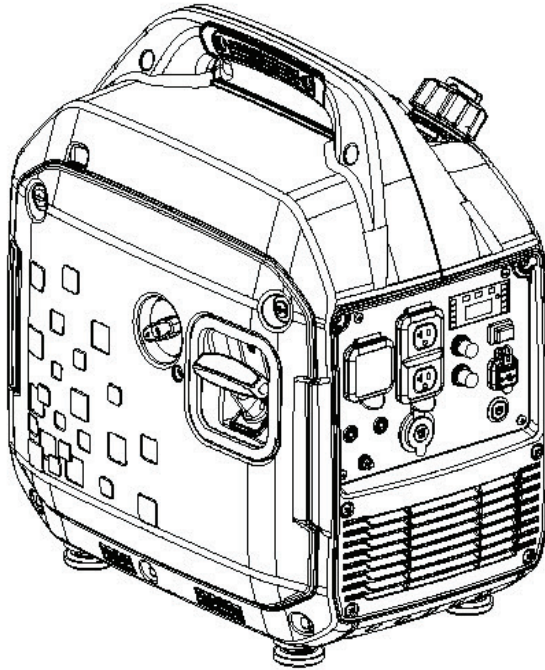


# LawnMaster®



# INVERTER GENERATOR

## SAFETY AND OPERATING MANUAL

PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATING THE UNIT

### LGBQH3300E-II



A STEELFORTH PRODUCT



PROUDLY  
NZ OWNED



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Thank you for purchasing our LawnMaster LGBQH3300EII Inverter Generator, the information contained within this manual will help you to have many years of safe and trouble free use of this LawnMaster product.

## OPERATOR SAFETY

### SAFETY RULES

This manual contains important safety information and instructions to operate the LGBQH3300E 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.

consumer use only. Air cooled generating sets cannot be run full time. No personal-modified any part of the generating set or any unsuitable usage is allowed.

Do not operate the Inverter Generator if you are under the influence of Alcohol, drugs or medication.

### DANGER - TOXIC FUMES

The exhaust of the engine contains carbon monoxide, an odorless, colorless, poison gas. Using engine indoors CAN KILL YOU! NEVER use inside any building or any kind of enclosure, EVEN IF doors and windows are open. Place the engine in a well-ventilated area and carefully consider wind and air currents when positioning the engine.

### WARNING

#### 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 entanglement, traumatic amputation or laceration. Broken bones, fractures, bruises or sprains.

#### FIRE

Operating this engine can generate sparks that may ignite nearby flammable materials. This engine might not come with a spark arresting muffler. If you plan to use the engine near flammable substances, such as agricultural crops, forests, brush, grass, or similar materials, ensure an approved spark arrester is installed. In some regions, a spark arrester is legally required. Please check with local fire agencies for specific laws and regulations regarding fire prevention.

Flammable materials can catch fire when they come into contact with hot surfaces. Do not place flammable objects within 1.5 meters.

#### HOT SURFACE

Engine and generator generate heat during operation, so touching hot surfaces may cause severe scalding. Avoid contact with high temperature exhaust gas. Do not touch the high temperature surface. Do not touch the generator when it is running or just stopped.

#### WARNING

Lithium battery is maintenance free, if you have any questions, please contact your local LawnMaster dealer.

## **FIRE OR EXPLOSION**

- Petrol is highly flammable and extremely explosive.
- Fire or explosion can cause severe burns or death.
- Keep flammable items away while handling petrol.
- Fill the fuel tank outdoors in a well-ventilated area with the engine turned off.
- Always wipe off any spilled fuel and wait until it has dried before starting the engine.
- Do not operate the engine if there are known leaks in the fuel system.
- Follow proper fuel storage and handling procedures.
- Do not store fuel or other flammable materials nearby.
- Empty the fuel tank before storing or transporting the engine.
- Keep a fire extinguisher handy and be prepared for any fire emergencies.

## **WARNING**

Before each use, thoroughly inspect the parts for looseness or damage, and check for oil or fuel leaks or any other conditions that might impact normal operation. Any damaged or defective parts must be repaired or replaced immediately.

