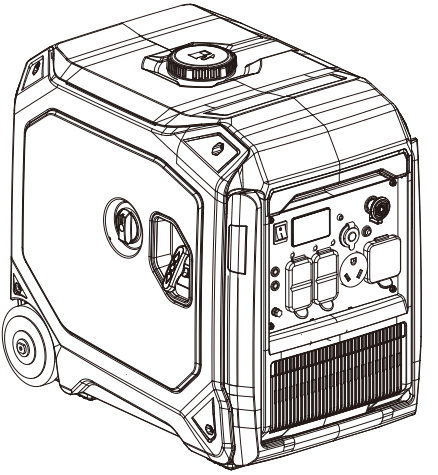
HAHN & SOHN

# GENERATOR

## SILENT INVERTER GASOLINE ENGINE GENERATOR

# Owner's Manual



Thank you for choosing a silent inverter gasoline engine generator set of our company.

This manual contains the information on how to do that. Please read it carefully before operating. Operating safely and correctly can help you get the best results.

All information in this publication is based on the latest product information available at the time of printing. The contents in this manual may be different from the actual parts due to revision and other changes.

Our company reserves the right to make changes at any time without notice and without incurring any obligation. No part of this publication may be reproduced without our company's written permission.

This manual should be considered a permanent part of the generator and should accompany the generator if it is resold.

# SAFETY WARNINGS

■ Personal safety and property safety of you and others are very important. .

■ Please read these messages which is preceded by a symbol ⚠ or **NOTICE** carefully.

> ⚠ **DANGER**
>
> You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

> ⚠ **WARNING**
>
> You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

> ⚠ **CAUTION**
>
> You CAN be HURT if you don't follow instructions.

> **NOTICE**
>
> Your generator or other property could be damaged if you don't follow instructions.

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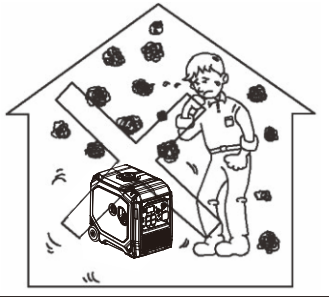
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# 1. SAFETY INFORMATION

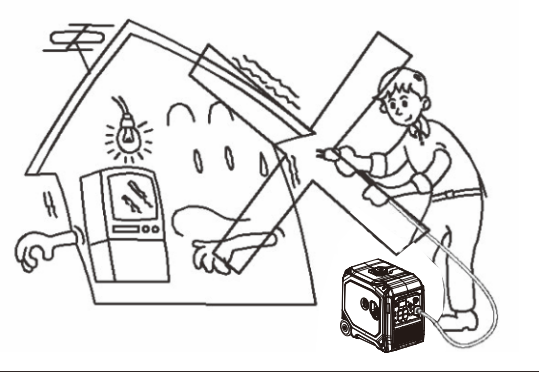
Read and understand this owner's manual before operating your generator. It will help you avoid accidents if you get familiar with your generator's safe operation procedures.



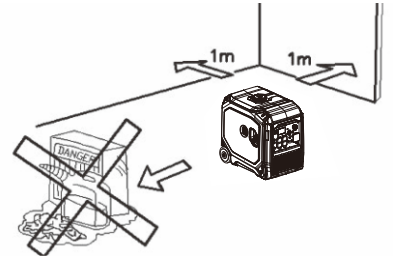
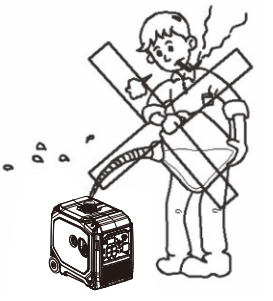
Never use it indoors

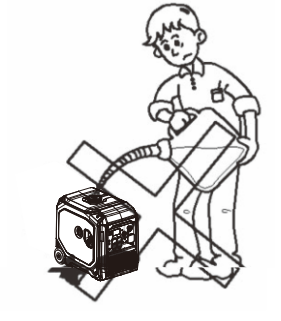


Never use it in a wet condition



Never directly connect it to a home power system

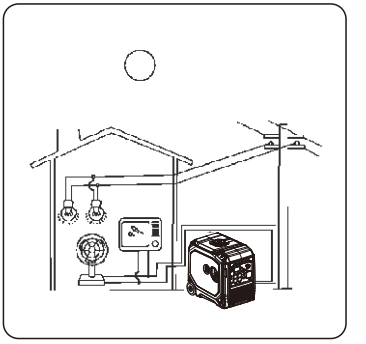
| | |
|---|---|
|  |  |
| Keep it at least 1m away from inflammables | Never smoke when fueling |

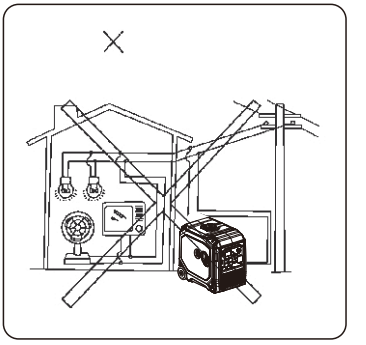
| | |
|---|---|
|  |  |
| Don’t spill when fueling | Stop the engine before fueling |

