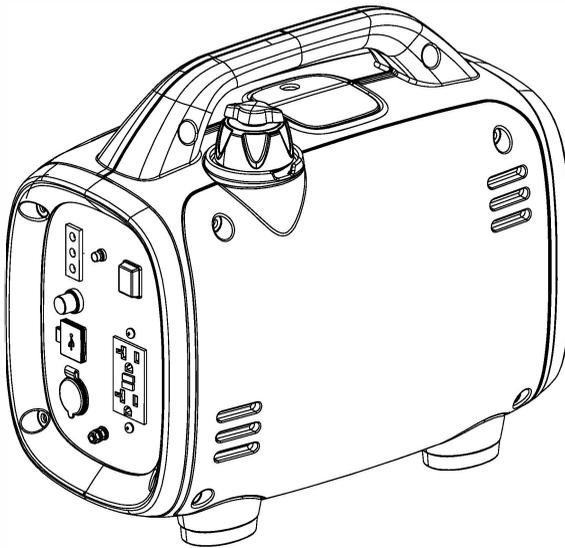


AIMS POWER™

www.aimscorp.net

PORTABLE INVERTER GENERATOR

GEN800W120V – 800 Watt



IMPORTANT - USERS OF THIS EQUIPMENT SHOULD
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

EXHAUST FUMES ARE POISONOUS

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

FUEL IS HIGHLY FLAMMABLE AND POISONOUS

Always turn off the engine when refueling.

Never refuel while smoking or near 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 allow any to get in your eyes, 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 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 carry handle.

Put the generator on the flat ground, allowing generator to vent heat freely.

ELECTRIC SHOCK PREVENTION

Never operate the engine in rain or snow.

Never touch the generator with wet hands or electrical shock will occur.

Be sure to ground (earth) the generator. **FIG. 1**

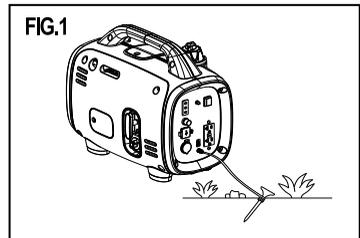
NOTE:

Use ground (earth) lead of sufficient current capacity.

Diameter: 0.12mm (0.005 in)/ampere

EX: 10 Ampere –1.2mm (0.055 in)-

USA 8 AWG



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.

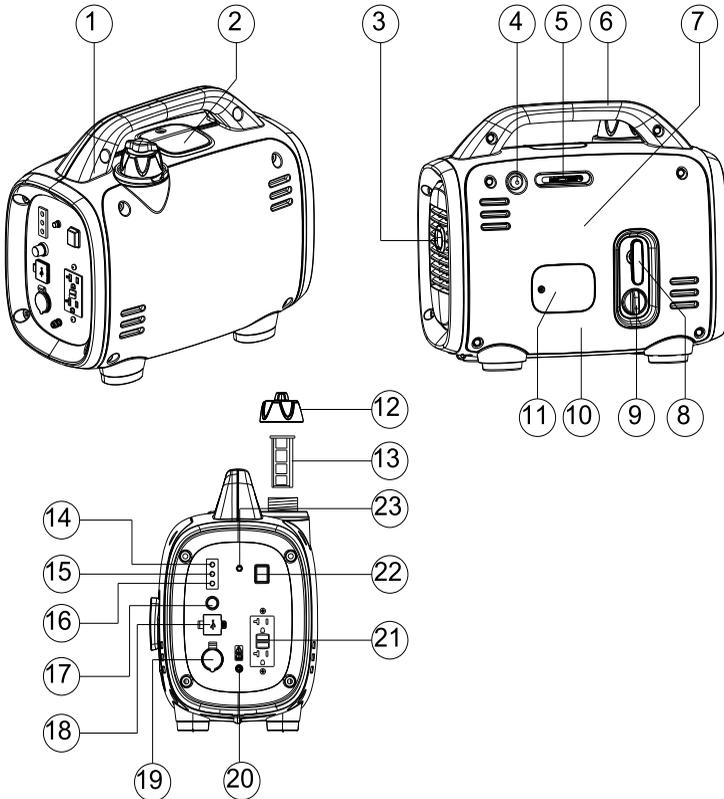


Hot Surface - Do not touch.

