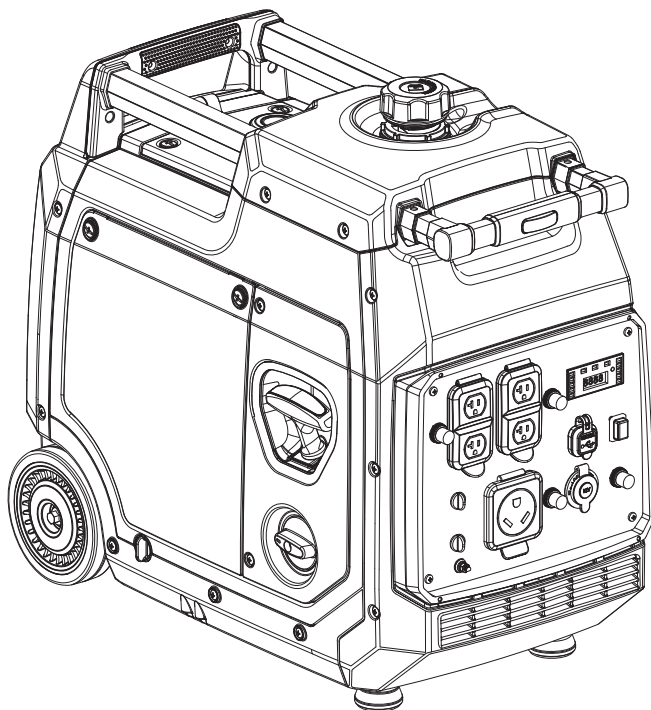


LawnMaster®



INVERTER GENERATORS

SAFETY AND OPERATING MANUAL

PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATING THE UNIT

BQH3500(E) / BQH4000(E)



A STEELFORT PRODUCT



PROUDLY
NZ OWNED



TABLE OF CONTENTS

I. OPERATOR SAFETY...	3
II. FEATURES & CONTROLS...	5
CONTROL PANEL...	5
III. OPERATION...	8
OPERATION CHECKLIST...	8
OPERATION CONDITIONS...	8
ENGINE OIL...	8
ENGINE FUEL...	9
GROUNDING...	10
BATTERY CONNECTION...	10
IV. STARTING THE GENERATOR...	10
STARTING FUNCTIONS...	10
WIRELESS REMOTE CONTROL ...	11
V. CONNECTING TO ELECTRICAL DEVICES...	12
LOADING CAPACITY...	12
WATTAGE REFERENCE CHART...	13
VI. STOPPING THE ENGINE...	13
VII. PARALLEL CONNECTION...	12
VIII. MAINTENANCE...	14
MAINTENANCE SCHEDULE...	15
GENERATOR MAINTENANCE...	16
ENGINE MAINTENANCE...	16
AIR FILTER...	17
SPARK PLUG...	18
SPARK ARRESTER...	18
IX. STORAGE & TRANSPORT...	19
X. TROUBLESHOOTING...	20
XI. SPECIFICATIONS & WIRING DIAGRAMS...	21-23
XII. WARRANTY...	24-26

I. OPERATOR SAFETY

SAFETY RULES

This manual contains important safety information and instructions to operate the LawnMaster Inverter Generator.

PLEASE READ THIS MANUAL CAREFULLY BEFORE USING THE UNIT.

Failure to adhere to the safety instructions could result in property damage and/or serious personal injury.

This manual should be considered a permanent part of the generator and should remain with the unit at all times. All information in this publication is based on the latest product information available at the time of printing.

Product Information and specifications can be altered and/or improved without notice. Content from this publication may not be reproduced without written consent.

DANGER

Indicates a hazardous situation which, if not strictly complied with, will result in substantial property damage and or serious injury.

WARNING

Indicates a hazardous situation which, if not strictly complied with, may result in property damage

CAUTION

Indicates a hazardous situation which, if not strictly complied with, could result in property damage or personal injury.

The warnings and precautions discussed in this manual does not cover all possible conditions and or scenarios that may occur.

It must be understood by the operator that common sense and caution must be taken into consideration when operating this product, as these are factors which cannot be built into this manual.

WARNING

This generator is intended for domestic consumer use only. Damage and faults created from commercial use may void warranty. These generators are designed for full time operation. No personal modifications should be made to any part of the unit.

DANGER

TOXIC FUMES

- The exhaust of the engine contains carbon monoxide, an odorless, colorless poison gas. Using the engine in confined/indoor spaces can be extremely dangerous and life threatening.
- DO NOT use the generator inside and or in enclosed spaces EVEN IF doors and windows are open. Only use the engine in well ventilated areas and consider wind and airflow when positioning the engine.

KICKBACK

- Rapid retraction of the starter cord will pull hand and arm towards the engine faster than you can let go. Unintentional startup can result in serious injury.

FIRE

- When operating the unit, the engine may create sparks that could trigger fires.
- When operating around dry vegetation such as agricultural crops, forest, bush, grass, or other similar environments please be careful.
- This engine may not be equipped with a spark arresting muffler. In some countries and regions, a spark arrester is required by law. Please contact your local council and or fire agency for laws and regulations relating to fire prevention requirements.
- Petrol is highly flammable and explosive. A fire and or explosion from petrol can cause severe burns or result in serious personal injury including death.
- Keep flammable items away while handling petrol. Fill fuel tank outdoors and in a well ventilated area with the engine stopped.
- Always wipe spilled fuel and wait until the fuel has dried before starting the engine.
- DO NOT operate the engine with known leaks in the fuel system. Use proper fuel storage and handling procedures.
- DO NOT store fuel or other flammable materials near the generator.

- Empty the fuel tank before storing or transporting the generator. Keep fire extinguisher handy at all times.

BATTERY

- Lithium battery is maintenance free, if you have any question, please contact a local authorised dealer.

HOT SURFACE

- Running the generator will produce heat and severe burns may occur upon contact. DO NOT touch the engine while under operation or just after stopping the unit.
- Avoid contact with hot exhaust gases and or hot surfaces.
- Maintain at least 1m of clearance on all sides to ensure adequate cooling. Combustible material can catch fire upon contact. Maintain at least 3m of clearance from combustible materials.

MOVING PARTS

- Moving parts can cause severe injury. Keep hands and feet away from the unit.
- DO NOT operate engine with covers, shrouds, or guards removed.
- DO NOT wear loose-fitted clothing, dangling drawstrings or items that could become caught or entangled.
- Tie up long hair and remove jewelry. The moving parts may catch operator's hand, feet, hair and or loose clothing resulting in serious injury.

GENERAL WARNINGS

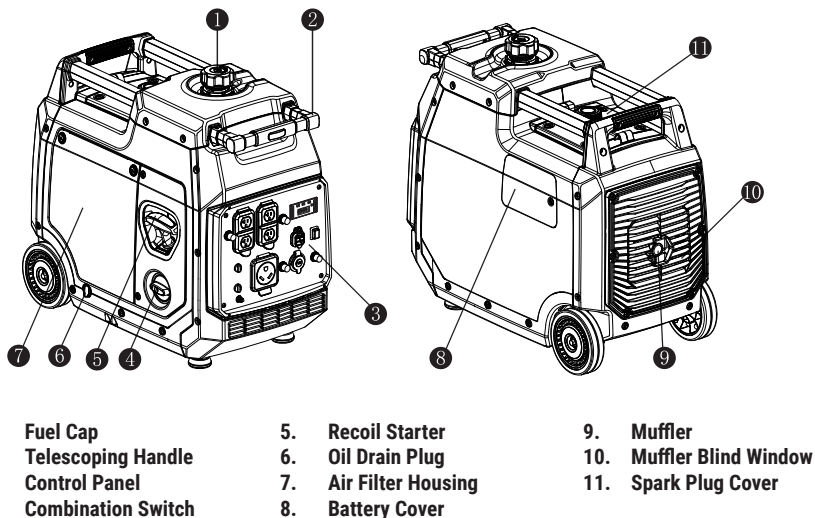
- Before use, check for loose or damaged parts, signs of oil or fuel leaks, and any other condition that may impact operation.
- Repair or replace all damaged and or defective parts immediately.
- Locate all operating controls and safety labels.
- Make sure all the safety instructions are in correct working condition.
- Operate only on level surfaces.
- DO NOT expose the generator to excessive moisture, dust, and or dirt.
- Keep all safety guards in place and in proper working order at all times.
- DO NOT allow any material to block the cooling slots.
- DO NOT allow children or untrained people to operate the unit.