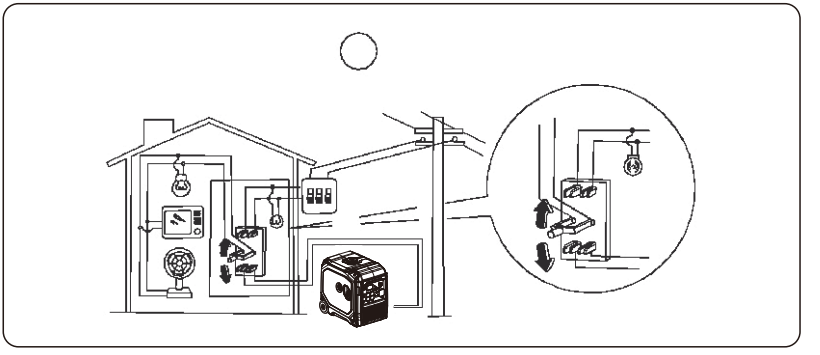
## Connections to a Home Power Supply

NOTICE

- If the generator is to be connected to a home power supply as a standby, connection shall be performed by a professional electrician or by another person with proficient electrical skill.
- When the loads are connected to the generator, please carefully check whether electrical connections are safe and reliable. Any improper connection may cause damage to the generator, or cause a fire.

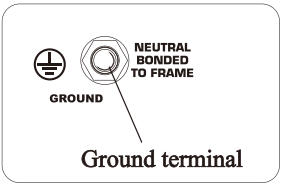






## Generator Ground Circuit

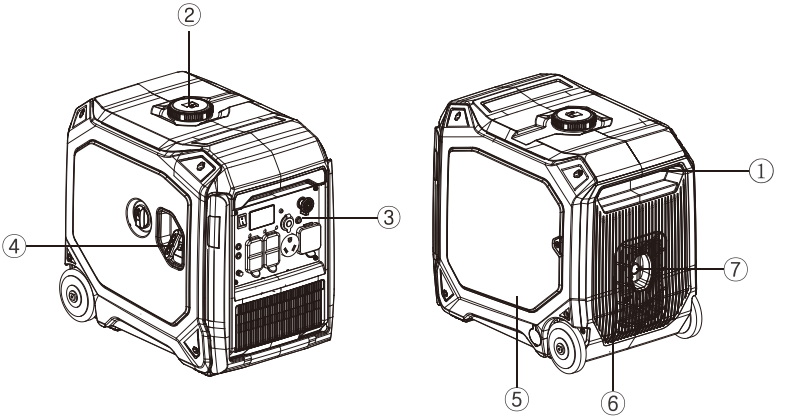
In order to prevent electric shock due to shoddy electrical appliances or wrong use of electricity, the generator must be grounded with a good-quality insulated conductor.




NOTICE

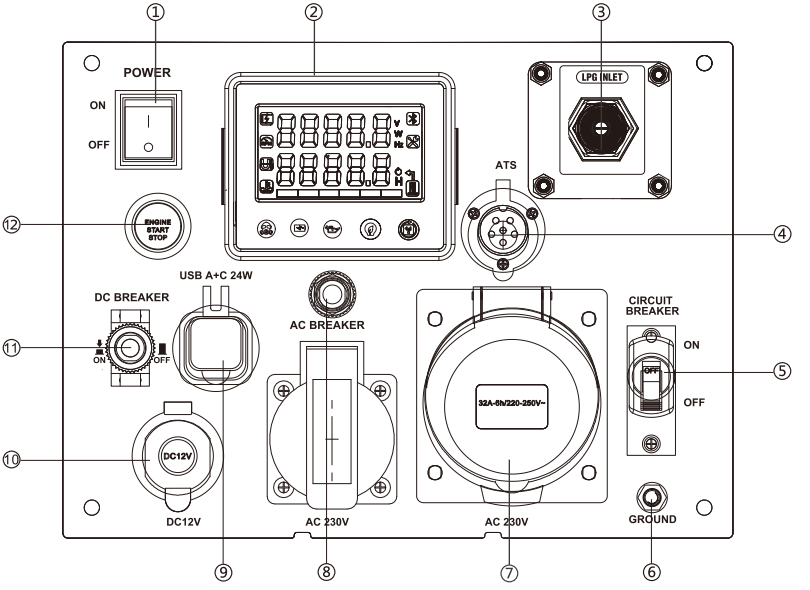
- Make sure the control panel, louver and the inverter bottom side cooling well and without chips, mud and water come in. It may damage the engine, inverter or alternator if the cooling vent blocked.
- Do not mix the generator with other stuff if moving, storing or running the unit.
- It may cause the generator damage or bring property safety issue when the generator in leakage.

