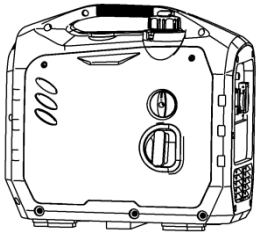
INVERTER PETROL GENERATOR
Owner's Manual

KP2300i-2



Read this manual carefully before operating this generator

PREFACE

Thank you for choosing a petrol generator set by our Co.

Based on the latest technology at home and abroad, our Co. has successfully developed the petrol generator set. The unit is characterised by advanced design, compact structure, reliable performance, convenient service, low fuel consumption and noise as well as fashion shape. With general petrol engine as power, it is widely used in many fields such as living, open working, shop, bank, fishing, etc.

The manual gives information with respect to operation and maintenance of the petrol generator, and be sure to read it carefully first before operating. If any trouble occurs, call your dealer who will provide you with the best after service.

Safety Warnings

Please read this manual carefully before using this petrol generator set 

Special important contents in this manual will be indicated in the following ways, please note.

DANGER：If you do not follow the instructions, your life will be in danger or you will be seriously injured.

WARNING：If you do not follow the instructions, your life will be in danger or you will be seriously injured.

CAUTION：Failure to follow instructions may result in minimal harm.

NOTICE：Failure to follow instructions may result in damage to your engine set and other property.

This specification is a permanent part of the gasoline generator set and should be attached when the petrol generator set is transferred to others.

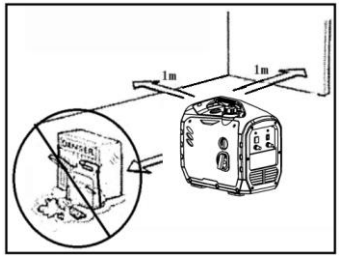
CONTENTS

1.0 Safety Notice for Petrol Generator

1. Never operate it in an enclosed room

2. Never connect directly to home/mains electricity

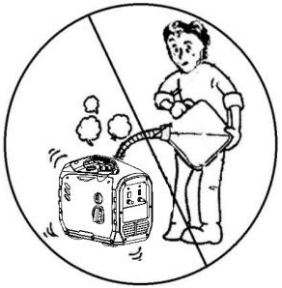
3. Do not operate in wet conditions



4. Keep inflammables at least 1m away from the unit

5. No smoking when filling fuel

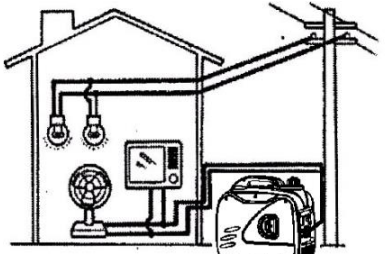
6. Always fill fuel with the generator stopped



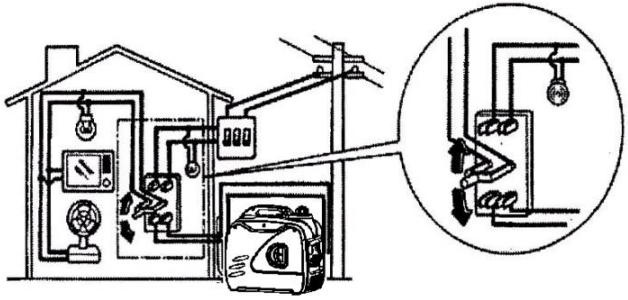
7. Avoid spilling fuel when filling

DANGER

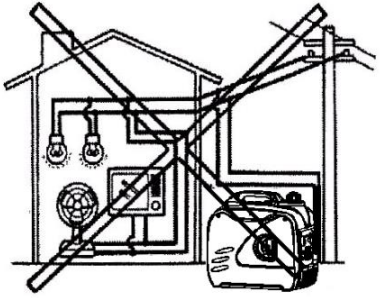
If connecting the generator to home/mains power supply, ensure this is performed by a qualified electrical engineer as this involves fitting specialists switch gear (ATS). Improper connection between the generator and loads could cause injury, death, fire or damage to the generator



1. Correct

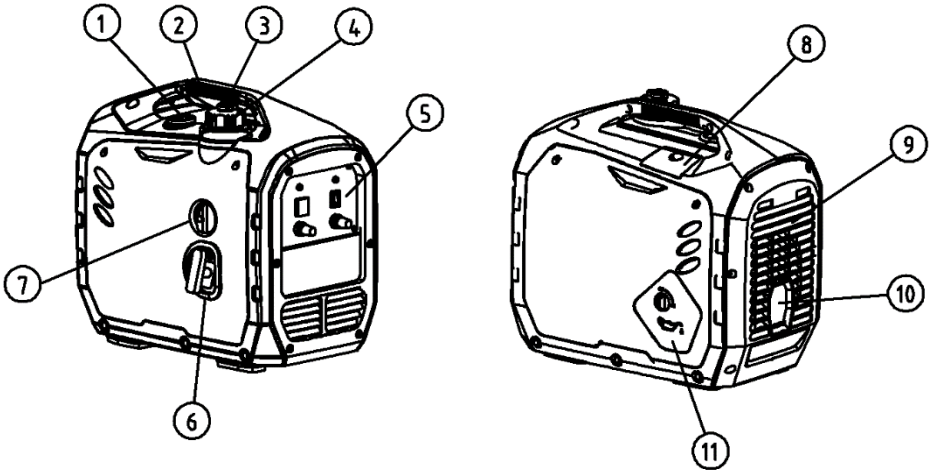


2. Correct



3. Incorrect/dangerous

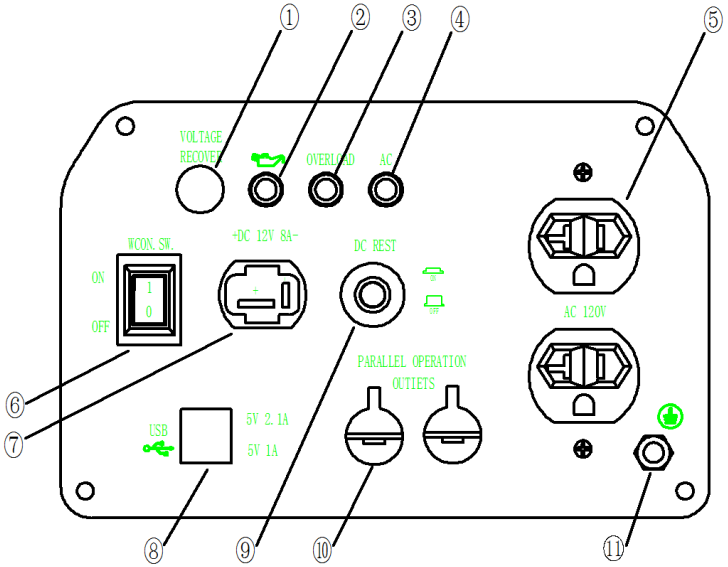
2.0 Introduction to Parts and Components



