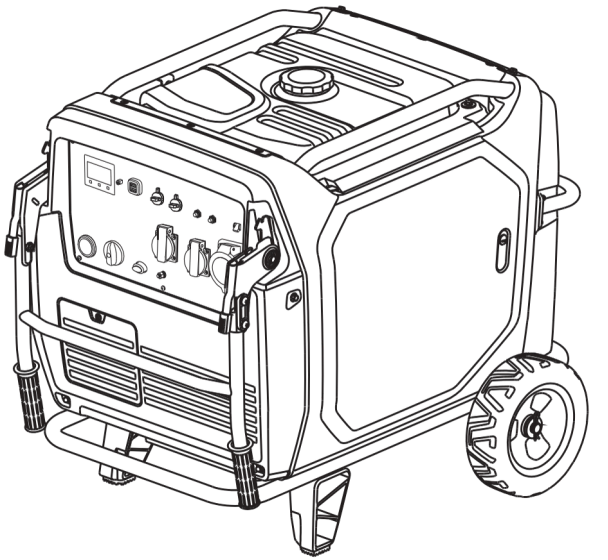
LONCIN

INVERTER GENERATOR
Owner's Manual

7500i LC7500i



Loncin Motor Co., Ltd.

Add:No.99 Hualong Road,Jiulong Industrial Park,
Jiulongpo District,Chongqing,P.R.China
Tel:86 23 8906 7577/7599
Fax:86 23 8906 7533

Web：www.loncinengine.com
E-Mail：marketing@loncinengine.com

Tips-read this manual carefully before operating this generator.

Save this operating manual properly and carry it with the generator for the convenience of emergency query in the future. This manual constitutes one permanent element of the generator. This manual shall be provided along with the generator set when you lend or resell it.

Relevant information and technical specifications defined in this manual take effect when printing is approved, with the contents based on the equipment in production at time of publication. Manufacturer reserves the rights to modify and improve any parts described in the text without prior notice.

Original instruction

Contents

1 Foreword 01
2 Safety Information 02-08
3 Control Function 09-18
4 Pre-oparation 19-20
5 Operation 21-26
6 Application Range 27
7 Maintenance 28-38
8 Accessories Installation 39
9 Transporting 40
10 Storage 41-42
11 Troubleshooting 43
12 Parameters 44-45
13 Electrical Schematic Diagram 46

Foreword

Thank you for purchasing a generator. We recommend that the operator read this manual carefully before use this generator, and fully comprehend all requirements and operating procedure concerning the generator. In case of any questions about this manual, contact the recent authorized dealer for startup, operation, maintenance program and so on. The technician will teach you how to use the generator in a correct and safe manner. We also recommend that the operator consult startup and operating procedure of this generator when buying it.

Safety precautions

This generator will work in a safe, effective and reliable way only when it is kept, operated and maintained properly. Before operation or maintenance of the generator, the operator should:

- Know well and strictly observe local laws and regulations.
- Read and observe all safety warnings in this manual and on the device.
- Let your family get familiar with all safety warnings in this manual.

It is impossible for manufacturers to predict all hazardous circumstances that may occur, for this reason, warnings in this manual and caution signs on the generator set may not cover all hazardous circumstances. If we do not give extra cautions for operating procedures, methods or techniques, operate the generator in such ways that helps guarantee personal safety, make sure no damage to generator set arises there from.

To make sure safe operation,Please read carefully three vital safety warnings in this manual and on the generator, preceded by a safety alert symbol ⚠ including:

⚠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.

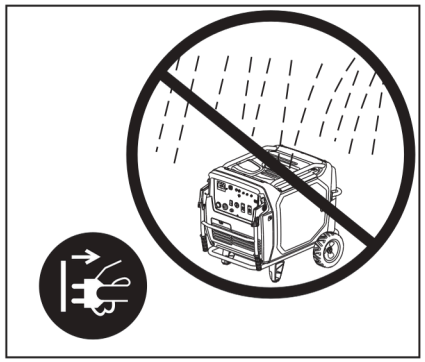
Safety Information

⚠ DANGER

Engine exhaust gases
are toxic.
Do not operate the generating set in
unventilated rooms.

⚠ DANGER

Do not spill fuel.



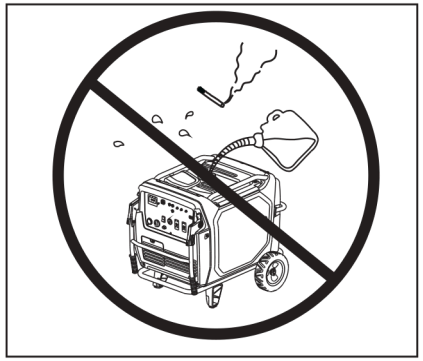
⚠WARNING

Do not use it in a wet condition.

2 Safety Information
Inverter Generator Owner's Manual

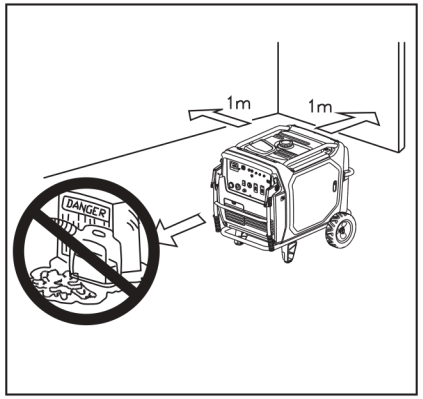
⚠WARNING

Do not refuel during operation.



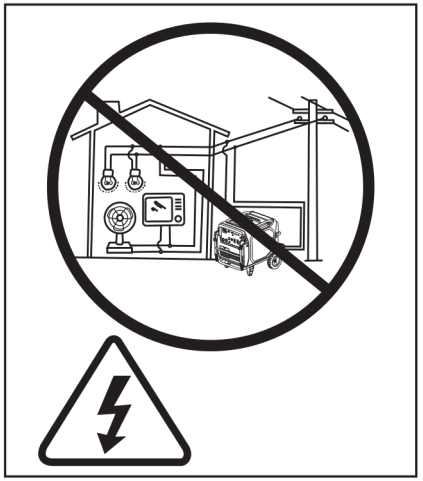
⚠WARNING

Fuel is combustible and easily ignited. Do not refuel while smoking or near naked flames. Do not spill fuel.



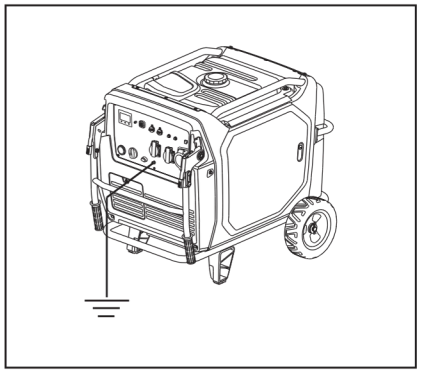
⚠WARNING

Protect children by keeping them at a safe distance from the generating set. Do not place flammable objects close to the outlet valve when generator operation. Keep it at least 1m away from inflammables.



⚠WARNING

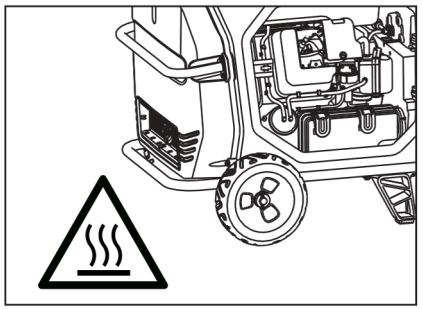
Do not connect to a home power system.



⚠WARNING

Be sure to ground the generator when the connected equipment is grounded.
It must realize safe grounding.

NOTICE **Use the ground wire with enough electric flux.**



⚠WARNING

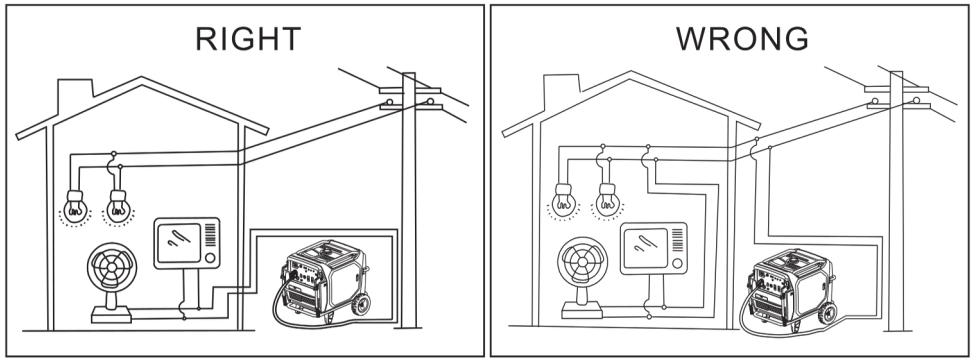
Some parts of the internal combustion engine are hot and may cause burns. Pay attention to the warnings on the generating set.