## 2. DESCRIPTION




① Carrying handle
② Fuel tank cap
③ Control panel
④ Recoil starter
⑤ Oil filler cap
⑥ Louver
⑦ Muffler

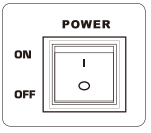
## 2.2 Control panel




① Power switch
② Digital panel meter
③ Inlet Connection
④ ATS
⑤ Circuit breaker
⑥ Ground (earth) terminal
⑦ AC receptacle
⑧ AC Breaker
⑨ USB
⑩ DC output
⑪ DC breaker
⑫ Easy start engine switch

# 3. CONTROL FUNCTION

### 3.1 Power off-on switch

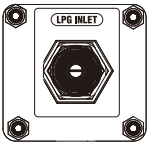



The power on-off switch① should be turned to “ON” before starting the unit.

The power on-off switch① is the master switch of the generator. Any operation to the unit is ineffective if the switch① is turned to “OFF”.

Tip:
The Power on-off switch can be used as an emergency shutdown switch if needed.

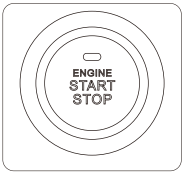
### 3.2 Inlet Connection




**⚠CAUTION**

For fuel selection, the generator will use LPG when the LPG hose is connected and gasoline when the hose is not connected.

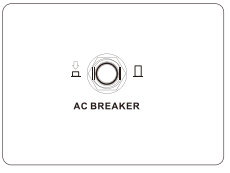
### 3.3 Electric start/ stop button




Press the engine switch to start the engine. Press the engine switch again to stop the engine.

### 3.4 AC breaker

The AC breakersare protectors of the generator.



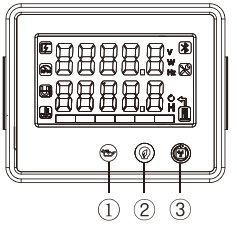

Turn on all the breakers before connecting any electric device to the generator. The protectors turn to “OFF” automatically when electric device being connected to the generator is operating and current above the rated flows. To use this equipment again, turn on all the protectors to “ON”.

If any breaker turn to “OFF” automatically, be sure to check the load condition before turn it to “ON”.

**⚠CAUTION**

Reduce the load of the connected electric device below the specified rated output of the generator if the protector turns off. If the protector turns off again, stop using the device immediately and consult our company authorized dealer.

### 3.5 Digital panel meter




① Oil warning light
② ECO control
③ Running light & reset button

### 1.ECO control

When you press the ECO control①, activate the ECO mode, the unit controls the engine speed according to the connected load. The results are better fuel consumption and less noise.

When the ECO mode is turned to "OFF", the engine runs at the rated speed regard-less of whether is a load connected or not.

Tip:

The ECO mode should not be used when using electric devices that require a large current, such as a compressor of a submergible pump.

### 2.Oil warning light (red)

When the oil level falls below the lower level, the oil warning light② 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 "ON" and then pull the recoil starter. If the oil warning light flickers for a few seconds, the engine oil is insufficient. Add oil and restart.

### 3.Running light & reset button

The running light③ comes on (green) when the engine starts and produces power.

The running light③ turns red when an overload of a connected electrical device is detected the inverter control unit over heats, 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 running light③ turns to red and power generation stops, but the engine will not stop running. Press the reset button and the generator will be reset to within rated output, the light will turn green.

If the reset button does not work, please proceed as follows:

1. Turn off any connected electric devices and stop the engine (push the electric start/ stop switch to 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

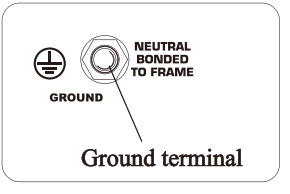
4. After checking, restart the engine.

### 4.Meter display switching

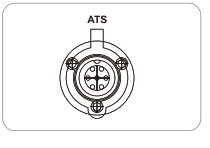
The multimeter can show the voltage, power, hours run, running hours and oil lever. Press the button④ to cycle the information.

### 3.6 Ground (Earth) terminal

Ground (Earth) terminal connects the earth line for prevention of electric shock. When the electric device is earthed, always the generator must be earthed.




### 3.7 ATS Switch/Control interface




1.Before using the ATS function, set the ATS switch to the "ON" position.

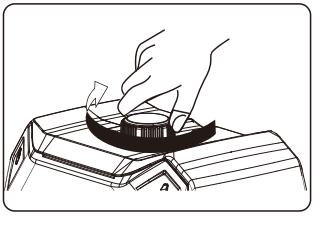
2.Connect to the ATS control box via wire harness to control generator startup and shutdown.

# 4. PREPARATION

## 4.1 Fuel

**⚠DANGER**

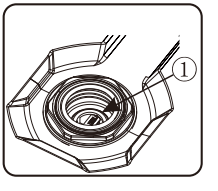
- Fuel is highly flammable and poisonous. Check "SAFETY INFORMATION" carefully before filling.
- Do not overfill the fuel tank, otherwise it may overflow when the fuel warms up and expands.
- After fill the fuel, make sure the fuel tank cap is tightened securely.