① Fuel gauge/sight glass (not always present)
② Fuel tank cap vent lever
③ Fuel tank cap
④ Carrying handle
⑤ Control panel
⑥ Starting handle
⑦ 3-in-1 combination switch (ignition on, fuel on and choke on/closed)
⑧ Spark plug access cover
⑨ Rear grille
⑩ Muffler assembly
⑪ Oil port access cover

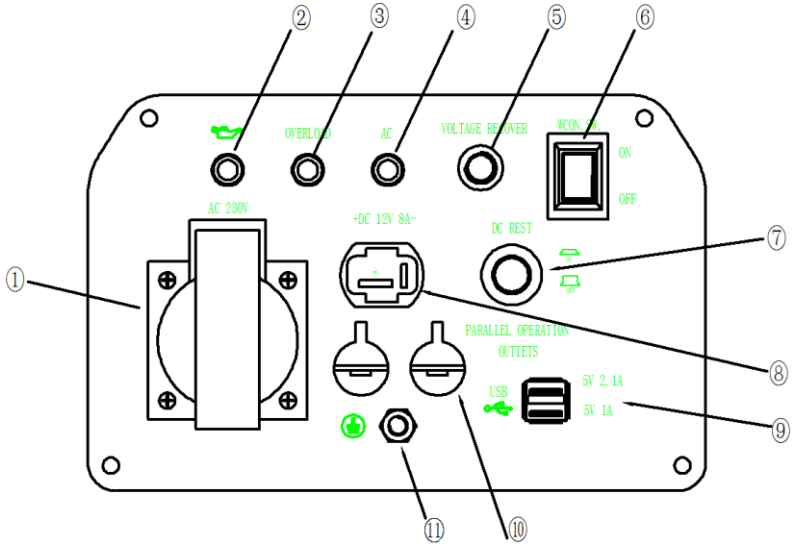
2.1 Control panel

120V 60Hz



① Voltage recovery button
② Low Oil Warning light (red)
③ Overload indicator light (red)
④ AC indicator light (green)
⑤ AC socket
⑥ Energy conservation switch (ECS)
⑦ DC socket
⑧ USB socket
⑨ DC protection
⑩ Parallel socket
⑪ Grounding (earth) terminal

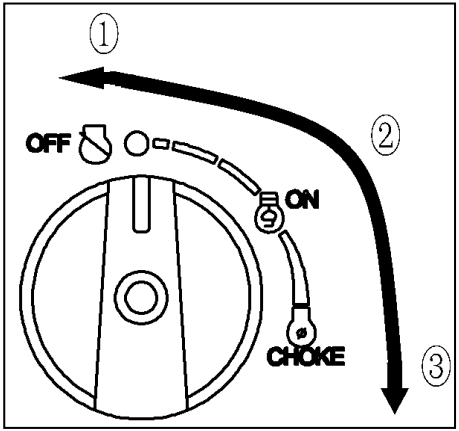
230V 50Hz



① AC socket
② Low Oil warning light (red)
③ Overload warning light (red)
④ AC indicator light (green)
⑤ Voltage recovery button
⑥ Energy conservation switch (ECS)
⑦ DC protection
⑧ DC socket
⑨ USB socket
⑩ Parallel socket (optional)
⑪ Grounding (earth) terminal

3.0 Control function

3.1 Three-in-one Combination Switch



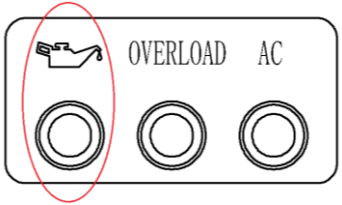
① Conbination Switch in "OFF" position: The ignition circuit is closed, the fuel is off and the engine cannot not start.

② Combination Switch in "ON" position: The ignition circuit is open, fuel is on, choke is in full open state allowing the engine to run normally.

③ Combination Switch in "CHOKE" position: The ignition circuit is open, fuel is on, choke is in a closed state allowing engine start-up from cold.

NOTICE： When the engine is hot, it may not be necessary to set to the "CHOKE" position when starting.

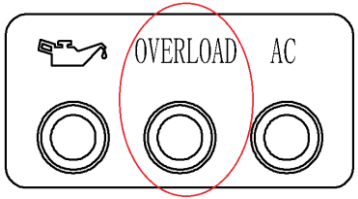
3.2 Low oil warning light (red)



When the crankcase oil drops below the safety level, the oil protection system will automatically shut off the engine and the low oil warning light (red) will light up. Filling the oil to the correct level will allow the engine to be re-started.

NOTICE： If the engine stalls or fails to start, rotate the power switch knob to the "ON" position, then pull the start handle. If the low oil warning light (red) flashes for a few seconds, the oil is insufficient. Fill the oil and re-start.

3.3 Overload indicator light (red)



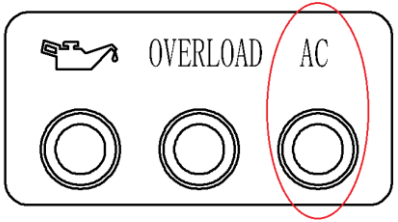
When the overload indicator lights up, it has detected that the output of the connected equipment has overloaded, causing the inverter to overheat. The AC protector will kick in and stop the generator working to protect the generator and the connected electrical equipment. When the AC indicator light (green) is off and the overload indicator light (red) is on, the generator will not stop working.

When the overload indicator is on and the unit has no output, the following measures should be taken:

1. Close and remove the connected electrical equipment.
2. Reduce the total power of the connected electrical equipment to the rated output range.

3. Check whether there is a foreign body blocking the air inlet and whether there is any abnormality in the relevant control parts. If there is any problem, immediately eliminate it.
4. After checking, press the voltage recovery button for 1-3 seconds to restore the voltage output.
NOTICE：When using electrical equipment with high startup current (such as compressors, submersible pumps, etc.), the overload indicator may light up for a few seconds at the beginning. However this may not be the fault mentioned above. Overload, short circuit, overheating and low engine speed, can all prevent output. Eliminate the above reasons until the output is restored.