CONTROLS & FEATURES

GENERATOR OVERVIEW

- | | | |
|-----------------------------|------------------------------|-------------------------------|
| (1) Fuel tank | (2) Spark plug | (3) Muffler |
| (4) Fuel pump | (5) Choke lever | (6) Carrying handle |
| (7) Air filter panel | (8) Recoil starter | (9) Fuel cock |
| (10) Drain plug | (11) Oil filler cap | (12) Fuel tank cap |
| (13) Fuel filter | (14) AC pilot light | (15) Overload indicator light |
| (16) Oil warning light | (17) DC protector | (18) USB output (option) |
| (19) DC 12V output | (20) Ground (earth) terminal | (21) AC receptacle |
| (22) Economy control switch | (23) Output reset | |



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

ENGINE SWITCH/ FUEL COCK

The engine switch controls the ignition system. The fuel cock is used to supply fuel from the tank to the carburetor. FIG. 3

① ON

Ignition circuit is switched on, the fuel cock is open. The engine will start.

② OFF

Ignition circuit is switched off, the fuel cock is close. The engine will not run.

ECONOMY CONTROL SWITCH

When the economy control switch is turned ON, the economy control unit controls the engine speed according to the connected load. The results are more efficient fuel consumption and less noise. FIG. 4

DC CIRCUIT PROTECTOR

The DC circuit protector turns off automatically when the load exceeds the generator's rated output. FIG. 5

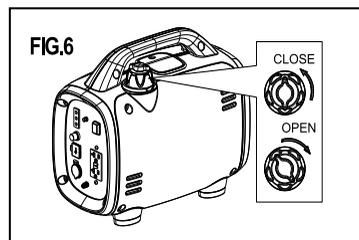
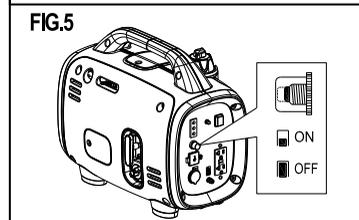
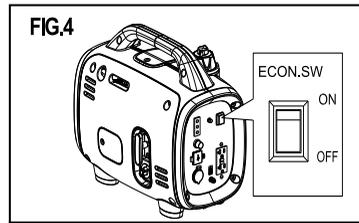
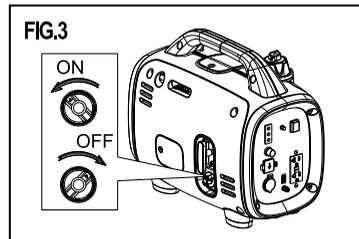
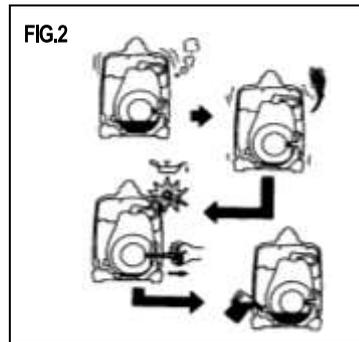
CAUTION: _____

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

FUEL TANK CAP AIR VENTKNOB

The fuel tank cap is provided with an air vent knob to stop fuel flow. The air vent knob must be turned once clockwise from the closed position. This will allow fuel to flow to the carburetor and engine to operate.

When the engine is not in use, tighten the air vent knob counterclockwise until it is finger-tight to stop fuel flow. FIG. 6

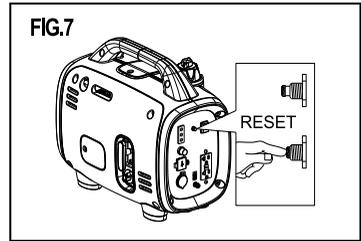


OUTPUT RESET

If generator stops producing AC due to overload, press reset button for 2 seconds. The generator will then recover and produce AC . FIG. 7

NOTE: _____

Reduce the load on the generator to fall within the generator's capacity rating



PRE-OPERATION CHECK

NOTE:

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

CHECK ENGINE FUEL

Make sure there is sufficient fuel in the tank. FIG. 8

If fuel is low, refill with unleaded automotive gasoline.