**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.

Remove the fuel tank cap and fill the fuel into the tank up to the red level ①.




Recommended fuel: Unleaded gasoline

Fuel tank capacity:

Total: 12.5L

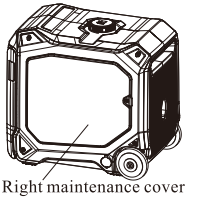
- When the fuel filter screen is not marked, the volume of the oil level distance from the lip of the oil tank at the 25.4mm of the oil tank is nominal;
- When the fuel filter is marked, the volume of the fuel is added to the mark.

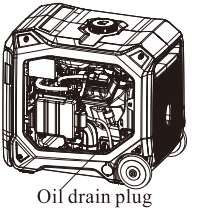
## 4.2 Engine oil

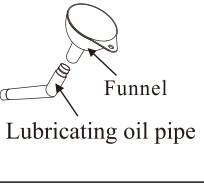
**NOTICE**

The generator has been shipped without engine oil. Do not start the engine till fill with the sufficient engine oil.

1. Place the generator on a level surface.
2. Screw the knobs① on the right maintenance cover to remove the cover.
3. Screw out the oil drain plug, then screw-in sealing plug into the pouring orifice, and use the funnel to add the specified amount of oil.
4. Screw the oil filler cap, install the maintenance cover and screw the knobs① back.




Recommended engine oil: SAE SJ 15W-40

Recommended engine oil grade: API Service SE type or higher

Engine oil quantity: 0.65 L

## 4.3 PRE-OPERATION CHECK

WARNING

- 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 unused.

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

**Pre-operation check**

**Fuel (See page 14)**

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

**Engine oil (See page 15)**

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

**The point where abnormality was recognized by use**

- Check operation.
- If necessary, add recommended oil to specified level.
- If necessary, consult our company authorized dealer.

# 5. 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·

**NOTICE**

- The generator has been shipped without engine oil. Do not start the engine till fill with the sufficient engine oil.
- Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.

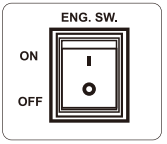
**TIP**:

- The generator can be used with the rated output load at standard a tmospheric conditions.
- "Standard atmospheric conditions"
- Ambient temperature 25℃
- Barometric pressure 100kPa
- Relative humidity 30%
- The output of the generator varies due to change temperature, altitude (lower air pressure at higher altitude) and humidity.
- The output of the generator is reduced when the temperature, the humidity and the altitude are higher than standard atmospheric conditions.
- Additionally, the load must be reduced when using in a confined areas, as generator cooling is affected.

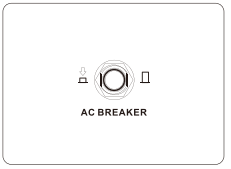
## 5.1 Starting the engine

Before any operation to the unit, make sure that the fuel and oil are filled. If the electric is earthed, please make sure the generator is also earthed before starting the engine.

1.Turn on the power switch ①

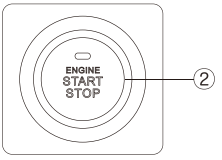



2.Turn on all the breakers




3.Start the engine, there are two options to start the engine:

a. Press the electric engine start/ stop button ②

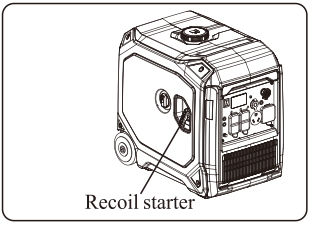



b. Press the remote control to start

If the engine can not be started by the button, try to start the engine by recoil starter:

Step 1: Screw the knobs on the right maintenance cover to remove the cover.

Step 2: Pull the recoil starter slowly until it is engaged, then pull it briskly.




**TIP:** Grasp the carrying handle firmly to prevent the generator from falling over when pulling the recoil starter.

When running with gasoline, please place the rubber plug on the air intake.

## 5.2 Stopping the engine

**TIP**：Turn off any electric devices.

1. Turn the ESC to “OFF”.
2. Disconnect any electric devices.
3. Turn the switch knob to “OFF”.
   a. Ignition circuit is switched off.
   b. Fuel is switched off.

## 5.3 Alternating Current (AC) connection

- 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 earthed, always the generator must be earthed.

1. Start the engine.
2. Turn the ESC to “ON”.
3. Plug in to AC receptacle.
4. Make sure the AC pilot light is on.
5. Turn on any electric devices.

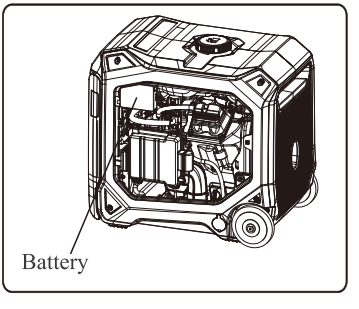
TIP: The ESC must be turned to “OFF” to increase engine speed to rated rpm.