3.4 AC indicator light (green)

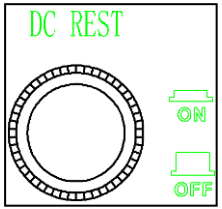


When the engine starts and outputs normally, the AC indicator lights up.
Indicator judgment:
1. Green light on: indicates normal operation, generator output;
2. Green light on and red light flashing: indicates overload, generator output;
3. When the green light is off and the red light flashes once every 3 seconds:
This indicates that the bus front-end voltage is too low and the generator has no output.
4. When the green light is off and the red light flashes twice in 3 seconds: This indicates that the engine speed is too low and the generator has no output.
5. When the green light is off and the red light flashes three times in three seconds: This indicates that the temperature of the inverter is too high and the generator has no output.

6. When the green light is off and the red light flashes 5 times in 3 seconds: This indicates that the bus voltage is too high and the generator has no output.
7. The green light is off and the red light flashes 6 times in 3 seconds: This indicates overload protection and no output.

3.5 DC protection

When the electronic equipment connected to the generator is running, if the rated current is exceeded, the dc switch will automatically turn to the "OFF" position. Press the DC switch to the "ON" position to operate the generator again.



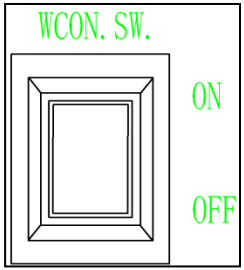
"ON" = Normal DC output

"OFF" = No DC output.

NOTICE：

If DC protection is off, reduce the load of the connected electronic equipment to the rated output range of the generator. If DC protection remains off, stop using electrical equipment directly and consult the dealer.

3.6 Energy Conservation switch

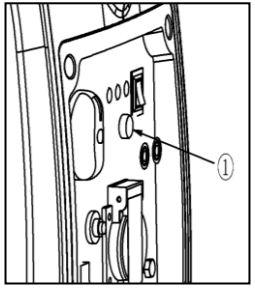


① "ON", when the energy conservation switch is in the "ON" position, the energy saving device controls the engine speed according to the connected load, which can achieve better fuel consumption and lower noise.

② "OFF", when the energy conservation switch is in the "OFF" position, the engine is running at the rated speed (3600r/min) regardless of whether the load is connected.

NOTICE: When using the following equipment, such as air compressor, submersible water pump, the energy conservation switch must be shut off due to the need for a large startup current.

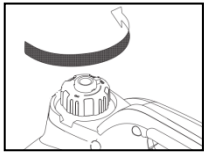
3.7 Voltage recovery button



When the generator overload light is on, the generator has no voltage output, but still running, check and remove all the loads and press the voltage recovery button for 1-3 seconds to restore the voltage output.

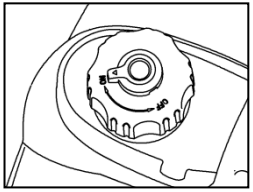
NOTICE: When the overload voltage recovers, please ensure that there is no load connection, no short circuit or other faults before pressing the recovery voltage button.

3.8 Fuel tank cap



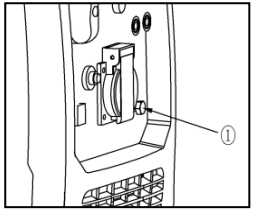
Rotate counter clockwise to remove the tank cap.

3.9 Fuel tank cap vent lever



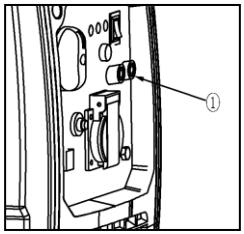
There is a vent lever on the top of the fuel tank to prevent the flow of fuel. When using the generator, the vent lever must be in the "ON" position allowing fuel to flow into the carburetor to keep the engine running. When the generator is not in use, turn the ventilation lever to the "OFF" position to stop the flow of fuel.

3.10 Grounding (Earth) terminal



Grounding (earthing) the generator by connecting an earth wire to the grounding terminal prevents electric shock. If the electrical equipment is grounded, the generator must be grounded.

3.11 Parallel operation (optional feature)



The parallel connector is used to connect two 2300i-2 of the same voltage and frequency running parallel to one another. Parallel operation requires two 2300i-2 devices and special cables (Rated output power of parallel operation is 3.4KVA, rated current of 120V generator is 28.0A and rated current of 230V generator is 14.5A) Operating procedures and related considerations are detailed in the parallel output system.

4.0 Pre-use inspection

NOTICE： Be sure to check before each use.

WARNING：

> The engine and muffler will become very hot during use. Do not check or perform any repairs until they have fully cooled. Ensure any parts of the body or clothing do not come into contact with the engine and muffler.

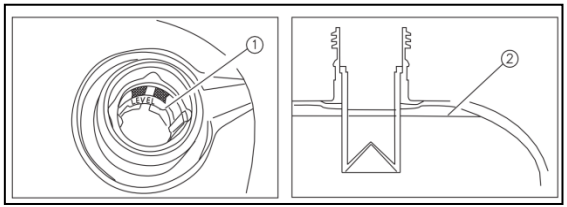
4.1 Fuel

DANGER： Fuel is flammable and contains poisonous substances. Read the Safety Requirements carefully before refueling (see page 2 for details). Do not overfill with fuel, or the tank will overflow once warm. After refueling, make sure the cap is screwed tightly.

NOTICE： After refueling, wipe away any spilled fuel with a clean, soft cloth immediately to avoid damage to the plastic casing. Use unleaded petrol only. Leaded petrol can seriously damage engine internal parts. Remove the fuel tank cap and add petrol to the shoulder of the fuel filter.

① Red level indicator
② Fuel level

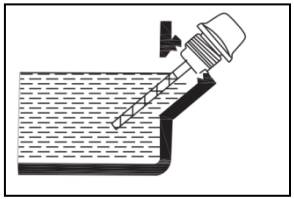
Recommended fuel: unleaded gasoline
Fuel tank capacity: 4L (0.88 UK gallons)



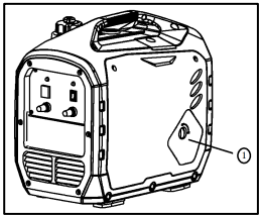
4.2 Engine oil

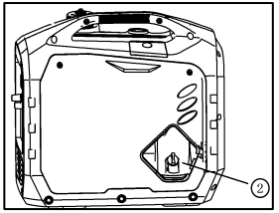
This generator is delivered dry WITHOUT OIL or FUEL. Do not attempt to start the engine until the oil has been filled to the correct level.

