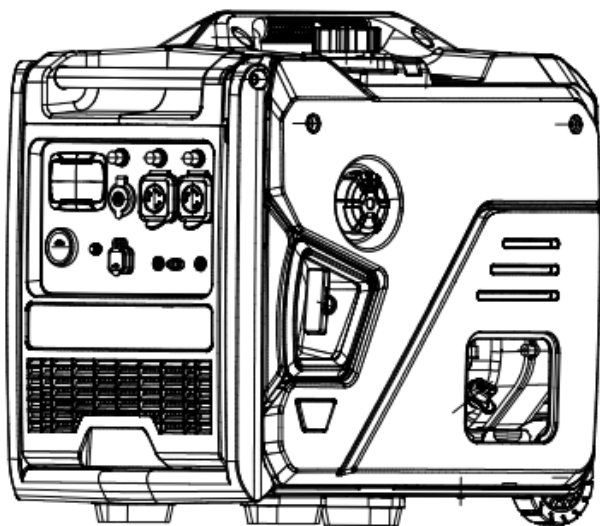


INVERTER GENERATOR

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 generators. Please read the instruction carefully before using, otherwise the wrong operation may lead to safety trouble or equipment damage. Proper and safe operation will extend the service life of 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 there is any trouble, or do not know about the generator, please consult the after-sales service department of the company.



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

*** The manual might be different because of the different type of generator.**

SAFETY WARNING

You and other people's personal and property safety is very important. please read carefully about the safety warning witch are in the manual or on the stickers.

Safety warning can mention 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 life risk if you don't follow the instruction.



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



You may get minor injures if you don't follow the instruction.

Your generator or other property may get damage if you don't follow the instruction.

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SAFETY WARNING

CONTENT

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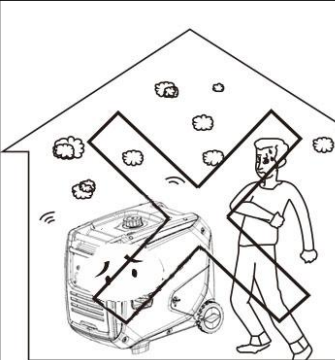
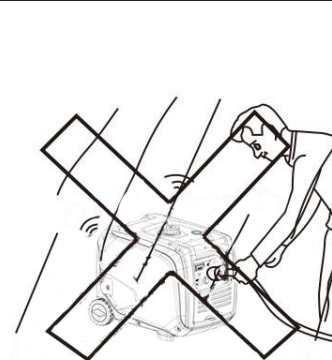
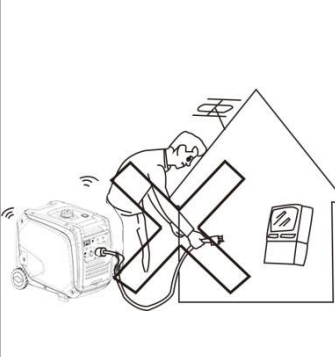
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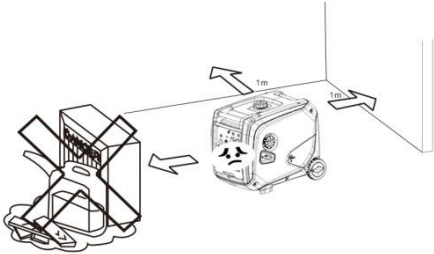
1. SAFETY INFORMATION

(1). Safety specification

Please read and understand this manual well before operating.

Familiarize with the safe operating procedures of generators can help you avoid accidents.

	
Do not use indoor	Do not use it in damp environment.
	
Connect to the appliance	Do not smoke while fueling

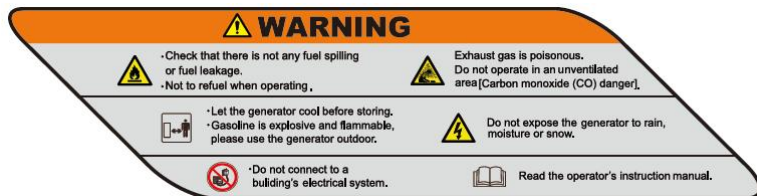
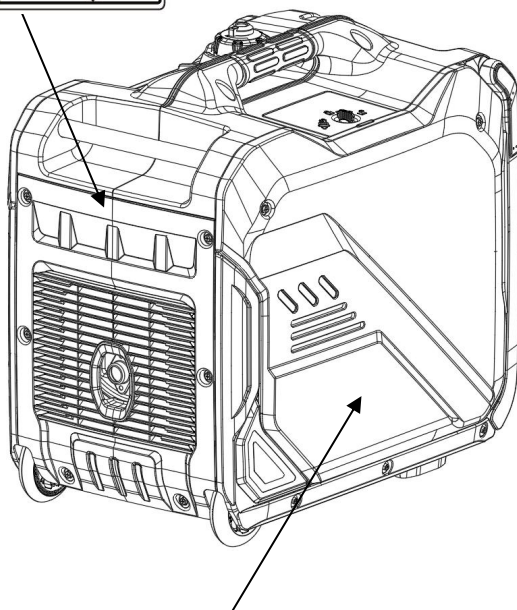
	