- DO NOT leave the generator unattended when it is in operation. Always turn off the generator prior to leaving the area.

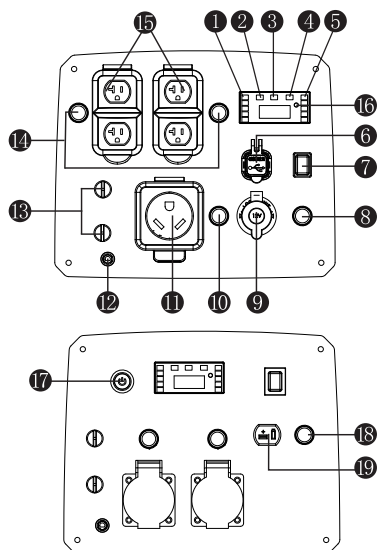
ELECTRIC SHOCK

- The generator produces powerful voltage and the electricity and can be dangerous and cause serious life threatening injuries if an electric shock is received.
- Please ensure that the unit is properly connected to an appropriate ground to help prevent electric shocks.
- Failure to properly ground the unit can result in electrocution, especially if the generator is equipped with a wheel kit. Consult an electrician for local grounding requirements.
- Installation should be performed by a certified electrician. Improper Installation could result in serious injury.
- To reduce the risk of electric shocks. DO NOT use electrical cords that are worn, frayed, bare or otherwise damaged.
- DO NOT touch bare wires or receptacles.
- DO NOT operate the unit in wet weather.
- Keep the generator dry and DO NOT handle generator or electrical cords while standing in water, while barefoot, or while hands or feet are wet.
- Keep children or pets away.
- DO NOT plug the unit into a building electrical system without the proper use and installation of a transfer switch installed by a qualified electrician.
- When using the generator for backup power, notify your utility company.
- Use approved transfers to isolate generator from electric utility.
- Failure to isolate the unit from the power utility could result in serious injury to the staff and utility workers due to back-feed of electrical energy.

II. FEATURES & CONTROLS

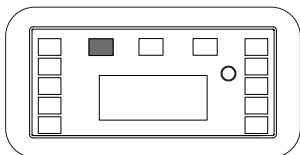


Control Panel



OVERLOAD INDICATOR (RED)

When the overload indicator is on, it indicates that the generating set is overloaded and then the AC circuit breaker has tripped. It will stop the power output of generating set to protect the electric equipment and the generator set itself. At this time, the running indicator (green) is off and the overload indicator (red) is on, but the engine is still in running state.

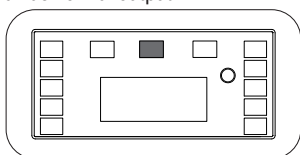


When the generating set has no output and the overload indicator is on, please take the following steps:

1. Lower the total load of the connected electric devices to the rated output range of the generator.
2. Check the air filter to ensure it is not clogged and the generator is in an open area to allow enough air flow to the generator.
3. Press the reset button.

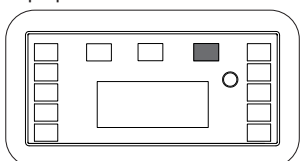
RUNNING INDICATOR (GREEN)

The running indicator lights up when generating set starts and has normal output.



OIL ALARM LAMP (YELLOW)

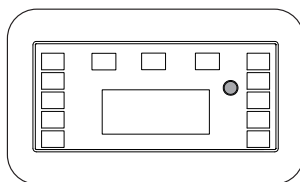
When the oil level drops below the lower limit, the oil protection system will stop the engine automatically and oil alarming lamp will blink when recoil starter is pulled. The engine will not run until the oil has been filled to the proper level.



Note: If engine stalls or fails to start, turn the combination switch to "RUN" position and then pull the recoil starter. If the oil alarming lamp lights up, it shows lack of oil. Please add appropriate oil and restart the engine.

RESET BUTTON

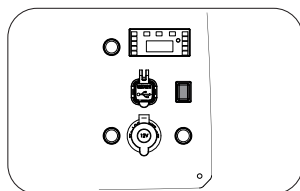
The reset button is used to restore output if an overload occurs. To restore output, reduce the load(s) and press the reset button.



ENERGY-SAVING SWITCH

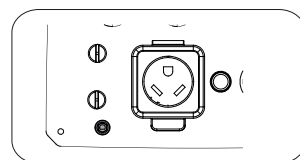
When the energy-saving switch is in "ON" position, the energy saving equipment controls the engine rpm according to the connected loads. There will be good fuel consumption and low noise. When the energy-saving switch is in "OFF" position, the engine will always run at full rpm no matter what load is connected to it.

Note: Please set the energy-saving switch to "OFF" position when connect to an air compressor, pumps, circular saws etc., Due to large starting current required.



GROUNDING TERMINAL

The grounding terminal is designed to prevent electric shock by connecting it to the grounding wire. The generating set must be properly grounded before operation.



COMBINATION SWITCH

(STOP & OFF & RUN & CHOKE)

Note: One-button start and remote control start have auto chokes.

Stop: Switch to turn the generator off.

Note: After the generator is unloaded, please run for 3 minutes with no load to stabilize the temperature, then stop the generator.

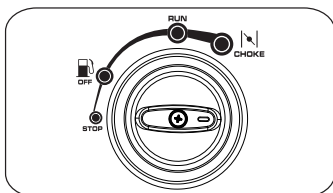
Off: Fuel shut off valve. This position can run out of the remaining fuel to ensure old fuel is not present when generator has not been used for long periods.

Note: If you do not plan to use the generator in the near future, please use this function, or drain the fuel inside the carburettor using the drain bolt on the carburettor bowl.

Run: The generator operates normally.

Choke: Close the choke.

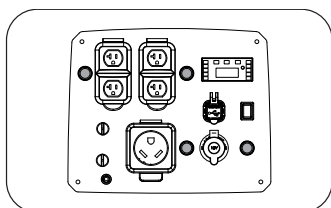
Note: Turn to choke position to start when engine is cold, and turn to Run position to start when engine is hot.



CIRCUIT BREAKER

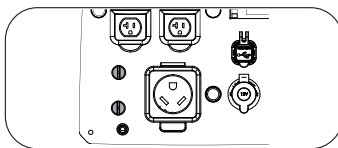
When the generator is overloaded or has overheated, the thermal protection works. Please reduce the load, or run it for a few minutes without load. Press the circuit breaker button to restore output power to equipment.

Note: The circuit breaker is influenced by factors, such as operation current and ambient temperature, so the protection time varies.



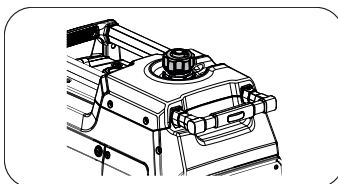
PARALLEL KIT TERMINAL

It is used for parallel operation with another inverter (parallel kit sold separately).

