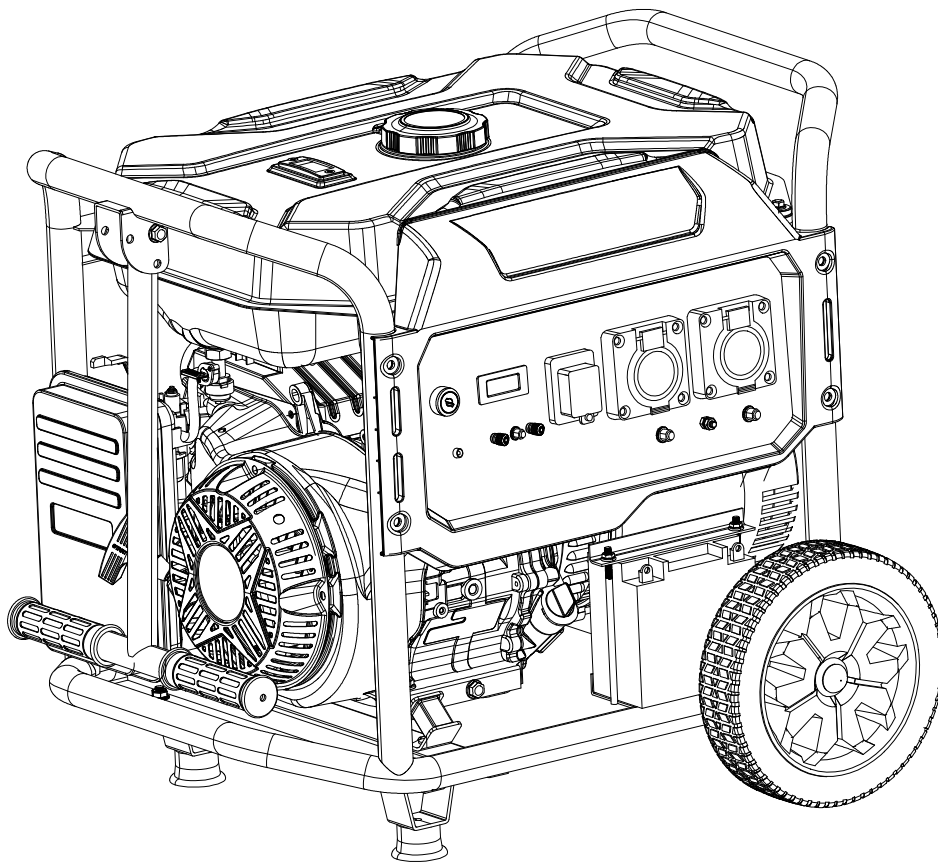




OPERATOR'S MANUAL

MODEL : DC3000
DC6500E
DC8000E



WARNING: To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

Table of Contents

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Foreward

Thank you for buying ABLE generator unit. This product is a household generator which produces electrical power by means of an engine driving a alternator, and is used in situations where electricity supply is interrupted or as a primary source of power supply where power is unavailable.

Please Read Instructions Carefully


If you DO NOT understanding any part of this manual, please contact ABLE local for any startup, operation and maintenance concerns. It is recommended that you read this manual to understand all requirements and operating steps of this generator before you use it. Keep this manual in good condition for reference in case of emergency in the future. If you lend or sell the generator unit supply with this manual.

The generator can be operated in a safe, effective and reliable way only when it is kept, operated and maintained properly. Before operating or carrying out maintenance of the generator unit, the operator will:

- Know well and strictly observe local laws and regulations.
- Read the manual carefully and observe all safety warnings in this manual and on the generator.
- Instruct others on the proper use of this generator and be sure they are familiar with all safety warnings in this manual before use.

It is impossible for manufacturers to predict all possible dangerous situations, therefore, warnings in this manual and labels on the generator unit may not identify all hazards. If no special suggestions are raised with respect to the operation procedures, working procedures or operating skills, use this generator in a manner which guarantees personal safety. In addition, make sure no damage to the generator unit is caused by the operating procedures, working methods or operating skills.

Information contained here is based on the machine in production at time of publication. ABLE reserves the right to change any parts described in the text without notice in advance.

Please read carefully the ALL safety warnings in the instructions and on the decals of the generator unit, with symbol  in front. Details are shown as follows:

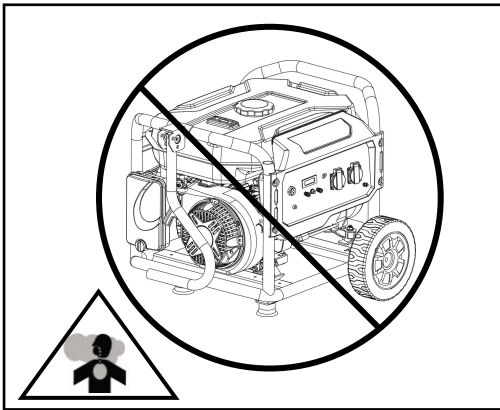


Danger: You may cause yourself serious injury if you do not follow these warning labels.

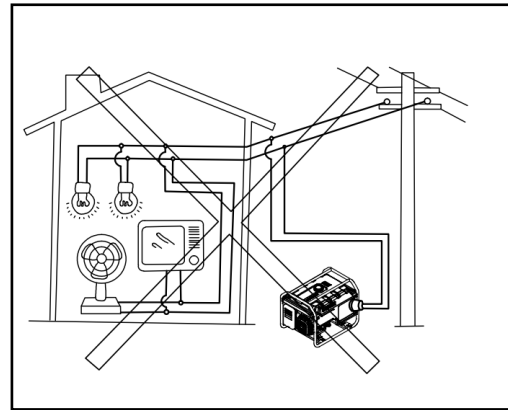


Warning: You may suffer serious harm by ignoring this label.

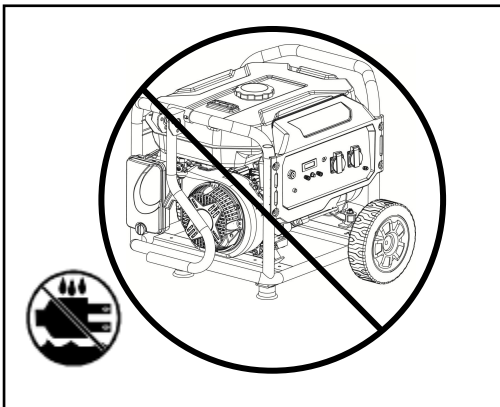
Safety Precautions



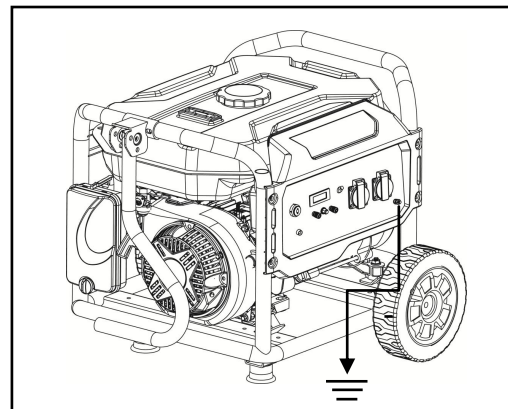
⚠ Danger: Use outdoors only, exhaust gas released from the equipment contains Carbon Monoxide (CO), which cannot be seen or smelt. Excessive inhalation of CO may cause a loss of consciousness and may claim life in extreme circumstances.