Be sure to use the fuel filter screen on the fuel filter neck.

Recommended fuel: Unleaded gasoline.

Fuel tank capacity: (see page 17)

WARNING:

Do not refill tank while engine is running or hot.

Close fuel cock before refueling with fuel.

Be careful not to admit 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 later and expands.

Wipe off spilled fuel thoroughly before starting engine.

Keep open flames away.

CHECK ENGINE OIL

Make sure the engine oil is at the upper level of the oil filler hole. Add oil as necessary. FIG. 9

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 contaminated.

Oil capacity: (see page 17)

Recommended engine oil:

API Service "SJ" FIG. 10

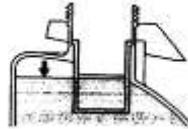


FIG.8



FIG.9

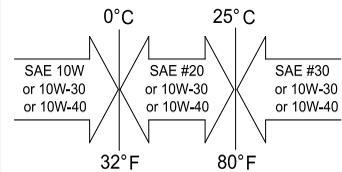
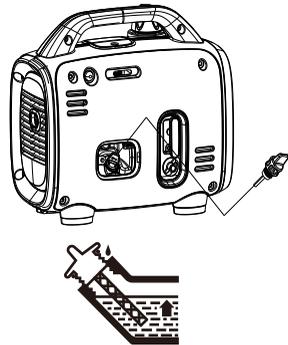
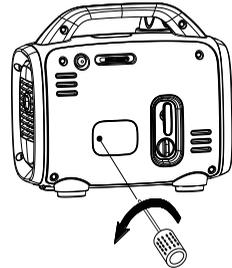


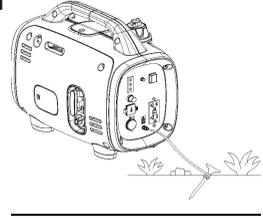
FIG.10

GROUND (Earth)

WARNING!

It is important to properly earth your generator before starting using a wire and a small metal earth spike. The wire and earth spike are not supplied with the unit. Use 8AWG wire. FIG. 11

FIG.11



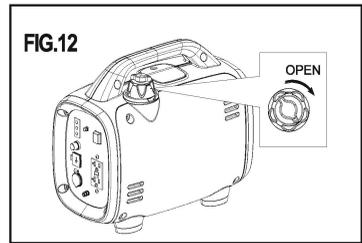
OPERATION

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.

FIG.12



STARTING THE ENGINE

NOTE:

Before starting the engine, do not connect the electric appliance.

1. Open the fuel tank air vent to the OPEN position. FIG. 12
2. Turn the fuel cock lever to the ON position. FIG. 13
3. The first time you use the generator, press the primer bulb 6 times after adding gasoline. FIG. 14
4. Turn the choke lever to the |  | CHOKE position. Not necessary if the engine is warm. FIG. 15

FIG.13



FIG.14

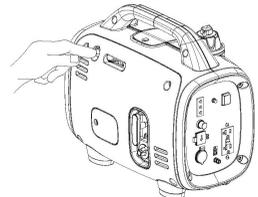
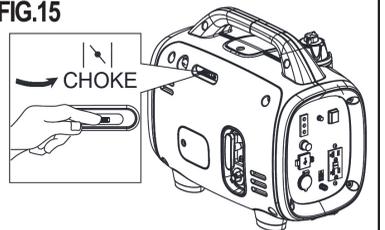
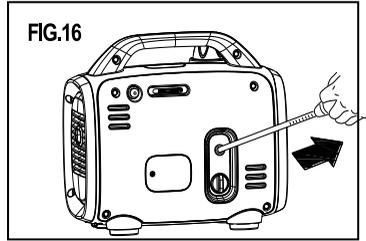


