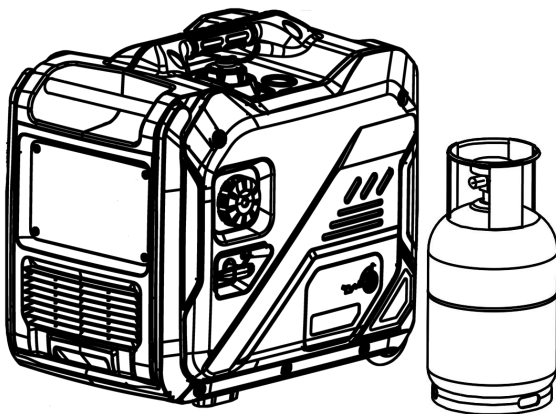




INVERTER GENERATOR Owner's Manual



Thank you for buying our inverter generator.

- The copyright of this specification belongs to our company.
- Any contents of the manual shall not be copied without the written permission of the company.
- The company reserves the right of modification of product and revision of the manual without any notice.
- This book is an integral part of generators and should be incidental to the sale of generators.
- This manual includes instructions for the operation and maintenance of this generator. Please read the instructions carefully before using, otherwise the wrong operation may lead to a safety hazard or equipment damage. Proper and safe operation will extend the service life of this generator.
- The company will continue to innovate and improve the design and quality of products.
- All the contents of this book are in line with the latest products at the time of printing this book.
- If you encounter any issue with this generator, please consult the after-sales service department of the company.



WARNING

Please follow the operation of this manual to ensure the inverter generator is safe and reliable. Be sure to read the manual before using, or the incorrect operation will lead to safety risks or equipment damage.

* The manual may differ according to the size and specs of the generator.

SAFETY WARNING

You and other people's personal and property safety is very important. Please read carefully about the safety warnings which are in the manual or on the stickers.

Safety warnings can tell you the dangers that may hurt you or others. Safety warnings including : “danger”, “warning”, “notice”


The details are as follow.



You may get very serious injures or risk your life if you don't follow the instruction in this manual.

Your generator or other property may get damage if you don't follow the instructions in this manual.

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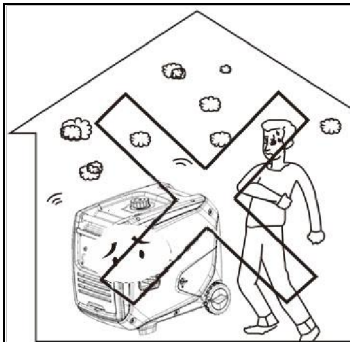
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1. SAFETY INFORMATION

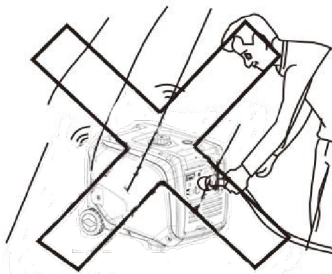
a. Safety specification

Please read and understand this manual well before operating.

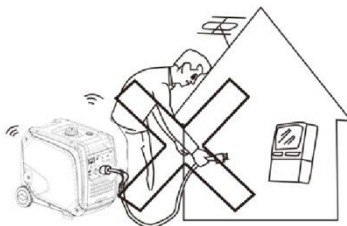
Familiarize yourself with the safe operating procedures of generators as this can help avoid accidents.



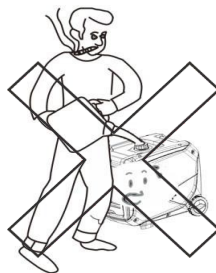
Do not use indoors



Do not use in damp environment.



DO NOT Connect directly into wall socket



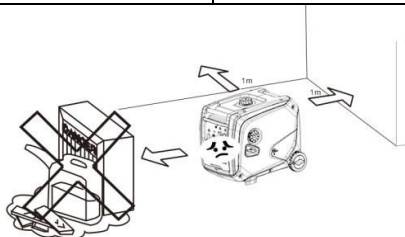
Do not smoke while fuelling



Do not spill fuel while filling.



Do not re-fuel while generator is running.

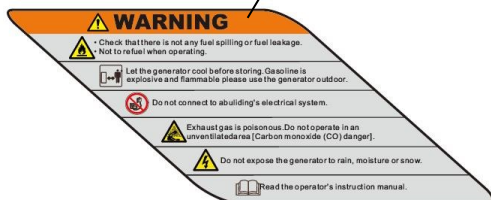
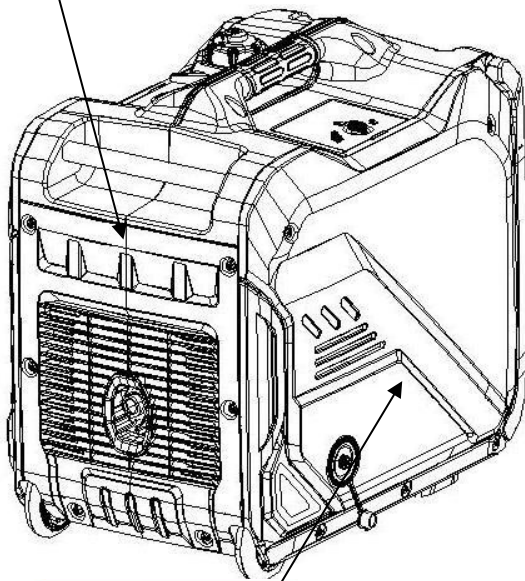