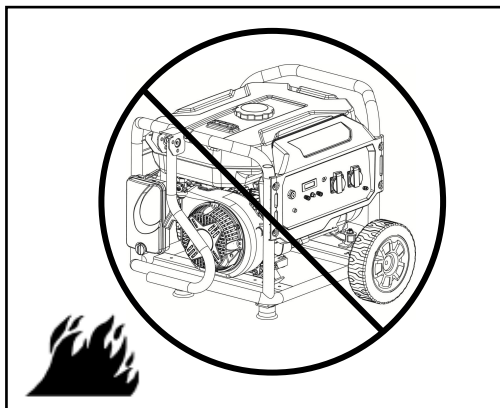
⚠ Danger: Do not connect the generator unit with mains supply or other power sources, use it alone.



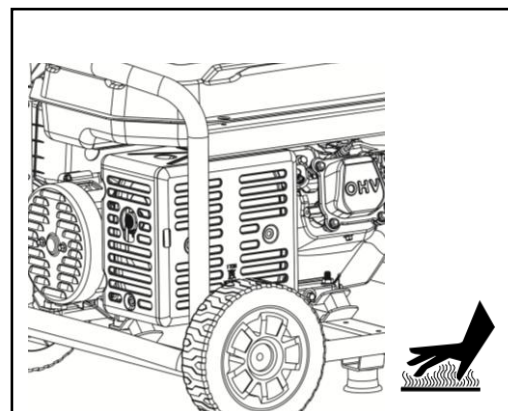
⚠ Warning: Do not use this generator if exposed to rain or if wet, and store in an enclosed area when not in use.



⚠ Warning: Properly ground the generator and verify grounding is in place before each use.



⚠ Warning: Keep the generator clean, remove any gasoline or oil spills on or around the generator.



⚠ Warning: DO NOT touch HOT surface or you may be injured or suffer burns.

Safety Specification



Danger: Electrocutation hazard - Electricity can cause DEATH or SERIOUS INJURY

- DO NOT use bare wire to connect power supply to electrical equipment, use a plug that meets local regulations.
- During generator operation, do not touch exposed wires.
- During generator operation, keep children a safe distance from the generator unit.
- DO NOT use the generator unless it is fully assembled as instructed in this manual.
- Properly ground the generator and verify grounding is in place before each use. Grounding regulations vary by location, consult a qualified electrician for verification.
- Accessories including cables and plug must not be defective. Electric shock prevention hinges on the breaker. If you renew the breaker use a breaker with the same rating and performance features, contact your local authorized service agent.

Danger: Fuel used by the generator is combustible, as this equipment generates high temperature, this causes a fire risk in some circumstances , such as refueling.



- It is strictly prohibited to add fuel while the generator is operating;
- When adding fuel, keep far away from any ignition source, and NO smoking;
- When adding fuel, pay attention not to spill fuel on the equipment, if fuel is spilt ; clean it immediately, and only start it up when the spilt fuel has evaporated completely;
- During operation, be sure there are no combustibles within a 2m range.
- In case of long-term nonuse, make sure you use a fuel stabilizer or empty the fuel tank and bowl.

Caution: This equipment contains high speed revolving parts, which may cause injury.



- During generator operation, avoid coming into contact with any revolving parts.
- During generator operation, observe surroundings, make sure there is no risk to the generator, other people and nearby equipment.
- During generator operation, do not lift or re-position. Turn the generator off ensuring it has come to a complete stop.







Attention: operating requirements

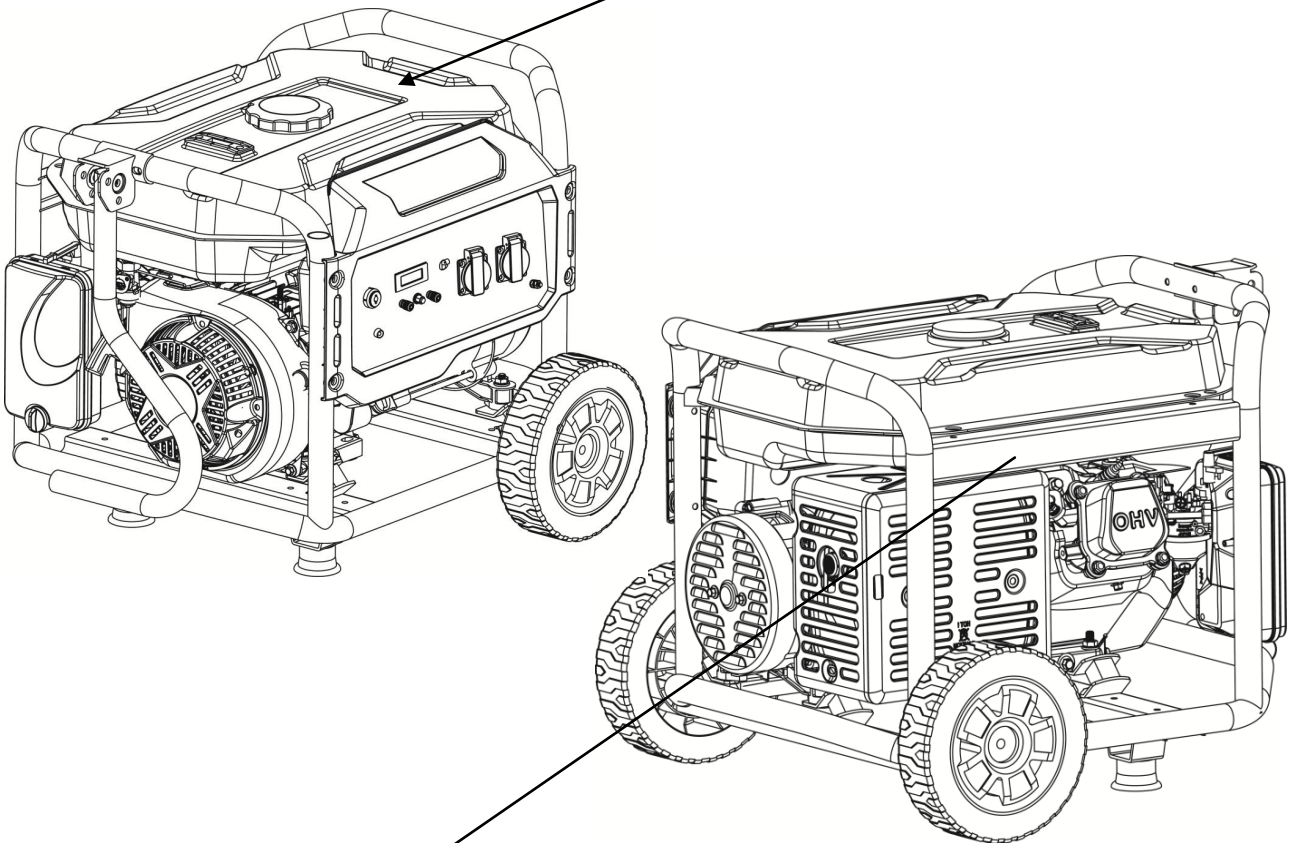
- Do not place weight on the equipment.
- The wheel is adopted for convenience of equipment moving, do not use it in long distance, otherwise it will be damaged.
- Do not exceed rating power of the equipment in operation; otherwise, its service life will be shortened. Power of common household appliances is shown on Page 14 in details.
- Maintain the equipment based on requirements so as to prolong its service life, refer to Page 15-17 for details.
- Operate and store the generator in a dust free area this prevents dust entering inside of the equipment which reduces its working life.