Do not spill fuel while filling.	Do not re-fuel while generator is running.
 Move all combustible materials away from generator at least 6.5ft. while in use.	

(2). Special Requirements

- Electrical equipment including wires and plugs should be no nudity
- Protective circuit- breaker should match the generator equipment. As for a replacement, apply exactly the same parameters, performance circuitbreaker replacement
- Ground the generator before use.
- You should meet the following requirements if you want to use extension line
4mm² , less than 100m

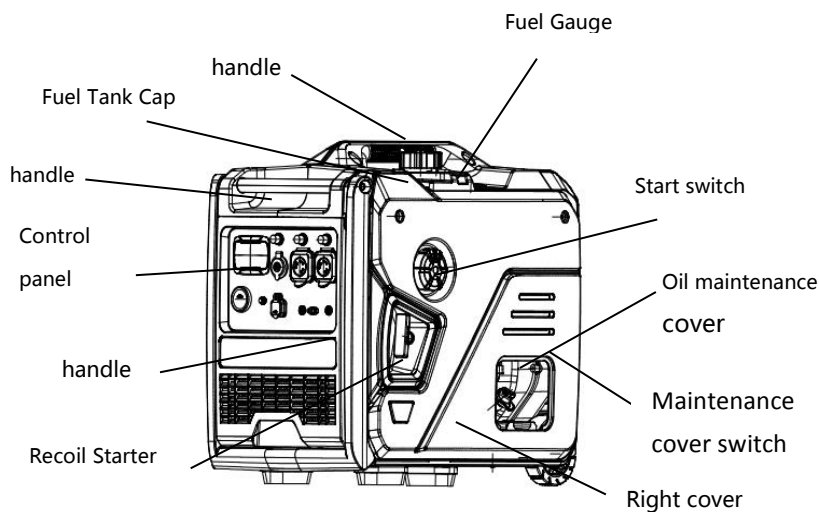
2. Security warning stickers

Pay attention to the security warning stickers before you use.



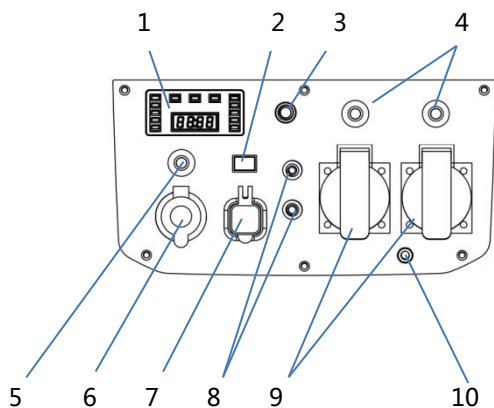
3. COMPONENTS IDENTIFICATION

(1). Components Feature



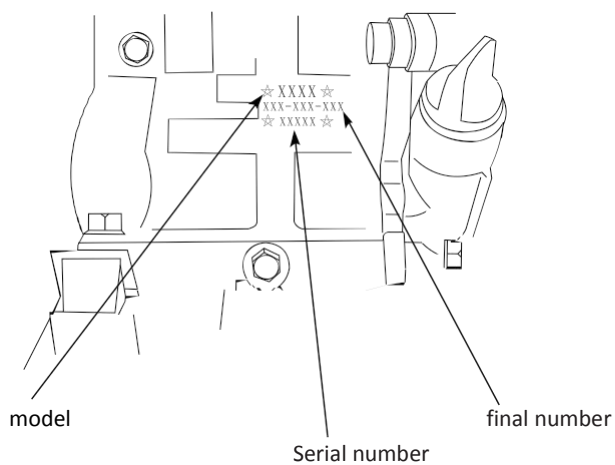
(2). Control panel

(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

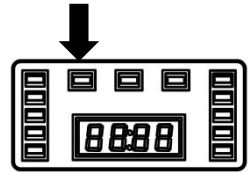
(3). model and serial number



4. control system

(1).oil alarm system (yellow)

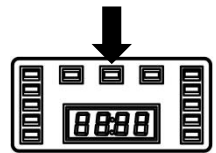
The engine oil protection system will stop the engine automatically if the oil is insufficient and the oil indicator will turn on. Check the oil level and re-fill it if necessary then restart again.