If the generator is connected to multiple loads or electricity consumers, please remember to first connect the one with the highest starting current. and last connect the one with the lowest starting current.

## 5.4 Battery Charging

**TIP:**

- The generator DC rated voltage is 12V.
- Please connect the negative (-) pole of battery firstly, then start the generator, battery can be charged by itself.



## 5.5 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<br>(Efficiency 0.85) |
| Rated output power | ⩽5,000W<br>⩽4,400W | ⩽4,000W<br>⩽3,520W | ⩽1,700W<br>⩽1,496W |

**TIP:**

- Application wattage indicates when each device is used by itself.
- The simultaneous usage of AC and DC power is possible but total wattage should not exceed the rated output.

**EX:**

| Generator rated output | | 5.0kW(GAS)4.4(LPG) |
|---|---|---|
| Frequency | Power factor | - |
| AC | 1.0 | ⩽5,000W<br>⩽4,400W |
| DC | --- | (12V/8.3A) |

- The overload indicator light comes on when total wattage exceeds the application range.

**NOTICE**

- Do not overload. The total load of all electrical appliances appliance must not exceed the supply range of the generator. Overloading will damage 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 form 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 manufacturer, a medical professional or hospital.
- Some electrical appliances or general-purpose electric motors have High starting currents, and cannot therefore be used, even if they lie within the supply ranges given in the above table. Consult the equipment manufacturer for further advice.

# 6. MAINTENANCE

The engine must be properly maintained to ensure its operation be safe, economy and trouble-free, as well as eco-friendly.

In order to keep your gasoline engine in good working condition, it must be periodically serviced. The following maintenance schedule and routine inspection procedures must be carefully followed:

| Items \ Frequency | | Each time | First 1 month or first 20hrs of operation | Thereafter, every 3 months or every 50hrs of operation | Every year or every 100 hrs of operation |
|---|---|---|---|---|---|
| Engine oil | Check-Refill | √ | | | |
| | Replace | | √ | √ | |
| Reduction gear oil(if equipped) | Oil level check | √ | | | |
| | Replace | | √ | √ | |
| Air filter element | Check | √ | | | |
| | Clean | | √ | | |
| | Replace | | | √ | |
| Deposit Cup ( if equipped) | Clean | | | | √ |
| Spark Plug | Check-adjust | | | | √ |
| | Replace | Every year or 250 hrs of operation | | | |
| Spark arrester | Clean | | | √ | |
| Idling ( if equipped)* | Check-adjust | | | | √ |
| Valve clearan -ce * | Check-adjust | | | | √ |
| Fuel tank & fuel filter * | Clean | | | | √ |
| Fuel line | Check | Every 2 years( change if necessary) | | | |
| Cylinder head, piston | Clean up carb -on * | ＜225cc, Every 125hrs<br>≧225cc, Every 250hrs | | | |

* These items should be maintained and repaired by our authorized dealer, unless the owner has appropriate tools and is proficient with mechanical maintenance.

NOTICE

- If the gasoline engine frequently works under high temperature or heavy load, change the oil every 25 hours.
- If the engine frequently work under dusty or other severe circumstances, clean the air filter element every 10 hours; If necessary, change the air filter element every 25 hours.
- The maintenance period and the exact time (hour), the one which comes first should govern.
- If you have missed the scheduled time to maintain your engine, do it as soon as possible.

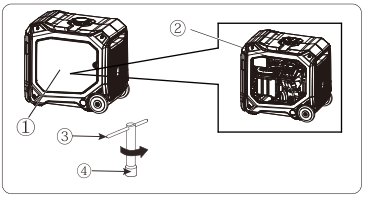
⚠WARNIN

**Stop the engine before servicing. Put the engine on a level surface and remove the spark plug cap to prevent the engine from starting. Do not operate the engine in a poorly ventilated room or other enclosed area. Be sure to keep good ventilation in working area. The exhaust from the engine may contain poisonous CO, inhalation can cause shock, unconsciousness and even death.**

## 6.1 Spark plug inspection

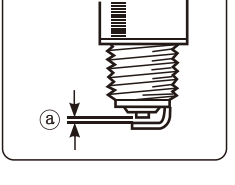
The spark plug is important engine components, which should be checked periodically.

1. Remove the cover ① and the spark plug cap ②, and Insert the tool ④ through the hole from the outside of the cover.




2. Insert the handlebar ③ into the tool ④ and turn it counterclockwise to remove the spark plug.

3. 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.