Safety Regulations

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














⚠ WARNING

| | | |
|---|--|---|
|  <p>You WILL be KILLED or SERIOUSLY HURT if you do not follow the operator's manual instructions.</p> |  <p>Generator is a potential source of electric shock. Do not expose to moisture, rain, or snow. Do not operate with wet hands or feet.</p> |  <p>Failure to properly ground generator can result in electrocution, especially if the generator is equipped with a wheel kit.</p> |
|  <p>Risk of fire. Do not add fuel while the product is operating.</p> |  <p>Exhaust contains poisonous carbon monoxide gas that can cause unconsciousness or DEATH. Operate in well ventilated, outdoor areas away from open windows or doors.</p> |  <p>Do not expose to rain or use in damp locations.</p> |



Warning Labels

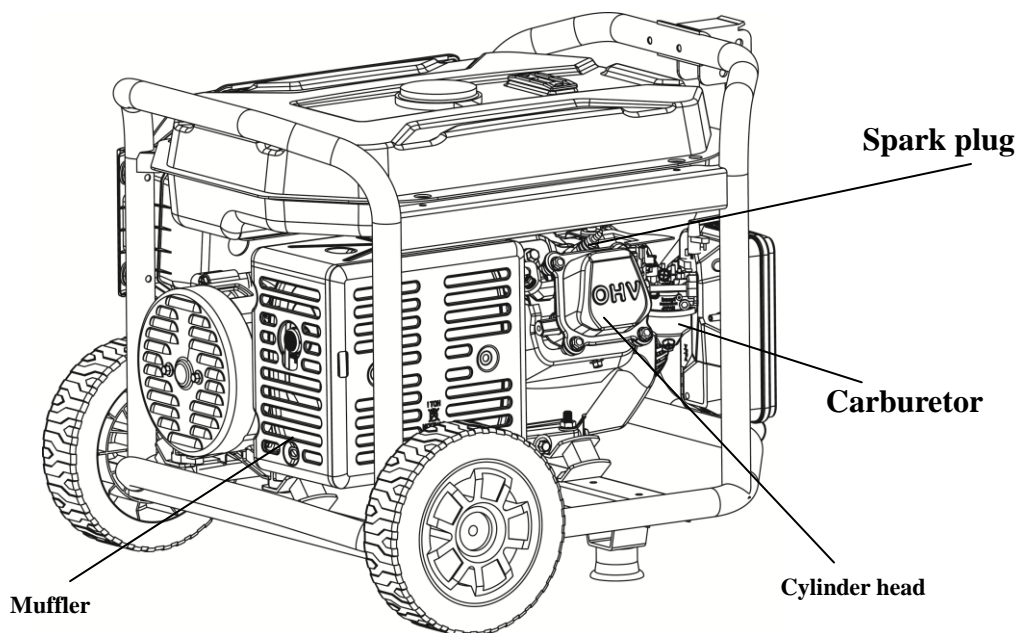
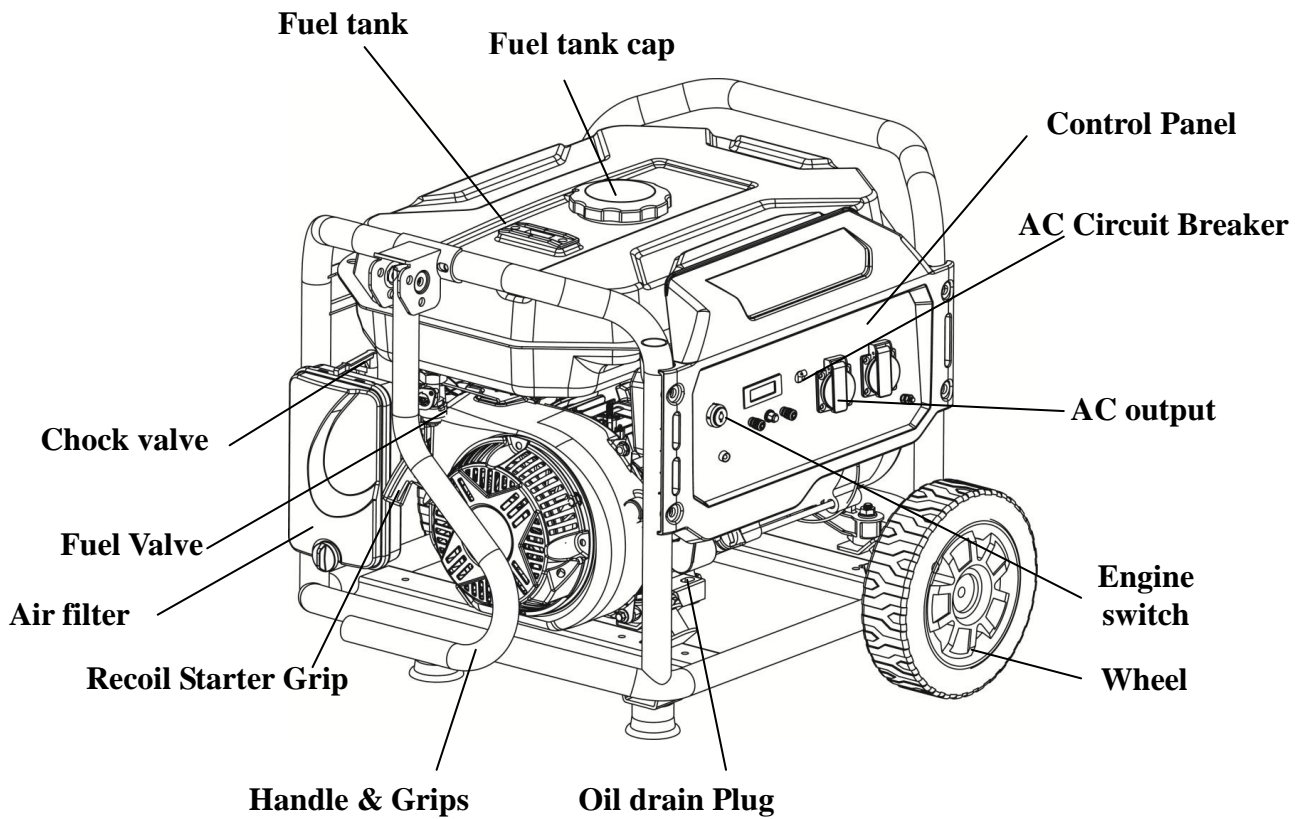
Some of following symbols are used in the machine or the manual. To understand their meanings will make it easy and safe for you in operation.

| Symbol | Name | Meaning |
|---|---------------------------|--|
| V | Volt | Voltage Unit |
| A | Ampere | Current Unit |
| Hz | Hertz | Frequency Unit (1Hz=60 r/min) |
| W | Watt | Power Unit |
| RPM | Revolution Per Minute | Speed Unit |
| PF | Power Factor | Generator Efficiency |
| G1 | Performance Rate | Performance Rate |
|  | Read Instructions | Please read instructions carefully before using. |
|  | Safety Warning | Risk of harm in the case of not following instructions. |
|  | Electrocution Risk | Indicate that there is an electrified body here, pay attention to safety. |
|  | Electric Shock | This is an electric device, failure to observe the indication may result in an electric shock. |
|  | Electricity, Do Not Touch | The device produces electricity, do not touch during operation. |
|  | Toxic Gas | Exhaust gas from this generator contains Carbon Monoxide (CO), a colorless & odorless gas. Excessive exposure to CO may cause loss consciousness and may lead to death in extreme circumstances. |
|  | Fire | High temperature generated from operation may cause fire, so operate it with caution. |
|  | Explosion | If the fuel tank is exposed to high temperature or open fire it may explode. |
|  | Burns | Some parts will generate high temperature in operation, this will burn the skin. |
|  | Grounding | Consult an electrician to determine grounding. Make sure the generator is safely grounded before operation. |
|  | Water Exposure | Do not use a plug or electric device on rainy days or if they are wet. |
|  | Engine Oil | Engine oil symbol and the specification is based on Page 9. |
|  | fuel | Fuel symbol. |

Product Specifications

| Model | DC3000 | DC6500E | DC8000E |
|---------------------|--|----------------|----------------|
| AC Output | | | |
| Frequency | 50Hz | | |
| Voltage | 240V | | |
| Power Factor | 1.0 | | |
| Rated Power | 2800W | 6000W | 7500W |
| Max. Power | 3000W | 6500W | 8000W |
| Fuel Tank Capacity | 15L | 25L | |
| Engine | | | |
| Type | 4 Stroke / Air Cooling / Single Cylinder / OHV/ Horizontal Shaft | | |
| Engine Oil Capacity | 0.6L | 1.1L | |
| Starting Mode | Recoil/Electric Start | | |
| Displacement | 212cc | 420cc | 457cc |

Component Identification



Features

KNOW YOUR GENERATOR

The safe use of this generator requires an understanding of the information provided in this operator's manual as well as a knowledge of the project you are attempting. Before use of this generator, familiarize yourself with all operating features and safety rules.