Move all combustible materials away from generator at least 6.5ft. while in use.

b. Special Requirements

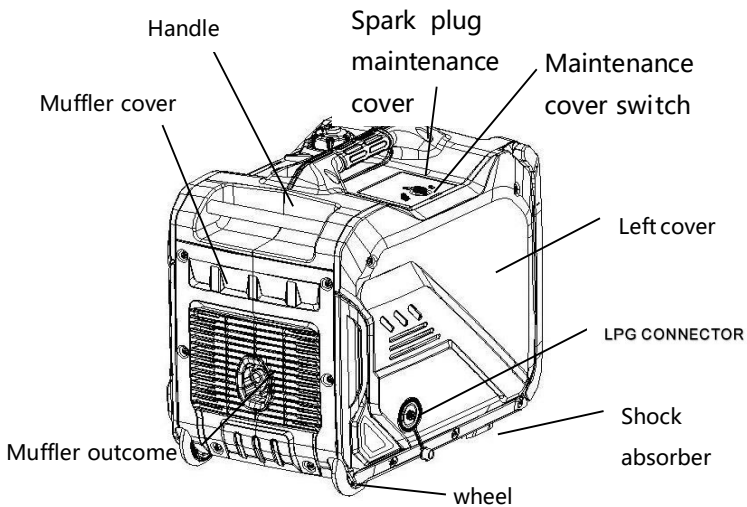
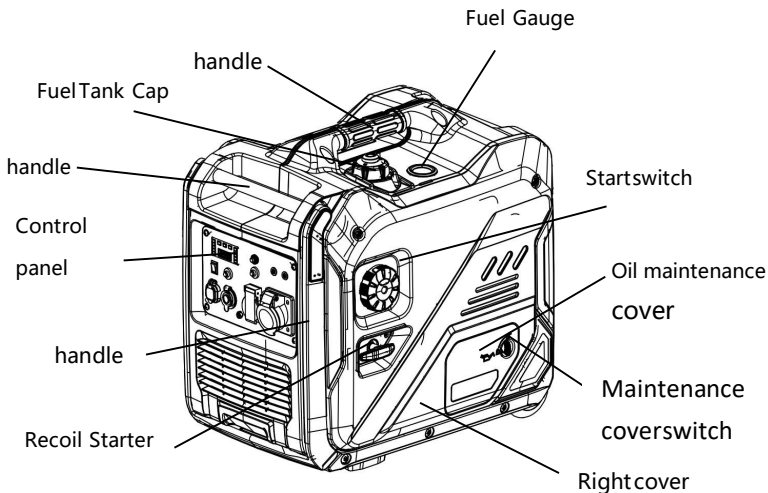
- Electrical equipment including wires and plugs should have NO exposed wires.
- Protective circuit-breaker equipment should match the generator equipment. As for a replacement, you should apply the same parameters, perform circuit breaker replacement.
- Ground the generator before use
- You should meet the following requirements if you want to use an extension cord: 40mm² thickness cable that is less than 100m.