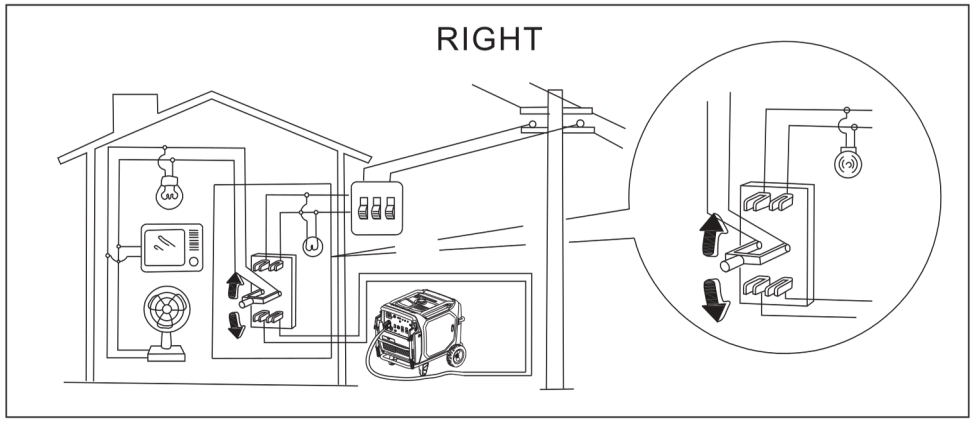
2 Safety Information
Inverter Generator Owner's Manual

WARNING:
Do not connect to a building's electrical system unless an isolation switch has been installed by a qualified electrician.
Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current form the generator to back feed into the utility lines .Such back feed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored ,the generator may explode, burn, or cause fires in the building's electrical system.
CAUTION:
Do not exceed the current limit specified for any one receptacle.
Do not connect the generator to a household circuit. This could cause the damage to the generator or to electrical appliances in the house.
Do not modify or use the generator for other purposes than it is intended for.
Also observe the following when using the generator.
Do not connect an extension to the exhaust pipe.
When an extension cable is required ,be sure to use a tough rubber sheathed flexible cable (IEC 245 or equivalent).
Limit length of extension cables; 60 m (200 feet) for cables of 1.5 mm^2(0.0023 in^2)and 100m (330 feet) for cables of 2.5 mm^2(0.0039 in^2). Long extension cables will lower usable power due to resistance in the extension cable.
Keep the generator away from other electric cables or wires such as commercial power supply lines.

Connection to a home power supply

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.

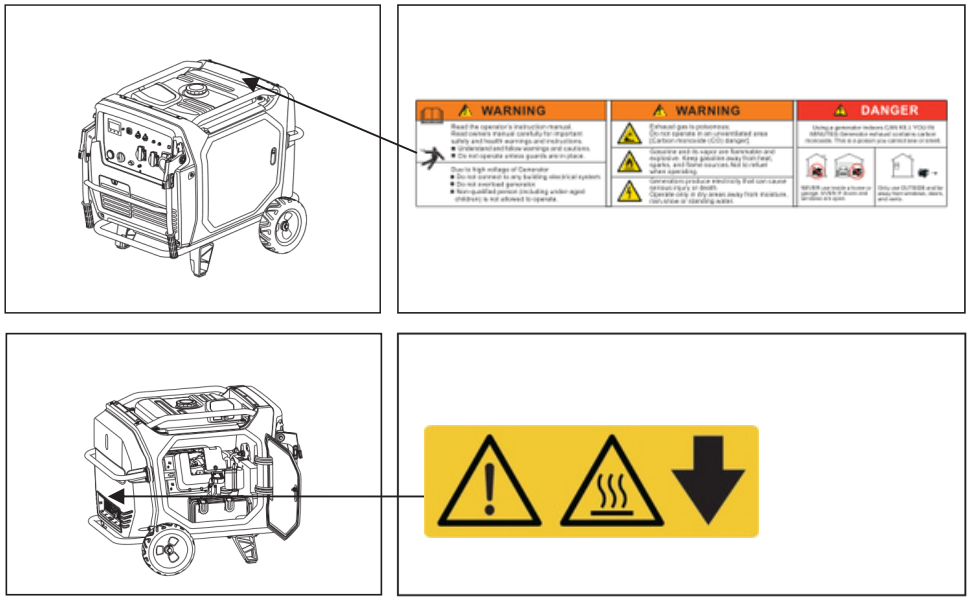




Others

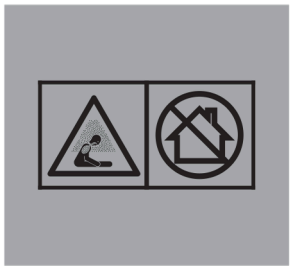
Make sure Inverter ducted fan, muffler louver and the inverter bottom side cooling well and without chips, mud and water come in. it may damage the generator, inverter or alternator if the cooling vent blocked.
Do not mix the generator with other stuff if moving, storing or running the unit, It may cause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

There is the warning label on the machine to remind you of the safety regulations.



Some parts of equipment will generate high temperature during operation, which will scald skin.

Read the safety instructions before using the generator.



Gases such as carbon monoxide (colourless and odourless gas) are produced during operation which may lead to suffocation. Only use the generator in well-ventilated areas.

Only fill the generator in well-ventilated areas and keep it away from open flames, sparks and cigarettes. Spilled fuel should be soaked up immediately.
Turn off the engine and let it cool down before filling the generator. Fuel is easily flammable and may even explode under certain circumstances.

Warning! Dangerous voltages are present when the generator is in operation.
Generator must always be turn off before performing maintenance works.

Wear ear protection when operating the generator.

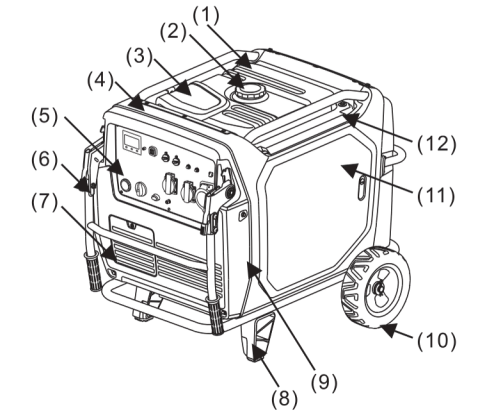
Before use, the generating set and its electrical equipment (including lines and plug connections) should be checked to ensure that they are not defective.

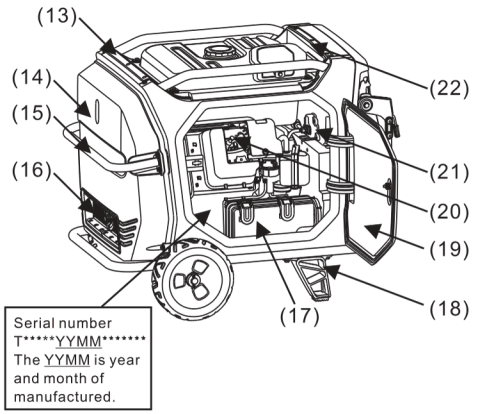
⚠WARNING

- A warning reminding the user that he shall conform to regulations of electrical safety applicable to the place where the generating sets are used.
- A warning on the requirements and the precautions to be respected by the user in the case of re-supply by generating sets of an installation, depending on existing protective measures in this installation and applicable regulations.

Control Function

DESCRIPTION

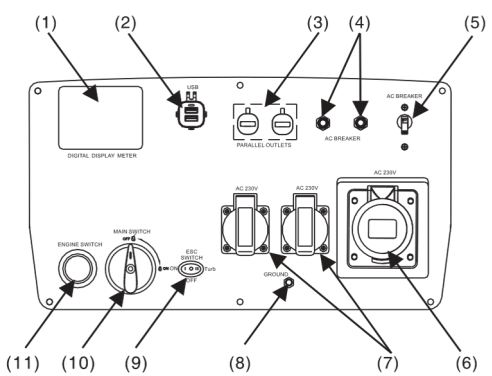




(1) Fuel tank
(2) Fuel tank cap
(3) Cover plate of oil level sensor
(4) Frame components
(5) Control panel
(6) Folding handle
(7) Battery maintenance cover
(8) Frame shock absorber bracket (right)
(9) Panel bed
(10) Support wheel parts
(11) Right maintenance door
(12) Seal ring (fuel tank)
(13) Tank hood (back)
(14) Frame hood
(15) Handle
(16) Silencer spark collector
(17) Air filter
(18) Frame shock absorber bracket (left)
(19) Left maintenance door
(20) Spark plug
(21) Main switch
(22) Tank hood (front)

CONTROL PANEL

230V



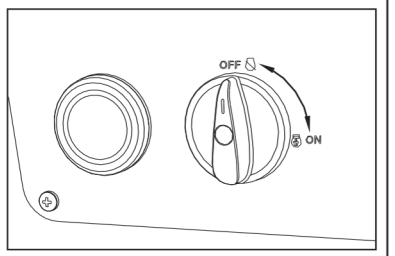
(1) Digital display meter
(2) USB charging port
(3) Parallel outlets
(4) AC breaker
(5) AC breaker
(6) AC socket
(7) AC socket
(8) Grounding terminal
(9) Esc switch
(10) Main switch
(11) Engine switch

NOTICE

AC Outlets: this socket is only corresponding to a market , the different laws and regulations according to the sales area changes corresponding to the socket.

3 Control Function
Inverter Generator Owner's Manual

CONTROL FUNCTION

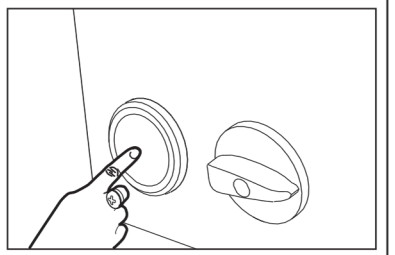


Main switch

This switch controls ignition system, fuel system, power system, and solenoid valve.

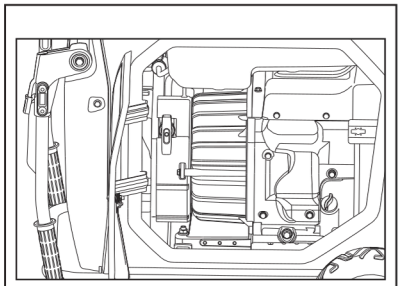
① Off -- stop the engine: Ignition system is in the closed state, fuel switch is off, solenoid valve switch is off, and power system switch is off; the engine can't be started normally.