AC CIRCUIT BREAKER

The circuit breakers are provided to protect the generator against electrical overload. The circuit breaker may be reset by pressing the circuit breaker reset button.

AIR FILTER

The air filter helps to limit the amount of dirt and dust drawn into the unit during operation.

CHOKE LEVER

The choke lever is used when starting the engine.

FUEL TANK

The fuel tank has a capacity of 6 liters/15 liters / 25 liters

FUEL VALVE

Fuel flow from the fuel tank to the engine is turned on and off using the fuel valve. Turn fuel off after use.

GROUND TERMINAL

The ground terminal is used to assist in

properly grounding the generator to help protect against electrical shock. Consult with a qualified local electrician for grounding requirements in your area.

LOW OIL SHUT DOWN PROTECTOR

The low oil sensor causes the engine to stop if the level of oil in the crankcase is insufficient.

OIL CAP/DIPSTICK

Remove the oil fill cap to check and add oil to the generator when necessary.

OIL DRAIN PLUG

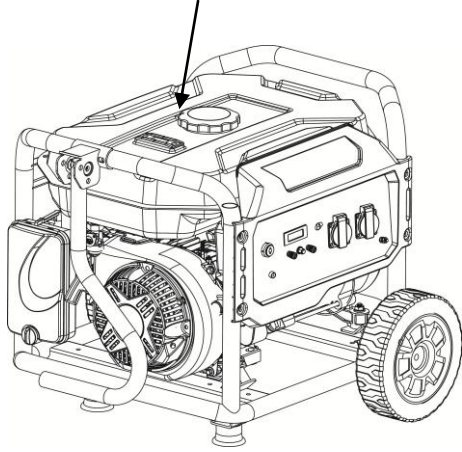
When changing the engine oil, unscrew and remove the oil drain plug to allow old engine oil to be drained.

RECOIL STARTER GRIP

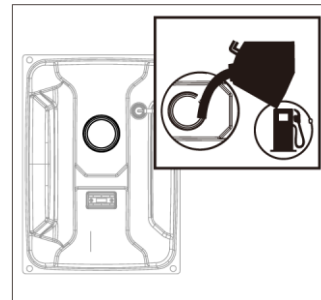
The recoil starter grip is used to start the generator's engine manually.

Operating Guide

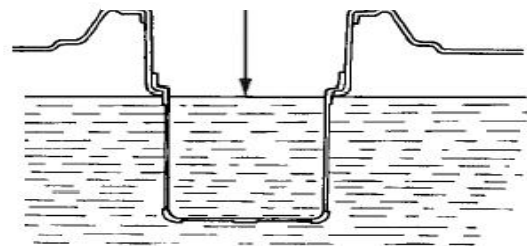
The operational steps are pasted above the fuel tank, . please operate as per the instructions.



Fill fuel



Do Not exceed this level



Open the fuel fill cap and fill with a **Ethanol Free 91 octane gasoline** (95 and 98 octane may be used). The fuel level position will be displayed on the indicator opposite the fuel cap. When filling the tank the maximum fuel position shall not exceed the inner strainer of the Fuel tank as indicated above.

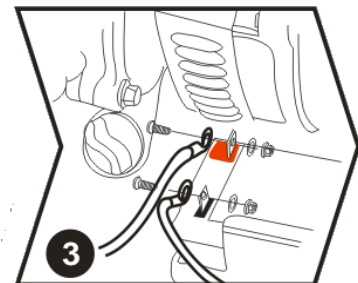
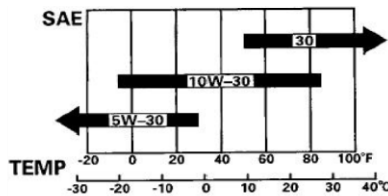
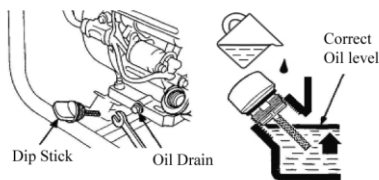
Warning: keep away from any possible ignition source when filling gasoline; do not fill the fuel tank while the generator is in operation.

Unit grounding

Shift the machine outdoors, use the grounding terminal connection wire to ground to earth. One end of the wire is pressed below the butterfly nut on the unit, screw it up tightly, and the other end is connected with the metal rod that is inserted into the ground.

Pre-operational

Add engine oil



Unscrew the oil dip stick, add engine oil SAE10W/30 (oil requirements may vary if operating in extreme temperatures, refer above table). Fill the oil to the top of the thread (indicated as "Correct Oil Level" above). If oil is spilt wipe off machine to avoid fire hazard and from the ground to avoid slipping.

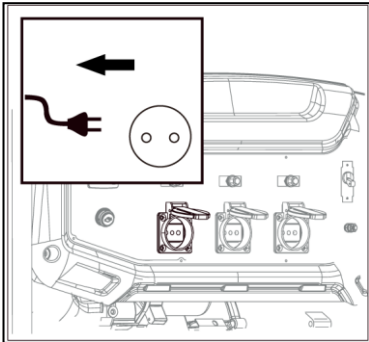
Connect electric battery (electrical starting only)

Connect the battery, red for positive terminal and green for the negative terminal and make sure you tighten the nuts. Pay attention and avoid contact between positive and negative terminal to eliminate the chance of short circuit. Make sure you place the rubber protective covers over the terminals.

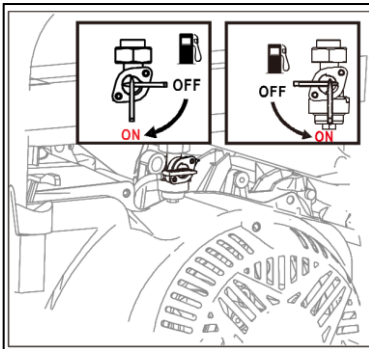
Operation

Starting the Engine

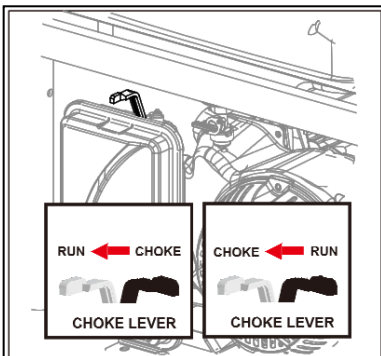
1. Unplug all loads from the generator.



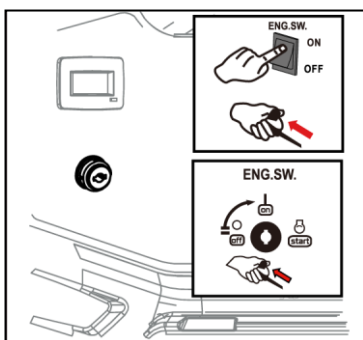
2. Turn the Fuel valve to the ON position.