2. SECURITY WARNING STICKERS



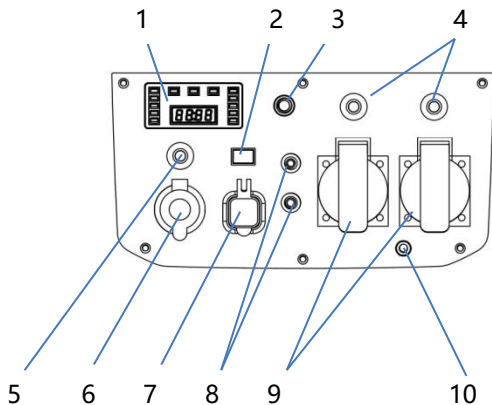
3. COMPONENTS IDENTIFICATION

a. Components Feature



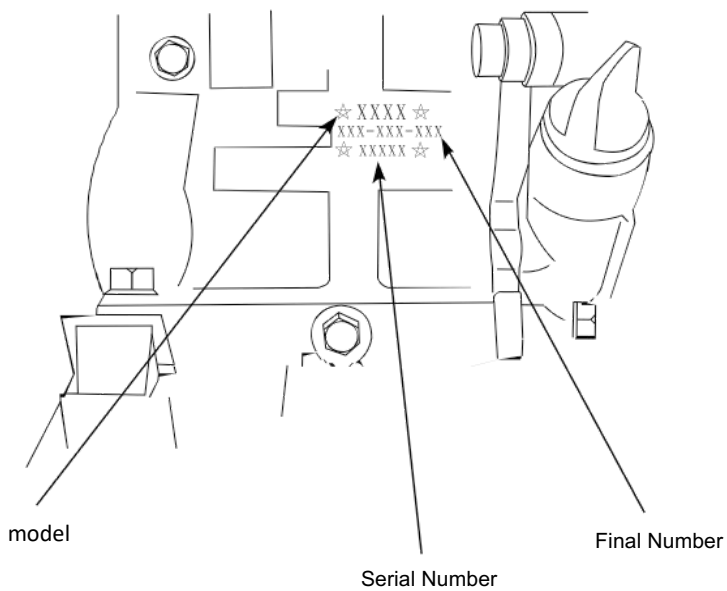
b. Control panel

(Depending on the configuration, the factory will make the appropriate adjustments, those changes are without separate notice.)



1	Display panel	6	DC socket
2	ESC switch	7	USB socket
3	AC reset	8	Parallel socket
4	AC breaker	9	AC socket
5	DC breaker	10	Ground terminal

c. Model and serial number



4. CONTROL SYSTEM

a. Gasoline, LPG switch system

Dual fuel series models have the function of automatic switching between LPG and gasoline. When both LPG and gasoline are supplied, the system gives priority to the use of LPG. When the LPG is used up or manually intervenes to shut down the LPG supply, the system detects that the air pressure is too low to meet the LPG supply of the generator, and then it will automatically switch to the use of gasoline. When LPG is switched on during gasoline use, the system switches to LPG and cuts off gasoline supply.



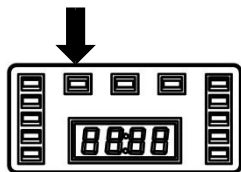
When the LPG pressure is insufficient, there may be multiple cycles of fuel switching. At this time, it is

recommended that the operator turn off the LPG source to avoid the decline of power output quality caused by multiple switching of the generator.

When LPG is used as the fuel, the external fuel pipes and gas bottle of the generator set must be effectively tightened. After tightening, turn on the LPG source to check for leakage again.

b. Oil alarm system (yellow)

The engine oil protection system will stop the engine automatically if the oil is insufficient and the oil indicator will turn on. Check the oil level and re-fill it if necessary then restart again.



If the engine oil indicator flashes for few seconds, it means the oil capacity is insufficient. Refill the oil and restart the engine. 0.7L of oil is required for this unit.

c. Overload Indicator (Red)

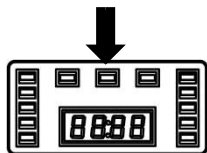
When the overload indicator is on, your generator has been overloaded, at this time the AC overload protector will turn on and stop the generator to protect it.

The running indicator(green) will shut off, and the overload indicator(red) will turn on, but the engine won't shut down.

While the overload light is on, and the generator has no output power, please take following measures:

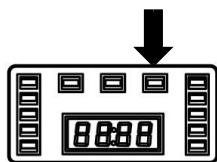
1. Remove the connected equipment and stop the engine.
2. Reduce the total power rate of connected electrical equipment within the rated output range.
3. Check the cool air inlet to see if it is blocked or other relevant control parts are abnormal. If there are any, fix it immediately.
4. Restart the engine after checking.

NOTE: When using the electrical equipment with high starting current (like compressor and sinking pump), the overload indicating light may flash for few seconds; but this does not belong to the issues as previously mentioned.



d. The AC indicator light (green)

The AC indicator light is on when the engine starts and outputs normally



e. Energy-Saving Switch

- "ON"

When the switch is in the "ON" position, the energy-saving device controls the engine speed according to the load it is connected to, resulting in better fuel consumption and low noise.

- “OFF”

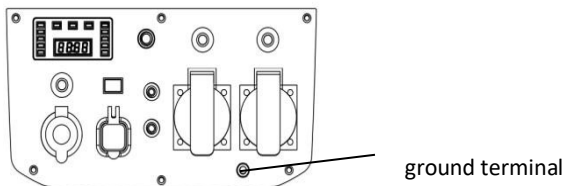
When the energy-saving switch is in the "OFF" position, the engine runs at rated speed (4800r/min) regardless of whether the load is connected.



Tips: When using a sinking pump, such as an air compressor, the ESC must be turned off because it requires a high starting current.

f. Earthing Terminal

The earthing terminal is connected to the ground wire to prevent electric shock. When electrical equipment is grounded, the generator must be grounded.