② On -- start/run the engine: Ignition system is in the working state, fuel switch is on, solenoid valve switch is on, and power system switch is on. The engine can be started with engine switch, recoil starter and run normally.



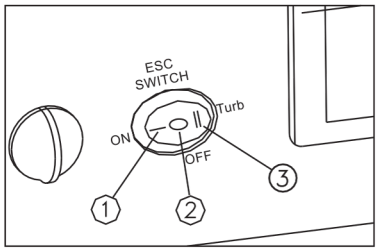
Engine switch

When main switch is placed in the "ON" position, press the switch button to start the engine.



Recoil starter

When the battery voltage is too low or power loss is serious, and the power fails to start normally, pull the recoil starter to start the engine. .



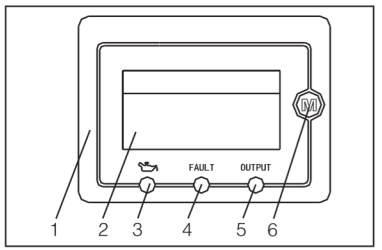
Esc switch

① "ON"
When the ESC switch is turned to "ON", the economy control unit controls the engine speed according to the connected load. The results are better fuel consumption and less noise.

② "OFF"
When the ESC switch is placed on the "Off" position, under the condition of load less than 4.5kW, the engine runs at the rated speed (3,100min^{-1}).
"TURB"

③ When the ESC switch is placed on the position of "TURB", the engine runs at the rated speed (3,600min^{-1}) regardless of whether the load is connected or not.

Tip: When the following devices are applied, such as air compressor and submersible pump, the ESC switch must be placed on the position of "TURB".

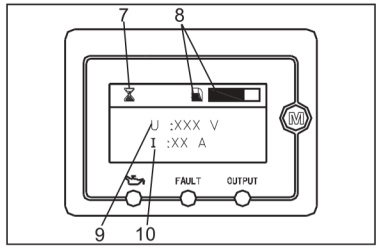


(1) Multimeter
(2) Liquid crystal display
(3) Oil warning light
(4) Overload indicator light
(5) AC indicator light
(6) Operating key

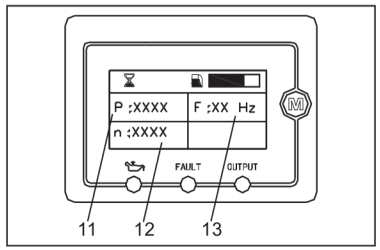
Digital display meter

1. When the main switch is placed on the "Off" position (when the engine is not started):
Operate key 6, only the content of 15 is displayed on the screen interface (after each operation of key 6, the display will disappear automatically after maintaining 5s.).
2. When the engine is not started, but the main switch is placed on the "On" position:

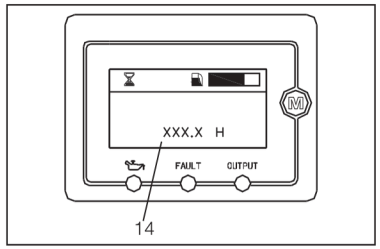
Digital display meter



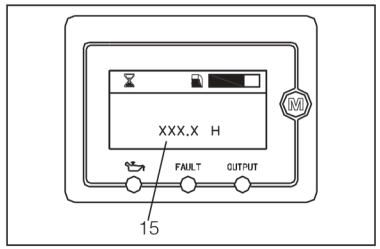
(7) Operation identification(Normal operation)
(8) Fuel quantity (9) AC Voltage
(10) AC Voltage



(11) Power (12) Speed (13) Frequency

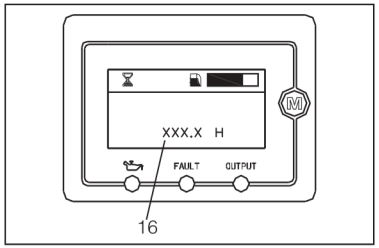


(14) Current run time

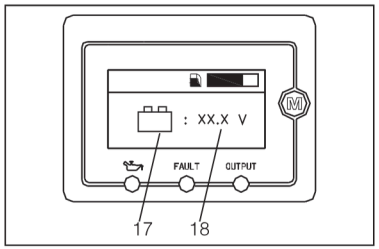


(15) Cumulative running time

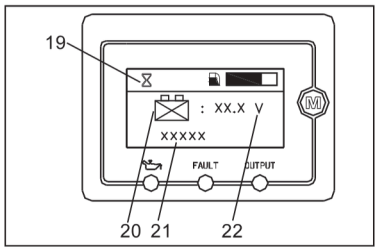
a. No content is displayed on the screen interface.
Notes: If the battery has been installed, this interface indicates that the battery voltage is less than 8V (the battery needs to be charged), one-key start cannot be carried out, but the engine can be started by recoil starter. If there is no display after replacing the battery with new one, please contact the designated dealer.
b. The screen interface displays the contents of 17-18 (2 display interfaces in total).
Notes: The interface with the display contents of 17-18 indicates that the battery voltage is more than 12V, one-key start can be carried out.
c. The screen interface displays the contents of 19-21 (2 display interfaces in total).
Notes: The interface with the display content of 19-21 indicates that the battery voltage is more than 8V but less than 12V, one-key start can not be carried out, but the engine can be started by recoil starter.
When the above contents are displayed in each display interface, the contents of 22, and 8 are also displayed at the same time.
3. When the main switch is placed on the "On" position, and the engine starts successfully and runs normally: the screen interface displays the contents of 8-10, 11-13, 14, 15, 16, 17-18 (6 display interfaces in total).



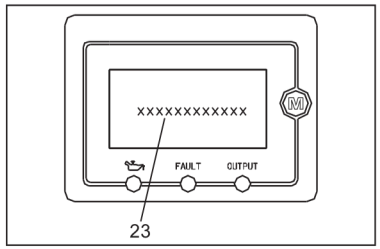
(16) Remaining run time



(17) Battery normal
(18) Battery (Voltage greater than 12V)



(19) Operation identification(Not running)
(20) Battery (loss of capacity)
(21) Hand Start Tips
(22) Battery (More than 8V and less than 12V)



(23) Maintenance tips

The display interface can be switched by operation of key 6, and the contents are displayed in turn.
When the above contents are displayed in each display interface, the contents of 6 and 7 are also displayed at the same time.

4. When engine runs with failure: the screen interface displays the contents of 24-25, and the content of 25 represents the fault information as follows:

U> a: AC over voltage, indicating the character of AC (alternative indication of AC and digit)
b: DC over voltage, indicating the character of DC (alternative indication of DC and digit)

U< a: AC under-voltage, indicating the character of AC (alternative indication of AC and digit)
b: DC under-voltage, indicating the character of DC (alternative indication of DC and digit)

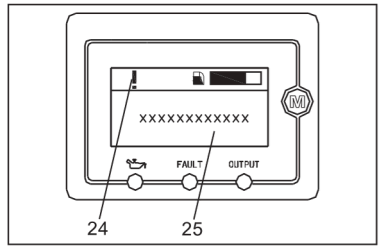
I> Output over current of generator.

Output short circuit of generator.

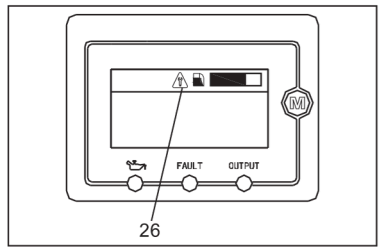
Over heat of frequency converter.

Prompt: When the above contents are displayed in each display interface, the contents of 8 are also displayed at the same time.

5. When the main switch is on the "On" position, the engine is not started or the engine is started successfully (running normally): the screen interface displays the content of 23, and the content of 23 represents the information as follows:

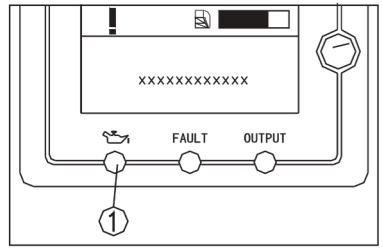


(24) Fault identification
(25) Fault code symbol



(26) Maintenance identification

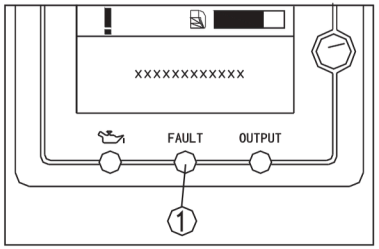
When the generator set reaches the maintenance time, it needs to be maintained immediately. If maintenance has been carried out, operate key 6 to clear this information.
Prompt: Operate key 6 to clear the maintenance information, the screen automatically switches to the next interface.
If key 6 is not operated to clear the maintenance information, the content of 23 will be displayed once every 1 minute in each screen interface for 10 seconds and the content of 23 will not be displayed again until 2 hours later. At the same time, the maintenance mark will be displayed on the screen interface, until the generator set is maintained and key 6 is operated to clear the maintenance information.



Oil warning light (Red)

When the oil level falls below the lower level, the oil warning light 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 main 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.