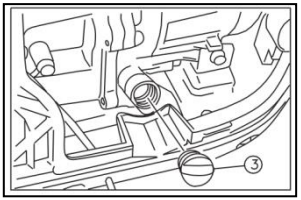
1. Please place the engine on a level surface.
2. Rotate the locking handle of the oil port cover and remove to gain access to the dipstick ①.
3. Unscrew the oil cap/dipstick ③.
4. Fill with the specified amount of recommended oil and replace the dipstick ②.
5. Replace the oil port cover ①.



Recommended oil: SAE SJ 10w-40
Recommended oil grade: API standard SE or higher
Oil capacity: 0.35L







4.3 Preparation

WARNING: If any of the following parts do not work properly, please carefully check and repair the engine before starting.

The user should be concerned about the state of the generator. Even if the generator is not in use, its important parts may break down suddenly.

NOTICE：A pre-operation check should be made every time the generator is used.

Check before use：

Fuel (see P14)

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

Engine oil (see P15)

- Check generator oil level
- If necessary, add the recommended oil to the designated oil level
- Check for oil leaks

Abnormal conditions during operation

- Check running condition
- Consult the dealer if necessary

5. Operating the Generator

WARNING:

- Do not use the generator in a confined space. The exhaust gases discharged from the generator may cause loss of consciousness or even death in a short time. Please use it in a well-ventilated place.
- Do not connect any electrical equipment before starting the engine.
- To prevent electrical misuse, be sure to ground the petrol generator.

NOTICE: The generator is not filled with oil during transportation. Do not start the engine until the generator has been filled with the correct grade and amount of oil.

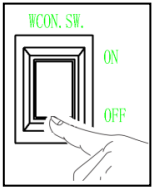
Do not tilt the engine when adding oil to prevent over/underfilling and causing damage to the engine.

NOTICE: The generator can work with rated output load under standard atmospheric conditions.

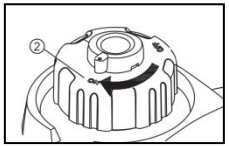
- "Standard atmospheric conditions": Ambient temperature: 25℃, Atmospheric pressure: 100kPa, Relative humidity: 30%.
- The output of the generator will vary according to temperature, height (higher altitude, lower pressure) and humidity.
- When the temperature, humidity and height exceed the standard atmospheric conditions, the output of the generator will decrease.
- In addition, when used in small Spaces, the load must be reduced because the cooling of the generator will be affected.

5.1 Starting the Generator from cold

1. Turn the energy saving switch to "OFF".



2. Turn the fuel tank cap ventilation lever to "ON".



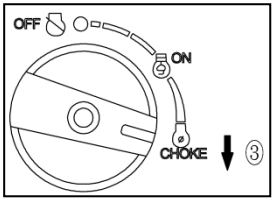
3. Rotate three-in-one combination switch to the "CHOKE" position to:

A) turn the fuel on

B) turn the ignition system on

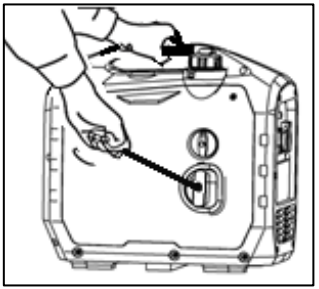
C) close the choke to assist the cold engine to start

NOTICE: When the engine is hot, it may not always be necessary to set the "CHOKE" position when starting.



4. Gently pull the hand starter until compression is felt, then pull it hard.

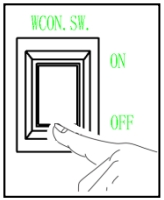
NOTICE： When pulling the hand starter, grasp the carrying handle to prevent the generator from tipping over. Once the engine is running smoothly after startup, turn the three-in-one combination switch to "ON".



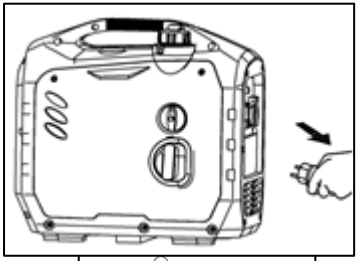
5.2 Stopping the Generator

NOTICE: Turn off all connected electrical equipment.

1. Turn the energy saving switch to "OFF"



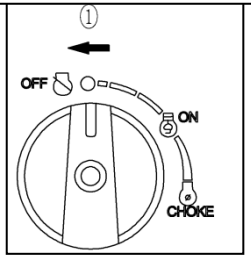
2. Disconnect all electrical equipment



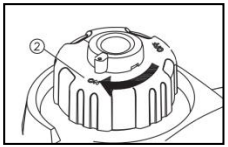
3. Set the combination control switch to the "OFF" position to:

A) turn the fuel off

B) turn the ignition system off



4. After the generator cools, move the fuel cap vent lever to "OFF"



5.3 AC connection

WARNING: All electrical equipment should be disconnected before the plug is inserted.

NOTICE:

- Ensure that all electrical equipment, including wires and plugs, are in good condition before connecting to the generator.
- Make sure all load of the generator is within the rated load range.
- Make sure the load current is within the rated current range of the rated socket.

NOTICE: Confirm that the unit is grounded. If the electrical equipment requires grounding, the unit must also be grounded.

1. Start the engine
2. Turn the Energy Conservation Switch to "ON"
3. Insert the plug into the AC socket
4. Confirm that AC indicator is on
5. Turn on the electrical equipment

NOTICE: Before raising engine speed, Energy Conservation Switch must be turned "OFF".

If the unit provides power for multiple loads or electrical equipment, please start from high to low according to the load size of the electrical equipment.

5.4 Battery charging

NOTICE:

- The rated DC voltage of this generator is 12V
- Connect the battery to the generator once the generator is running
- Before starting to charge, make sure the DC protector is on

1. Turn on the generator.
2. Connect the charger red wire to the positive (+) battery terminal.
3. Connect the black lead of the charger to the negative (-) terminal of the battery.

NOTICE:

- Make sure the charger red wire connected to the positive (+) battery terminal, black line and the cathode (-) terminals, not the reverse
- The charger cables are securely connected to the battery terminals to prevent the generator from loosening under vibration or other conditions
- Follow the steps in the user manual to operate correctly
- During charging, if the current exceeds the rated current, the DC protector will turn off the output. Press the DC protector to the "ON" position to start charging again. If the DC protector is closed again, stop charging immediately and contact the dealer.