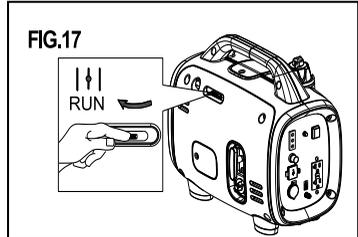
FIG.15



5. Pull the starter handle slowly until resistance is felt. This is the “Compression” point. Return the handle to its original position and pull swiftly. Do not fully pull out the rope. After starting, allow the starter handle to return to its original position while still holding the handle. Grasp the carrying handle firmly to prevent the generator from falling over when pulling the recoil starter. FIG. 16



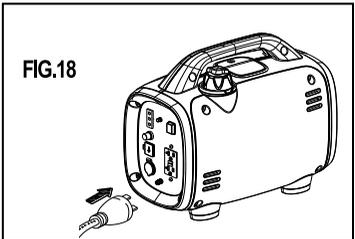
6. Warm up the engine.
 7. Turn the choke lever back to the |  | RUN position. FIG. 17
 8. Warm up the engine without a load for a few minutes.



USING ELECTRIC POWER

1. AC APPLICATION

- (a) Check the AC pilot lamp 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. 18



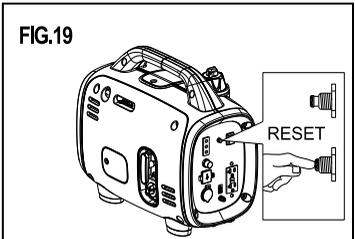
CAUTION: _____

Be sure the electric appliance is turned off before plugging in.

Be sure the total load is within generator rated output.

Be sure the socket load current is within socket 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 submergible pump.



2. OVERLOAD INDICATOR LIGHT

If the load connected to the generator is too large the overload light will indicate overload. To protect the generator the AC circuit breaker will open. The generator will allow overload for 60 seconds and the green LED will flash.

After 60 seconds the green LED will turn red. If the generator is in over temp, the green and red LED will

illuminate. **FIG. 19**

- (a) Disconnect all electric devices.
 (b) Reduce the total power of electric device(s) to acceptable ranges.
 (c) Check for any obstructions around the air inlet, remove any blockage.

CAUTION:

The generator's AC output automatically resets when the engine is stopped and then restarted.

When using electric devices that require a large starting current, such as a compressor or a submergible pump the overload indicator light may come on for a few seconds, this is not a malfunction.

3. DC APPLICATION (option)

This applies to 12V battery charging only.

(a)

Disconnect the leads from the battery.

Loosen the battery fluid filler cap.

Fill distilled water to the upper limit, if the battery fluid is low.

Measure the specific gravity for the battery fluid by using the hydrometer, and calculate the charging time in according with the table shown on right side.

The specific gravity for the fully charged battery should be within

1.26 to 1.28. It is recommended to check every hour. **FIG. 20**

(b) Connect between the DC output socket and the battery terminals using the charging leads. The leads must be connected making sure of the (+) and (-) polarity. **FIG. 21**

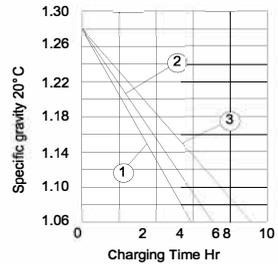
(c) Turn on the DC breaker after confirming AC devices are off.

CAUTION:

Be sure the economy control switch is turned **OFF** while charging the battery.