If the engine oil indicator flashes for few seconds, it means the oil capacity is insufficient. Refill the oil and restart the engine.

(2).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.



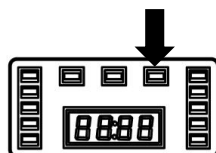
While the overload light is on, and the generator has no output, please take following measures:

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 is 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 doesn't belong to troubles as previously mentioned.

(3). The AC indicator light (green)

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



(4). Energy-Saving Switch

① "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.

② "OFF"

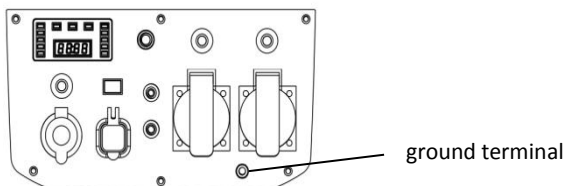
When the energy-saving switch is in the "OFF" position, the engine runs at rated speed (4800r/min) regardless of whether the load is connected.

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



(5). 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.

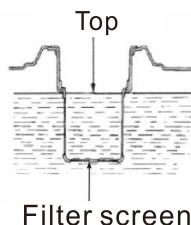
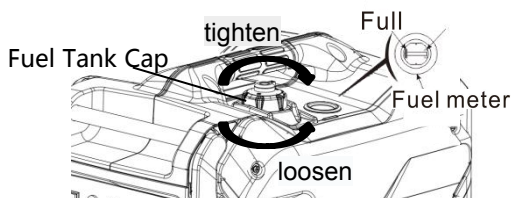


5. Preparations

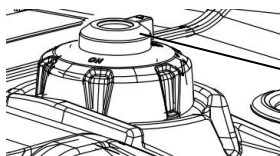
(1). Fuel



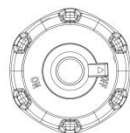
- Fuel is flammable and toxic. Please read the safety instructions carefully before refueling (see page 6 for details).
- Do not fill the oil too full, or the oil will spill when the fuel tank warms up.
- After refueling, confirm that the fuel tank cap has been tightened (when there is a "Kaka" sound).



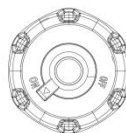
- Starting the engine is the tank cap ventilation switch should be rotated to the "ON" position so that the tank and the atmosphere are communicated. On transportation of the generator, the tank cap ventilation switch should be rotated to the "OFF" position to avoid fuel leakage.



Ventilation
Switch



OFF Position



ON Position

⚠ WARNING

- After refueling, wipe the residual gasoline with a clean, soft cloth to avoid damaging the plastic shell.
- Do not use unleaded gasoline, because leaded gasoline can seriously damage the engine's internal parts.

Recommended fuel: Unleaded gasoline

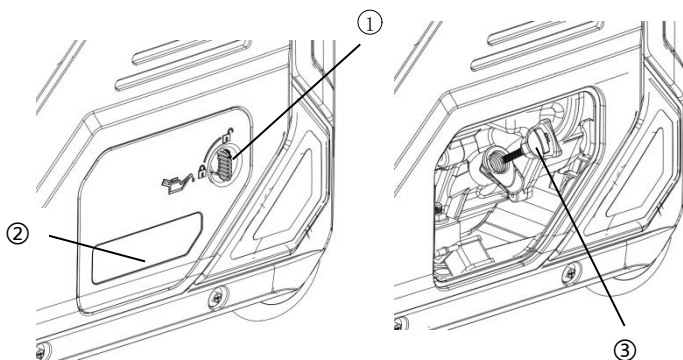
Fuel tank capacity: 11L

(2) .Oil

⚠ WARNING

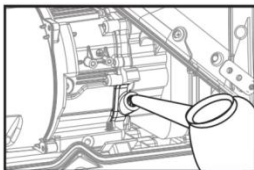
The generator was delivered without oil injection. Do not start the generator without sufficient oil injection.

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



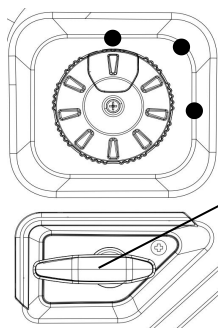
4.Inject the specified amount of recommended oil and tighten the oil cap.