NOTICE:

- The following instructions in the user manual indicate the completion of charging.
- Measure the specific gravity or voltage of the electrolyte at about 13V to determine whether the battery is fully filled. At full charge, the electrolyte specific gravity is between 1.26 and 1.28.

- It is recommended to check the electrolyte specific gravity at least every 1 hour to prevent the battery from overcharging.

WARNING:

Do not smoke while connecting or disconnecting the battery during charging. The resulting spark will ignite the gas around the battery.

Battery electrolyte contains sulfuric acid, which is toxic and is a burn hazard. Avoid contact with skin, eyes and clothes.

Treatment:

External contact -- wash with plenty of water

Ingest -- drink plenty of water or milk, milk containing magnesium oxide, eggs or vegetable oil.

Call the hospital immediately

Eye penetrating --- rinse with water for 15 minutes, seek medical advice if necessary.

Batteries can produce explosive gases. Keep away from sparks, flame, cigarette, etc. When using batteries in a confined space, please maintain ventilation. It is recommended you wear eye protection when working near the battery.

Keep the battery away from children.

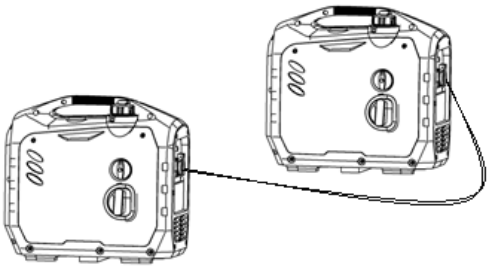
5.5 AC parallel operation (optional feature)

Before connecting a device to any generator, ensure that it is in good working condition and that its electrical rating does not exceed the total number of parallel generators. Most motors require more than their working current when started. When the motor is started, the overload indicator (red light) will light up. Normally, the overload indicator (red light) disappears within 4 seconds. If the overload indicator (red light) stays on, consult your generator dealer.

When running in parallel, it is necessary to ensure that the voltage and frequency of the parallel generator are the same, and the Energy Conservation Switch of the two generators should be in the same position.

1. Provide the 2300i-2 and another 2300i-2 generator with its cable kit as instructed and connect the parallel operation cable.
2. Start the engine in turn to ensure that the output indicator (green light) of each generator is on.
3. Insert the device plug into the AC socket.
4. Turn on the device.

When the generator is overloaded or there is a short circuit in the connected equipment, the overload indicator (red light) light up. The overload indicator (red light) will light up and stay on. After about 4 seconds, the connected circuit will stop, the output indicator (green light) will disappear, the generator and the device will stop working. Check and determine if it is caused by a short circuit or overload of the connected device.



Correct the problem and restart the generator.

The two types of 2300i-2 generators (same voltage and frequency) can be connected to each other, using a parallel cable suite to increase the available power supply.

Connect the equipment or power cord to the generator first as described in the accessories to the parallel running cable kit accessories.

NOTICE:

- Make sure it is in good working condition, a wrong device or power cord may cause an electric shock.
- If a device starts functioning abnormally, becomes sluggish, or stops suddenly, turn off the power immediately, disconnect the device, and determine if the rated capacity of the appliance or if the generator has been exceeded.
- Ensure that the electrical rating of the combined tools or equipment does not exceed that of the generator. Do not exceed the maximum limit of 30 minutes.
- The variable frequency generator set with the same voltage and frequency can be connected in parallel when the load does not exceed the total output.
- In parallel operation, only the cable kit selected by our company can be run in parallel and then the 2300i-2 is connected in parallel with another 2300i-2 generator.
- Do not connect or unplug parallel operating cables while the generator is running.
- For single unit operation, the cable in parallel operation must be unplugged.

Warning: The overload indicator light (red) will stay on when a large amount of overload occurs, which may damage the generator. The overload indicator light (red) will flash when a light load overload occurs, which may shorten the service life of the generator.

The limit time when the maximum power can be operated: 30 minutes
Maximum power for parallel operation: 3.6Kw
Rated power for parallel operation: 3.4Kw, continuous operation, not exceeding rated power.
The requirement for total power of all connected equipment must be considered. The list of manufacturers of electrical appliances and power tools usually lists power ratings for similar models or serial numbers.

5.6 Scope of application

Before using the generator, make sure that the total load is within the rated load range of the generator, otherwise it may damage the generator.

AC				DC 
Power factor	1	0.8-0.95	0.4~0.75	
2000i	~1600W	~1280W	~544W	Rated voltage:12V Rated current: 8A

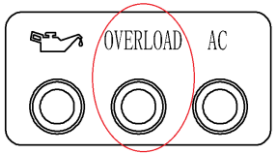
NOTICE:

- When each device works on its own, it will display the number of application power.
- AC and DC can be used at the same time and the single total power cannot exceed the rated output power.

For example:

Generator rated output		1600W
Frequently	Power factor	
AC	1.0	≤1600W
	0.8	≤1280W
DC	--	96W

When the total power exceeds the rated power, the overload indicator light will illuminate (see P8).



NOTICE:

Do not overload; the total power of the electrical equipment must not exceed the output power of the generator, or it will cause damage to the generator.

When using this generator to supply power to precision instruments, electronic controllers, personal computers, electronic computers, microcomputers, etc., please keep sufficient distance between the equipment and the generator to prevent electromagnetic interference of the engine. It also ensures that the engine is protected from the surrounding electronics.

If this generator is used to power medical equipment, it is recommended to consult the equipment manufacturer, professional or hospital about the amount of current required to start certain electronic equipment or general motors, which may render them unusable. Even if its startup parameters meet the conditions in the above table, please contact the equipment manufacturer

6. Maintenance

Good maintenance is the best guarantee to achieve safe, economical and zero fault operation. It also contributes to environmental protection.

The user should operate the machine safely. Periodic inspection, adjustment and lubrication can ensure safe and efficient operation of the generator.

Warning: Please turn off the engine before maintenance.

Note: The original parts should be used in replacement. For more details, please contact the dealer.