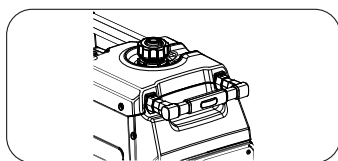


FUEL TANK CAP

Remove the fuel tank cap by rotating it anticlockwise.



VENTILATION KNOB (IF APPLICABLE)



The fuel cap is equipped with a ventilation knob to prevent fuel leakage. During operation, the ventilation knob must be in the "ON" position for the generator to operate normally. When the generator will not be used for a long time or needs to be transported, turn the ventilation knob to the "OFF" position to prevent fuel leakage.

TELESCOPING HANDLE

When moving the generator, please hold the telescoping handle and press the button on it, and pull it outward.

Note: Before moving, please turn off the generator and fuel switch. Please move the generator on a relatively flat ground. Do not perform the movement on a surface where the pit exceeds 40mm.

III. OPERATION

1. OPERATING CHECKLIST

OPERATING LOCATION

Only use this generator OUTSIDE and in well ventilated areas.

Only operate the generator on a flat, level surface and in a clean, dry operating environments. Only use the generator for applications within its operating scope. If you have any question regarding applicable scope, please speak to your nearest Service Agent.

In some locations and regions, the generator may require additional provisions and or regulations for operation, please consult with your nearest Service Agent.

ANGER

TOXIC FUMES

The exhaust of the generator contains carbon monoxide, using the engine indoors may cause serious personal injury including death. DO NOT use the generator inside any buildings or within enclosed spaces EVEN IF doors and windows are open. Place the generator in a well-ventilated and clean area. Note the wind direction and airflow when placing the generator.

HIGH ALTITUDE

This generator may require a high altitude carburetor kit to ensure correct operation at high altitudes. Consult with your local authorised dealer for high altitude kit information if you intend to operate the generator at altitudes above 5,000 feet (1,500 meters).

CAUTION

- Even with carburetor modification, generator horsepower will decrease by 3.5% for every 1,000 feet (300 meters) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.
- Operating the engine at altitudes below 5,000 feet (1,500 meters) with a modified carburetor may cause the generator to overheat and result in serious engine damage. Please restore factory specifications of the carburetor with your service dealer when using the engine in low altitude areas.

2. OPERATING CONDITION

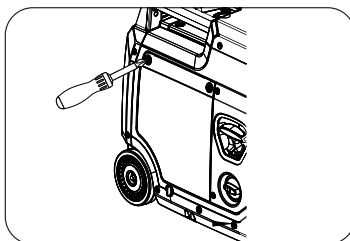
Check for loose or damaged parts, signs of oil or fuel leaks, and any other condition that may affect proper operation. Repair and or replace with genuine spare parts immediately.

WARNING

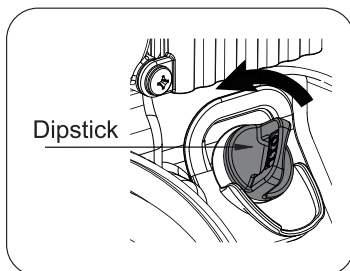
- Failure to correct problem(s) before operation may result in property damage and or serious personal injury.
- Remove excessive dirt or debris, especially around the muffler and recoil starter.
- DO NOT move or tip the generator during operation.

3. ENGINE OIL

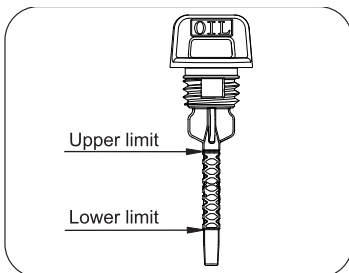
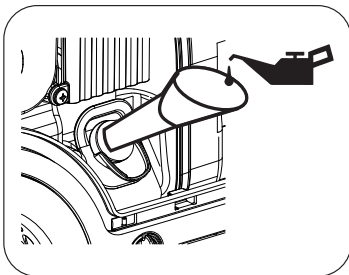
- Place the engine on a level surface with engine stopped. Check the engine oil level.
- Remove the oil maintenance cover.



- Remove the dipstick and wipe it clean.



- Reinstall dipstick into hole; rest on oil fill neck, DO NOT thread cap into hole.
- Remove the dipstick again and check oil level. Level should be between the upper and lower limit.
- Fill to the upper limit of the dipstick with the recommended oil if the oil level is too low.



Reinstall and fully tighten the dipstick.
Refer to add oil instruction in MAINTENANCE section for more information.

Oil capacity (rated):
See Parameters

WARNING

- Oil is a major factor affecting performance and service life.
- We recommend using LawnMaster 4-Stroke 10W30 Oil (PP01020005). You can find more information about this in the MAINTENANCE section of this manual.
- **OIL MUST BE PLACED IN ENGINE BEFORE STARTING.** This engine is not filled with oil at the factory. Any attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil may result in engine damage and void your warranty.

CAUTION

Operate generator only on level surfaces. The engine is equipped with a low oil sensors (if applicable) that will automatically stop the engine when the oil level falls below safe threshold. To avoid the inconvenient unexpected shutdowns, fill to the upper limit and check oil levels regularly.

4. ENGINE FUEL

- With the engine stopped, check the fuel level gauge. Refill the fuel tank if necessary.
- Use clean, fresh, regular unleaded petrol.
- DO NOT mix oil with petrol.
- Always wipe up any spilled fuel.
- Be sure not to fill above the upper limit mark
- Always allow room for fuel expansion.
- DO NOT use engine and or carburetor cleaning products in the fuel tank as this could result in permanent damage.
- It is important to prevent gum deposits from forming in essential fuel system components, such as the carburetor, fuel filter, fuel hose or tank during longterm storage. Also, experience indicates that alcohol-blended fuels (gasohol, ethanol or methanol) can attract moisture, which could lead to separation and formation of acids during longterm storage.
- Acidic fuels can damage the fuel system while in storage. Be sure to review the instructions in the "Storage" section.
- Petrol/Alcohol Blends: up to 10% alcohol, 90% unleaded petrol by volume is approved as a fuel. Other forms of petrol/alcohol blends are not approved.
- Damage and faults caused by old, stale or contaminated fuel may void warranty.

DANGER

- Do not fill the fuel tank above the upper limit. Over filling will result in engine damage and may void warranty.
- Petrol is highly flammable and extremely explosive. Keep flammable items away while handling petrol as this could result in a fire.
- Fill fuel tank outdoors and well-ventilated areas with the generator stopped.
- Always wipe off spilled fuel and wait until the fuel has dried before starting the generator.

CAUTION

- To minimise gum deposits in your fuel system and to insure easy starting, do not use petrol that is left over from the previous seasons.
- Pressure can build up in the fuel tank. Allow the generator to cool for at least two minutes before removing fuel cap. Loosen the fuel cap slowly to relieve any pressure in the tank.

5. GROUNDING

- The generator must be properly connected to an appropriate ground. It helps prevent electrical shock if a ground fault condition exists in the generator or in connected electrical devices, especially when the unit is equipped with a wheel kit. Proper grounding also helps dissipate static electricity, which often builds up in ungrounded devices.

DANGER

ELECTRICAL SHOCK

Failure to properly ground the generator could result in electric shocks.

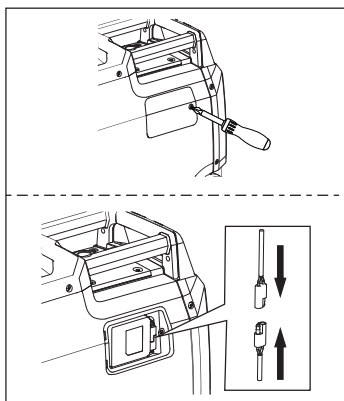
A ground terminal on the frame of the generator has been provided and can be found on the end of the generator. For remote grounding, connect a (4 mm²) length of heavy gauge copper wire between the generator ground terminal and the copper rod driven into the ground.