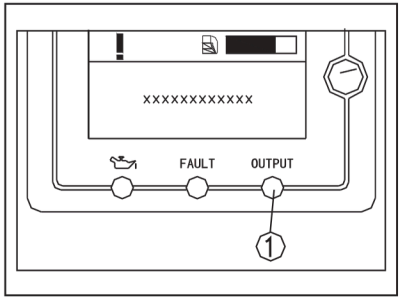


Overload indicator light (Red)

The overload indicator light comes on when an overload of a connected electrical device is detected, the inverter control unit overheats, 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 AC indicator light (Green) will go off and the overload indicator light (Red) will stay on, but the engine will not stop running.
When the overload indicator light comes on and power generation stops, proceed as follows:

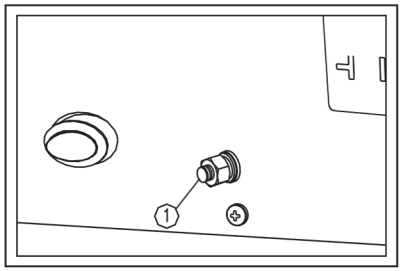
1. Turn off any connected electric devices and stop the engine.
2. Reduce the total wattage of connected electric devices within the rated output.
3. Check for blockages in the cooling air Inlet and around the control unit. If any blockages are found remove.
4. After checking, restart the engine.

TIP : The overload indicator light may come on for a few seconds at first when using electric devices that require a large starting current, such as a compressor or a submergible pump. However, this is not a malfunction.



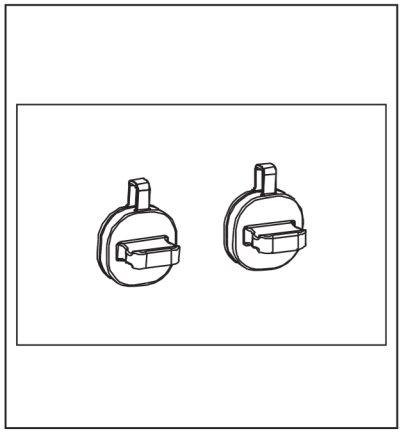
AC indicator light (Green)

The AC indicator light comes on when the engine starts and produces power.



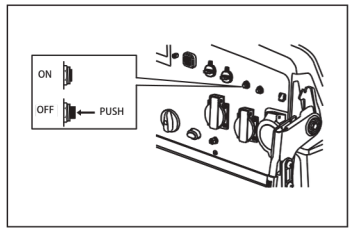
Ground (Earth) terminal

Ground (Earth) terminal ① connects the earth line for prevention of electric shock. When the electric device is earthed, always the generator must be earthed.



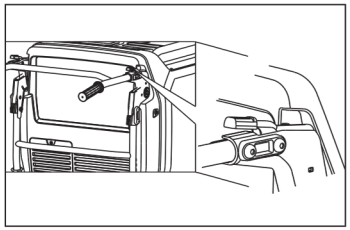
Parallel Operation Outlets

This is the terminal for connecting special cables for parallel running of two generator. The parallel running requires two generator and the special cables. (The rated output power of parallel operation is 12kW.The rated current of parallel operation is 52A.)
The handing, operation procedure and the notes on usage are described in the PARALLEL RUNNING KIT OWNER'S MANUAL included in the Parallel.



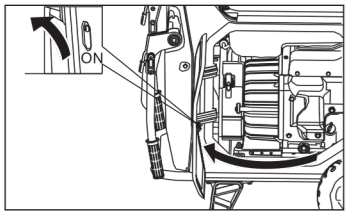
AC circuit breaker

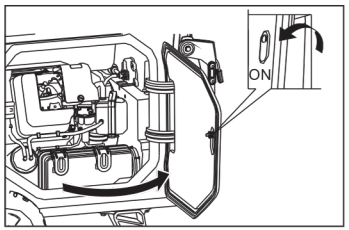
It will break to protect the electric device when current is too heavy.
Protection against electrical shock depends on circuit breakers specially matched to the generating set. If the circuit breakers require replacement, they should be replaced with a circuit breaker having identical ratings and performances characteristics

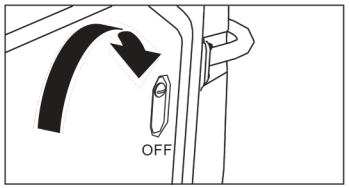


Folding handle

Pusher makes it easier to push the generator. When the generator is at rest, pusher should be folded. Do not place objects on extended arms. Lift handle up and lock handle and fix handle in place.
Extend handle - lift handle up, lock handle and fix handle in place.
Fold handle - press down both handles to lock the handle and lower the handle.







Maintenance door

Open and close maintenance doors for unit maintenance.
In the case of no electrical start, open the right maintenance door and start the engine by recoil starter.
Make sure that the maintenance door is closed while the engine is running.
Purpose of right door:
Inspection/replacement of engine oil; manual start.
Purpose of left door:
Inspection/replacement of spark plugs; inspection/cleaning of air filter; drain of carburetor.
Open maintenance door: Rotate lock 90°anticlockwise.
Close maintenance door: Rotate lock 90°clockwise.

Pre-oparation

NOTICE Pre-operation checks should be made each time operation.

⚠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.

Fuel

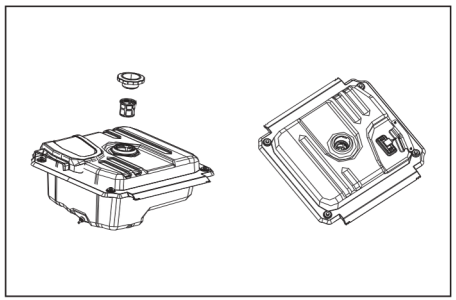
⚠WARNING

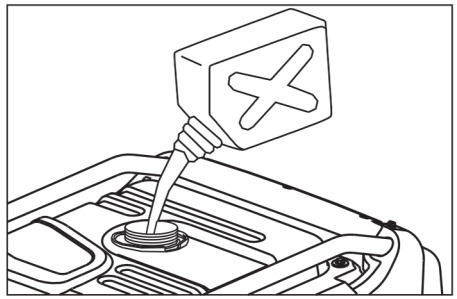
- Fuel is highly flammable and poisonous. Check "SAFETY INFORMATION"(See page 2-5) carefully before filling.
- Do not overfill the fuel tank, otherwise it may overflow when the fuel warms up and expands. After fill the fuel, make sure the fuel tank cap is tightened securely.
- Immediately wipe off spilled fuel with a clean.
- Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts.

Make sure that there is enough fuel in the tank. If the fuel is not enough, open the fuel tank cover and add fuel to the red indicated position.

Recommended fuel: Unleaded gasoline
Fuel tank capacity: Total: 25.0L

① Add fuel



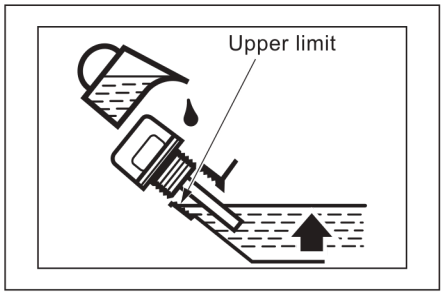


Engine Oil

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. This could result in overfilling and damage to the engine.

Oil level



Recommended engine oil:
SAE 10W -30
Recommended engine oil grade:
API Service SE type or higher
Engine oil quantity:
1.45 L

NOTICE

Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

Operation

NOTICE

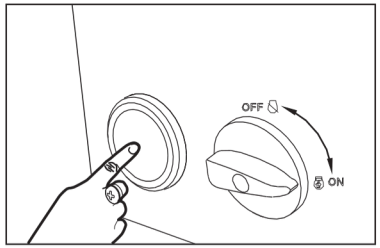
Never operate the engine in a closed area or it may cause unconsciousness and death within a short time. Operate the engine in a well ventilated area. The generator has been shipped without engine oil. Do not start the engine till fill with the sufficient engine oil.

TIP:

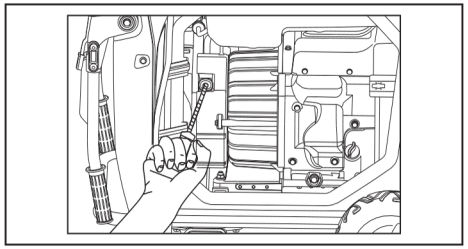
The generator can be used with the rated output load at standard atmospheric conditions.
“Standard atmospheric conditions ”; Ambient temperature 25℃.
Barometric pressure 100kPa; Relative humidity 30%
The output of the generator varies due to change temperature, altitude (lower air pressure at higher 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 confined areas, as generator cooling is affected.

STARTING THE ENGINE

1. Do not connect any electrical equipment before starting the generator. Turn the ESC switch to “Off” position.
2. Turn the main switch to “On” position.



Engine switch start
Press and release the engine switch button on the control panel. The engine switch will start the motor for 5 seconds. When the engine starts successfully, the starter will stop automatically. If the engine does not start successfully, wait at least 10 seconds before starting again.
Tip: Press the button for at least 0.5 second. When the generator does not run, it is strictly prohibited to put the combination switch on the “On” position, or the battery will be severely depleted. When the generator is not in use, turn the main switch to the "on"position.



Recoil start

Turn the lock 90°anticlockwise, and open right maintenance door. First, pull the recoil starter gently, the guy wire is tightened, and then pull hard. Turn the lock 90°clockwise, and close right maintenance door.

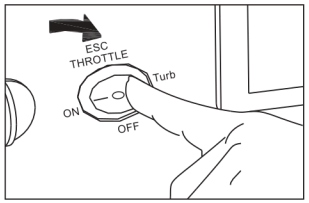
⚠WARNING

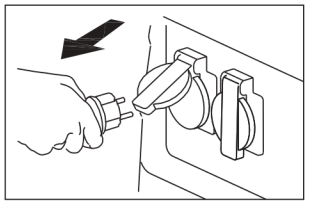
1. Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.
2. Do not let the starter rope rub against the generator body, or the rope will wear out prematurely.