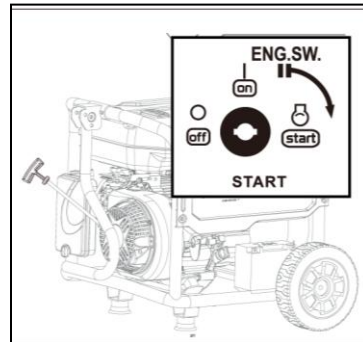
3. Move the choke lever to the CHOKE position.
NOTE: If engine has been operating and is being restarted leave the choke lever in the RUN position.



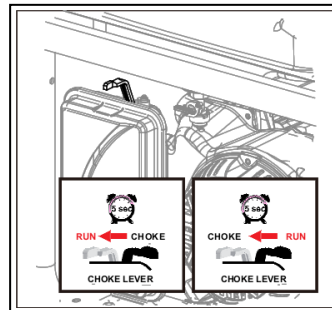
4. Turn the switch on the control panel to ON.
a. The generator unit is electric.



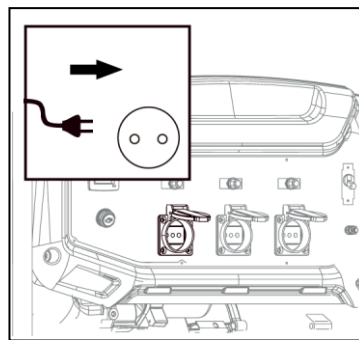
start and can be started by turning the switch around to the START position. In order to extend the service life of the battery, do not turn the switch for more than 3 seconds and the interval between two attempts should be at least 10 seconds apart.



b. For the manual start generator by pulling the recoil starting grip until the engine runs. NOTE: Do not allow the grip to snap back after starting; return it gently to its original place. Allow the engine to run for 10-20 seconds, then move the choke lever to the RUN position.



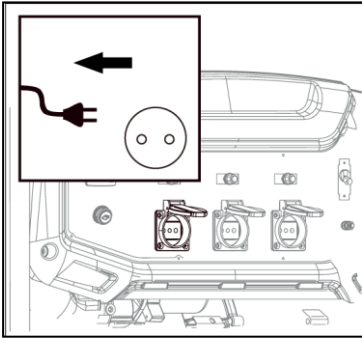
5. To operate electrical equipment, turn the circuit breaker ON. Please note that when using several appliances at the same time, do not add the next one unless the generator and other items are running normally. The total power of the loads should not exceed the rated power of the unit.



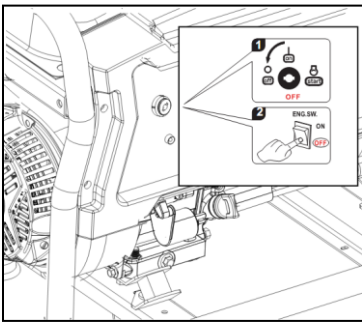
Operation

Stopping the Engine

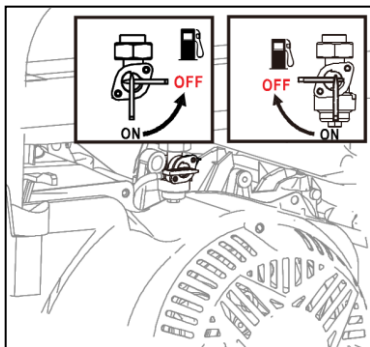
1. Remove any load from the generator.



2. Turn the engine switch to the OFF position.



3. Turn the fuel valve to the OFF position.

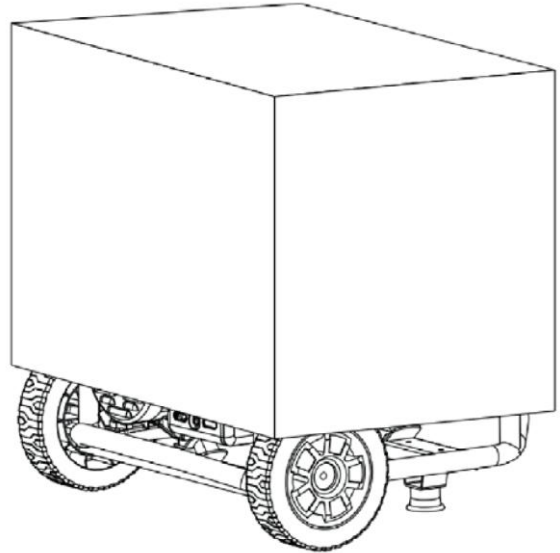


To stop the unit quickly in an emergency:

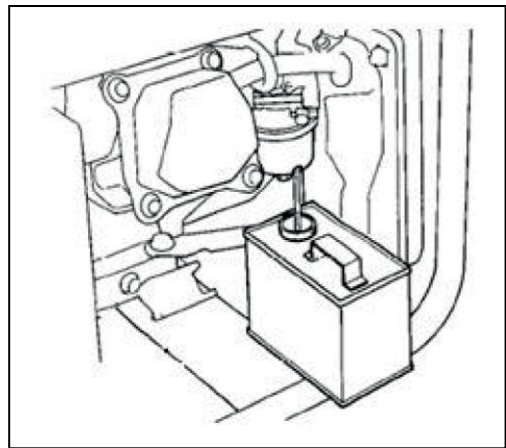
Turn the engine switch to the OFF position.

Warning:

The surface temperature of the generator unit are still high after shutdown, and it should not be moved or touched before cooling down to avoid the possibility of burns.









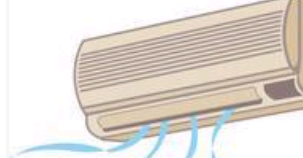





The unit should be stored in a clean and dry place and should be protected from rain and high temperature. Covering the unit is recommended to avoid excessive exposure to moisture and dust.



If the generator is not used regularly remove the fuel via the drainage bolt of the carburetor and drain the fuel tank. Then tighten the oil drainage bolt again. If a quality fuel stabilizer is used then this procedure can be ignored.

Power Management

| Electric equipment | | Rated power(W) | Starting power(W) | |
|----------------------|---------------------------|---|-------------------|------|
| Household Appliances | Flat panel television 27" |  | 500 | 800 |
| | Energy saving lamp |  | 5~50 | 5~50 |
| | Electric cooker |  | 1000 | 1000 |
| | Computer |  | 800 | 800 |
| | DVD |  | 100 | 100 |
| | Refrigerator |  | 800 | 1600 |
| | Washing machine |  | 300 | 600 |
| | Electric fan |  | 50 | 100 |
| | Air-conditioner 2HP |  | 1500 | 3000 |
| Tools | Electric welder |  | 2500 | 5000 |
| | Electric hammer |  | 1000 | 1500 |
| | Water pump |  | 800 | 1200 |

The starting wattage of some appliances are can be higher than the operating watts. Please read the labels of the electric equipment for reference. The total power of the loads should not exceed the rated power of the generator.

Maintenance

Regular maintenance is the best guarantee of safe, economical and fault-free operation, and can also contribute to environmental protection.