4. Check the spark plug type and gap.

| |
|---|
| Standard Spark Plug: F6RTC<br>Spark Plug Gap: 0.7-0.8mm |

**TIP:** The spark plug gap should be measured with a wire thickness gauge and, If necessary, adjusted to specification.

5. Install the spark plug.

| |
|---|
| Spark Plug Torque: 22 N.m |

**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.

6. Install the spark plug cap and spark plug cover.

## 6.2 Carburetor adjustment

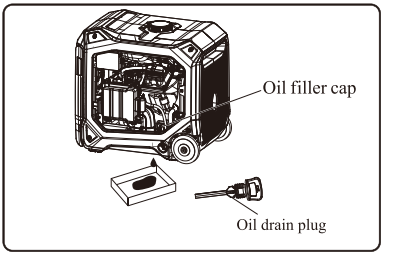
The carburetor is a vital part of the engine. Adjusting should be left to our company authorized dealer with the professional knowledge, specialized date, and equipment to do so properly.

## 6.3 Engine oil replacement (refer to 4.2)

**⚠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 and turn the fuel switch knob, fuel tank cap air vent knob to “OFF”.
2. Remove the screws and then remove the cover .
3. Remove the oil filler cap . (See page 15)
4. Place an oil pan under the engine. Tilt the generator to drain the oil completely.
5. Replace the engine oil on a level surface.




**NOTICE**

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

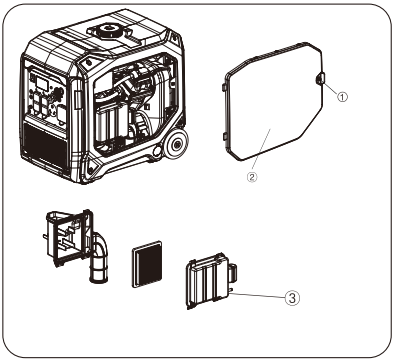
NOTICE

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

8. Install the oil filler cap.
9. Install the cover and tighten the screws.

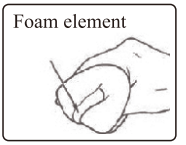
### 6.4 Air filter

1. Remove the screws ①, and then remove the cover ②.
2. Remove the air filter case cover③.




3. Remove the paper filter or foam filter.
4. Paper filter :Slap the filter or using air gun to blow from the inside out until all impurities fall off;Do not use brushes; Foam filter:Using retardant detergent to clean, after the filter completely dry, apply a little new oil until it penetrates the filter,then squeeze out excess oil.

The foam element should be wet but not dripping.




NOTICE

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

5. Insert the paper filter or foam filter. into the air filter case.

**TIP:** Be sure the foam element sealing surface matcher the air filter so there is no air leak.

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

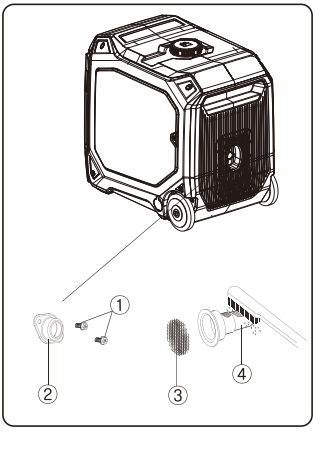
6. Install the air filter case cover in its original position and tighten the screw.
7. Install the cover and lock it.

## 6.5 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,
2. Remove the muffler cap ②, the muffler screen ③ and spark arrester ④.
3. Clean 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 muffler screen and spark arrester.**

4. Check the muffler screen and spark arrester. Replace them if damaged.
5. Install the spark arrester.

TIP: Align the spark arrester projection with the hole in the muffler pipe.

6. Install the muffler screen and the muffler cap.
7. Install the cover and tighten the screws.

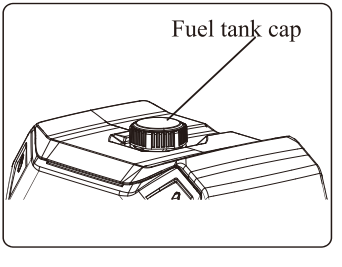
## 6.6 Fuel tank filter

**WARNING**

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

1. Remove the fuel tank cap and filter.
2. Clean the filter with gasoline.
3. Wipe the filter and install it.
4. Install the fuel tank cap.

**Be sure the fuel tank cap is tightened securely.**



# 7. STORAGE

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

## 7.1 Drain the fuel

1. Turn the switch knob to “OFF”.
2. Remove the fuel tank cap, remove the filter . Extract the fuel from the fuel tank into an approved gasoline container. Then, install the fuel tank cap.

**⚠WARNING**

**Fuel is highly flammable and poisonous. Check “SAFETY INFORMATION” (See page 4) carefully.**

**NOTICE**

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

3. Start the engine ( See Page 18 ) and leave it run until it stops. The engine stops in approx. 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.

4. Remove the screws, and then remove the cover.
5. Drain the fuel from the carburetor by loosening the drain screw on the carburetor float chamber.
6. Turn the 3 in 1 switch to “OFF”.
7. Tighten the drain screw.
8. Install the cover and tighten the screws.
9. Turn the fuel tank cap air vent knob to “OFF” after the engine has completely cools down.

## 7.2 Engine

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

1. Remove the spark plug, pour about one table- spoon of SAE 10W-30 into the spark plug hole and reinstall the spark plug. Recoil start the engine by turning over several times to coat the cylinder walls with oil.