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



(3). Hand-drawn starting handle

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

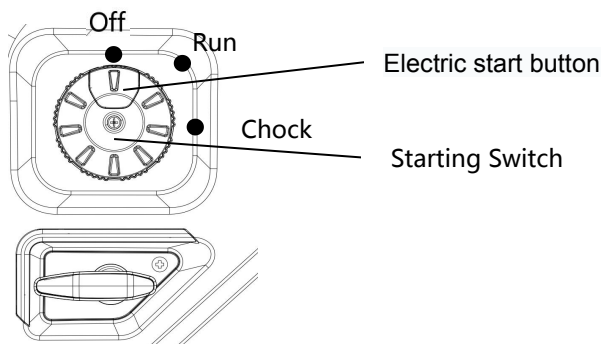


Manual Starting Lever



WARNING

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



(4). 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 carburetor. 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.

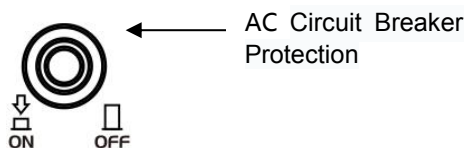
The electric starting button is a control device which drives the starting battery built in the unit to drive the engine to start. When the rotary starting switch makes the electric starting switch point to the run or start position and you press the electric starting switch button, the starting electric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

(5). 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.



(6). 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%.
- Applicable altitude: the area below 1000 meters (Drop the power or contact the dealer to adjust the carburetor for use in the area above 1000 meters).

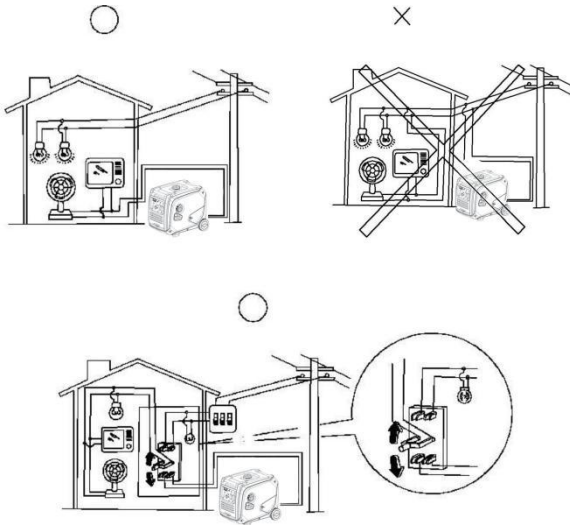
(1) . Connect to Household Power Supply



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.

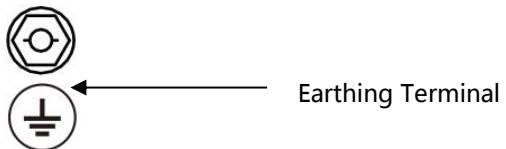
After connecting the load to the generator, carefully check whether the

electrical connection is safe. Improper electrical connection may result in damage to the generator, combustion or fire.



(2). Generator Ground

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



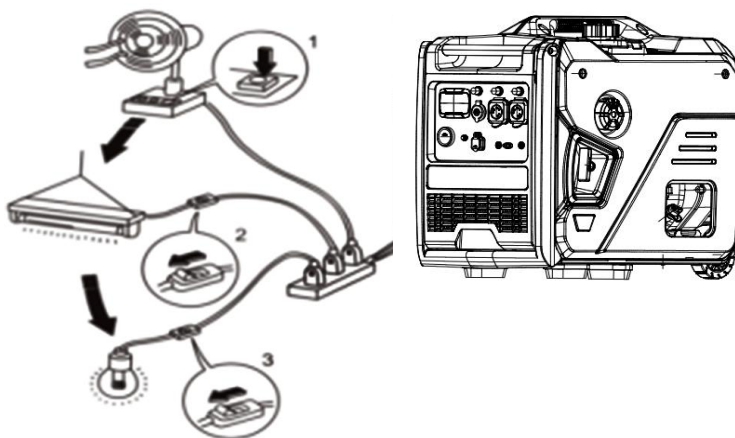
(3). Alternating Current

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 power of the generator.

⚠ WARNING

Overload will lead to generator flameout 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.



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)

(4). Used at high altitudes

At high altitude area, standard carburetors can make the engine have more gasoline mixture, reduce power output and increase fuel consumption. The performance of gasoline engines can be improved by replacing the carburetor with a slightly smaller main injector or by adjusting the adjusting screw. If you often use the generator at an altitude of more than 1000 meters, you can buy special high-altitude parts to replace for use. Otherwise, the load power should be reduced to use the generator.

Even with the right carburetor, a 300m rise in altitude reduces petrol

engine power by about 3.5%. Without the replacement of a suitable carburetor, this decline would be even greater.