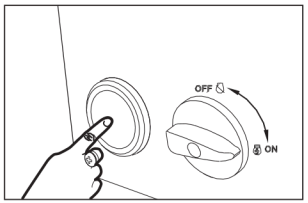
If you want to use the energy saving function, turn the ESC switch to the “On” position after the engine is started and preheated for 2-3 minutes.
Tip: When the engine is started, the ESC switch is on the “ON” position and the generator cannot be connected to any load. When the environment temperature is lower than 0 ℃ (32 ℉), engine speed reaches 3,100min^{-1}, and warm-up time reaches 5 min. When the environment temperature is less than 5 ℃ (41 ℉), engine speed reaches 3,100 r/min, the warm-up time reaches 3 min. After running for the above time, ESC switch can only work normally when it is “ON”.

5 Operation
Inverter Generator Owner's Manual

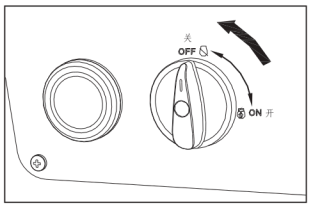
STOP THE ENGINE







If the engine is turned off in an emergency, rotate the main switch quickly to the “Off” position. Under normal circumstances, follow these steps to shut down the engine.
Tip:
1. Turn off all electrical equipment.
2. Turn the ESC switch to the “Off” position.
3. Disconnect all electrical equipment from the AC socket.
4. Manual extinguishing: (skip this step and proceed to the next step directly).



5. Turn the main switch to the “Off” position (ignition system off, fuel system off, solenoid valve off, power system off).

Tip: When the generator is not running or not in use, put the main switch on the “Off” position, otherwise the battery will be seriously damaged to affect the next one-key start.

ALTERNATING CURRENT (AC) CONNECTION

⚠WARNING Be sure any electric devices are turned off before plugging them in.

NOTICE

- 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 engine and make sure that AC indicator light is green.
2. Insert the plug into AC socket.
3. Make sure that AC indicator light is on.
4. Make sure the AC breaker is in "ON"position and the AC indicator light is green.

TIP: Many electric load devices require starting power above their rated power to start.

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

- Most motorized appliances require more than their electrical rating for startup. When an electrical motor is started, the overload indicator (red) may come on. This is normal if the overload indicator (red) goes off within 4 seconds. If the overload indicator (red) stays on, consult your generator dealer.
- 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.
- If the generator is overload, or if there is a short circuit in a connected appliance, the overload indicator (red) will go ON. The overload indicator (red) will stay ON, and after about 4 seconds, current to the connected appliance(s) will shut off, and the output indicator (green) will go OFF. Stop both engines and investigate the problem. Determine if the cause is a short circuit in a connected appliance or an overload, correct the problem and restart the generator.

5 Operation
Inverter Generator Owner's Manual

Use of extension cables a loss of power takes place when connecting electrical equipment or a tool to the nenerator with an extension cable — the longer the cable the greater the loss of power. This means that less voltage is conveyed to the electrical equipment and the input current is increased or the performance is reduced. A larger extension cable diameter reduces the loss of voltage.
NOTE: Operation of electrical equipment under low voltage may lead to overheating.
The table serves as a guideline for selecting the correct cable size…
Only tough ,rubber—sheated flexible cables in accordance to regulation IEC 60245-4 or equivalent be used.
WARNING:
Damaged cable may cause electric shock , which can lead bo serious injury or death. NEVER use worn ,bare or frayed cables. Replace damaged cables immediately.
Never exceed the cable's rated power.
Contact the cable manufacturer if you have questions about using the cable.
When using extension lines or mobile distribution networks the resistance value shall not exceed 1.5Ω.

AC parallel operation

Before connection an appliance to either generator, make sure that it is in good working order and that its electrical rating does not exceed that of the receptacle.
During parallel operation, the ESC switch should be in the same position on both generators.

1.Connect the parallel operation cable between the generator to either an generator or companion generator following the instructions supplied with the cable kit.
2.Start the engines and make sure the AC indicator (green) on each generator comes on.
3.Plug an appliance into the AC receptacle of the parallel operation cable.
4.Turn on the appliance.

AC Parallel Operation Applications

TIP:

- Make sure that it is in good working order. A faulty appliance or power cord can create a potential for electrical shock.
- If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn if off immediately. Disconnect the appliance and determine whether the problem is the appliance, and determine whether the problem is the appliance or the rated load capacity of the generator has been exceeded.
- Make sure that the combined electrical rating of the tools or appliance do not exceed that of the generator. Never exceed the maximum may be used for no more than 30 minutes.
- Never connect different generator models.
- Don't remove the parallel operation cable when the generator operation.
- For single generator operation, the parallel operation cable must be removed.

⚠WARNING

- Substantial overloading that continuously lights the overload indicator (red) may damage the generator Marginal overloading that temporarily light the overload indicator (red) may shorten the service life of the generator.
- For continuous operation, do not exceed the rated power.
- Rated power in parallel operation is: 12kW.

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 (Efficiency 0.85)
7500i / LC7500i	~6500W	~5200W	~2600W

TIP:

- "~"means below.
- 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		6500VA
Frequency	Power factor	
AC	1.0	~6500W
	0.8	~5200W

The overload indicator light comes on when total wattage exceeds the application range. (See page 12 for more details.).

NOTICE

- Do not overload. The total load of all electrical appliances 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 from 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.

Maintenance

Safety is an obligation of the owner. Periodic inspection, adjustment and lubrication will keep your generator in the safest and most efficient condition possible. The most important points of generator inspection and lubrication are explained on the following pages.

⚠WARNING Improper maintenance can lead to danger, if you are not familiar with the maintenance operation, please refer to the designated dealer for your service.

Carelessly maintained machines can pose dangers! Regular maintenance and occasional repairs are necessary to ensure the safe and correct functioning over longer time periods. If problems should occur with the generator or while the machine is being maintained, always attach a “DO NOT START” sign to the control panel in order to alert others of this.

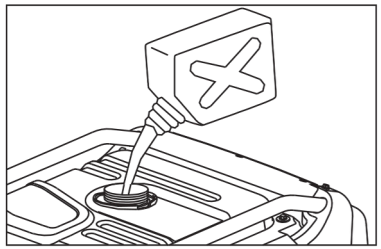
Maintenance chart

Use only franchised dealer specified genuine parts for replacement. Ask an authorized franchised dealer for further attention.

Routine maintenance cycle (1)		Each check	First months or 20 Hr.	3 months or 50 Hr.	6 months or 100 Hr.	12 months or 300 Hr.
Item	**Routine**					
Oil	Inspect	○				
	Replace		○		○	
Air filter	Inspect	○				
	Clean			○ (2)		
	Replace					○ (*)
FUSE	Inspect	Every 2 years (3)				
Spark plug	Clean				○	
	Replace					○
Spark arrester	Clean				○	
Valve clearance	Inspect-Adjustment					○ (3)
Combustion chamber	Clean	Every 1000 hours (3)				
Fuel tank	Clean	Every 2 years or 1000 hours (3)				
Fuel filter	Replace	Every 2 years or 1000 hours (3)				
Fuel hose	Clean	Every 2 years (Replacement if necessary) (3)				

Tip: (*) Replace the paper filter element.
(1) When it is used for commercial purposes, record the running time to ensure timely maintenance.
(2) Clean more frequently when using it in damp or dusty places.
(3) Unless you have the appropriate tools and mechanical proficiency, these items should be maintained by the service dealer. Stop using the generator and contact the dealer for disposal.
Failure to follow this maintenance schedule can result in an unwarranted failure.

Add Fuel



When the engine stops, check the level of gasoline. When the oil level is low, add gasoline to the tank.

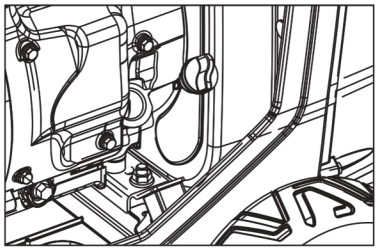
⚠WARNING Gasoline is flammable and explosive. When refueling, you can get burns or serious injuries.

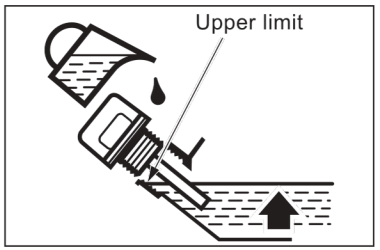
Stop the engine and stay away from fireworks, spark plugs and Flame and so on. Fuel only outdoors. Wipe up the spilled fuel quickly.

NOTICE Gasoline can damage paint and plastics. When refueling, take care not to spill gasoline.

Add gasoline in a well-ventilated area before starting the engine. If the engine is running, let it cool down automatically. It is strictly prohibited to fill more than the fuel filter scale on the tank bracket (red).
It is strictly prohibited to add gasoline in the closed environment, because the gasoline will contact spark and flame after volatilization. Keep gasoline away from electrical indicator lights, household appliances, barbecue, power tools, etc.
Spilling fuel not only causes fires, but also causes environmental damage. Wipe off the spilled fuel quickly.