The National Electrical Code requires that the frame and external electrically conductive parts of this generator be properly connected to an approved earth ground. Local electrical codes may also require proper grounding of the unit. We strongly recommend that you consult with a qualified electrician for grounding requirements in your area.

6. BATTERY CONNECTION

(IF APPLICABLE)

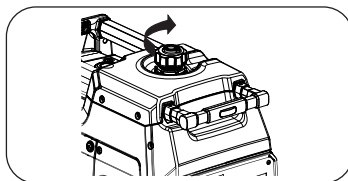
Remove the battery maintenance cover, connect the battery terminal to the motor terminal, and reinstall the maintenance cover.



IV. STARTING THE GENERATOR

Pull the starter handle 6-8 times to prefill fuel system before initial operation or removal from long term storage. Failure to do so could result in bad starting experience.

1. Perform operating checklist (see page 10) and remove all loads.
2. Turn the ventilation knob of fuel cap to the "ON" position to ensure fuel flow.
(Some Applicable Units)

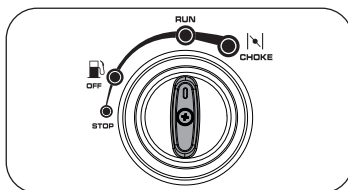


The following are suitable for hand start:

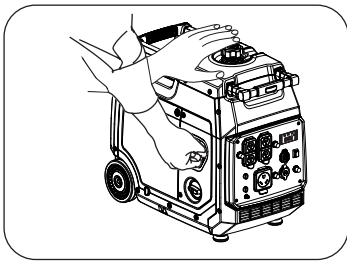
3. **COLD START**
Turn the combination switch to "CHOKE" position to shut off the choke.

WARM START

Turn the combination switch to "RUN" position, if not started, please turn the combination switch to "CHOKE" position before restarting.



4. **MANUAL START**
1. When starting engine, grasp the recoil starter handle and pull slowly until resistance is felt. Then pull rapidly to avoid kickback. When pulling the recoil starter, firmly grasp the generator to avoid tumble of generator or personal injury caused by tumble.



WARNING

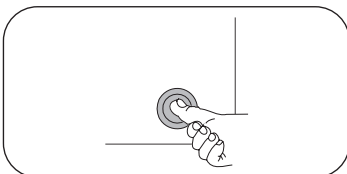
Check starter cord conditions before operating. Have it replaced immediately by local authorised dealer if cord is frayed.

DANGER

Beware of KICKBACK. Rapid retraction of the starter cord will pull hand and arm towards the engine faster than you can let go. Unintentional startup may result in serious personal injury.

5. ELECTRIC START

Cold/ hot engine start (electric start): Turn the combination switch to "Run" position. Press the engine switch and release it after the engine starts



If it fails to start, release the switch. The unit will restart by itself. If it fails to start after repeated 5 times, please allow the generator to cool for 1 minute and start again.

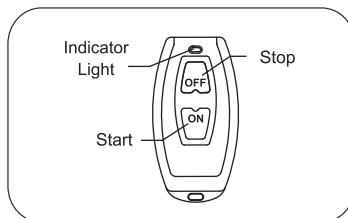
IMPORTANT

- Do not continue to start the generator without identifying the fault.
- DO NOT try to start the generator after changing to a different battery without authorisation.
- If the generator fails to start after three attempts, the generator still fails to start or stops after starting, please search and solve the fault.
- The engine should not exceed 15 seconds of continuous attempts to start. If the engine fails

to start, please allow the generator to cool for at least 1 minute before your next attempt. Failure to do this will damage the starter motor and may void warranty.

- If the generator idles for a long period of time due to other improper use/ other factors; the lithium battery will be undercharged and so the generator cannot be electrically started. Follow the manual start steps to control the choke and to start the generator manually. The generator will automatically charge the lithium battery during operation.

5. WIRELESS REMOTE CONTROL (IF APPLICABLE)



Press and hold the "ON" key for 1 second and release it to start the generator.

If it fails to start, the generator will restart by itself. If it fails to start after repeated 5 times, please allow the generator to cool for 1 minute and start again.

IMPORTANT

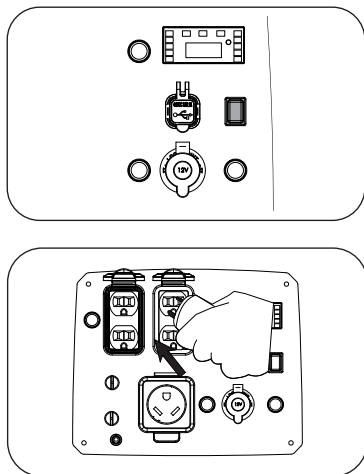
- Sometimes the generator can take a few attempts to start in cold weather. If machine does not start in the first 10 seconds, wait for 30 seconds before attempting again.
- If the motor turns a little then stops when you press the Start key, it may indicate a low battery. Charge the battery before operation or start by recoil start.

WARNING

The starting remote controls come from the factory pre-set, users do not need to link to the generator when first used. If you need to link (pair) the remote transmitter, press and hold the start button for 5seconds and release, then press the "ON" button for 1second. If the generator starts, the remote transmitter is successfully paired.

When electrical device requires a large starting current, please put the energy-saving switch in the "OFF" position; When the starting current required by electrical device is small, put the energy-saving switch in the "ON" position.

After completing the operations above, the generator can be connected to electrical devices.



WARNING

It is prohibited to start or close the generating set when the output terminal of generating set is connected to an electric device and the electric device is in "ON" state.

V. CONNECT TO ELECTRICAL DEVICES

Inspect power cord for damage before using. A hazard is electrical shocks from crushing, cutting or heat damage.

1. Allow the engine to stabilise and warm up for a few minutes after starting.
2. Make sure the electrical devices are in "OFF" position and the load current is not higher than the maximum withstanding current of the single socket

DANGER

If connected devices overheat, turn them off and disconnect them from generating set.

ELECTRICAL SHOCK

- To reduce the risk of electrical shock, DO NOT use electrical cords that are worn, frayed, bare or otherwise damaged.
- DO NOT touch bare wires or receptacles.
- DO NOT handle generator or electrical cords while standing in water, while barefoot, or while hands or feet are wet.

LOADING CAPACITY

You must make sure your generator can supply enough rated (running) and surge (starting) watts for the electrical devices you plan to power at the same time. Follow these simple steps to calculate the running and starting watts that are necessary for your purposes.

WARNING

- DO NOT overload the generator.
 - Exceeding the generator's capacity can damage the generator and/or electrical devices connected to it. Faults and damaged caused by overloading may void warranty.
1. Select the electrical devices you will power at the same time.
 2. The amount of power you need to run all the devices is the total rated (running) watts of these items.
 3. Identify how many surge (starting) watts you will need. Surge wattage is the short burst of power needed to start electric power tools and or appliances. Because not all motors start at the same time, total surge watts can be estimated by adding only the electrical device(s) with the highest additional surge watts to the total rated watts from step 2.

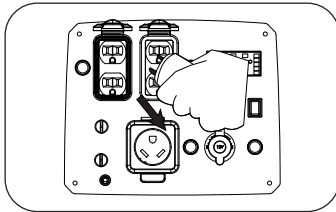
When the generator is being used as a back up power supply for a building, you are required to have an isolating switch installed by a qualified electrician. This is to ensure the generator is not connected to the main electrical grid. Failure to isolate the generator from the electrical grid may result in injury or death to electrical utility workers, or damage to the generator due to the back feed of electrical current.