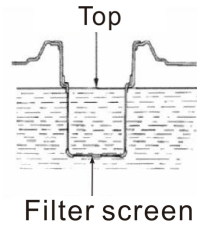
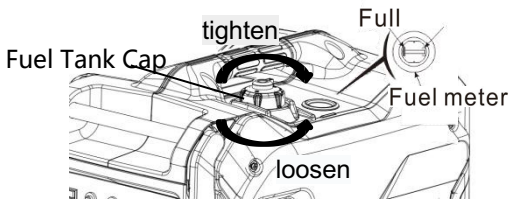


5. PREPARATIONS

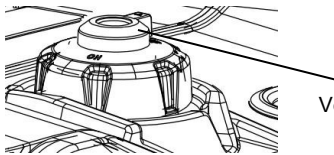
a. Gasoline、LPG



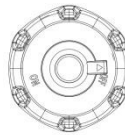
- Fuel is flammable and toxic. Please read the safety instructions carefully before refuelling (see page 6 for details).
- Do not fill the oil too full, or the oil will spill when the fuel tank warms up.
- After refuelling, confirm that the fuel tank cap has been tightened (when there is a “clicking” sound).



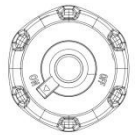
- Starting the engine, the tank cap ventilation switch should be rotated to the "ON" position so that the tank and the atmosphere are communicated. On transportation of the generator, the tank cap ventilation switch should be rotated to the "OFF" position to avoid fuel leakage.



Ventilation Switch

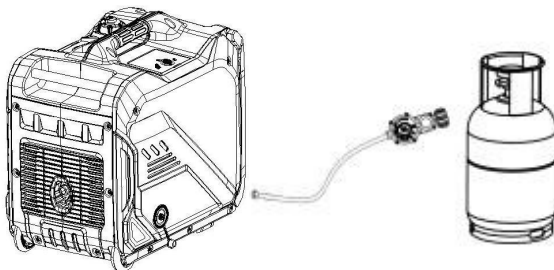


OFF Position



ON Position

- Before connecting the LPG, ensure that the gas pipe connector is reliably connected. In case of gas leakage, pipeline damage, etc., immediately shut down the gas source and conduct maintenance.



⚠ WARNING

- After refuelling, wipe the residual gasoline with a clean, soft cloth to avoid damaging the plastic shell.
- Only use unleaded gasoline, because leaded gasoline can seriously damage the engine's internal parts.

Recommended fuel: unleaded gasoline (Fuel tank capacity: 11L)

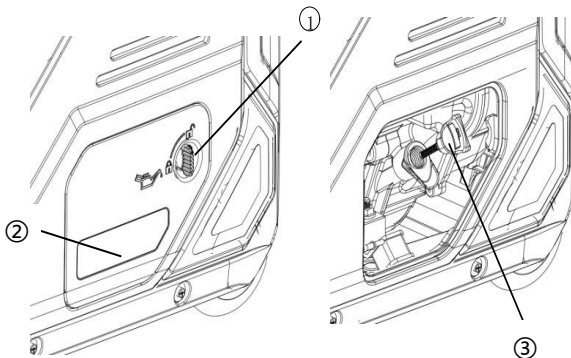
Recommended gas: LPG Gas

b. Oil

⚠ WARNING

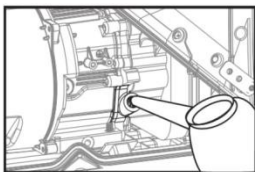
The generator was delivered without oil. Do not start the generator without sufficient oil injection.

1. Please place the generator on a horizontal plane.
2. Turn the knob ① to the ON position and remove the oil cover ②.
3. Open the oil cap ③.



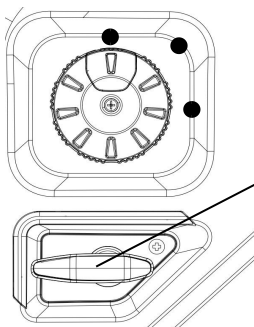
4. Pour the specified amount of recommended oil and tighten the oil cap.

5. Replace the oil maintenance door and turn the knob to the OFF position.



c. Hand-drawn starting handle

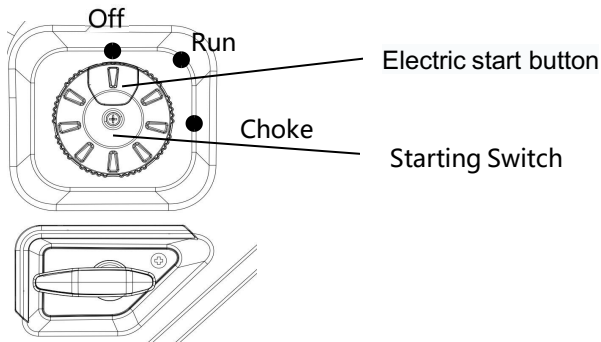
Gently pull the starting handle up until resistance is felt, then suddenly pull it out.



Manual Starting Lever



Do not let the starting handle snap back after starting, but gently put the handle back.



d. Three-in-one Switch

(Fuel switch/Electric start switch/Choke)

The fuel switch is the device that controls the flow of fuel from the tank to the carburettor. After shutdown, ensure that the start button on the start switch is in the "OFF" position. The rotary fuel switch disconnects the fuel when the start button points to the off state, and the fuel supplies when the start button points to the run and chock state.