Item	**Routine**	**Pre-operation check（daily）**	**6 months or 100 Hr**	**12 months or 300 Hrs**
engine oil	Check the oil level	✓		
	Replace		✓（*1）	
Fuel	Check	✓		
The fuel oil pipe	Check	✓		
Spark plug	Clean-adjust			✓★
Air filter inspection	Check	✓		
	Clean		✓（*2）	
Fuel tank filter	Clean or replace if necessary			✓
Valve clearance	Check-adjust			✓

Spark eliminator	Check-adjust		✓	
Cylinder head & piston	Clean carbon deposit			★★
★ These items should be replaced if necessary				
★★ These items shall be maintained by the company's authorised dealers, unless the user has appropriate tools and maintenance capabilities				

NOTICE:

*1-- the first oil change should be done 1 month or 20 hours whichever is reached first

*2-- air filters should be cleaned more frequently when used in damp or dusty places

- If working under high temperature or load frequently, oil should be changed every 25 hours.
- If working frequently in dusty or harsh conditions, the air filter element should be cleaned every 10 hours and replaced every 25 hours if necessary.
- The inspection period and time should be the current maintenance.
- If the maintenance cycle time has passed, should be implemented as soon as possible according to the above table maintenance.

Warning:

Please stop the engine before any maintenance. The engine should be placed in a horizontal position and the spark plug cap should be disconnected from the spark plug to prevent engine from starting.

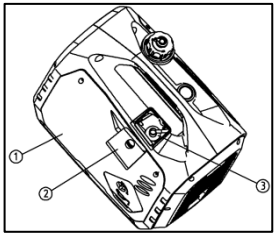
Do not use it indoors or in places with poor ventilation such as tunnels and caves. Make sure that the working area is well ventilated. Exhaust fumes from engines contain toxic gas carbon monoxide, which can cause shock, unconsciousness and even death when inhaled.

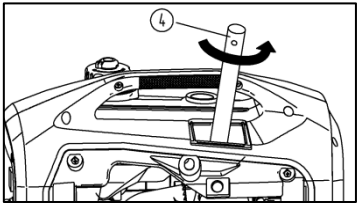
6.1 Spark plug maintenance

The spark plug is an important part of generator and must be checked regularly

1. Remove the outer plastic cover ①, open the spark plug maintenance cover and remove the spark plug cap ② insert the spark plug spanner ④ into the hole from the outside of the cover

2. Insert the metal bar ③ into the spanner ④ and remove the spark plug by rotating counterclockwise



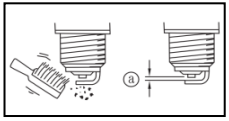


3. Check whether the colour is faded and remove any carbon deposits. The porcelain core around the central electrode of the spark plug should be moderately light brown;

4. Check spark plug type and clearance

NGK spark plug：CR5HS Spark plug gap：0.7-0.8mm

Tip: spark plug gap should be measured with a feeler or thickness gauge, and adjusted if necessary.



5. Install spark plug & tighten to the recommended torque

Torque: 22 N*m

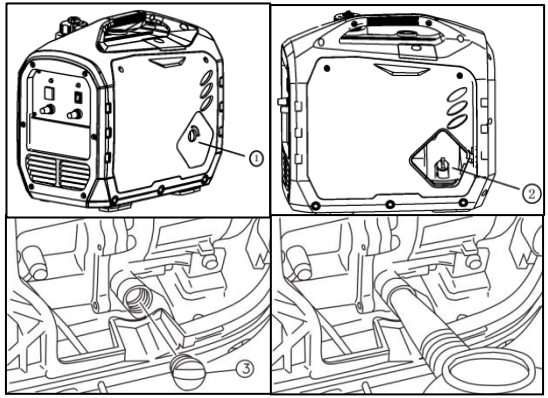
6. Replace spark plug cap and outer plastic cover.

Tip: When installing spark plug without a torque wrench, ‘hand tight’ should be sufficient temporarily. However, the spark plug should be adjusted/tightened as soon as possible to the specified torque.

6.2 Carburettor adjustment

The carburetor is an important part of the engine. Adjustments should only be performed by someone with professional mechanical knowledge

6.3 Changing the engine oil



Warning: Drain the oil when warm; do not drain oil immediately after shutting down the generator. Oil temperature is still very high, be careful to avoid burns.

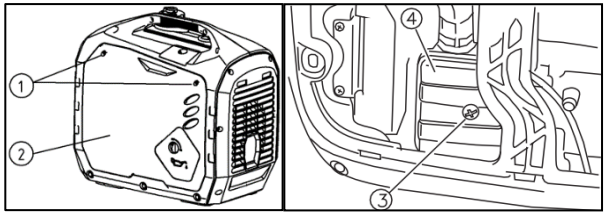
1. Place the generator on a level surface and start the generator for a few minutes to increase its temperature before stopping the engine. Turn the three-in-one combination switch and fuel tank cover ventilation lever to “OFF” .
2. Rotate the locking handle of the oil port cover and remove ①
3. Remove the oil filler cap②
4. Place an oil collection pan adjacent to the oil port, tilt the generator to drain the oil into the pan
5. Replace the generator back to a level surface.
6. Refill the oil to the recommended level.
7. Clean the cap and wipe off any oil spills.
8. Replace and tighten the oil filler cap.
9. Replace the oil port cover

Engine oil: SAE 10W-30
Engine oil：API standard SE or higher
Capacity: 0.35L

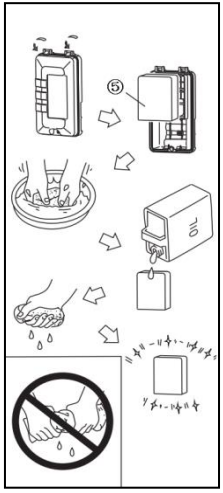
Note: Do not tilt the engine when adding oil to prevent over/underfilling damaging the power.

Do not allow foreign matter to fall into engine case.

6.4 Air filter

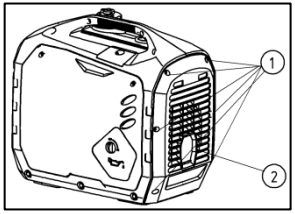


1. Remove the screw ①, and outer plastic cover ②
2. Remove the screw ③ and air filter housing cover ④
3. Remove the foam element ⑤
4. Clean the foam element with solvent and dry it
5. Soak the foam element in oil and squeeze out the excess
The foam element should be wet, but it should not drip oil
Note: Do not twist the foam element to avoid damage
6. Place the foam element in the air filter
Tip: Make sure that surface of foam element is close to the air filter without gap. Do not start the engine when the filter is not in place, as excess gas and cylinder wear may occur.
7. Return the air filter cover to the original position and tighten the screw.
8. Replace the outer cover plate and tighten the screw.

