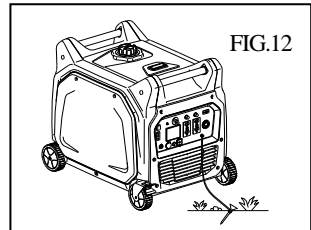
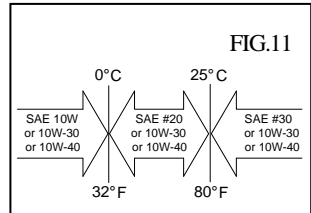
Make sure to ground (earth) the generator. **FIG.12**

## 4) CONNECT BATTERY

- Loosen the screw and remove the battery cover. **FIG.13**
- Clamp the **red** wire to the **positive (+)** terminal and the **black** wire to the **negative (-)** terminal of the battery. Do not reverse the polarity.
- Be sure the battery is installed on the battery mount tray securely.
- Install the cover and tighten the screw.

**NOTE:** \_\_\_\_\_

- Recommended battery: 12V18AH
- \_\_\_\_\_





# OPERATION

## NOTE:

- The generator has been shipped without engine oil. Fill with oil or it will not start.
- Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.

## 1) STARTING THE ENGINE

### NOTE:

- Before starting the engine, do not connect electric appliance. **FIG.14**

### A Electric start

1. Turn the fuel cock lever to the **ON** position. **FIG.15**
2. Pull out manual choke lever
3. Turn the engine switch to the **START** position. **FIG.16**
4. Turn the engine switch to the **RUN** position. **FIG.17**
5. Warm up the engine without a load for a few minutes.
6. Push in manual choke lever

### B Auto start

1. Make sure the fuel cock valve to the **ON** position.
2. Make sure the engine switch to the **RUN** position.
3. Connect the cable to Auto Gen Start plug, as soon as the generator receives the start signal, the generator will start. If the generator does not start successfully, it will try to start again. Generator will disconnect the circuit when the generator does not start after three times. **FIG.18**

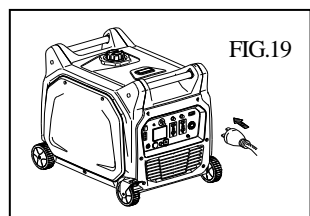
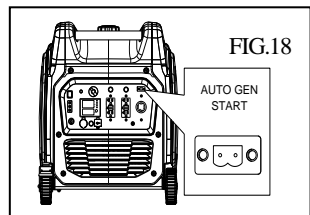
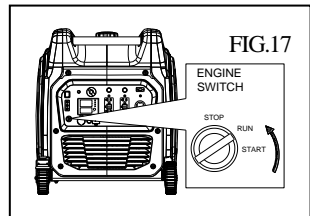
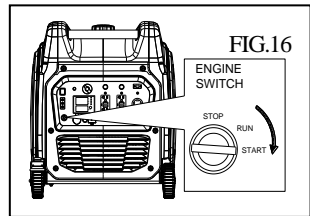
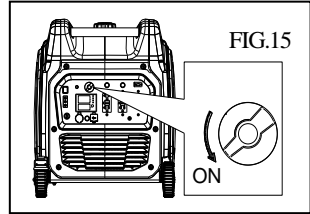
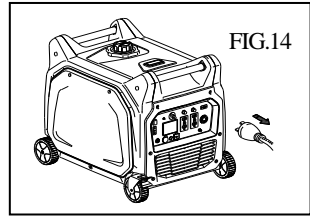
## 2) USING ELECTRIC POWER

### 1. AC APPLICATION

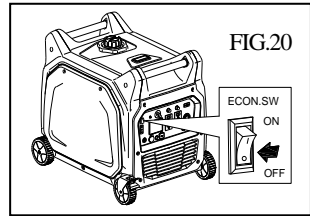
- (a) Check the AC indicator light for proper voltage.
- (b) Turn off the switch(es) of the electrical appliance(s) before connecting to the generator.
- (c) Insert the plug(s) of the electrical appliance(s) into the outlet. **FIG.19**

### CAUTION:

- Be sure the electric device is turned off before plugging in.
- Be sure the total load is within generator's rating.