The electric starting button is a control device which drives the starting battery built in the unit to drive the engine to start. When the rotary starting switch makes the electric starting switch point to the run or start position and you press the electric starting switch button, the starting electric motor drives the engine to start.

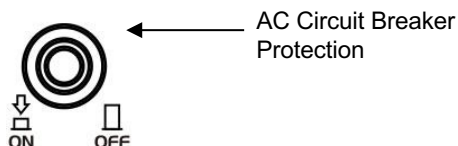
The choke provides the gasoline engine with an oil-rich mixture at the cold starting. When the gasoline engine starts coldly, the rotary starting switch makes the starting button in the "choke" position., But after starting, the starting switch must be rotated to the "run" position. When the gasoline

engine is hot start, rotate the start switch to place the start button in the "run" position.

e. AC Circuit Breaker Protection

Overload current can automatically turn off the breaker protector.

Load short circuit and overload should be avoided. If the circuit breaker is automatically turned off, be sure to check the load condition before placing it in the open position.



f. Earthing Terminal

Earthing terminal is a special terminal used to ground the whole generator well.



6. GENERATOR USAGE

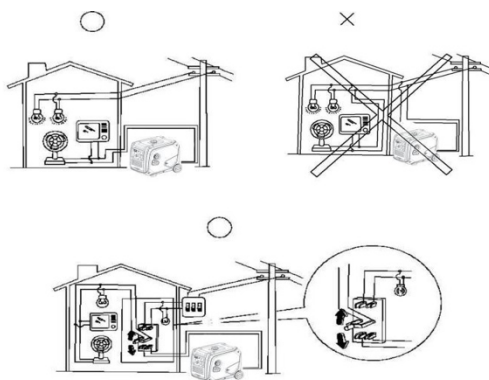
- Applicable temperature: $-5^{\circ}\text{C} \sim 40^{\circ}\text{C}$.
- Applicable humidity: below 95%

a. Connect to Household Power Supply

⚠ WARNING

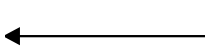
When the generator is connected to the home power supply as a backup power supply, it should be connected by a special electrician or someone familiar with electricity.

After connecting the load to the generator, carefully check whether the electrical connection is safe. Improper electrical connection may result in damage to the generator, combustion or fire.



b. Generator Ground

It is recommended to ground the generator with a good lead with insulated leather in order to prevent the generator from being damaged by electric shock or the wrong use of electricity



Earthing Terminal

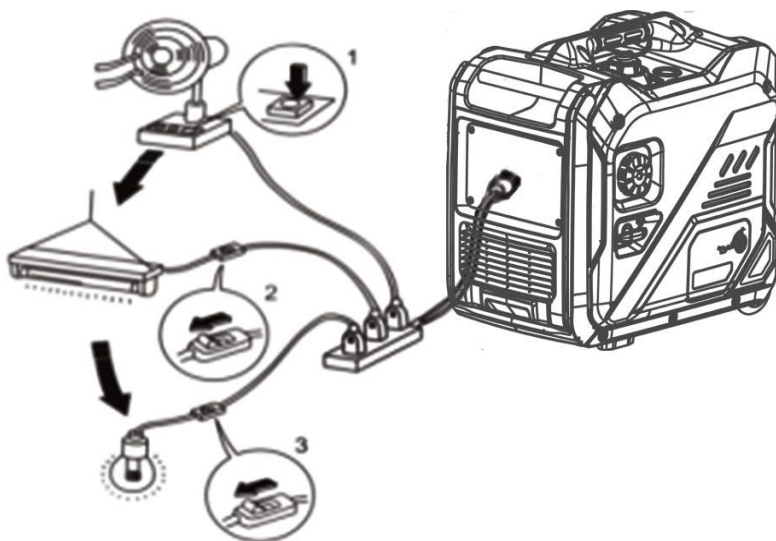
c. Alternating Current

- Make sure before starting the generator:

The total power of the load apparatus (the sum of resistive, capacitive and inductive load) shall not exceed the rated output power of the generator.



Overload will lead to generator burnout or greatly shorten the life of the generator. If more than one load or electrical equipment is connected to the generator set, remember that the one with the highest starting load is connected first, and the one with the lowest starting current is connected last.



Indication Only:

In general, capacitive and inductive load, especially motor drive device, produce a large starting current when starting up. The following table is for your reference when you connect these electrical appliances to the generator set.