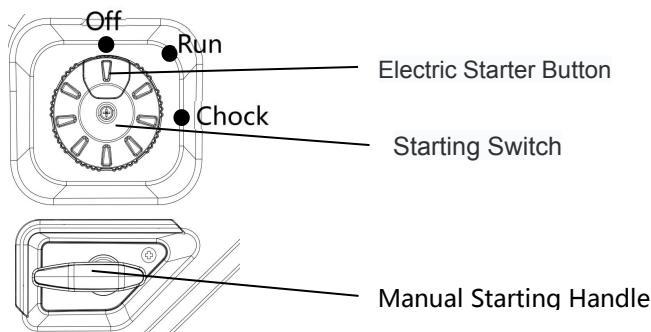
If a carburetor suitable for high altitude use is fitted to a gasoline engine for low altitude use, too thin mixture will reduce the power output of the gasoline engine, cause overheat or even serious damage.

7. Start the Generator

Before starting the generator, please prepare the unit before operation. You should fill the oil and fuel, and turn the ventilation switch of the oil tank cap to the "ON" position.

(1). Recoil Start

- 1) Remove all load from the output.
- 2) Turn the start switch to place the start button in the "chock" position.
- 3) 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.

4) Gently pull the starting handle up until resistance is felt and pull it out quickly.

5) When the generator is started, rotate the start switch to place the start button in the "run" position.

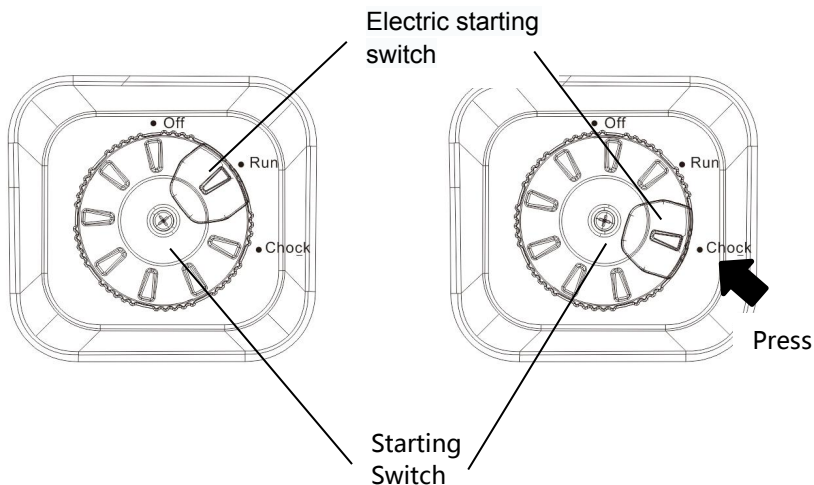
6) Put the AC circuit breaker protector in the "on" position before the electrical load can be used.

(2). Electric Start

1) Remove all load from the output.

2) Turn the start switch to place the start button in the "chock" position.

3) 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.

4) Press the start button.

5) When the generator is started, rotate the start switch to place the start button in the "run" position.

6) 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.

AfterThe 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 charge.

(3). Remote Start

1) Confirm whether the load is within the rated power range of the generator;

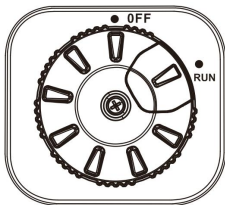
2) Rotate the start switch to place the start button in the "run" position

a, Fuel System,On

b, Ignition system on

c,Remote control power on

3) Press the "START" button of the remote control key, the generator will start automatically (in order to avoid mis-operation, there is an operation delay function, please press the remote control button for about 1-2 seconds when operating the remote control)



4)When the generator is started, put the AC circuit breaker in the "ON" position before the electrical load can be used.



The lithium-ion battery is required to store no more than 50% of its capacity when it leaves the factory.

When the generator is controlled and configured, please start the engine by pulling the starter by hand and let the machine run continuously for more than 2 hours to complete the charging, otherwise the service life of the battery will be shortened.

When the remote-controlled generator remote start operation is more than 3 times and still can't start, please press the remote control button.

Press the "OFF" button of the control key to stop repeated starting, and switch to manual starting, or perform remote control operation after troubleshooting, otherwise the starter motor and battery will be damaged.

If it is not used within 48 hours, please turn off the start switch to avoid affecting the battery life or causing abnormal starting, and turn off the fuel to prevent oil leakage.

The daily use of the starting battery of the generator set should pay attention to the following matters to protect the starting battery and prolong the battery life:

1. Theoretically, the battery power should be kept above 60%, which is more helpful to prolong the service life of the battery.