- Familiarise yourself with the location of all controls and safety signs.
- Ensure all safety indicators are always in their correct positions and functioning properly.
- Always operate the generator on a level surface.
- Do not block the cooling channel with any objects.
- Avoid exposing the generator to excessive humidity or large amounts of dust.
- Children and untrained individuals are not permitted to operate the generator.
- Do not run the generator unattended; always turn it off before leaving.
- Avoid touching the generator while it is running or immediately after it has been turned off.
- Keep a space of 0.9 m around the generator to ensure good cooling.

## **DANGER**

### **MOVING PARTS**

- Moving parts can cause severe injury. Keep hands and feet away.

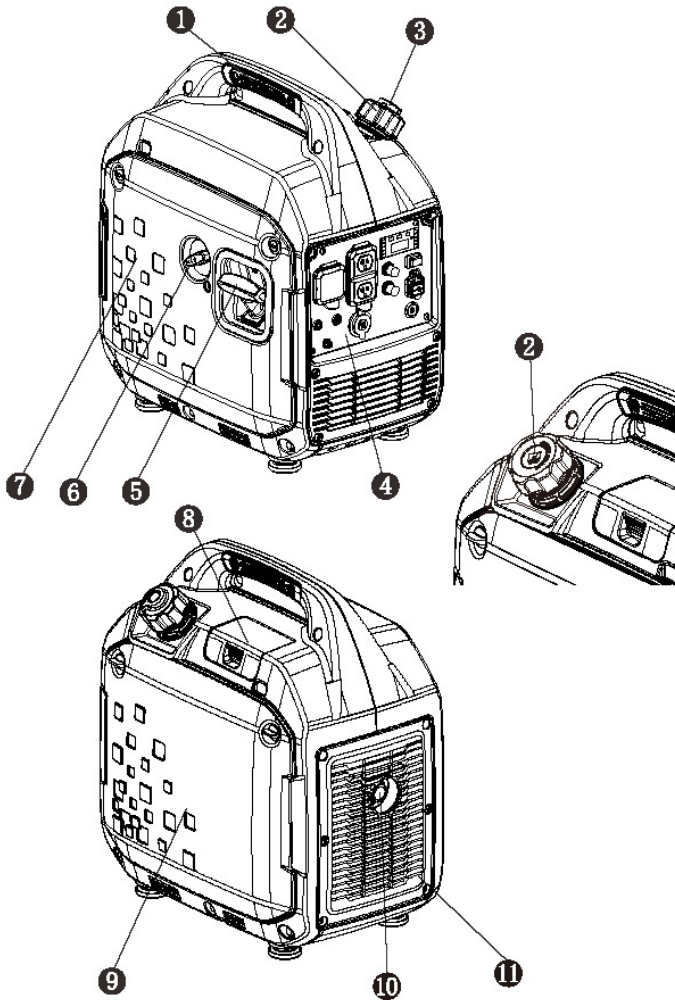
- DO NOT operate engine with covers, shrouds, or guards removed.
- DO NOT wear loose-fitting clothing, dangling drawstrings, or items that could become caught. Tie up long hair and remove jewellery.
- Moving parts can catch the operator's hands, feet, hair, or clothes, potentially causing traumatic amputation, broken bones, or fractures.
- NEVER place your fingers, hands, or body near the engine while it is running.

## **ELECTRIC SHOCK**

This generating set produces high voltage, and the electricity CAN KILL YOU.

- Ensure the generating set is properly connected to an appropriate ground to prevent electric shock. Failure to do so can result in electrocution, especially if the set is equipped with a wheel kit.
- Consult an electrician for local grounding requirements. Installation should be performed by a certified electrician. Improper installation can result in electric shock and death.
- To reduce the risk of electric shock, DO NOT use electrical cords that are worn, frayed, bare, or otherwise damaged.
- DO NOT touch bare wires or receptacles.
- DO NOT operate the generating set in wet weather. Keep the generator dry at all times.
- Keep children and pets away from the generating set.
- DO NOT connect the generating set to a building's electrical system without a properly installed transfer switch by a qualified electrician.
- When using the generating set for backup power, notify the utility company. Use an approved transfer switch to isolate the generating set from the electric utility. Failure to isolate the generating set from the power utility can result in death or injury to electric utility workers due to backfeed of electrical energy.