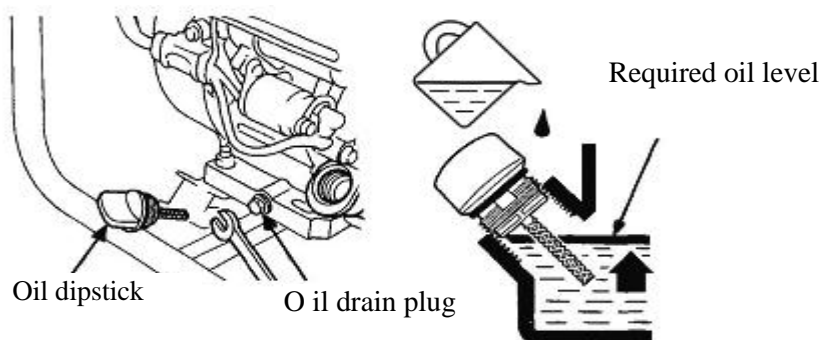
Maintenance schedule is as follows- Please carry out the recommended maintenance at the earlier of the stated hours or elapsed time.

| Schedule for regular maintenance | | Per use | Every 20 hours or in the first month of initial use (3) | Every 50 hours or every 3 months (3) | Every 100 hours or every 6 months (3) | Every 300 hours or every year (3) |
|----------------------------------|-----------------------|---------------------|---|--------------------------------------|---------------------------------------|-----------------------------------|
| Engine oil | Inspect the oil level | ○ | | | | |
| | Replace | | ○ | | ○ | |
| Air filter | Inspect | ○ | | | | |
| | Clean | | | ○ (1) | | |
| Fuel strainer bowl | Clean | | | | ○ | |
| Spark plug | Clean | | | | ○ | Replace |
| Valve clearance | Readjust | | | | | ○ (2) |
| Cylinder head | Wash | Every 300 hours (2) | | | | |
| Fuel tank and strainer | Wash | Every 2 years (2) | | | | |
| Oil tube | Replace | Every 2 years (2) | | | | |

(1) Maintenance should be conducted more frequently if the unit is used in dusty conditions.

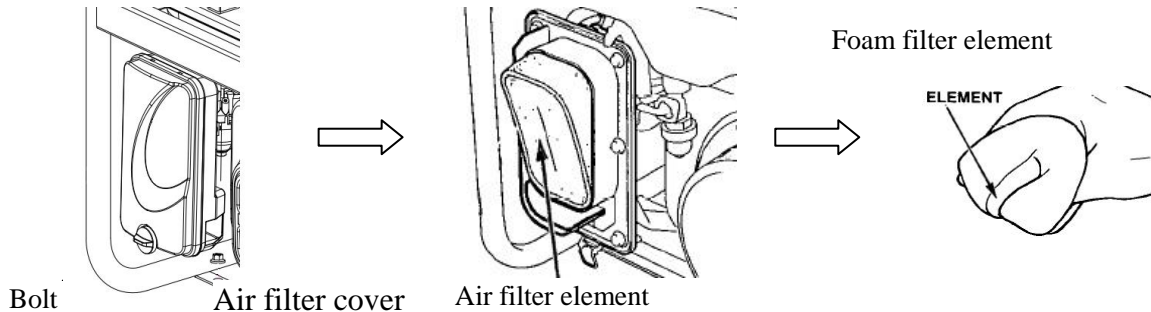
(2) Maintenance should be conducted by an authorized generator dealer.

Replace the engine oil



Maintenance

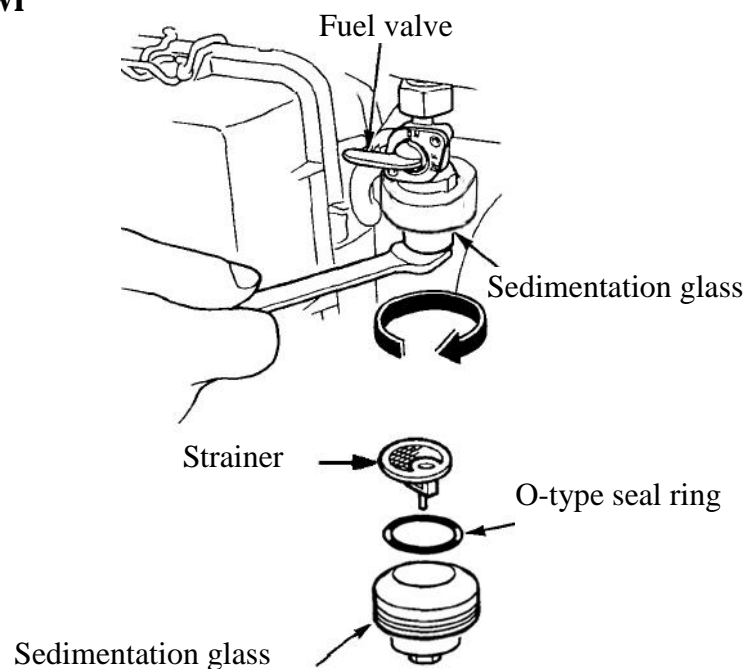
Clean the air filter



The air cleaner system uses a foam element that can be washed and reused.

1. Open the cover with the lock nut and remove the foam air filter element.
2. Wash the foam element in liquid detergent and water, then rinse in clean water and squeeze dry in a clean cloth.
3. Saturate the foam filter with clean engine oil, remove excess by squeezing into a dry clean cloth.
4. Refit the air filter and air filter cover.

Clean the fuel bowl



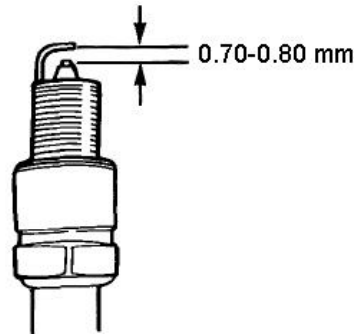
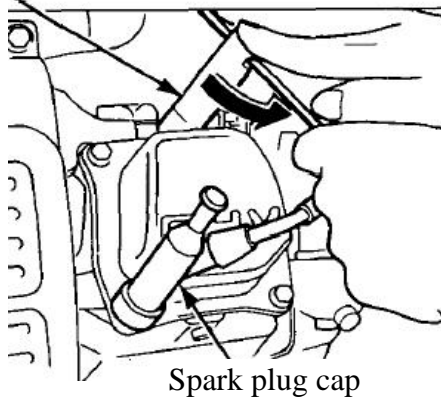
1. Close the fuel valve and remove the sediment bowl. Take out the O-type seal ring and strainer.
2. Clean the sediment bowl, O-type seal ring and strainer with incombustible or high-flash solvent.
3. Reinstall the O-type seal ring and strainer, and tighten the sediment bowl.
4. Open the fuel valve and inspect for leakage.

Maintenance

Clean the spark plug

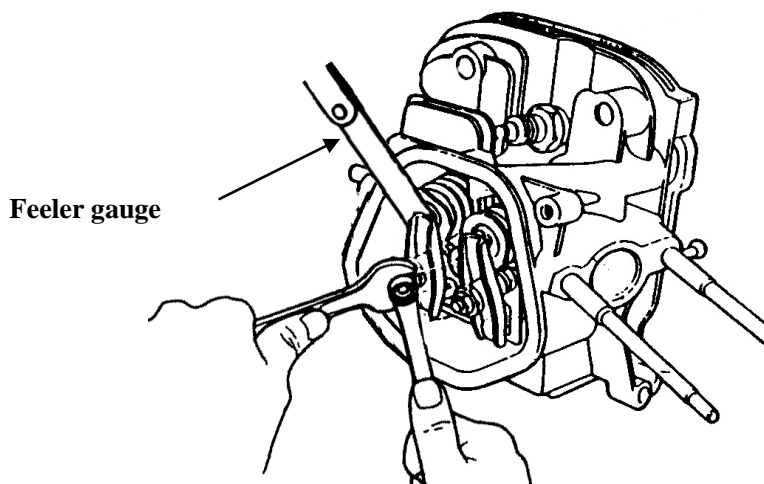
Recommended spark plug models: NGK: BPR6ES. Champion RN7YC.