2. When starting the generator, please be careful not to start the generator several times in a short time to avoid damage to the

battery or circuit. If the generator cannot be started after 5 consecutive starts, please stop it for inspection or send it to a special maintenance point for inspection and maintenance.

3. If it is not used for a long time, please fully charge the battery before disconnecting the negative pole of the battery connection, and store the unit in a dry and cool place. The battery self-discharge is affected by the ambient temperature and humidity. High temperature and high humidity will accelerate the battery. of self-discharge. And the battery should be charged and recharged every month to keep the battery power above 60%, so as to avoid the irreversible capacity loss caused by the low capacity of the battery due to self-discharge.

4. If it is found that the battery of the unit cannot be charged or cannot be started, please check whether the battery is exhausted or damaged. Damaged or low capacity, please replace the battery. The generator can still be started in the following ways when the battery is depleted or damaged:

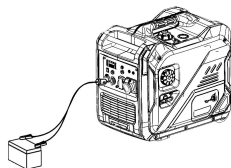
1. External DC12V power supply to start

There are two ways to do this:

a. Connect an external DC12V power supply from the DC12V output socket of the control panel

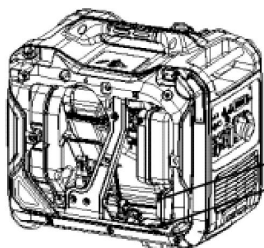
As shown in the figure below, connect the external DC12V power supply to the DC12V output socket or terminal of the control panel of the generator set through the wire plug. Then the normal hand-pull start is performed through the starter handle, and the generator can be started. This method is to provide power to the system to make the genset control system work to cooperate with the operator to

start the generator. Note that the remote starter or electric starter cannot be used normally at this time, please do not try to avoid damage to the electrical system.



b. Connect the DC12V battery or external DC12V power supply in parallel to the battery of the generator set.

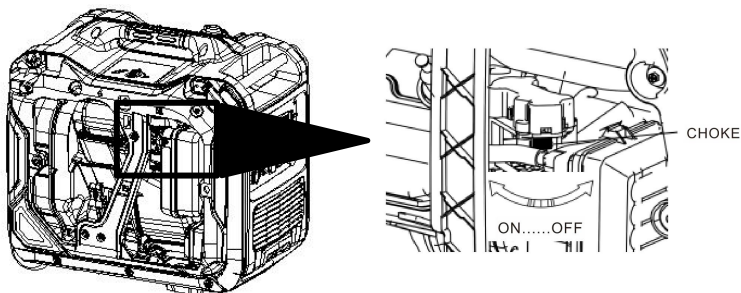
As shown in the figure below, first remove the two bolts of the left appearance cover with tools, then open the left appearance cover from the handle on the top of the left appearance cover and remove it. Connect the backup DC12V battery or DC12V power supply to the battery terminal in parallel, this way is to provide power for the system to make the generator set control system work and cooperate with the operator to start the generator. Note that if the battery or power supply specification is not smaller than the DC12V battery that comes with the unit, it can be started by hand, electric start or remote control. If the low-power DC12V power supply is used, it can only be started by hand to avoid damage to the electrical system or the DC12V power supply, because the current that the low-power DC12V power supply can provide is not enough to start the generator.



Connect a DC 12V battery
or Power Bank Supply in parallel
to the battery output

2.Remove the choke and then manually pull to start the generator set

After removing the left appearance cover of the unit, if it is in the cold engine state, the choke needs to be turned to the closed state; if it is in the warm engine state, the air choke needs to be turned to the open state, and then the normal hand-pull start is performed through the starter handle. The generator can be started. If it still can't start normally, try to move the choke to the middle position and try to start by hand. The operating position is shown in the figure below



8. 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 equipments.



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

9. 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.			
*These items should be replaced if necessary.					
**These items shall be maintained by the authorized dealer of our company unless the User has the appropriate tools and maintenance capabilities.					

WARNING

- 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.

(1). Change the oil

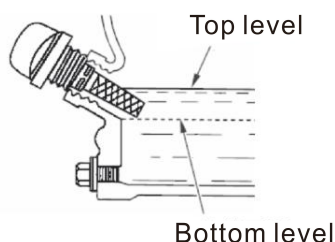
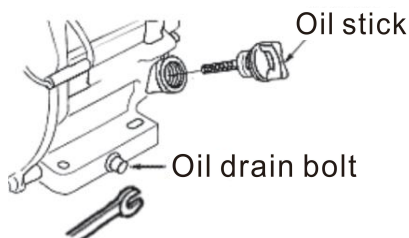
The oil can be discharged quickly and cleanly after starting the gasoline engine.