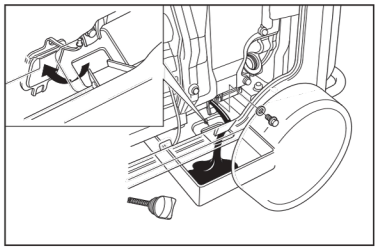
ENGINE OIL INSPECTION

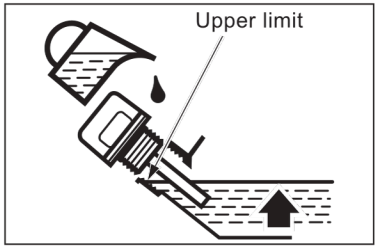




Check engine oil when engine is stopped and placed on a horizontal surface.
1. Rotate the lock 90°anticlockwise, and open right maintenance door.
2. Remove the oil gauge.
3. Check the oil. If the oil level is below the highest mark, add the specified oil to the highest mark.
4. Reinstall the oil gauge.
5. Rotate the lock 90°clockwise, and close right maintenance door.
When the oil level is below the minimum safety scale, the oil alarm system will automatically shut down the engine. For this reason, in order to avoid unexpected shutdown inconvenience, check the oil usually.

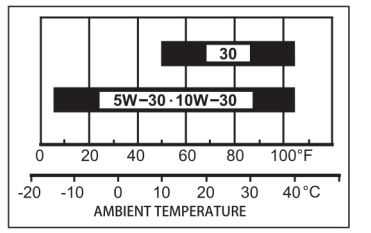
ENGINE OIL REPLACEMENT





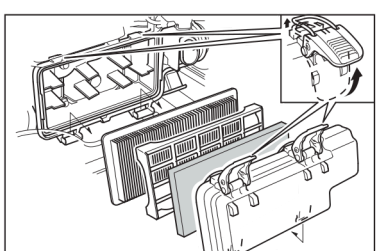
Discharge oil when engine is hot to ensure rapid and thorough discharge of oil.
1. Rotate the lock 90°anticlockwise, and open right maintenance door.
2. Remove the black rubber seal ring under the oil drain bolt.
3. A suitable container for oil is placed at the bottom of the engine.
4. Remove the oil gauge.
5. Remove oil drain bolts and washers to drain oil thoroughly.
6. Reinstall the oil drain bolts and washers and tighten the oil drain bolts.
7. Reinstall the black rubber seal ring.
8. Place the generator on a horizontal surface and add the specified oil to the maximum scale.
9. Reinstall the oil gauge.
10. Rotate the lock 90°clockwise, and close right maintenance door.

OIL SPECIFICATION TABLE



Oil is an important factor which affects performance and service life. Use four-stroke oil.
SAE 10W30 is recommended for regular use. However, when the average temperature in your area is within the recommended range, you can use other viscosity types of oil shown in the chart.

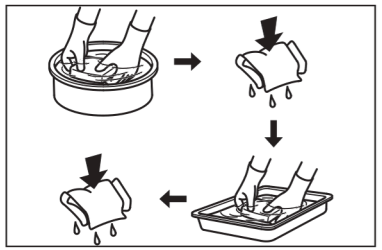
AIR FILTER



1. Rotate the lock 90°anticlockwise, and open left maintenance door.
2. Loosen the air filter cover clamp and remove the air filter cover, foam filter core, filter core bracket and paper filter core together.
3. Paper filter element:
a. Remove the paper filter element from the filter holder.
b. If the paper filter element is dirty, replace it with a new one. Do not clean the paper filter element.
c. Insert the paper filter element into the filter holder.
4. Foam filter:
a. Remove the foam filter element from the empty filter cover.
b. Check the foam air filter to make sure that it is clean and in good condition. If the foam filter element is dirty, refer to the following page for cleaning. If the foam filter element is damaged, replace it with a new one.
5. Put the foam filter element, the filter holder and the paper filter element together into the empty filter cover.
6. Install the air filter cover and lock the cover clamp.
7. Close the left maintenance door, and rotate the lock 90°clockwise.

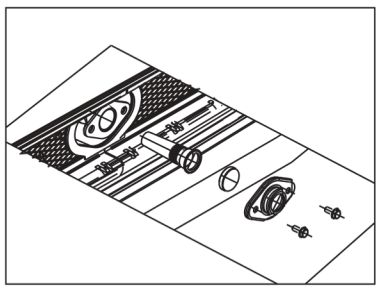
NOTICE Dust can enter the engine and quickly wear it out, if the engine runs without a filter element or if the filter element is damaged.

FOAM FILTER CLEANING

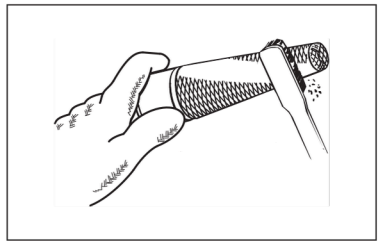


The foam filter element of the dirty air filter will restrict the air flow to the fuel system and reduce the engine performance. If the generator is used in a dusty area, the maintenance frequency of the air filter's foam filter element is higher than that in the maintenance requirements.
1. Wash the filter element in warm soapy water and let it dry naturally, or clean and dry it in a non-flammable solvent.
2. Dip the filter element into clean oil and squeeze out excess oil. If there is too much oil left in the filter element, start the engine and the engine will smoke.
3. Use a wet cloth to remove dirt from the inside of the air filter's cover. Take care to prevent dust from entering the air ducts which leads to the fuel system.

SPARK ARRESTER



The spark collector must be maintained every 100h to keep the engine running normally.
After running the engine, the engine and muffler will become very hot. Do not allow your skin and clothes to directly touch the engine and muffler. When the motor and muffler are cooled, check and clean them up.

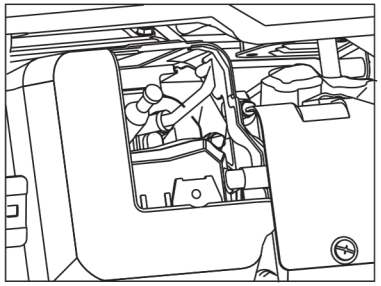


The spark collector must be maintained every 100h to keep the engine running normally.
After running the engine, the engine and muffler will become very hot. Do not allow your skin and clothes to directly touch the engine and muffler. When the motor and muffler are cooled, check and clean them up.
1. Loosen two M5 x 12 pan head bolts and remove mounting cover, muffler mesh cover and spark collector
2. Clean the muffler's mesh cover and the cumulative carbon on the spark collector with a steel wire brush.

NOTICE Clean them with steel wire brush gently to avoid damage or scratch to muffler's mesh and spark collector. The spark collector must not be broken or cracked. If it is damaged, please replace it in time.

3. Reload the spark collector in reverse order to remove the spark collector.

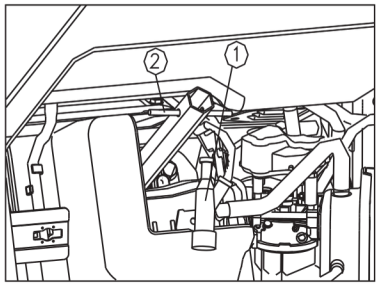
SPARK PLUG



In order to maintain the spark plug, you need to prepare a set of spark plug sleeve ① and loading rod ②.
In order to make sure that the engine is running properly, spark plug must be clean and carbon-free.

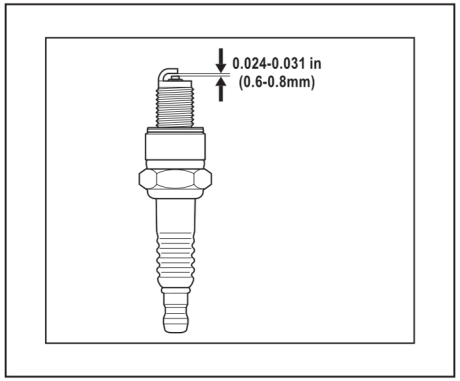
NOTICE Incorrect spark plug can cause damage to engine.

If the engine is hot, let it cool naturally before maintenance of spark plug.



1. Rotate the lock 90°anticlockwise, and open left maintenance door.
2. Loosen bolt of spark plug's maintenance cover and remove it.
3. Remove the spark plug cap, remove impurities and dust around the spark plug, and place the sleeve in the appropriate position of the spark plug.
4. Use the spark plug sleeve and the loading rod (insert the loading rod into the sleeve), rotate counterclockwise and remove the spark plug.
5. Check the spark plugs. Replace the spark plug, if the electrode is worn or stained, or if the insulator is cracked or broken.
Standard spark plug: F7RTC/F7TC, clearance of spark plug: 0.6-0.8mm.
6. After ensuring that the spark plug is in good condition, fix the spark plug gently to the head of the cylinder by hand to prevent thread damage caused by force.
7. After the spark plug is fixed, tighten it with the spark plug sleeve. If the used spark plug is to be reinstalled, tighten 1/8-1/4 circle manually after fixing the spark plug and before tightening it to the specified position.
If the newly installed spark plug is to be reinstalled, tighten 1/2 circle manually after fixing the spark plug and before tightening it to the specified position.
Torque: 13.3 LBS. Ft (18 N.M, 1.8 kg.m)

Tip: If the spark plug is installed without torque wrench, a better estimation method is to tighten 1/4-1/2 circle manually, but the spark plug should be tightened to the specified torque.

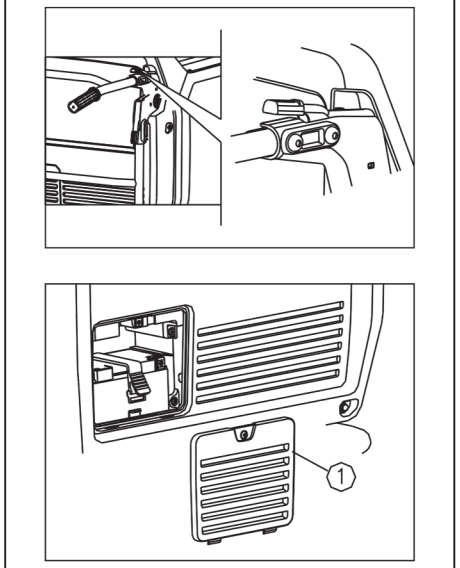


NOTICE Loose spark plugs may overheat and damage the engine. Excessive tightening of spark plugs can damage the thread on the head of cylinder.