WATTAGE REFERENCE CHART

Electric equipment		Rate power(W)	Starting power(W)
Appliances	Tablet TV 27"	80	100
	Energy saving lamb	5-50	5-50
	Electric cooker	1000	1000
	Computer	250	250
	Electric fan	50	100
	Washing machine	250	500
	Refrigerator	50	300
	Air-conditioner	1600	3200
Electric tooling	Electric hammer	1000	1500
	Impact Hammer	3000	6000
	Water pump	2200	5000
	Electric welding machine	5000	7500
	Air compressor	5000	10000

VI. STOPPING THE ENGINE

1. Remove the connectors of all electric equipment from the generating set panel.



2. Turn the combination switch to the "stop" position, the generator stops operation

WARNING

NEVER stop the engine with electrical devices connected and with the connected devices turned "ON".

WIRELESS REMOTE CONTROL (IF APPLICABLE)

- Press and hold the "OFF" button for at least 0.3 seconds to stop the generator. After the generator stops , turn the combination switch to the "stop" position.

- When the control distance is shortened or the indicator light is on but the remote control function is not available, Wireless remote replace the battery. Contact your local dealer for more information.

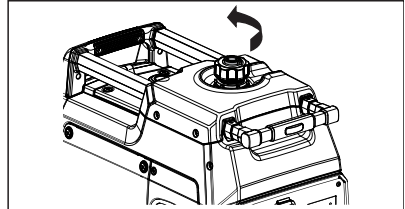
ONE BUTTON START-STOP (IF APPLICABLE)

- Press the start-stop button to turn off the generator. After the generator shutdown, turn the combination switch to "stop" position.

WARNING

If the generator will not be used for a long time, please turn the combination switch to the "off" position. After the fuel in the carburetor bowl runs out and the generator automatically shuts down, turn the knob to the "stop" position. If the combination switch knob is not turned to the "stop" position, there is a risk of fuel leakage. And the battery will be undercharged after a long time placed, resulting in failure to start the generator.

3. For some applicable models, after the generator stops and cools down, turn the fuel tank cap ventilation knob to "OFF" position.



VII. PARALLEL OPERATION

Only applicable to some models.

Make sure that the generator is in a good running state before connecting it to other similar generator units. The total power of electric devices should not exceed rated power of the generator.

When the electric motor starts, the overload indicator (red) will light up and will normally stop within 4 seconds. If it doesn't go out, please consult your Service Dealer.

During parallel operation, energy-saving switches of generator should be in the same position.

1. Connecting one generator to other generator set(s) in parallel. Use the parallel kit to make the parallel connection (the parallel kit needs to be purchased separately).
2. Start the engine in proper order and make sure that the running indicator (green) is normal.
3. Connect the plug of electric devices to the AC receptacle of parallel kit.
4. Run the electrical devices.

VIII. MAINTENANCE

It is the operator's responsibility to complete all scheduled maintenance and or servicing in a timely manner. Always correct any issues before operating the generator. Follow all inspection and maintenance recommendations that are listed in the manual.

WARNING

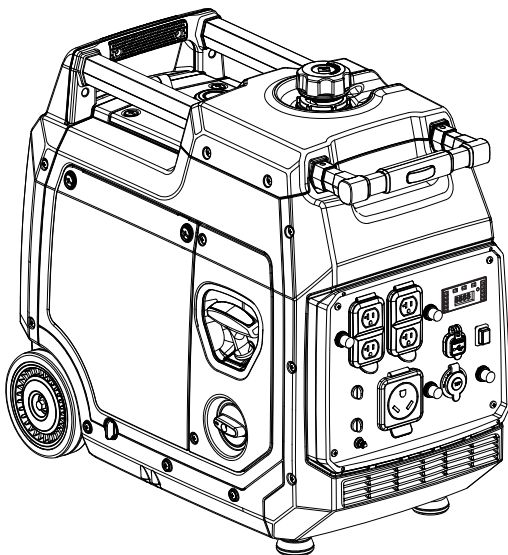
Improper maintenance and or failure to correct problems prior to operating the unit may cause the unit to malfunction and result in property damage and or serious personal injury. Improper maintenance and servicing may void warranty.

DANGER

Accidental starts can cause serious personal injury. Remove and ground the spark plug wire before performing any service.

CAUTION

The filter element may contain PAHs, PAHs that is harmful for your health. Please wear gloves for protection during air filter maintenance.



1. MAINTENANCE SCHEDULE

Before servicing the generator, stop the generator, disconnect all electric devices and battery (if equipped) and allow the generator to cool down.

Follow the service intervals indicated in the chart below. Service your generator more frequently when operating in adverse conditions. Contact your local Service Dealer if the generator requires maintenance.

		Each time before use	The first month or 10 hours ^{note2}	Every three months or 50 hours ^{note2}	Every six months or 100 hours ^{note2}	Every year or 300 hours ^{note2}
Engine oil	Inspection	√				
	Replacement		√		√	
Air filter	Inspection	√				
	Cleaning			√ ^{note3}		
Spark plug	Inspection and adjustment				√	
	Replacement					√
Spark Extinguisher ^{note1}	Cleaning				√	
Idle speed	Inspection and adjustment					√ ^{note4}
Valve clearance	Inspection and adjustment					√ ^{note4}
Carbon canister ^{note1}	Inspection	Every two years ^{note4}				
Low permeability oil tube ^{note1}	Inspection	Every two years ^{note4}				
Oil tube	Inspection	Every two years ^{note4}				

Note 1: Applicable types (if available).

Note 2: Before each season and after (whichever comes first).

Note 3: Service more frequently under severe, dusty, dirty conditions.

Note 4: To be performed by knowledgeable and or experienced owners. However, we recommend using an authorised service agent to conduct all maintenance and servicing need for the purpose of voiding issues with warranty.

2. GENERATOR MAINTENANCE

- Make certain that the generator is kept clean and stored properly.
- Use a damp cloth to clean exterior surfaces of the generator.
- Use an compressed air (25 PSI) to clear dirt and debris from the generator.
- Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

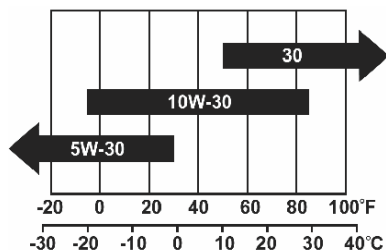
WARNING

- DO NOT use water to clean the generator. Water can enter the generator through the cooling slots and damage the generator windings.
- DO NOT modify the generator in any way.
- DO NOT tamper with governed speed. Generator supplies correct rated frequency and voltage when running at factory set.
- Tampering with the factory reset governor will void your warranty

3. ENGINE MAINTENANCE

3.1 ENGINE OIL

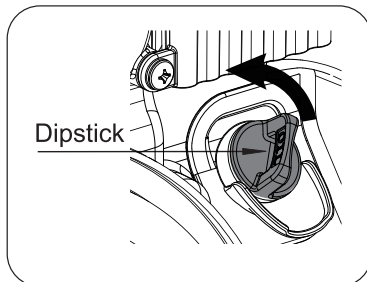
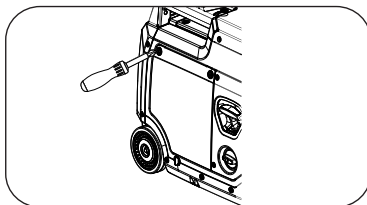
LawnMaster 10W30 Oil (PP01020005) is recommended. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range. **OIL MUST BE PLACED IN ENGINE BEFORE STARTING.**



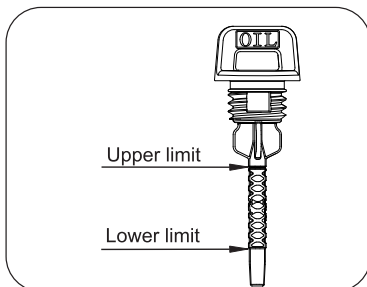
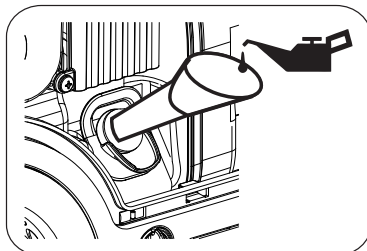
Ambient temperature
Oil capacity (rated):
See Parameters.