Type	Wattage		Typical Equipment	example		
	Start	Rated		Device	Start	Rated
Incandescent Lamp Heating Apparatus	X1	X1	Incandescent Lamp TV set	Incandescent Lamp 100w	100VA (W)	100VA (W)
Fluorescent Lamp	X2	X1.5	Fluorescent Lamp	Fluorescent Lamp 40w	80VA (W)	60VA (W)
Electromotor Drive Device	X3-5	X2	Refrigerator Electric Fan	Refrigerator 150W	450- 750 VA(W)	300VA (W)

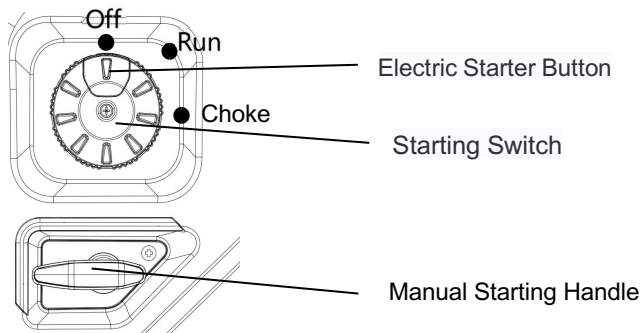
7. START THE GENERATOR

Before starting the generator, please prepare the unit before operation.

You should fill the oil and fuel(or LPG), and turn the ventilation switch of the oil tank cap to the "ON" position.

a. Recoil Start

- Remove all load from the output.
- Turn the start switch to place the start button in the "choke" position.
- Put the AC circuit breaker protection in the "off".

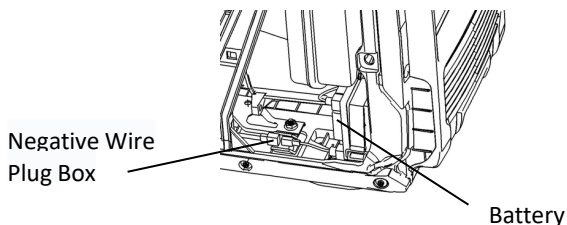


When the petrol engine is started in the thermal mode, turn the start switch to make the start button in the "run" position.

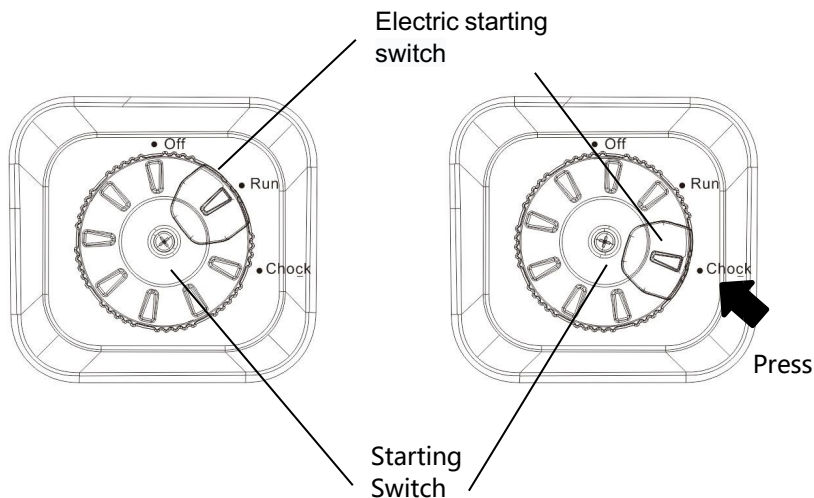
- Gently pull the starting handle up until resistance is felt and pull it out quickly
- When the generator is started, rotate the start switch to place the start button in the "run" position.
- Put the AC circuit breaker protector in the "on" position before the electrical load can be used.

b. Electric Start

Before starting, remove the appearance cover plate and connect the negative wire as the figure.



- Remove all load from the output.
- Turn the start switch to place the start button in the "choke" position.
- Put the AC circuit breaker protector in the "off" position





When the gasoline engine is started in the thermal mode, turn the start switch to make the start button in the “run” Position

- Press the start button
- When the generator is started, rotate the start switch to place the start button in the "run" position.
- Put the AC circuit breaker protector in the "on" position before the electrical load can be used.



Turn the generator switch to the electric starting position for no more than 5 seconds, otherwise it will damage the starting motor. If the start is unsuccessful, 10 seconds should be the interval for multiple starts.

After the starter motor is used for a period of time, if the speed of it declines much, it means that the battery should be removed to be charged.

8. FUEL SWITCH

By default, this product gives priority to the consumption of LPG. If the LPG is connected and there is gasoline in the fuel tank, the engine will shut off the gasoline supply by relying on the LPG pressure when the system operates normally. The system will not automatically switch to the gasoline supply until the LPG is used up or the pressure is insufficient to support the normal operation of the system. If you want to switch to using gasoline at this time, just turn off the LPG supply. If it is necessary to switch to use LPG during operation with gasoline, connect the gas pipe, turn on the gas source, switch the system to use LPG and cut off the gasoline supply.



When the gas pressure is insufficient, there may be multiple cycles of fuel switching. At this time, it is recommended that the operator turn off the LPG source to avoid the decline of power output quality caused by multiple switching of the generator

9. STOP THE GENERATOR

- 1) Turn the ESC energy-saving switch to "OFF"
- 2) Turn off the AC circuit breaker protector
- 3) Turn the start switch to place the start button in the "off" position
- 4) Turn the tank cap ventilation switch in the "OFF" position
- 5) Disconnect all electrical equipment



If you need to stop the generator in an emergency, put the generator switch in the "off" position.