FIG.20

Aim for specific gravity and charging time



Battery capacity
1. 30AH 20HR
2. 35AH 20HR
3. 47AH 20HR

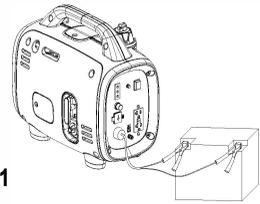


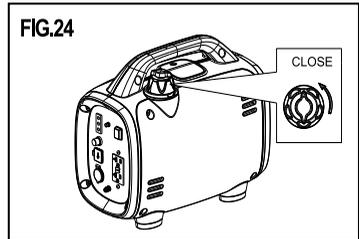
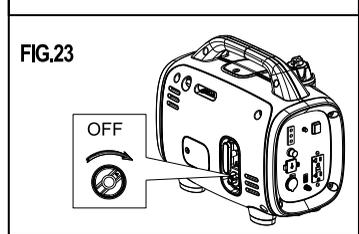
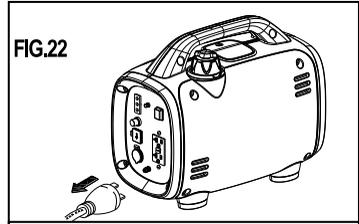
FIG.21

STOPPING THE ENGINE

1. Turn off all electric appliances or disconnect any devices. **FIG. 22**

2. Turn the fuel cock lever to **OFF**. **FIG. 23**

3. Turn the fuel tank cap air vent knob counterclockwise to the **CLOSE** position. **FIG. 24**



PERIODIC MAINTENANCE

MAINTENANCE CHART

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	●				

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

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 counterclockwise to the **CLOSE** position.
2. Loosen the screw and remove the cover. **FIG. 25**
3. Remove the oil filler cap.
4. Place an oil pan under the engine. Tilt the generator to drain the oil completely. **FIG. 26**
5. Place the generator on a level surface.
6. Add engine oil to the upper level. **FIG. 27**
7. Replace the oil filler cap.
8. Replace the cover and tighten the screw
Recommended engine oil: (**see page 17**)

API Service "SJ"

CAUTION:

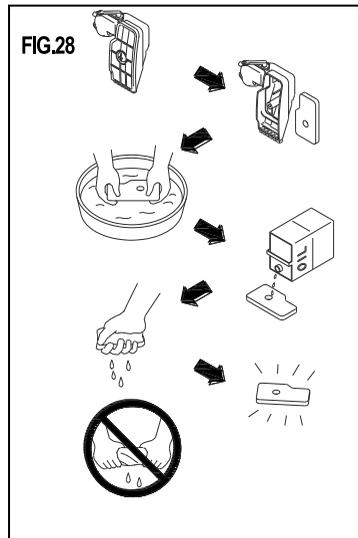
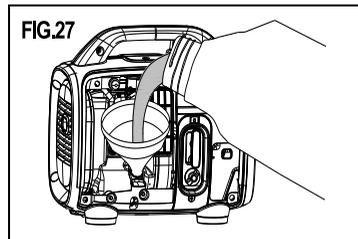
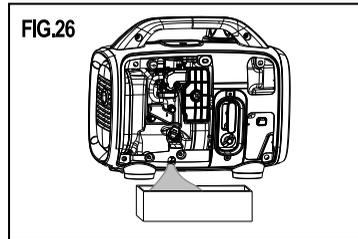
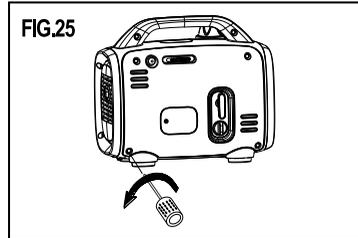
Be sure no foreign material enters the crankcase.

Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine

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 creates a less efficient combustion process. **FIG. 28**

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. Install the cover.

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.
3. Check the spark plug type and gap. **FIG. 29**
4. Replace the spark plug.
5. Replace the cover.

CAUTION: _____

Standard electrode color: Tan Color,
Standard Spark Plug: CMR6A (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. 30**
2. Clean the filter with solvent. If damaged, replace.
3. Wipe the filter and insert it.

WARNING! _____

Be sure the tank cap is tightened securely.

MUFFLER SCREEN

WARNING! _____

The engine and muffler will be very hot if engine has been on.
Avoid touching the engine and muffler while they are still hot with any part of your body or clothing during inspection or repair.