2. Pull the recoil starter until you feel compression. Then stop pulling. (This prevents the cylinder and valves from rusting).

3. Clean exterior of the generator. Store the generator in a dry, well-wentilated place, with the cover placed over it.

# 8. TROUBLE SHOOTING

## 8.1 Engine won't start

### 1. Fuel systems

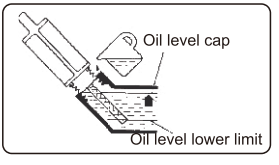
No fuel supplied to combustion chamber.

○ No fuel in tank…Supply fuel.

○ Fuel in tank….Fuel tank cap air vent knob and fuel cock knob to "ON"

○ Clogged fuel filter …. Clean fuel filter.

○ Clogged carburetor…. Clean carburetor.




### 2. Engine oil system

Insufficient

○ Oil level is low…. Add engine oil.

### 3. Electrical systems

○ Put the 1 in 3 switch to "CHOKE" and pull the recoil starter … Poor spark.

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

○ Faulty ignition system … consult our company authorized dealer.

## 8.2 Generator won't produce power

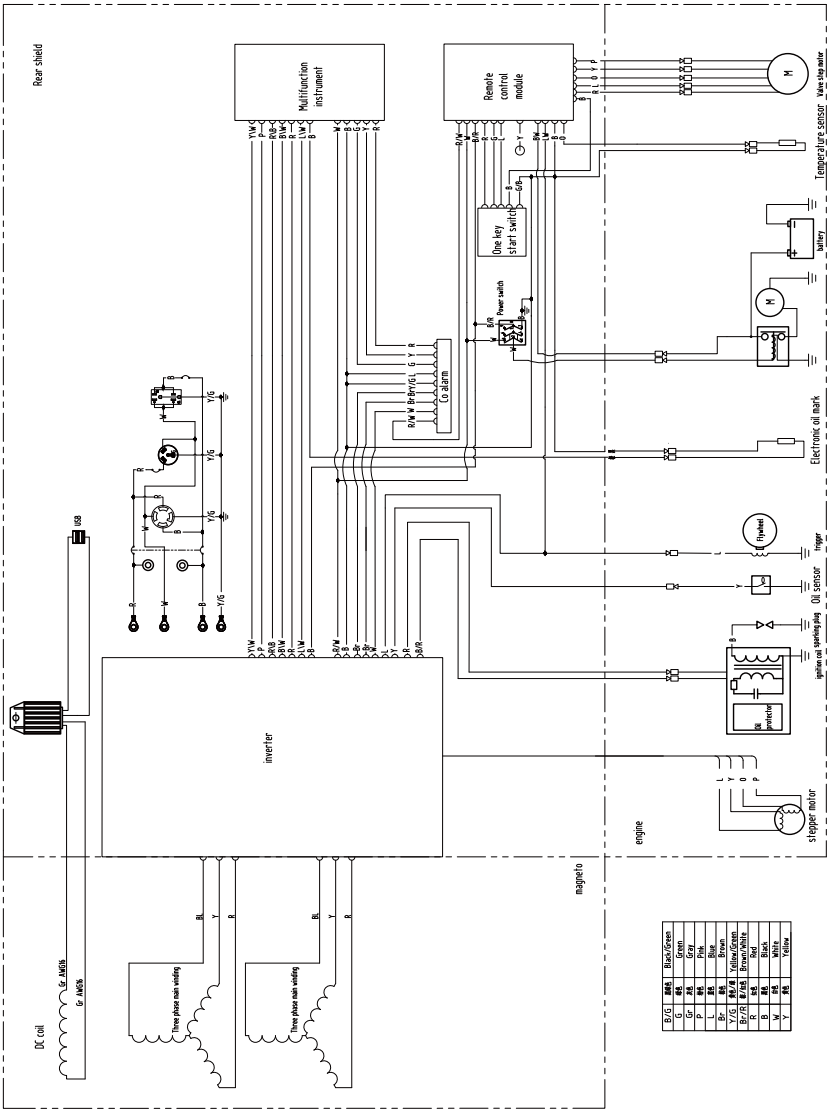
○ Safety device (DC protector) to "OFF"…. Press the DC protector to "ON".

○ The AC pilot light (Green) go off …. Stop the engine, then restart.