3.2 ADDING OIL

1. Place the engine on a level surface.
2. Remove the air filter maintenance cover and dipstick and wipe it clean.



3. Add recommended oil to the upper limit.



4. Fully tighten the dipstick and reinstall the air filter maintenance cover.

CAUTION

OIL LEVEL CHECK

Reinstall dipstick into tube; rest on oil fill neck, DO NOT thread cap into tube.

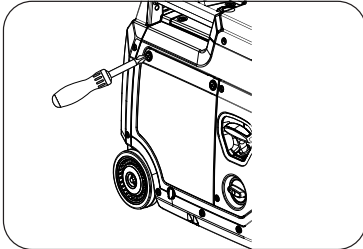
- Dispose of used oil at an approved waste management facility.

3.3 CHANGING OIL

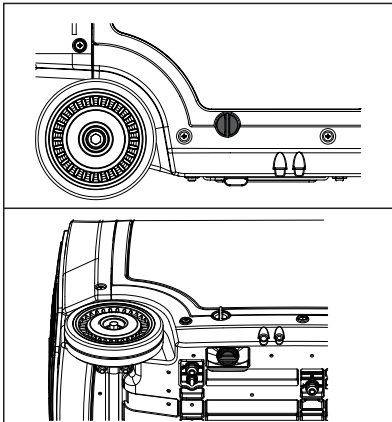
CAUTION

Change the oil when in hot engine state. The oil can reach up to 140 °C under that condition. Careful operation should be taken to prevent burns.

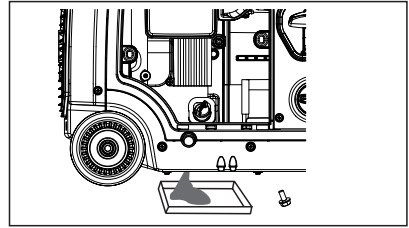
1. Place the machine on a level surface which is 300mm higher than the ground.
2. Remove the air filter maintenance cover.



3. Remove the oil drain plug



4. Place the oil container box under the oil drain hole of the generator and remove the drain bolt to drain out all the used oil.



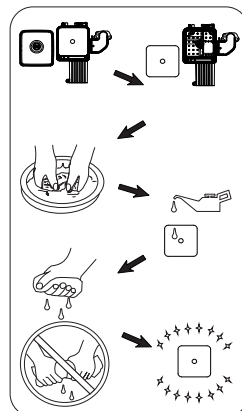
5. Fully tighten the drain bolt before reinstalling the drain plug.
6. Add recommended oil to the upper limit.
7. Fully tighten the dipstick and install the air filter maintenance cover back in place.
8. Properly dispose of any used oil at an approved waste management facility.

WARNING

The engine is not filled with oil at the factory. Any operation before it has been properly filled with the recommended type and amount of oil may result in engine damage and void your warranty.

4. AIR FILTER

1. Loosen the filter fix bolt and remove the cover of the air filter.
2. Remove the foam filter element.
3. Wash in liquid detergent and warm water
4. Squeeze thoroughly dry in a clean cloth.
5. Saturate in clean engine oil.
6. Squeeze in a clean, absorbent cloth to remove all excess oil.
7. Place the filter in the assembly.
8. Fasten the air filter cover with the fix bolt, and the mounting it back to the air filter body.



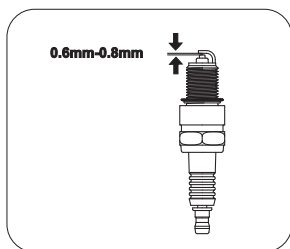
WARNING

DO NOT run the engine without the air filter, or serious danger can result.

5. SPARK PLUG

1. Clean any dirt from the spark plug cap and spark plug base.
2. Remove the spark plug cap.
3. Using socket wrench to loose and remove the spark plug.
4. Inspect the spark plug and spark plug washer, if it's damaged or worn, replace with new one. Clean the spark plug with wire brush if reuse it.
5. Check spark plug gap. Carefully bend side electrode to adjust the gap if necessary.

SPARK PLUG GAP: 0.6MM - 0.8MM



6. Carefully thread the plug into the engine by hand.
7. After the spark plug is in position, use spark plug wrench to tighten the plug.

SPARK PLUG TIGHTEN TORQUE: 15-20 N.M

8. Attach the spark cap to the plug and connect the spark plug wire to the plug.

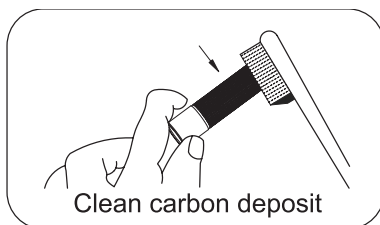
WARNING

Only use the recommended spark plug or equivalent. DO NOT use spark plugs that have improper heat range.

9. Install spark plug maintenance cover.

SPARK ARRESTER (IF APPLICABLE)

1. Allow the generating set to cool completely before servicing the spark arrester.
2. Remove the muffler blind window first.
3. Remove the spark arrester screen.
4. Carefully remove the carbon deposits from the spark arrester screen with a wire brush.
5. Replace the spark arrester if it is damaged.
6. Reinstall the spark arrester in the muffler and reinstall the muffler blind window.



IX. STORAGE & TRANSPORTATION

STORAGE

The generating set should be started at least once every 2 weeks and allowed to run for at least 20 minutes. Follow the instructions below for longer term storage if the generating set will be out of service for 2 months or more.

WARNING

FIRE OR EXPLOSION

Gasoline is highly flammable and extremely explosive. Empty the fuel tank and shut off fuel valve before storing or transporting this generating set.

1. Allow the generating set to cool completely before storage.
2. Clean the generating set according to instructions in Maintenance section.
3. Drain all fuel completely from the fuel tank, fuel hose and carburetor to prevent gum from forming.
4. Turn the combination switch in "STOP" position to cut off the fuel.
5. Remove the oil drain plug to drain out the oil
6. Remove the spark plug and pour about 15 ml of fresh oil into the cylinder. Pull the recoil starter slightly to distribute the oil and lubricate the cylinder. And then attach the spark plug.
7. Store the unit in a clean, dry area out of direct sunlight.
8. Disconnect the battery.

TRANSPORTATION

When generator is being transported or put into short term storage, the generator should be in the normal operating position and fixed vertically to prevent fuel leakage. The combination switch should be in the "stop" position and knob of the fuel cap should be turned to the "OFF" position.

WARNING

When transporting do not overfill the tank. Do not operate the generating set while it is on vehicle. Take the generating set off the vehicle and use it in a well-ventilated place. Avoid a place exposed to direct sunlight when putting the generating set on a vehicle. If the generating set 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 generating set on board. If you must transport the generating set on a rough road, drain the fuel beforehand.