10. MAINTAIN

Good maintenance is the best guarantee to achieve safe, economic and zero-fault operation. It also contributes to the environment protection.

To keep the engine in good condition, you must check and maintain it regularly. Please follow the schedule below.

Maintenance Period Item		Every time	First time in 1 month or 20 hours after use	Every three months or every 50 hours after that	Every year or use
Engine Oil	Check - Add	√			
	Replace		√	√	
Reducer Gear Oil (if any)	Check oil level	√			
	Replace		√	√	
ACL Filter	Check	√			
	Clean		√		
	Replace			√	
Sedimentation cup (if any)	Clean				√
Spark Plug	Clean – Adjust				√
Spark Eliminator	Clean		√	√	
Idling (if any)	Check – Adjust				√

Valve Lash**	Check – Adjust				√
Fuel Tank and fuel filter**	Clean				√
Fuel Pipe	Check	Every two years (Replace if necessary)			
Cylinder head, piston	Eliminate carbon deposition	Displacement < 225cc, every 125 hours Displacement ≥ 225cc, every 250 hours			
<p>*These items should be replaced if necessary</p> <p>**These items should be maintained by the authorised dealer of our company unless the user has the appropriate tools and maintenance capabilities.</p>					



- If you often work under high temperature or high load, you should change the oil every 10 hours.
- If you often work in dusty or harsh environments, the air filter element should be cleaned every 10 hours, and if necessary, the air filter element should be replaced every 25 hours.
- Check the period and date, and maintenance should be carried out on the first arriving machine.
- If the maintenance period expired, the maintenance should be carried out according to the form above as soon as possible.



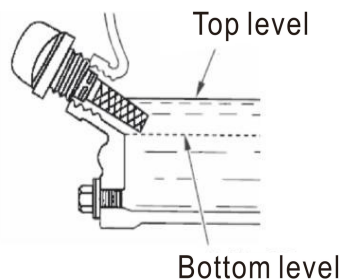
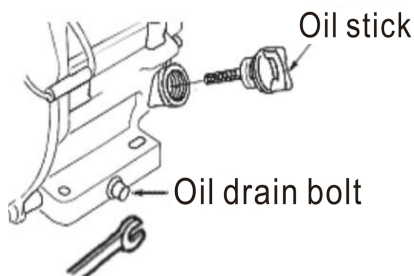
Please stop the machine before carrying out any maintenance. The engine should be placed in a horizontal position. To prevent the engine from starting, separate the spark plug cap from the spark plug. Do not use it indoors or in poorly ventilated places such as tunnels and caves, and make sure that the working area is well ventilated. Exhaust gas from engine contains toxic gas carbon monoxide, which can cause shock, loss of consciousness and even death when inhaled.

a. Change the oil

The oil can be discharged quickly and cleanly after starting the gasoline engine.

1. Remove the oil gauge. Then unscrew the oil opening bolt to drain the oil.
2. Install the oil drain bolt and tighten it.
3. Fill the oil and check the oil level.
4. Install the oil gauge.

Oil volume:	RGLIV6250	0.7 L
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Long-term and frequent skin contact with engine oil may lead to skin cancer. Although this is not inevitable, it is recommended to wash the skin exposed to engine oil immediately and thoroughly with soap and water. From the perspective of environmental protection, please properly dispose of the used engine oil after use. We strongly recommend that you put the waste engine oil in a sealed container and send it to the local service station or waste oil recovery centre. Remember: do not throw it into the garbage or dump it on the ground or in the drain.

b. Maintain the Air Filter



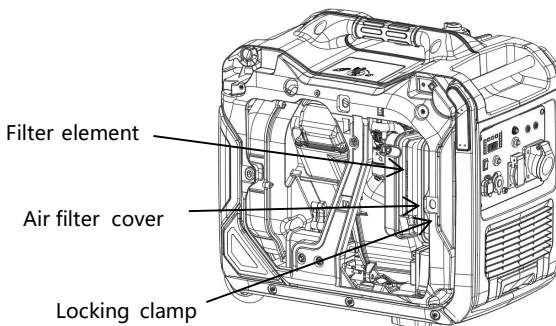
Dirty air filter will affect air flowing into carburettor. To prevent carburettor failure, please regularly maintain the air filter. If used in dusty environment, it should be maintained more frequently.

Please clean the filter element with soapy water or non-flammable solvent for the gasoline or the flammable solvent may cause fire or explosion.



It is forbidden to start the generator without installing an air filter, otherwise the gasoline engine will be worn-out quickly.