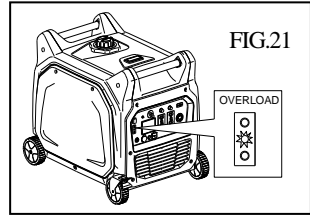


- Be sure the outlet load current is within outlet's rated current.
- The economy control switch must be turned to "OFF" when using electric devices that require a large starting current, such as a compressor or a submersible pump. **FIG.20**

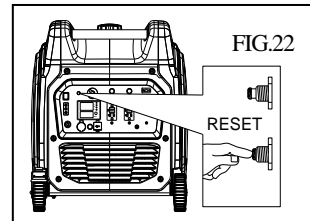


## OVERLOAD INDICATOR LIGHT

The overload indicator light comes on when overloaded, short circuit, or voltage is out of operating tolerance, or the AV output voltage rises. The electronic breaker will then activate, stopping power to the generator in order to protect the generator and any connected electric devices. The overload indicator light (red) will flicker and then keep on, the generator will stop power output. If so please follow the following steps: **FIG.21**



- Reduce the total wattage of connected electric devices within the application range.
- Check for blockages in the cooling air inlet and around the control unit. If any blockages are found, remove.
- Press the "RESET" button to reset the output, **FIG.22**



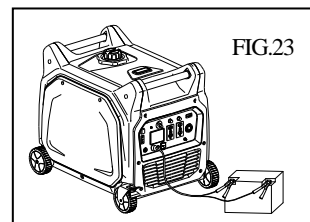
## CAUTION:

- The generator AC output automatically resets when the engine is stopped and then restarted.
- 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 submergible pump. This is not a malfunction.

## 2. DC APPLICATION

12V battery charging only. **FIG.23**

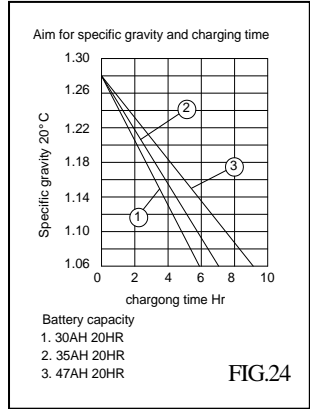
- 12V DC socket maybe use to charge cell phones and other small electronics using a 12DC adapter
- When charging batteries, make sure to properly connect the leads to the battery. Do not reverse the polarity.



- (c) If DC breaker has popped or open, disconnect the device then press to reset and reconnect DC device.

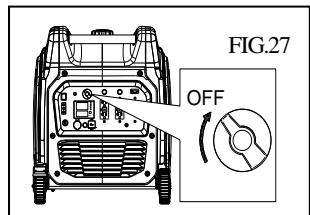
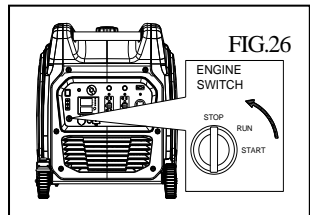
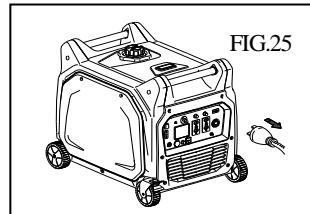
**CAUTION:**

- Be sure the economy control switch is turned off while charging the battery.



**3) STOPPING THE ENGINE**

1. Turn off the power switch of the electric device or disconnect any electric devices. **FIG.25**
2. Turn the engine switch to **STOP** position. **FIG.26**
3. Turn the fuel cock lever to **OFF**. **FIG.27**



# PERIODIC MAINTENANCE

## MAINTENANCE CHART

Regular maintenance is important for the best performance and safe operation.