Spark plug socket spanner



- 1 Remove the spark plug cap.
- 2 Clean the spark plug base.
- 3 Remove the spark plug with the spark plug socket spanner.
- 4 Inspect the spark plug insulator visually for damage. If it is damaged, replace a new one.
- 5 Measure the spark plug clearance with a feeler gauge. The clearance should be kept between 0.70 and 0.80mm.
- 6 Inspect if the washer of the spark plug is in good condition.
- 7 Reinstall the spark plug and tighten it with the spark plug socket spanner. Press down the washer of the spark plug and place the spark plug cap.

Valve clearance (should be conducted by a professional person)



Remove the cylinder cover and measure the valve clearance with the feeler gauge. The clearances are 0.1mm for the inlet valve and 0.15mm for the outlet valve.

Trouble Shooting Guide

| Fault | Cause | Action |
|------------------------------------|---|--|
| The unit can not start | No fuel | Fill the fuel tank with gasoline |
| | The Fuel valve is not turned on | Turn the fuel valve to ON |
| | The Fuel valve is blocked | Clean the fuel bowl (refer to page 16) |
| | No engine oil or the engine oil level is low | Add oil |
| | The engine switch is turned off | Turn the switch to the “on” position |
| | The spark plug fails | Clean or replace the spark plug (refer to page 17) |
| There is no power output | The circuit breaker is in the off position | Turn the circuit breaker to the “on” position |
| | The plug is poorly contacted | Remove and refit the plug. |
| The unit shudders during operation | The choke lever position is incorrect | Move the choke lever to the “open” position during operation |
| The unit emits white smoke | The temperature of the engine is too high, maybe overloaded | Let the engine run without load for more than 10 minutes |
| | The fuel is contaminated | Use fresh clean fuel |
| The unit emits black smoke | The air filter is dirty | Clean the filter element of the air filter |
| | The load is too heavy | Reduce load to the rated limit |
| The unit emits blue smoke | The engine oil is overfilled | Drain oil to correct level |
| | The engine oil type is incorrect | Choose appropriate engine oil model (refer to page 11) |
| The power decreases | The spark plug fails | Clean or replace the spark plug (refer to page 17) |
| | The valve clearance are out of adjustment | Adjust the valve clearance (refer to page 17) |

The environmental condition required to operate the generator:

Suitable temperature: -15°C-40°C.

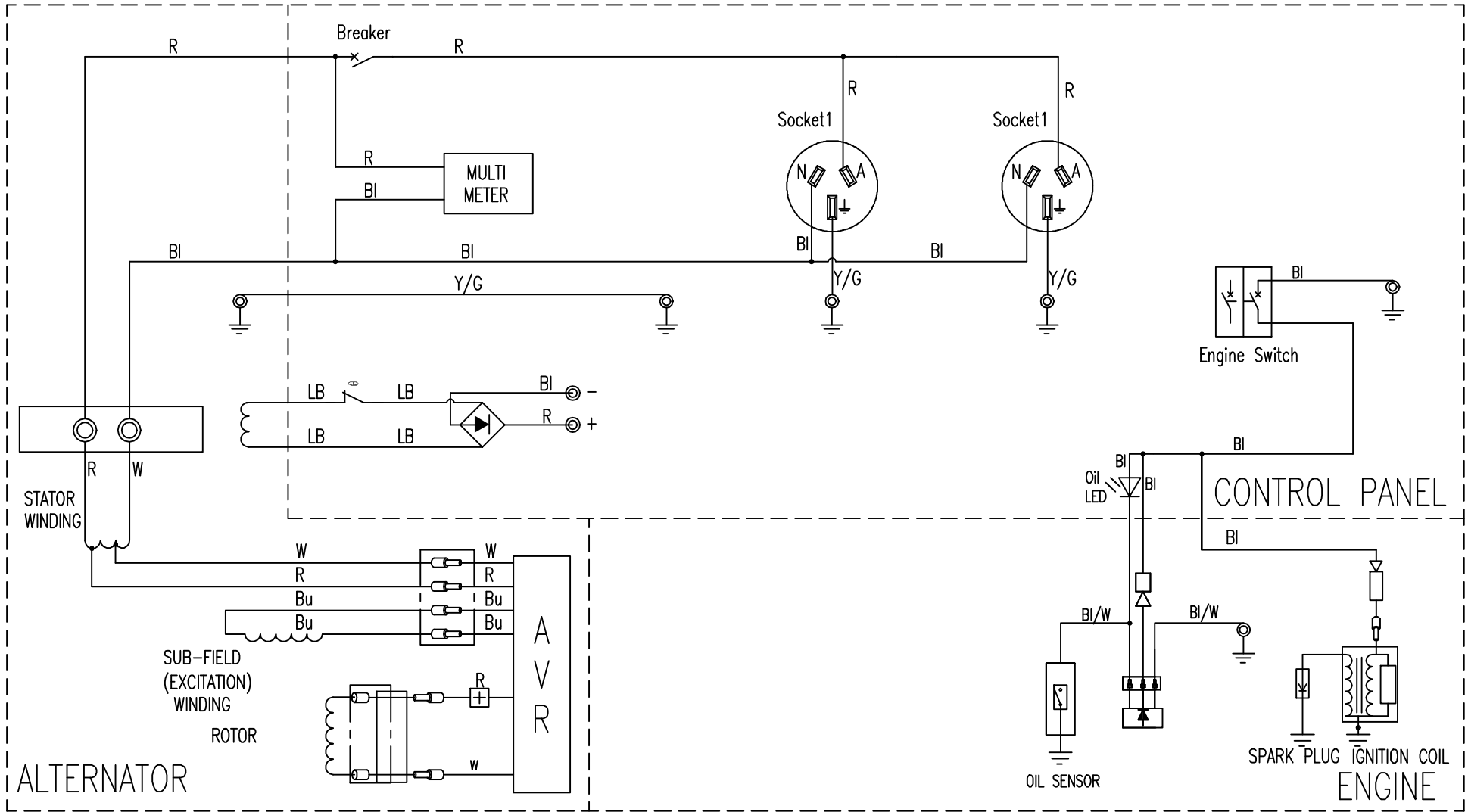
Suitable humidity: lower than 95%.

Suitable altitude: under 1,000 meters (The power load should be reduced where the generator is used at altitudes greater than 1000 meters.)

The generator unit can only be loaded to the rated power under the specified environment conditions. If the environment conditions are inconsistent with the above standards, or if the cooling conditions of the engine and generator unit are poor; for example, when operating in enclosed areas, it is necessary to reduce the power load. It is also necessary to reduce the power load when the temperature, altitude or relative humidity exceed the standards.

If the generator does not work properly in optimal conditions, please take to the nearby dealer or after-sales service center for inspection.