1. Open the connecting button of the air filter cover the air filter cover. Check the air filter element to ensure it is intact and clean.
2. If the foam filter element gets dirty, please clean it in hot water with household cleaner, or in non-combustible or high flash point solvent; then rinse it with clean water and squeeze it dry. Drop a few drops of engine oil and squeeze them into the foam filter element.
3. Install the filter element and cover the air filter.

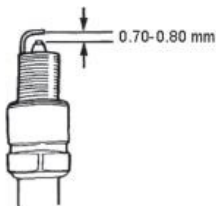


c. Spark plug

Please replace the spark plug in accordance with the original specification:

F7TC

1. Detach the cover of spark plug.
2. Remove the spark plug with the socket wrench.
3. Visually inspect the spark plug insulator for damage. Replace it if it is damaged.
4. Measure spark plug with thickness gauge, and bend the side electrodes to adjust the gap. The gap should be guaranteed to be 0.70-0.80mm.
5. Inspect whether the spark plug gasket is in good condition. Install the spark plug, and tighten it with the socket wrench, press the spark plug ring and cover the spark plug cap tightly.



Please use the spark plug with proper calorific value.

4. STORAGE



In order to avoid burning or fire caused by contact with high-temperature parts of the generator, the generator must be cooled before being packaged and stored.

Please ensure the storage area is clean and dry if long-term storage is needed.

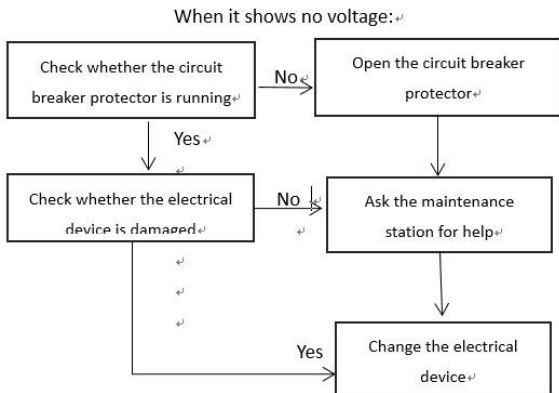
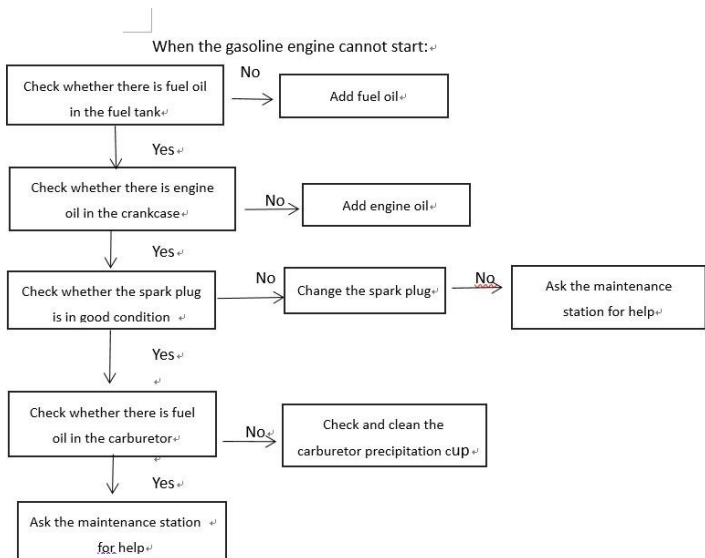
- Clean the fuel in the fuel tank. Clean the fuel filter screen, O-ring seal and settling cup before installing them. Unscrew the carburettor oil drain bolt, clean the fuel in the carburettor, and then install and tighten the carburettor oil drain bolt.



Usually, the engine oil is combustible and explosive. Please drain the oil under well ventilated conditions after shutdown. Fireworks are strictly prohibited during oil discharge.

- Unscrew the oil level gauge and the oil drain bolt on the crankcase, and drain the oil in the crankcase. Then tighten the oil drain bolt, fill new oil to the upper limit of oil, and then install the oil level gauge.
- Remove the spark plug and pour a tablespoon of clean engine oil into the combustion chamber. Rotate the crankshaft several times to distribute the oil everywhere. Then install the spark plug.
- Gently pull the starting handle until resistance is felt, so that the intake and exhaust valves are closed.
- Place the generator set in a clean and dry area.

5. TROUBLE SHOOTING



7. PARAMETERS

	Items	RGLIV6250
Gasoline engine	Engine model	Single cylinder, four-stroke, air-cooled, cylinder center inclined 55°
	displacement(cc)	223
	Ignition system	Integrated digital ignition
	Starting mode	Recoil Start/E-start
	Tan capacity (L)	11
	Oil capacity(L)	0.7
Generator set	frequency (Hz)	50
	phase	Single phase
	voltage (V)	230
	Rated power(kW)	Gasoline:5.0kW / LPG:4.5kW
	Max.power (kW)	Gasoline:5.5kW / LPG:5.0kW
	DC Output	12V/8.3A
	length(mm)	590
	width(mm)	390
	height(mm)	550