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:	6250iS/ 6250iE	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 center. Remember: do not throw it into a garbage or dump it on the ground or in a ditch.

(2). Maintain the Air Filter



Dirty air filter will affect air flowing into carburetor. To prevent carburetor 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 nonflammable solvent for the gasoline or the flammable solvent may cause fire or explosion.

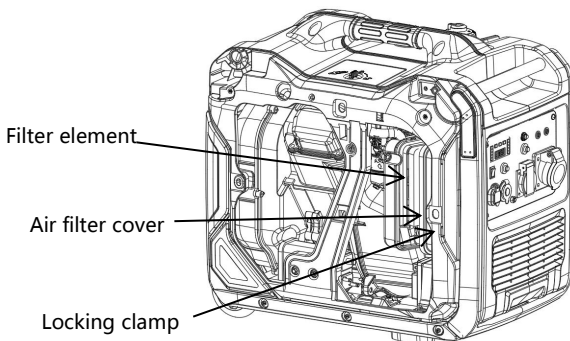


It is forbidden to start the generator without installing an air filter, otherwise the gasoline engine will be worn-out quickly.

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.

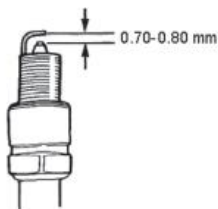


(3). Spark plug

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.

10. 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.

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

2) 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.

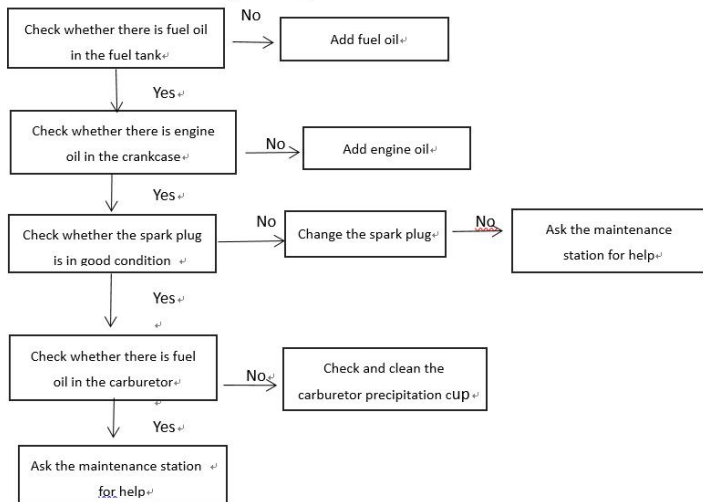
3) Remove the spark plug and pour a tablespoon of clean engine oil into the combustion chamber. Rotate the crankshaft several times to distribute the oil everywhere. Then install the spark plug.

4) Gently pull the starting handle until resistance is felt, so that the intake and exhaust valves are closed.

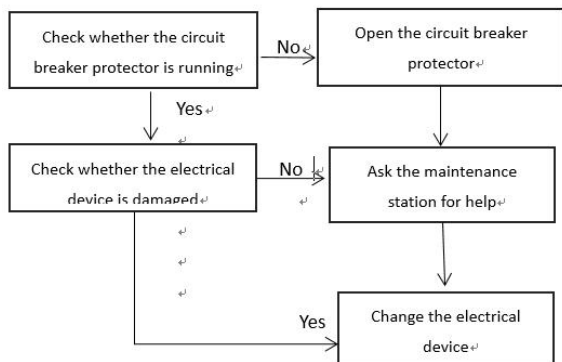
5) Place the generator set in a clean and dry area.

11. Trouble Shooting

When the gasoline engine cannot start:

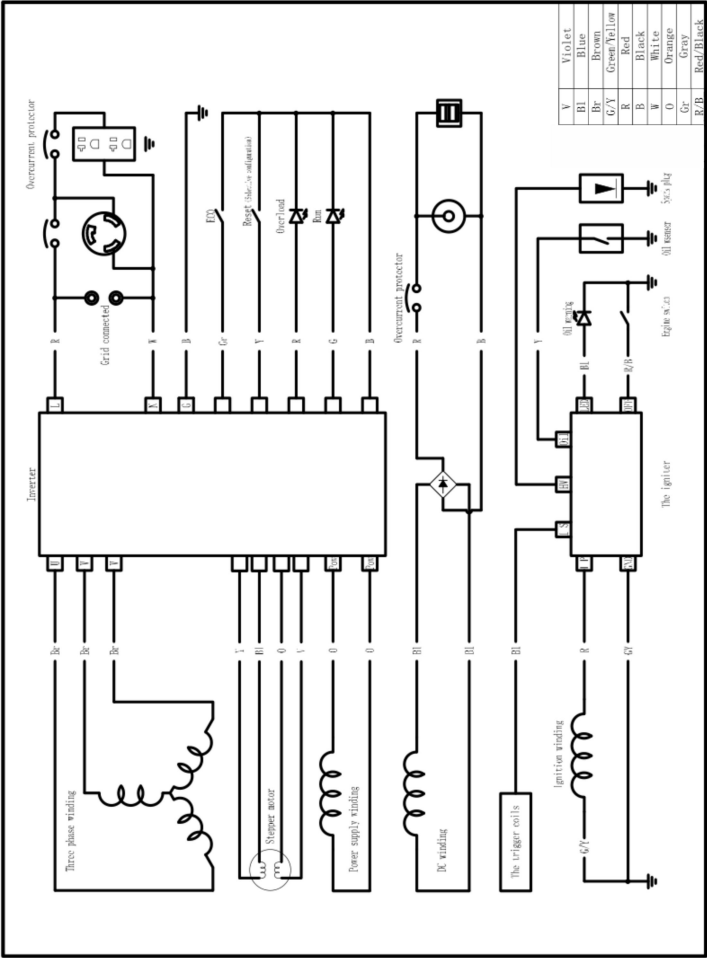


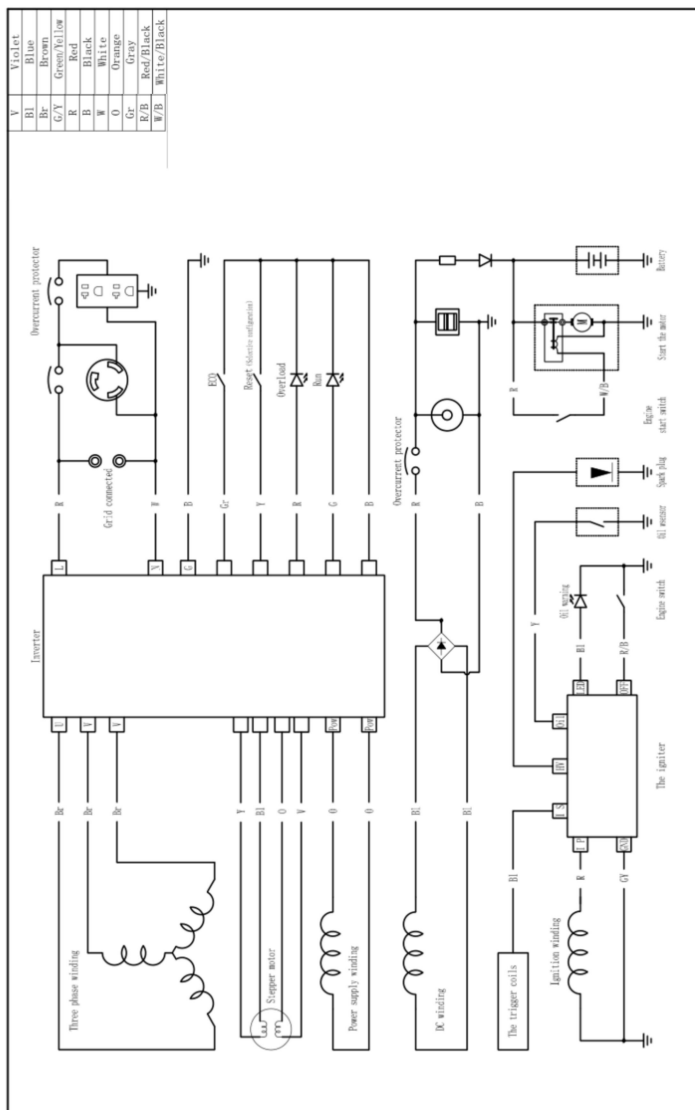
When it shows no voltage:



12. Circuit Diagram

(According to different configurations, the factory will make corresponding adjustments. Subject to change without prior notice)







13. Parameter

	items	6500ise
Gasoline engine	Engine model	Single cylinder, four-stroke, air-cooled, cylinder center inclined 55°
	displacement(cc)	224
	Ignition system	Integrated digital ignition
	Starting mode	Recoil Start/E-start
	Tan capacity (L)	11L
	Oil capacity(L)	0.6L
Generator set	frequency (Hz)	60Hz/50Hz
	phase	Single phase
	voltage (V)	110V/120V/220V/230V/240V
	Rated power(kW)	5.0kW
	Max.power (kW)	5.5kW
	DC Output	12V/8.3A
	length(mm)	660
	width(mm)	450
	height(mm)	610