X. TROUBLE SHOOTING

Failure	Trouble	Solution
Generating set fails to start	Combination switch is in “OFF” or “STOP” position.	When engine is cold, turn switch to“CHOKE”, and follow starting procedure to start the generating set. When engine is hot, turn switch to “RUN”, and follow starting procedure to start the generating set,
	Lack of fuel.	Fill fuel tank per instructions in this manual.
	Lack of engine oil.	Check oil level. This engine is equipped with a low oil sensor. The engine cannot be started unless the oil level is above the prescribed lower limit.
	No ignition.	Remove the spark plug cap. Clean any dirt around the plug base, and then remove the spark plug. Install the spark plug in the plug cap. Turn the combination switch to“RUN” position. Grounding the electrode to any engine ground, pull the recoil starter to see if sparks jump across the gap. If there is no spark, replace the plug. Reinstall the plug and start engine according to instructions in this manual. Consult Customer Service if necessary.
	Spark plug is splashed by fuel	Remove the spark plug and wipe the fuel.
	The generating set flames out after running for a certain time.	Turn the ventilation knob on the fuel tank cap to “ON” position; Check the fuel and oil level. Add them if necessary.
	Battery undercharge (electric start)	Charge the battery by starting the generator manually (at least 30 minutes). After closing the choke manually, start the generator according to the manual startup steps.
Generating set has no output	Breaker trip	Reset circuit breakers.
	Inadequate cord sets or extension cords.	Check cord sets or extension cords capabilities in section controls; cable size in this manual. Consult Customer Service if necessary.

XI. SPECIFICATIONS & WIRING DIAGRAMS

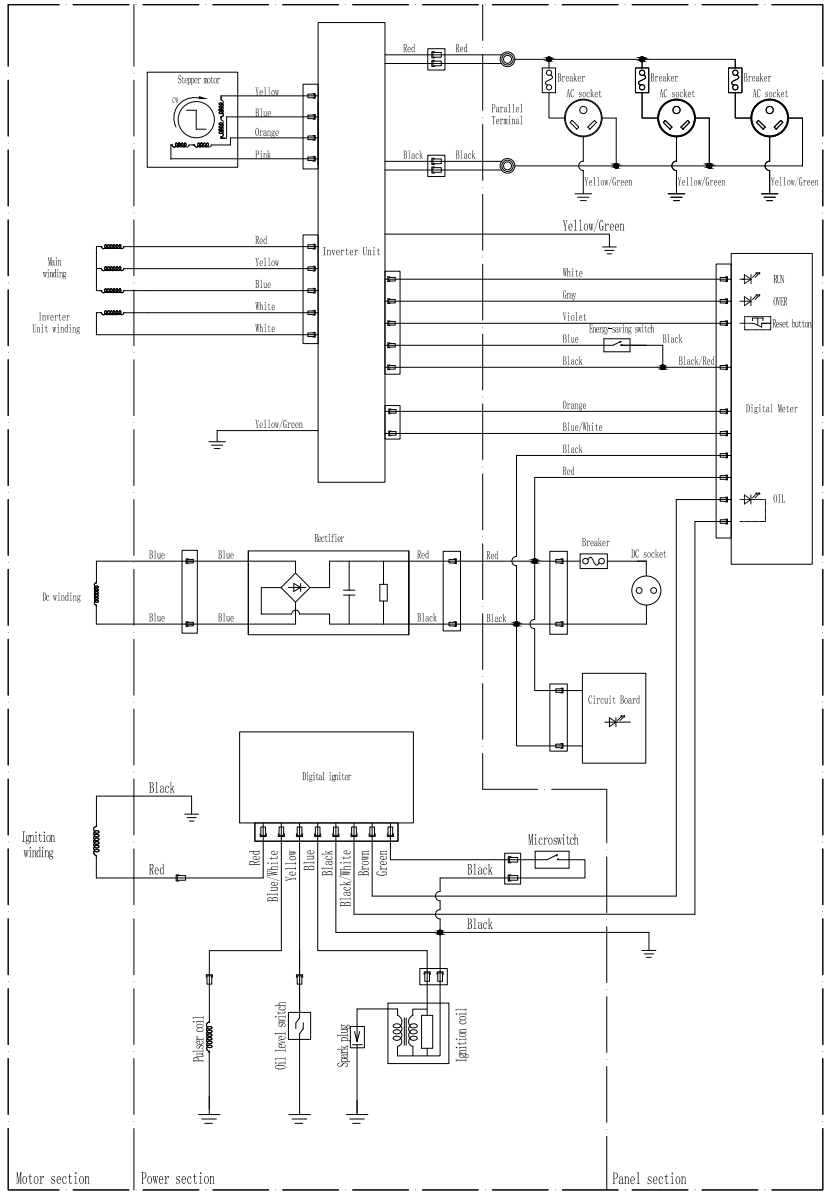
1. SPECIFICATION (PARAMETER TABLE)

Model		BQH3500(E)		BQH4000(E)	
Feature					
Engine parameter	Engine model	NH225(E)-2		NH225(E)-2	
	Style	OHV			
	Displacement (cm ³)	224			
	Ignition system	DCI			
	Start style	Hand recoil or electric starting			
	Oil capacity(L)	0.6			
Series parameter	Frequency(Hz)	50	60	50	60
	Voltage(V)	230	120/220	230	110/120
	Rated power(kW)	3.2		3.6	
	Maximum power(kW)	3.5		3.8	
	Power factor	1		1	
	Insulation rate	F		F	
	Fuel capacity(L)	7.8/7.2(Reversal Valve)		7.8/7.2(Reversal Valve)	
	Operating temperature(℃)	-10~40		-10~40	
	Max. site altitude of installation(m)	1500		1500	
	Measured sound pressure level(dB(A))	65		65	
	Measurement uncertainty(dB(A))	≤1.5		≤1.5	
	Guaranteed sound power level(dB(A))	≤89		≤91	
	Net weight(kg)	BQH3500:32.5 BQH3500E:34.5		BQH4000:32.5 BQH4000E:34.5	