8. Install the spark plug cap.
9. Install spark plug maintenance cover and tighten maintenance cover's bolts.
10. Close the left maintenance door, and rotate the lock 90°clockwise.

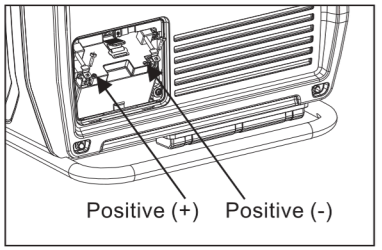
BATTERY

When the engine is running, the generator's charging system will automatically charge the battery. However, if the generator is only used regularly, it must be charged monthly to maintain the service life of the battery.



Remove battery

Battery terminals, wiring terminal and associated accessories containing lead and lead compounds. Wash hands immediately after handling.
1. Lift handle up, lock handle and fix it in place.
2. Loosen the bolts of maintenance cover, and remove the battery maintenance cover ①.
3. Remove the negative (-) cable from the negative (-) terminal of the battery, and then remove the positive (+) cable from the positive (+) terminal of the battery.
4. Remove the battery band from the hook at the bottom of generator.
5. Remove the battery from the mounting box.



Install the battery

1. Put the battery in the mounting box.
2. Connect the positive (+) cable with the positive (+) terminal of the battery, tighten the bolt and cover the rubber cap.
3. Connect the negative (-) cable with the negative (-) terminal of the battery, and tighten the installation bolt.
4. Install the battery band.
5. Reinstall battery maintenance cover and tighten the bolts.

In the case that the battery maintenance cover is not assembled, it is strictly prohibited to run the generator, otherwise the performance of the generator and the engine will become poor.

1.Start the engine.
2.Connect the red battery charger lead to the positive (+) battery terminal.
3.Connect the black battery charger lead to the negative (-) battery terminal.
4.Turn the ESC switch to "OFF" position to start charging.

NOTICE

- Be sure the ESC switch is turned off while charging the battery.
- Be sure to connect the red battery charger lead to the positive (+) battery terminal, and connect the black lead to the negative (-) battery terminal. Do not reverse these
- positions.
  Connect the battery charger leads to the battery terminals securely so that they are not disconnected due to engine vibration or other disturbances.

7 Maintenance
Inverter Generator Owner's Manual

⚠WARNING

- Never smoke or make and break connections at the battery while charging. Sparks may ignite the battery gas.
- Battery electrolyte is poisonous and dangerous, causing severe burns, etc. contains sulfuric (sulphuric) acid. Avoid contact with skin, eyes or clothing.

Antidote:

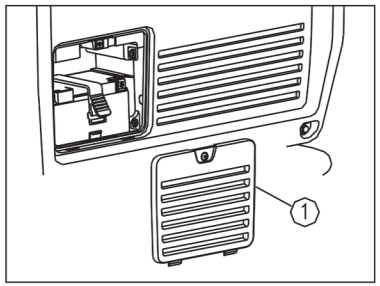
External- Flush with water.
INTERNAL- Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil.
Call physician immediately.

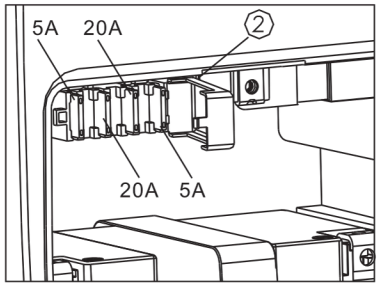
EYES: Flush with water for 15 minutes and get prompt medical attention.
Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc., away. Ventilate when charging or using in closed space. Always cover eyes when working near batteries.

KEEP OUT OF REACH OF CHILDREN

Protect children by keeping them at a safe distance from the generating.

FUSE





If the fuse blows, the generator will stop.
In the case of a fuse failure, find out the cause of the failure and fix it before continuing to use. If the fuse continues to fail, stop using the generator and contact the dealer.
1. Turn the main switch to the "Off" position, before checking and replacing the fuse.
2. Loosen the bolts of battery maintenance cover, remove the battery maintenance cover ①.
3. Open the cover of the fuse mounting box ② (90 ° counterclockwise)
4. Replace the fuse with the one of the same type and grade.
Specifications of fuse: 5A, 20A.

NOTICE

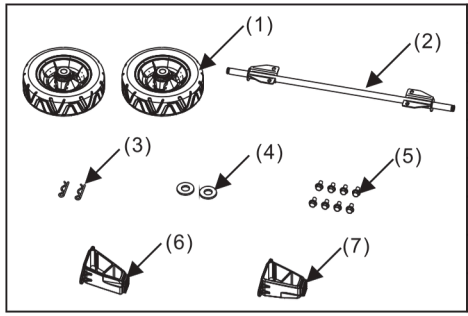
Prohibited the use of fuses that do not conform to the type and grade, or they may cause serious damage to the electrical system or fire.

5. Cover the fuse mounting box and install the battery maintenance cover.

Accessories Installation

REMOVE ACCESSORIES

Remove the attachment, remove the generator and attachment box from the packing box, and count the number of attachments according to the following table.



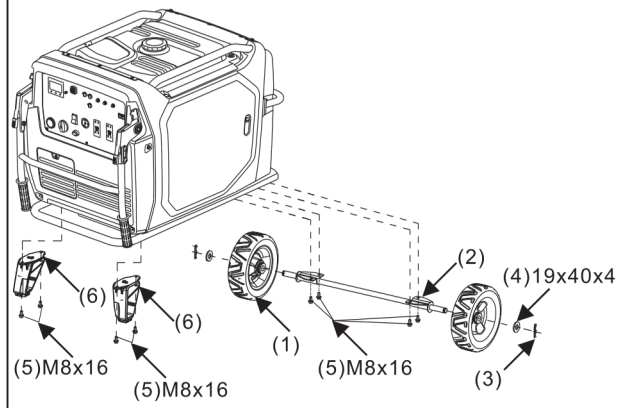
No.	Name	Quantity
1	Wheel	2
2	Axle	1
3	B pin	2
4	Washer	2
5	Bolt	8
6	Frame shock absorber bracket (left)	1
7	Frame shock absorber bracket (right)	1

WHEEL SET INSTALLATION

Tool requirements:12 mm wrench, 10 mm wrench, crosshead screwdriver used for battery wiring, and clamp.
It is strictly forbidden to run the generator, when the wheel kit is not installed. The wheel kit provides air flow space between the ground and the air inlet of generator.

NOTICE

If the wheel kit is not installed, dust and debris may be sucked into the duct of generator, which will cause damage to the generator. Be sure to run the generator after the wheel kit is installed.



1. Install the wheels to the generator with two washers and pin clamps.
2. Install the axle onto the generator with four M8×16 bolts.
3. Install the frame shock absorber bracket (left) onto the generator with two M8×16 bolts.
4. Install the frame shock absorber bracket (right) onto the generator with two M8×16 bolts.
Torque: 11-16 LBS. Ft (15-22 N.M, 1.5-2.2kg.m).

Transporting

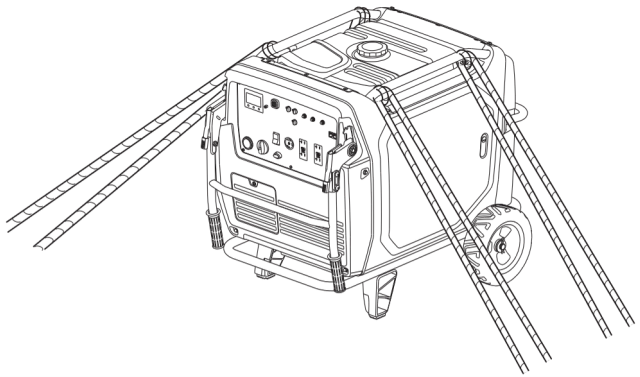
If the generator set just runs, allow it to cool naturally for at least 15 minutes before loading it into the vehicle. The thermal power and exhaust system can cause harm to people and ignite some combustible materials. To prevent fuel leakage, the generator shall be placed horizontally and the engine switch shall be off during transportation.

⚠WARNING

When transporting the generator:

- Do not overfill the tank.
- Do not operate the generator while it is on a vehicle. Take the generator off the vehicle and use it in a well ventilated place.
- Avoid a place exposed to direct sunlight when putting the generator on a vehicle .If the generator is left in an enclosed vehicle for many hours, high temperature inside the vehicle could cause fuel to vaporize resulting in a possible explosion.
- Do not drive on a rough road for an extended period with the generator on board. If you must transport the generator on a rough road, drain the fuel from the generator beforehand.

NOTE:
To transport the generator, hold the holding part(See below).
Take care not to drop or strike the generator when transporting.
Do not place heavy objects on the generator.
When the rope or strap is used for fixing generator for transportation, only the frame's lifting part must be used as the connection point. Do not attach rope or strap to the main body of the generator or to any position on the folding handle.



Storage and Transportation

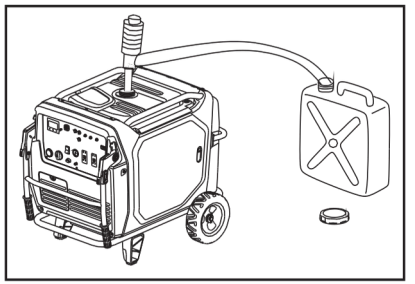
Long term storage of your machine will require some preventive procedures to guard against deterioration.
In order to make your generator trouble-free and in good condition, proper storage preparation is essential. The following steps will help to prevent rust and corrosion that damage the generator's function and appearance, and make it easier to start the engine when you use the generator again.