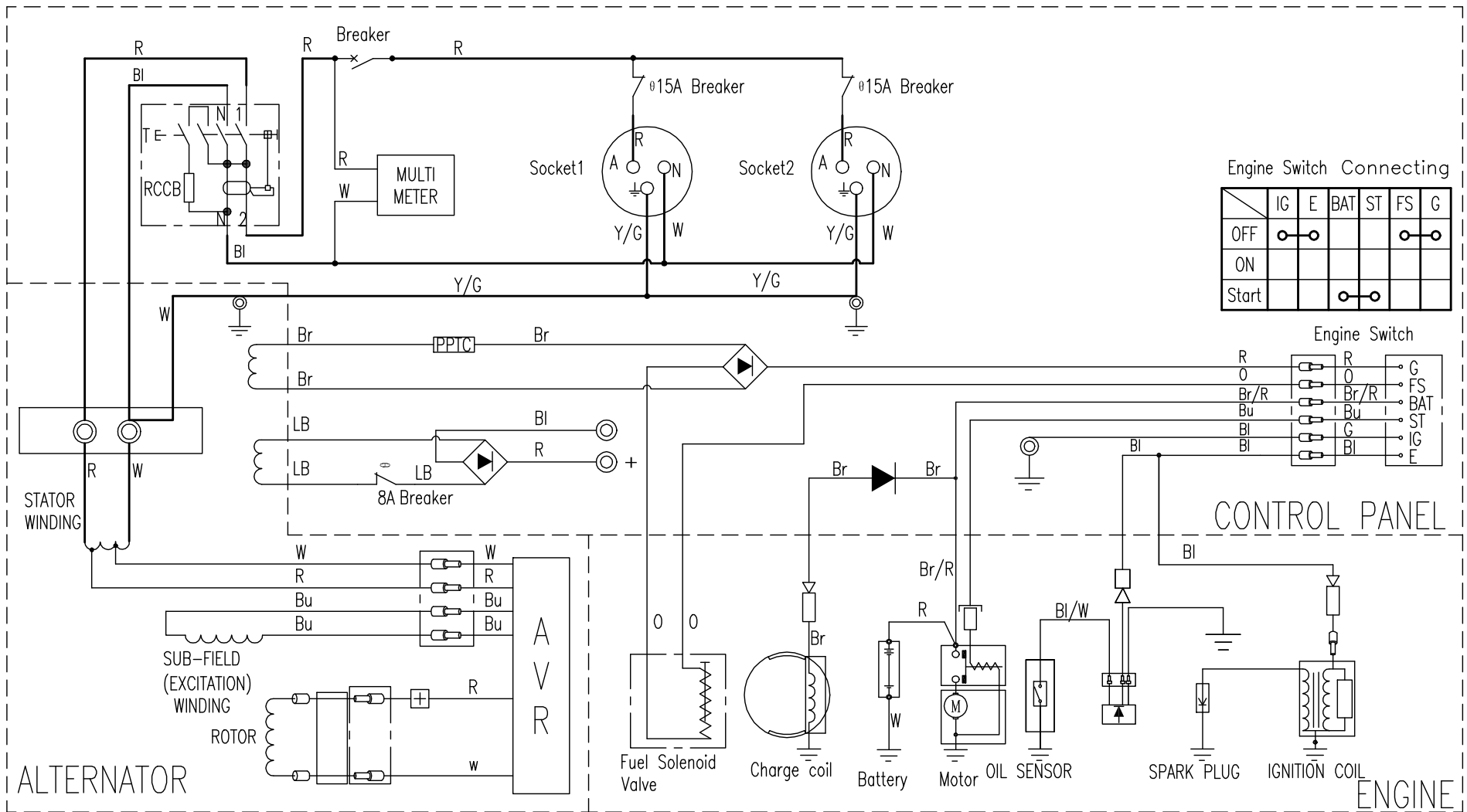
Electrical schematic diagram 1 DC3000



| | | | | | |
|----|--------|------|------------|------|--------------|
| BI | Black | Br | Brown | Y/G | Yellow/Green |
| O | Orange | Br/R | Brown/Red | BI/W | Black/White |
| Bu | Blue | LB | Light Blue | P | Pink |
| Gr | Gray | BI | Black | | |
| R | Red | W | White | | |

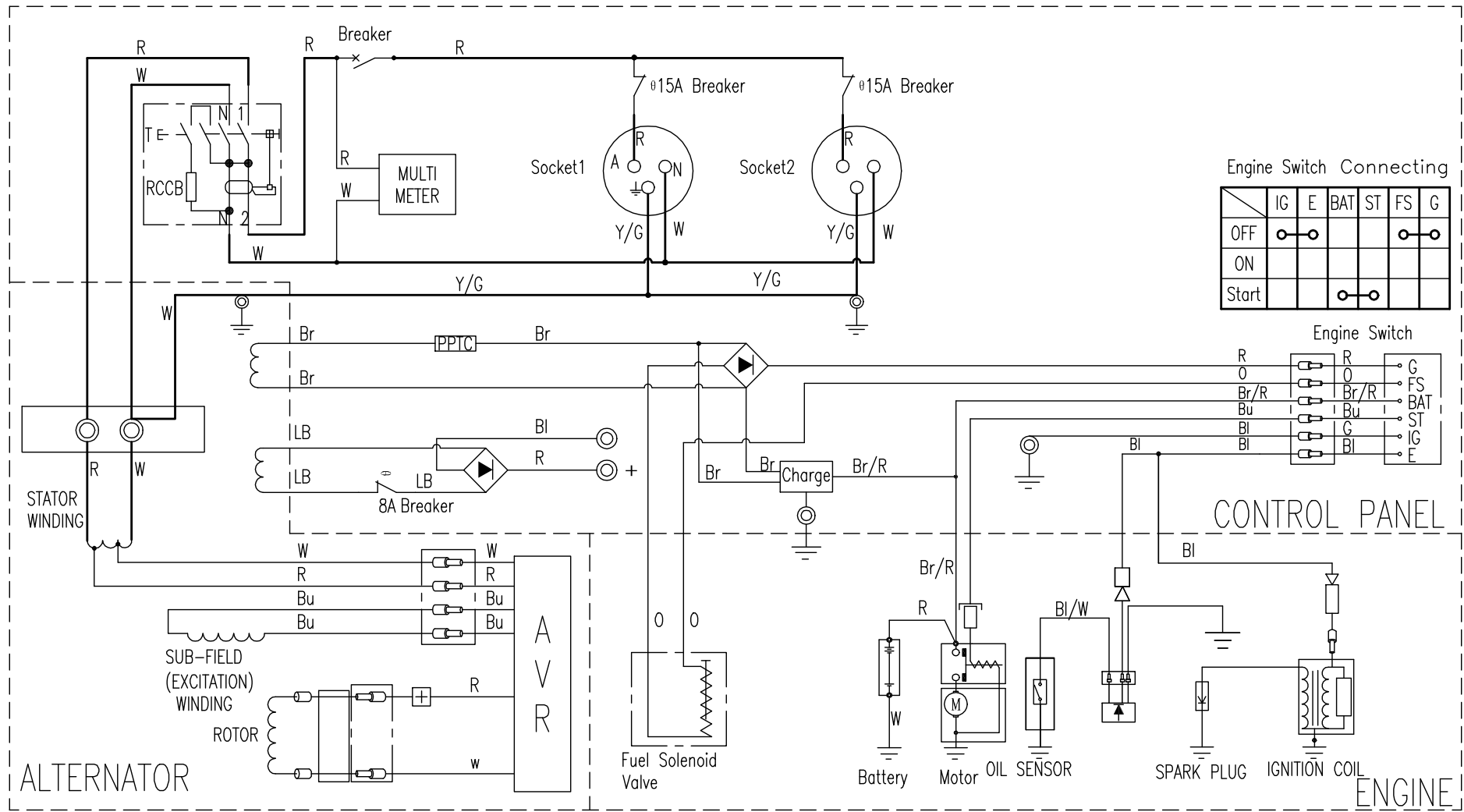
WIRING DIAGRAM OF 220V/230V/240V GENERATOR SET

Electrical schematic diagram 2 DC6500E



WIRING DIAGRAM OF 220V/230V/240V GENERATOR SET

Electrical schematic diagram 3 DC8000E



WIRING DIAGRAM OF 220V/230V/240V GENERATOR SET