FIG.29

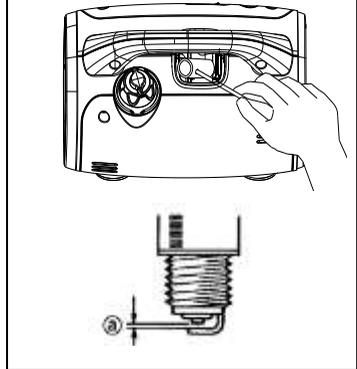


FIG.30

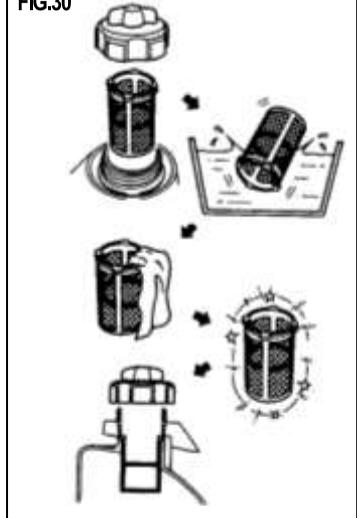
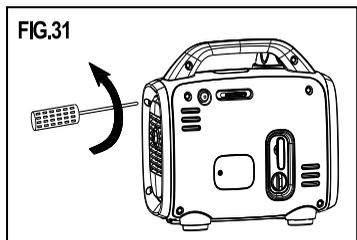
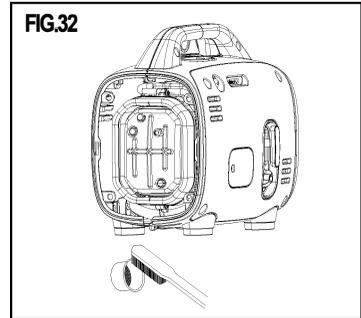


FIG.31



1. Remove the cover. **FIG. 31**
2. Remove the muffler screen.
3. Use the 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. 32**
5. Replace the muffler screen.
6. Replace 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 **OPEN**, fuel cock knob to **ON**.

Clogged fuel line....Clean fuel line.

Clogged carburetor....Clean carburetor.

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

2. Electrical systems

Poor spark

Spark plug dirty with carbon or wet...Remove carbon or wipe spark plug dry.

Faulty ignition system....Consult dealer.

3. Compression insufficient

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

Generator won't produce power

Safety device (AC) to "OFF" ...Stop the engine, then restart.

Safety device (DC) to "OFF" ...Press to reset the DC protector

STORAGE

Long term storage of your generator will require some preventive 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. Use the recoil starter to turn the engine over several times (with ignition off).
3. Pull the recoil starter until you feel compression.
4. Stop pulling.
5. Clean exterior of the generator and apply a rust inhibitor.
6. Store the generator in a dry, well-ventilated place, and cover.
7. The generator must remain in a vertical position.

SPECIFICATION

MODEL		GEN800W120V
GENERATOR	Type	Inverter Generator
	AC Voltage	100V / 110V / 120V
	Frequency	60Hz
	Max. Output	0.80 kW
	Rated Output	0.70 kW
	Power Factor	1.0
	DC Output	12V / 4.0A (option)5V/1A2.1A(option)
ENGINE	Model	XY139F-6
	Type	Air-cooled, 4 cycle, OHV, Gasoline Engine
	Bore × Stroke mm × mm	39 × 33.5
	Displacement	40 cc
	Max. Output	0.9KW / 5500rpm
	Fuel	Unleaded Automobile Gasoline
	Fuel tank Capacity	2.1 liters / .55 Gal
	Rated Continuous Operation	6 Hours at 50% Load
	Lubricating oil	SAE 10W30
	Lubricating oil Capacity	0.25 liter/ 8.54 oz
	Starting System	Recoil Starter
	Ignition system	C.D.I.
	Spark Plug: Type	CMR6A (TORCH)
DIMENSION	Net dimension L×W×H	15.5" × 8.7" × 13.58"
	Overall dimension L×W×H	16.73" × 9.64" × 14.56"
	Net Weight	20.5 lb
	Gross Weight	23.14 lb

Specifications subject to change without prior notice.

WIRING DIAGRAM