FUEL

NOTICE Depending on the area of operation equipment, the fuel may deteriorate and oxidize rapidly. The fuel may deteriorate and oxidize within 30 days and may cause damage to the fuel system.

Fuel may deteriorate and oxidize during storage. Old gasoline can make it difficult to start and leave deposits that can clog up the fuel system. If gasoline in the generator deteriorates during storage, maintenance and replacement of fuel system's components may be required. The length of time of gasoline which remains in the fuel tank and will not cause functional problems varies with factors such as the mixture of gasoline, storage temperature, and whether the tank is partially or fully filled. The partially filled air in the tank can cause the fuel to deteriorate. Higher storage temperature can accelerate fuel deterioration. Fuel deterioration problems can occur within months, or even less if the gasoline added to the tank is not fresh.
The distributor's effective warranty does not cover damage to the fuel system or performance problems caused by careless storage. You can extend fuel storage life by adding gasoline stabilizers, or you can avoid fuel deterioration problems by removing fuel from the tank.

DRAIN THE FUEL



1. Turn the main switch to “ON” position.
2. Open the tank cover and remove the filter; all the fuel in the tank is extracted into the special tank and then put back into the filter screen and tank cover.
3. Fuel oil is extremely volatile and toxic. Please read “Safety Tips” carefully and use clean and soft cloth to test the fuel oil, which prevents damage to the plastic cover.
4. Start the engine, about 20 minutes later, till the fuel runs out, the engine will automatically stop.

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.

5. Rotate the lock 90°counterclockwise, and open the left maintenance door.
6. Loosen the drain bolt on the carburetor and put the fuel in the carburetor into the special tank.
7. Turn the main switch to “Off” position.
8. Tighten the drain bolt on the carburetor.
9. Rotate the lock 90°clockwise, and close the left maintenance door.

ENGINE

Follow the following steps to protect the tank, piston ring and other vulnerable parts.
1. Open the left maintenance door, loosen the bolt of spark plug maintenance cover, and remove the spark plug's maintenance cover.
2. Remove spark plug, and pour one tablespoon of SAE10W30 oil.
3. Turn the main switch to “Off” position.
4. Open the right maintenance door, and pull the recoil starter for a few minutes to lubricate the cylinder.
5. Install spark plugs and pull the recoil starter, till you feel tight (prevent cylinder and valve from rusting).
6. Install the spark plug's maintenance cover, and close left and right maintenance doors.
7. Clean the surface of the unit, and put the unit in a ventilated and dry horizontal place. Cover it with a sleeve.

Common Fault Analysis

Failure to Start of Engine		
No.	Potential Reasons	Countermeasures
1	The main switch is placed on the “Off” position.	Turn the main switch to the “On” position.
2	Not enough fuel in the tank.	Add fuel.
3	The engine is untreated or fails to exhaust gasoline during storage, or inferior gasoline is added before use.	Drain the fuel from the tank, and refill with new gasoline.
4	Too low oil level causes the oil alarm system to run.	Add engine oil.
5	The spark plug got wet by gasoline.	Turn the main switch to the “Off” position, pull recoil starter for five times or more times, which can dry the spark plug. If it still doesn't run, remove the spark plug and dry it.
6	Ignition system fault, wiring harness fault, valve clearance, etc.	Contact dealers for handling.
Decrease of output power		
No.	Potential Reasons	Countermeasures
1	Air filter element failure	Clean or replace filter element.
2	The engine is untreated or fails to exhaust gasoline during storage, or inferior gasoline is added before use.	Drain the fuel from the tank, and refill with new gasoline.
3	Ignition system fault, wiring harness fault, valve clearance, etc.	Contact dealers for handling.
No output of control panel		
No.	Potential Reasons	Countermeasures
1	AC indicator light is off, and overload indicator light is on.	Check AC load. Stop and restart the engine.
		Check the inlet of cooling duct. Stop and restart the engine.
2	Over-current protector action.	Check AC load and reset over-current protector.
3	Load tool or equipment failure.	Replace or repair load tools or equipment,Stop and restart the engine.
4	Other faults of engine	Contact dealers for handling.

Parameters

Model No.			7500i LC7500i
Generator	Type		Inverter generator
	Rated frequency /Hz ※		50
	Rated voltage /V ※		230
	Rated power COP/kW		6.5
	Maximum power MAX/kW		7.0
	Starting Watts /kW		7.5
	Power factor		1.0
	AC output quality		ISO8528 G2
	THD/%		⩽1.5
	Noise Level /dB	Measured Sound Pressure Level	70
		Measured Sound Power Level	90
		Uncertainty	2
		Guaranteed Sound Power Level	92
	Overload Protect	AC	AC breaker
	Maximum side altitude above sea level (m)		1500
	Maximum side ambient temperature(^{0}C)		40
Engine	Engine		190FD-2 LC190FD-2
	Engine type		Single cylinder, 4-Stroke, forced air cooling, OHV
	Displacement/cc		420
	Fuel type		Unleaded Gasoline
	Fuel capacity/L		25
	Continue Running Time (at rated power) / h		6.5
	Oil Capacity/L		1.45

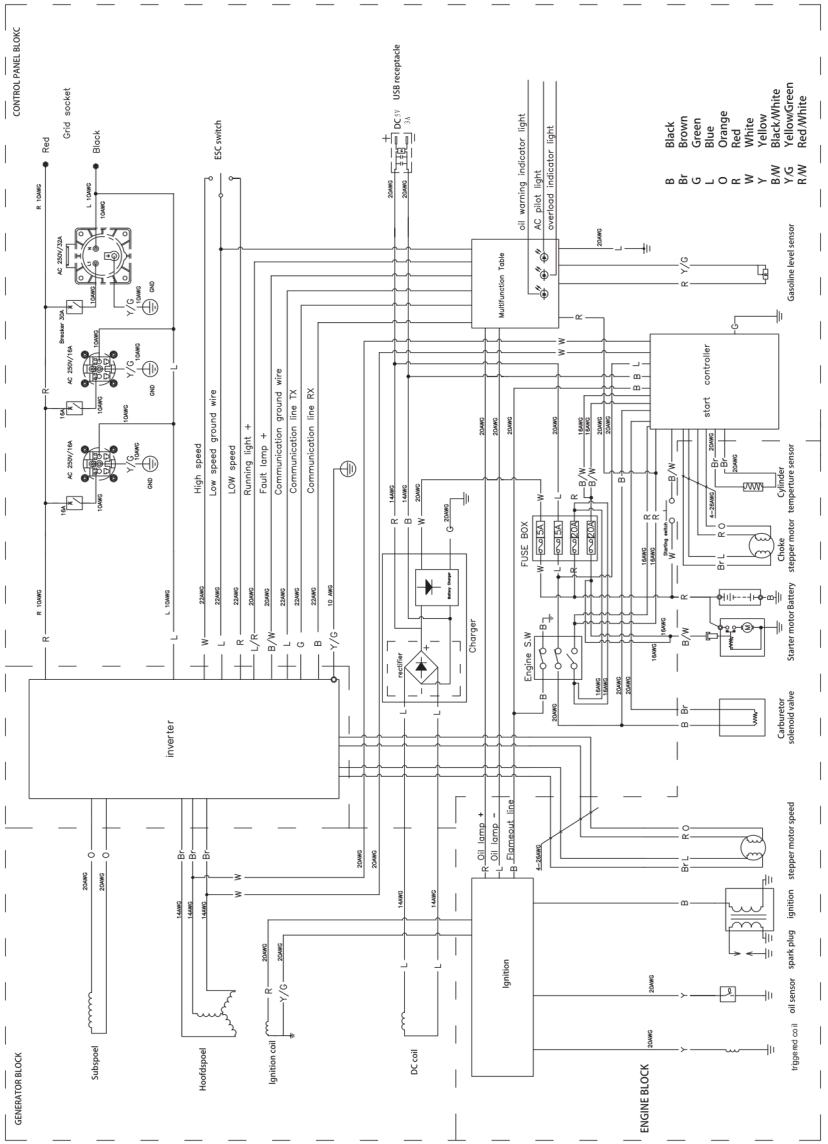
12 Parameters
Inverter Generator Owner's Manual

Engine	Spark Model No.	F7TC/F7RTC
	Starting mode	Recoil start / Engine switch start
Generator	Length×Width×Height/mm	950×765×773
	Wheel / inch	2×10
	Net weight/kg	130

Note:

All the parameters were test at room temperature 20±5℃, relative humidity 30%, ambient air pressure 100kPa and Altitude above sea level ≤1500m, and ambient temp. shall not exceed 40℃.

● 230V


CONTROL PANEL BLOKC
GENERATOR BLOCK
ENGINE BLOCK
inverter
Red
Grid socket
Block
ESC switch
USB receptacle
Multifunction Table
oil warning indicator light
AC pilot light
overload indicator light
start controller
Gasoline level sensor
Cylinder temperture sensor
Choke stepper motor
Starter motor Battery
Carburetor solenoid valve
stepper motor speed
ignition
spark plug
oil sensor
triggered coil
Ignition
Charger
rectifier
FUSE BOX
Engine S.W
Oil lamp +
Oil lamp -
Flameout line
Subspool
Hoofdspool
Ignition coil
DC coil
High speed
Low speed ground wire
LOW speed
Running light +
Fault lamp +
Communication ground wire
Communication line TX
Communication line RX
B Black
Br Brown
G Green
L Blue
O Orange
R Red
W White
Y Yellow
B/W Black/White
Y/G Yellow/Green
R/W Red/White