Item	Remarks	Pre-operation check (daily)	Initial 1 months or 20 Hr	Every 3 months or 50Hr	Every 6 months or 100Hr	Every 12 months or 300Hr
Spark Plug	Check condition adjust gap and clean. Replace if necessary.			●		
Engine Oil	Check oil level	●				
	Replace		●		●	
Oil filter	Clean oil filter				●	
Air Filter	Clean. Replace if necessary.			●		
Fuel Filter	Clean fuel cock filter. Replace if necessary				●	
Choke	Check choke operation	●				
Valve Clearance	Check and adjust when engine is cold.					●
Fuel Line	Check fuel hose for crack or damage. Replace if necessary.	●				
Exhaust System	Check for leakage. Retighten or replace gasket if necessary	●				
	Check muffler screen. Clean / replace if necessary.					●
Carburetor	Check choke operation	●				
Cooling system	Check fan damage.					●
Starting system	Check recoil starter operation.	●				
Idle speed	Check and adjust engine idle speed					●
Fittings / Fasteners	Check all fittings and fasteners correct if necessary.				●	
Crankcase breather	Check breather hose for cracks or damage. Replace if necessary					●
Generator	Check the pilot light comes on	●				

## ENGINE OIL REPLACEMENT

1. Place the generator on a level surface and warm up the engine for several minutes. Then stop the engine and turn the fuel cock knob to **OFF**. Turn the fuel tank cap air vent knob clockwise.
  2. Loosen the screw and remove the cover. **FIG.28**
  3. Remove the oil filler cap. **FIG.29**
  4. Place an oil pan under the engine. Tilt the generator to drain the oil completely.
  5. Replace the generator on a level surface.
  6. Add engine oil to the upper level of dip stick.
  7. Install the oil filler cap.
  8. Install the cover and tighten the screw.
- Recommended engine oil: (**see page 17**)

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### CAUTION:

- Be sure no foreign material enters the crankcase.
- Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.
- Change the oil filter every 100hr.

## AIR FILTER

Cleaning your air filter needs to be part of your maintenance regime. The air filter ensures that the air entering the combustion chamber is as clean as possible. Contaminated air wears on the engine caused by foreign bodies and a less efficient combustion process. **FIG.30**

1. Remove the cover.
2. Remove the air filter cover and element.
3. Wash the element in solvent and dry.
4. Oil the element and squeeze out excess oil. The element should be wet but not dripping.
5. Insert the element into the air filter.
6. Replace the cover.

FIG.28

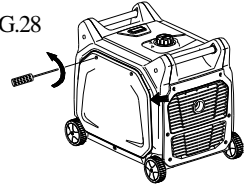


FIG.29

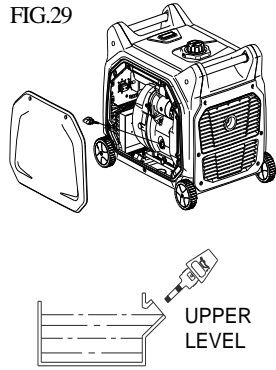
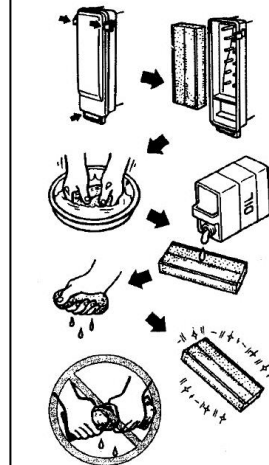


FIG.30



**CAUTION:**

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

**CLEANING AND ADJUSTING SPARK PLUG**

1. Remove the cover.
2. Check for discoloration and remove the carbon. **FIG.31**
3. Check the spark plug type and gap.
4. Replace the spark plug.
5. Attach the cover

Standard electrode color: Tan Color  
Standard Spark Plug: F5RTC (TORCH)  
Spark Plug Gap: 0.6-0.7 mm (0.024-0.028 in)

**FUEL TANK FILTER**

1. Remove the fuel tank cap and filter. **FIG.32**
2. Clean the filter with solvent. If damaged, replace.
3. Wipe the filter and reinsert.

**WARNING**

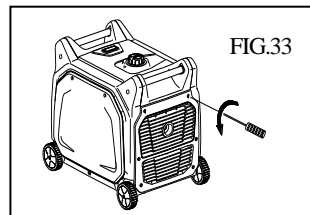
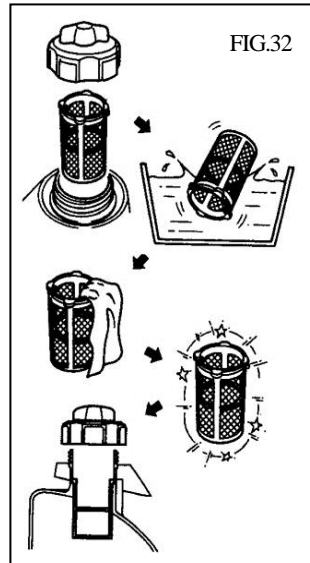
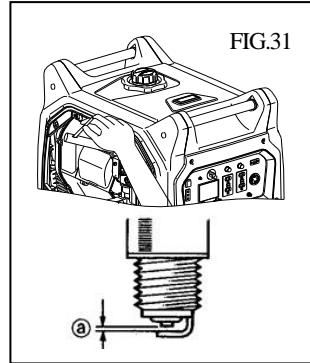
- Be sure the tank cap is tightened securely.