# 9. SPECIFICATIONS

| Model No. | | 5kw | |
|---|---|---|---|
| Generator | Type | Silent Inverter | |
| | Rated frequency (Hz) | 50 | |
| | Rated voltage (V) | 230 | |
| | Rated output power (kW) | 5.0(GAS)4.4(LPG) | |
| | Maximum output power(kW) | 5.5(GAS)5(LPG) | |
| | Power factor | 1 | |
| | AC output quality | ISO8528 G2 | |
| | Charging Voltage (DC) (V) | 14.5 | |
| | Charging Current (DC) (A) | 1 | |
| | Overload Protect (DC) | Non-fuse Protector | |
| | Guaranteed sound power level | 96dB(A) | |
| Engine | Engine | R225D-Vi2 | |
| | Engine type | Single cylinder, 4-Stroke, forced air cooling, OHV | |
| | Displacement (cc) | 224 | |
| | Fuel type | Unleaded Gasoline 、LPG | |
| | Fuel tank capacity (L) | 12.5 | |
| | Oil Capacity (L) | 0.65 | |
| | Spark Model No. | F6RTC | |
| | Starting mode | Recoil | Electric |
| Generator set | Length×Width×Height (mm) | 592×405×560 | |
| | Net weight (kg) | 46 | |

# 10. WIRING DIAGRAM




| B/G | AWG | Black/Green |
|---|---|---|
| L | #16 | Blue |
| Gr | #16 | Gray |
| P | #16 | Pink |
| L | #16 | Blue |
| Br | #16 | Brown |
| Y/G | #16/#18 | Yellow/Green |
| Br/R | #16/#18 | Brown/White |
| R | #16 | Red |
| B | #16 | Black |
| W | #16 | White |
| Y | #16 | Yellow |

# 11 HOW TO CONNECT THE BATTERY

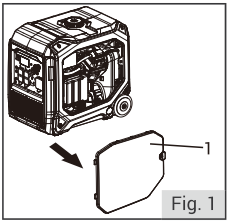


Fig. 1

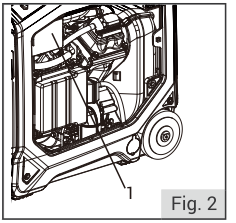


Fig. 2

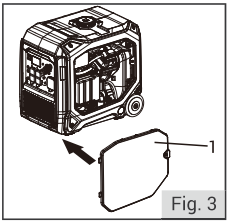


Fig. 3

**TO CONNECT THE BATTERY:**
1. Remove the cover (Fig. 1 - 1).

2. Connect the black cable onto the battery's negative terminal (Fig. 2 - 1).

**NOTE:** The generator's positive terminal has already been connected. Double check that the positive terminal's connection is secure.

3. Reinstall the cover (Fig. 3 - 1).

**IMPORTANT:** If you do not plan to use the generator for an extended period of time, we recommend DISCONNECTING the negative battery cable from the battery. This will protect the battery from losing its charge. After disconnecting the negative cable, cover the free end of the cable with an insulator such as electrical tape. Alternatively, you can use a trickle charger (not included) to maintain battery charge.

# 12. SELECT THE FUEL

## NOTICE

**Do not route the LPG (propane/gasoline mixture) hose into the path of the generator's exhaust pipe, especially while the engine is running.**

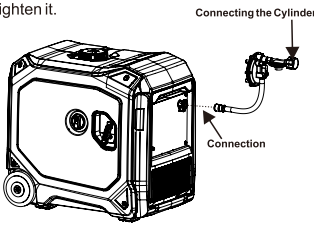
### Connecting an LPG Cylinder.

1. Connect the supplied LPG hose assembly to the outlet valve of the cylinder and tighten it.

2. Remove the rubber protective cap from the LPG inlet connector on the panel.

3. Insert the hose connector into the quick-connect fitting and push it in until you hear a "click" and the outer collar of the quick-connect fitting moves forward.

4. Perform a leak test by wetting all connections with a soapy water solution: If bubbles appear or increase, it indicates a leak. If there is a leak at a connection, close the cylinder valve and tighten the connection; open the valve again and repeat the soapy water leak test. If the leak persists, or if the leak does not originate from the connections, do not use the generator and contact customer service.




**TIP: As soon as the LPG hose is plugged in, the generator will only run on LPG, regardless of whether there is fuel in the gasoline tank.**

## ⚠ WARNING

- The LPG hose included with this machine is designed for use with standard 20, 30, and 40 lb LPG cylinders.
- Ensure that the requalification date of the cylinder has not expired.
- Always position the LPG cylinder so that the connection between the cylinder valve, the generator inlet, and the hose is free of kinks and folds.
- Do not let children handle or play with an LPG cylinder or the hose connections.
- Use approved LPG cylinders equipped with an overfill prevention valve. Always keep the cylinder in an upright position, with the valve pointing up, and placed on a flat surface at ground level. Cylinders must not be placed near any heat source and must not be exposed to sunlight, rain, or dust. When transporting or storing, close the cylinder valve and the generator's LPG valve, then disconnect the cylinder. Connect the outlet, usually protected by a plastic cap, if applicable. Keep cylinders away from any heat source and in a well-ventilated area when installed in a vehicle.
- If LPG emits a strong odor: Close the cylinder valve. Perform a leak test on the connections by wetting them with a soap and water solution. The appearance or growth of bubbles indicates the presence of a leak. Do not smoke, light a cigarette, or perform a leak test with a match, open flame, or lighter. Contact a qualified technician to inspect or repair the LPG system if a leak is detected before using the generator.