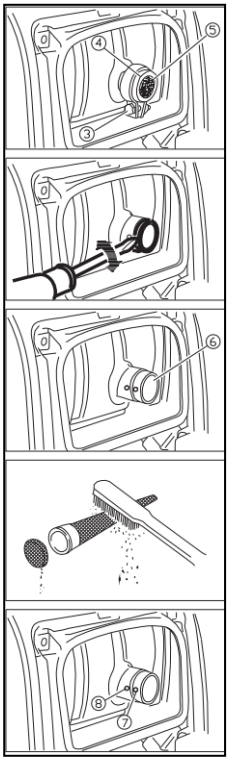


6.5 Muffler mesh and spark collector

Warning: engine and muffler will remain very hot after use. Do not allow your skin and clothing to directly touch the engine and muffler during inspection and maintenance.



1. Remove the screw ①, remove the rear grille ②
2. Remove the screw ③, remove the muffler bracket ④, muffler mesh ⑤ and spark collector ⑥.
3. Use wire brush to remove carbon deposits on muffler mesh cover and spark collector.



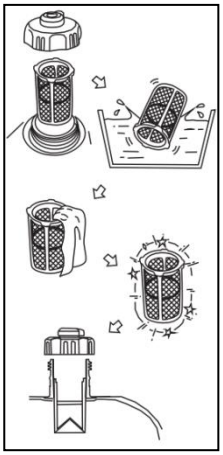
Note: clean with steel wire gently to avoid damaging or scratching the muffler mesh and spark collector.

4. Check the muffler mesh and spark collector, replace them immediately if they are damaged.
5. Reinstall the spark collector.

Note: Ensure the spark collector's protrusion point ⑦ and small hole of muffler pipe ⑧ are correctly aligned

6. Replace the muffler mesh cover and muffler bracket.
7. Re-position the rear grille and tighten the screw.

6.6 Fuel tank filter



Warning: Do not use petrol where there is smoke or flame.

1. Remove fuel tank cap and strainer.
2. Clean the fuel tank strainer with fresh petrol.
3. Dry the strainer and replace back in the fuel tank.
4. Replace and secure the fuel cap.

NOTE: Ensure the fuel cap is secured correctly.

6.7 Adjustment of carburettor for high altitude

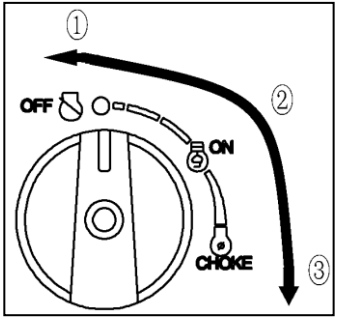
At high altitude, the standard carburettor air intake will be decreased due to air pressure; this results in a drop in performance and increases fuel consumption. Rich mixture also will contaminate the spark plug and cause difficulty in starting. Exhaust emissions may be increased when the engine is operated at an altitude different to where the engine is certified.

If you intend to use your generator continuously at a high altitude (≥1500m), please contact your dealer to modify the carburettor to improve the engine performance. In this case, the modified carburettor will meet all emission standard during its service life.

7. Storage

Some storage measures should be taken to prevent aging if you plan to store this generator for a long time.

7.1 Draining off fuel



1. Turn the three-in-one combination switch to the OFF position
2. Open the tank cap and remove the strainer. Syphon all the fuel from the tank into a suitable storage container and reinstall the tank cap.

Warning: The fuel is highly volatile and toxic. Please read the safety instructions carefully (see page 1).

Note: Immediately wipe away any spilled oil or fuel with a soft clean cloth to prevent damage to the plastic case.

3. Start the engine (see page 18) and run until the remaining fuel until used up and the engine cuts out

- Do not connect any electrical equipment
- Running time of engine depends on the fuel remaining

4. Remove the screws and the side cover
5. Loosen the drain bolt on the bottom of the carburettor and drain any remaining fuel into a suitable container
6. Turn the three-in-one control switch to the “CHOKE” position
7. Tighten the drain bolt
8. Replace the side cover and tighten the screws
9. Once the engine has cooled completely, close the vent lever on the tank cover

7.2 Engine storage

Follow the steps below to protect the cylinder, piston rings and other corrosion-prone parts.

1. Set the three-in-one combination switch to “OFF”
2. Remove the spark plug, pour in approx. 15ml (1 tblespn) of SAE10W30 oil , replace the spark plug then pull and release the hand-pull starter several times to lubricate the cylinder and valves with the oil.
3. Pull the recoil starter gently until you feel the compression then release slowly. This protects the cylinder, cylinder head etc. by closing the valves to prevent rusting.
4. Clean the outer surface with a soft clean cloth; place the engine in a dry ventilated place and cover with a protective sheet.

8. Troubleshooting

Engine does not start

1. Fuel system

There is no petrol in the combustion chamber

No fuel in the tank → Refuel

There is fuel in the tank → Check the fuel cap vent is open;

Clogged fuel filter → Clean fuel filter

Carburettor is blocked → Clean carburetor

2. Oil system insufficient

Oil level is too low → Refill the oil

3. Electrical system

Combination switch to "CHOKE", hand recoil starter normal → Spark plug has no spark

Spark plug may have carbon deposits or moisture → Clean and dry spark plug or replace

Trouble in ignition system → Please contact your dealer

The generator has no voltage output

Safety device (DC protector) in "OFF" position → Press the DC protector to be in the "ON" position.

AC indicator light (green) off → Stop the engine and restart. Or press the voltage recovery button for 1-3 seconds to restore the voltage output.