**MUFFLER SCREEN**

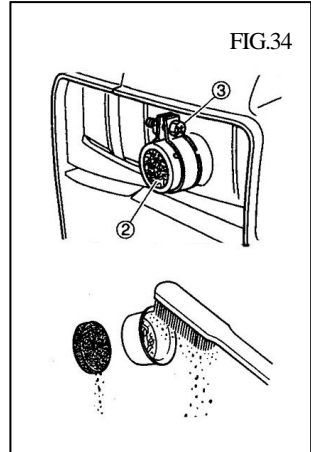
**WARNING**

- 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 cover. **FIG.33**
2. Remove the muffler screen.



3. Use a flathead screw driver to pry the spark arrester out from the muffler.
4. Remove the carbon deposits on the muffler screen and spark arrester using a wire brush. **FIG.34**
5. Re-install the muffler screen.
6. Re-install the cover



## TROUBLE SHOOTING

### ENGINE WON'T START

#### 1. Fuel systems

No fuel supplied to combustion chamber.

- No fuel in tank....Supply fuel.
- Fuel in tank....Fuel tank cap air vent knob to "ON", fuel cock knob to "ON"
- Clogged fuel line....Clean fuel line.
- Clogged carburetor....Clean carburetor.

#### 2. Engine oil system

Insufficient oil

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

#### 3. Electrical systems

Poor spark

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

#### 4. Compression insufficient

- Worn out piston and cylinder....Consult dealer.

#### 5. Generator won't produce power

Output breaker safety device (AC) to **OFF** ... Stop the engine, then restart.

Output breaker safety device (DC) to **OFF** ... Press to reset the DC protector

## **STORAGE**

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

### **DRAIN THE FUEL**

1. Remove the fuel tank cap, drain the fuel from the fuel tank
2. Remove the cover, drain fuel from the carburetor by loosening the drain screw.

### **ENGINE**

1. Remove the spark plug, pour in about one tablespoon of SAE 10W30 or 20W40 motor oil into the spark plug hole and reinstall the spark plug.
2. Clean exterior of the generator and apply a rust inhibitor.
3. Store the generator in a dry, well-ventilated place, with the cover place over it.
4. The generator must remain in a vertical position.



## SPECIFICATION

<b>MODEL</b>		GEN6600W240VS - EPA Compliant
<b>GENERATOR</b>	Type	Inverter Generator
	AC Voltage	120/240V
	Frequency	60Hz
	Max. Output	6.6 kW
	Continuous Output	6 kW
	Power Factor	1.0
	DC Output	POWER OUTLET 12V / 5.0A / USB 5V/3.1A
<b>ENGINE</b>	Model	XY188F-1
	Type	Air-cooled, 4 cycle, OHV, Gasoline Engine
	Bore × Stroke    mm × mm	88 × 64
	Displacement	389cc
	Max. Output	7.2kW / 3600rpm
	Fuel	Unleaded Gasoline
	Fuel tank Capacity	18.5 liters
	Rated Continuous Operation	4h30min (100% Load)
	Lubricating oil	SAE 10W30
	Lubricating oil Capacity	1.1 liter
	Starting System	Electric Starter
	Ignition system	C.D.I.
	Spark Plug: Type	F5RTC
<b>DIMENSION</b>	Net dimension    L × W × H	29.5 × 21 × 25 inches
	Overall dimension    L × W × H	32.5 × 24.5 × 27.5 inches
	Unit Weight	191b
	Boxed Weight	211.5lb

- Specifications subject to change without prior notice.

# WIRING DIAGRAM