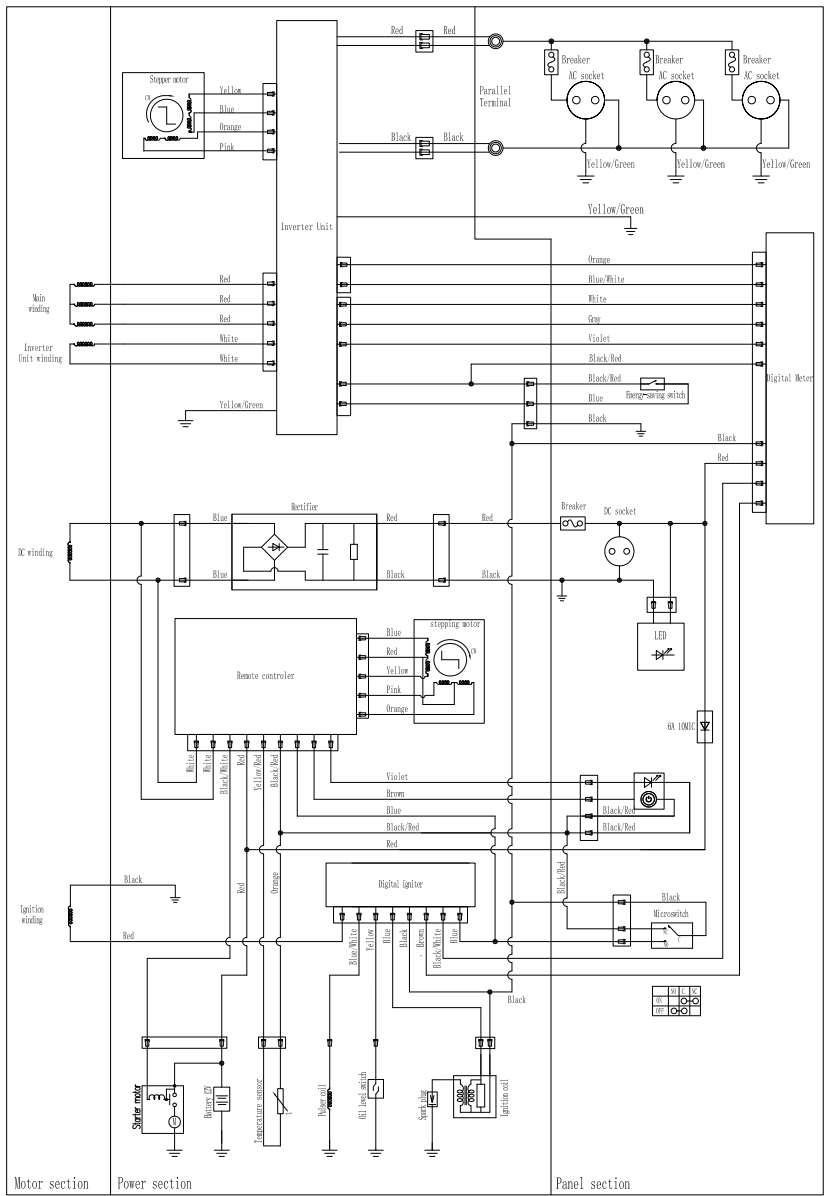
Note: The generating set with different specification and configurations may have different parameters and may change at any time without notice.

2. WIRING DIAGRAMS

BQH35000/BQH4000 RECOIL START



BQH35000E/BQH4000E ELECTRIC START



Note: Because of the difference of generator, the wiring diagram is only for reference.

XII. WARRANTY

3-YEAR DOMESTIC CONDITIONAL WARRANTY

UP TO 90 DAYS FOR COMMERCIAL USE.

LawnMaster Dealer extended warranty period for items that are:

- Registered at the time of sale.
- Serviced by an Authorised LawnMaster Service Dealer in accordance with the service schedule using Genuine parts and oils (proof required).
- Meeting all other warranty requirements.

LAWNMASTER LIMITED WARRANTY

The warranty applies to all new LawnMaster products that are identified by their unit serial number.

In order to be eligible for the LawnMaster limited warranty, you must have, maintenance performed according to the schedule contained in the relevant owner's manual that is supplied with the product, and ongoing maintenance performed by an authorised LawnMaster dealer.

Steelport will recognise your statutory rights under the Consumers Guarantee Act 1993. To ensure the safe operation of this product, we strongly recommend that you only use an authorised LawnMaster dealer for all maintenance and servicing requirements. Authorised LawnMaster

Dealers have access to special tools, training, and genuine parts that are required to maintain your LawnMaster product for peak operating conditions. The purchaser must keep an accurate record of all service and maintenance. This may be requested when assessing any future warranty claims.

To qualify for the LawnMaster extended Warranty, a warranty registration must be completed online through the Steelport website (www.steelport.co.nz) within ten (10) days following the date of purchase.

Proof of purchase documentation are required and must include the engine serial number and frame serial number as appropriate for all warranty claims.

Authorised LawnMaster dealers are able to repair and or replace parts that are defective within the limits of this warranty at no expense to the owner, and this includes the cost for replacement parts and or labour. Consumable items such as, but not limited to, oils, coolants, filters and spark plugs maybe an additional charge at the expense of the owner. All defective parts will be replaced and become the property of Steelport.

Transportation costs related to freight and or delivery of replacement parts, and or whole goods maybe an additional charge at the expense of the owner.

WARRANTY EXCLUSIONS

- Any damage which results from neglect of periodic maintenance specified by Steelfort.
- Any damage resulting from repair or maintenance by methods other than specified by Steelfort.
- Any product which has participated in a competition racing or rally event.
- Any damage which results from misuse and or use beyond the limitations of the intended purpose specified by Steelfort, such as overloading, and or under abnormal conditions.
- Any damage resulting from the use of non-genuine parts, lubricant or fluid not approved by Steelfort.
- Any damage resulting from modification or installation in other products in a way that is not approved by Steelfort that has an influence on the function and/or performance of the products.
- Any damage that results from operating under conditions that are not specified in the Owner's Manual either intentionally or by error.
- Fading of painted surfaces, deterioration of plated surfaces, deterioration of rubber and plastics including, rusting due to the passage of time.
- Normal phenomena such as noise, vibration and or oil, are considered by Steelfort as not affecting the quality, function or performance of the product.
- Any damage due to improper storage and or transport.
- Consumable replacement items: Spark plugs, contact points, shear pins, fuel strainers, oil filter elements, air cleaner elements, brake shoes or pads, clutch components, fuses, motor brushes, gaskets, tube or hoses, belts, cutting blades, light bulbs, serviceable bearings. Petroleum and others fluids: Oil, grease, battery electrolyte, and radiator coolant. Other items specified by Steelfort.
- Periodical maintenance items such as cleaning, inspection and adjustments.
- Any repair and/or adjustment performed by persons other than an authorised dealer, or damage resulting therefrom. All maintenance and repairs conducted by unauthorised service dealers and or persons will void the warranty.
- Any repair and/or adjustment to correct improperly and or poor-quality work that is previously performed.

- Incidental expenses that are incurred in the warranty claim for additional expenses such as towing, communications, accommodation and meals, that are incurred due to the breakdown of the product at a remote location are not covered.
- Any expense related to personal injury and/or property damage, (exclusive of the product itself). Compensation for loss of time, commercial losses or rental costs of a substitute product during the period of adjustment.
- Any damage which results from unavoidable natural disasters, fire, collision, theft, etc.
- Any normal wear or deterioration, such as that of sliding and or rotating parts caused under normal operating conditions i.e., normal wear to pistons, piston rings, cylinder bores, piston pins, valve seats, stems and bearings.
- Any damage resulting from exposure of the product to soot and smoke, medicines and chemical agents, seawater, sea breeze, salt or other environmental phenomena

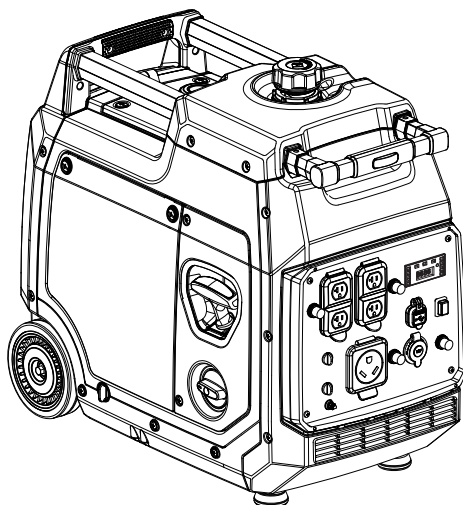
DOMESTIC USE:

Personal, residential or household use only and is covered by a 3-year warranty.

NOTE: These warranty conditions apply in New Zealand only.

COMMERCIAL USE:

All uses other than domestic use, including use for income-producing (including farming) or rental purposes have a 90-day warranty. NOTE: These warranty conditions apply in New Zealand only.



NOTES

[illegible]

LawnMaster®

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Auckland, 1061, New Zealand
09 573 1324 | outlet@steelfort.co.nz



SCAN TO VIEW THE
LAWNMASTER RANGE



A STEELFORT PRODUCT



[steelfortnz](https://www.instagram.com/steelfortnz)