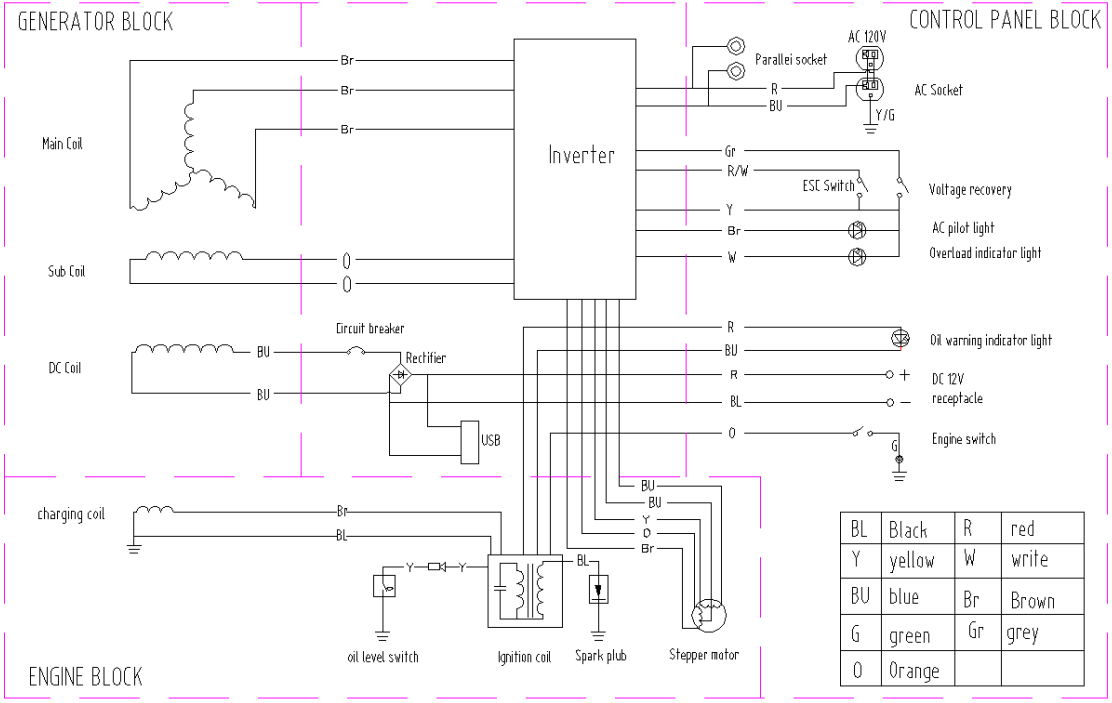
9. Parameters

Model No.			KP2300iO-2
Generator	Type		Inverter
	Rated frequency/Hz		50/60
	Rated voltage/V		120/220/230
	Rated output power/Kw		1.8
	Max. output power /Kw		1.95
	Power factor		1
	DC output /V-A		12V-8A
	AC output quality		ISO8528 G2
	THD/%		3
	Noise /dB		64
	Overload protect	DC	Non-fuse protector
		AC	Controlled by inverter overload protect program

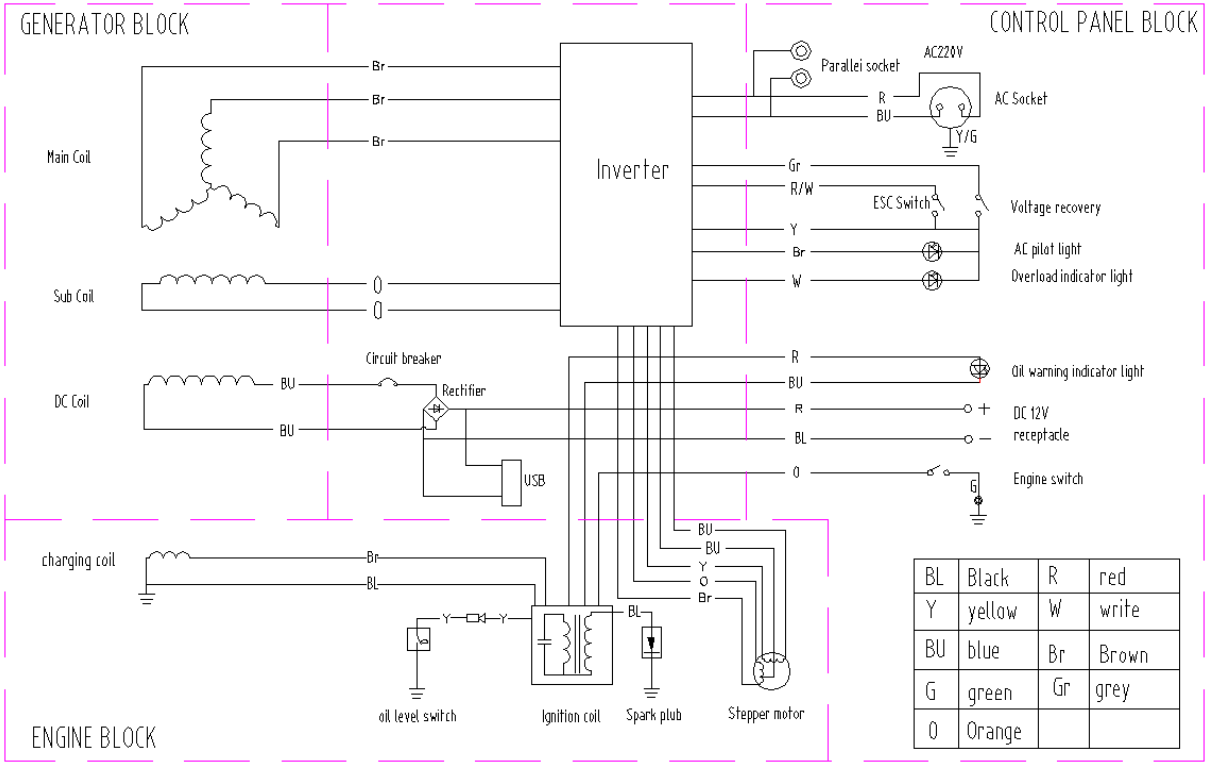
Engine	Engine model	148F
	Engine type	Single cylinder, 4-stroke, forced air cooled, OHV
	Displacement/cc	80
	Fuel type	Unleaded petrol
	Fuel tank capacity/L	4
	Continue running time/h	4
	Engine oil capacity	350ml
	Spark model No.	NGK CR5HS
	Starting mode	Hand Recoil
Dimensions	L×W×H/mm	495*290*460
Net weight/Kg		18.70

10.0 Wiring diagram

AC 120V 60Hz



AC 220V 5


GENERATOR BLOCK
CONTROL PANEL BLOCK
Main Coil
Sub Coil
DC Coil
Br
Br
Br
O
O
BU
BU
Circuit breaker
Rectifier
USB
Inverter
Parallel socket
AC220V
R
BU
AC Socket
Y/G
Gr
R/W
Y
Br
W
ESC Switch
Voltage recovery
AC pilot light
Overload indicator light
R
BU
R
BL
O
Oil warning indicator light
DC 12V
receptacle
Engine switch
G
charging coil
Br
BL
BU
BU
Y
O
Br
BL
Y
Y
oil level switch
Ignition coil
Spark plub
Stepper motor
ENGINE BLOCK
BL Black
Y yellow
BU blue
G green
O Orange
R red
W write
Br Brown
Gr grey