## FEATURES, CONTROLS & TECHNICAL DATA



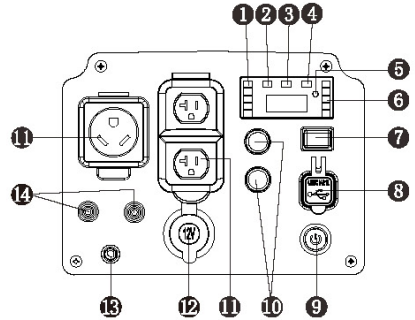
- 1. Carrying Handle
- 2. Fuel Tank Cap
- 3. Ventilation Knob (If Applicable)
- 4. Control Panel

- 5. Recoil Starter
- 6. Transfer Switch
- 7. Left Cover
- 8. Spark Plug Maintenance Cover

- 9. Right Cover
- 10. Muffler
- 11. Muffler Blind Window

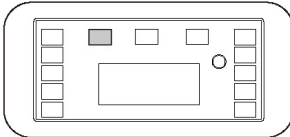
# CONTROL PANEL

- |                       |                           |
|-----------------------|---------------------------|
| 1. Power Indicator    | 8. USB Port               |
| 2. Overload Indicator | 9. Switch Button          |
| 3. Running Indicator  | 10. AC Circuit Breaker    |
| 4. Oil Alarm Lamp     | 11. AC Output Receptacle  |
| 5. Reset Button       | 12. 12V DC                |
| 6. Fuel Display       | 13. Ground Terminal       |
| 7. ECO Model          | 14. Parallel Kit Terminal |



## OVERLOAD INDICATOR (RED)

When the overload indicator is on, it means the generating set is overloaded, activating the AC protector. This will stop the output from the generating set to protect both the electrical equipment and the generating set itself. At this time, the running indicator (green) will be off and the overload indicator (red) will be on, although the engine will still be running.

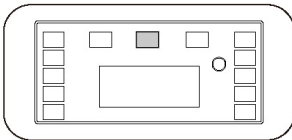


When the generating set has no output and the overload indicator is on, please take the following steps:

1. Lower the total power of the connected electric devices to the rated output range of generating set.
2. Check the air intake for impurities and check the control parts for abnormal situation. Handle immediately if necessary.
3. Press the reset button.

## RUNNING INDICATOR (GREEN)

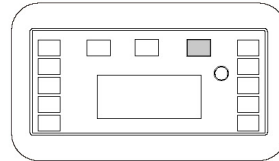
The running indicator lights up when generating set starts and has normal output.



## OIL LEVEL INDICATOR (YELLOW)

When the oil level falls below the lower limit, the oil protection system will automatically shut down the engine. The oil level indicator will blink, indicating the need for oil replenishment. The engine will remain

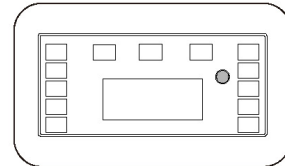
inactive until the oil is filled to the proper level.



**NOTE:** If the generator fails to start with the engine turned off, switch the start-stop knob to the "RUN" position, then pull the starter handle. If the oil alarm indicator lights up, it indicates insufficient oil capacity. Add oil and restart the generator.

## RESET BUTTON

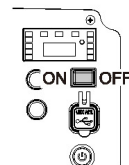
The reset button is used to restore output if an overload occurs. To restore output, reduce the loads and press the reset button.



## ECO MODEL

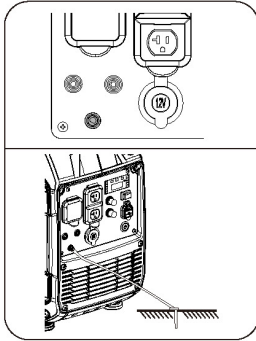
When the electrical equipment requires a large starting current, set the ECO Model to the "OFF" position. For electrical equipment requiring a small starting current, set the ECO Model to the "ON" position.

**NOTE:** For equipment with large starting currents (such as air compressors, submerged water pumps, etc.), always set the ECO Model to the "OFF" position.



### GROUNDING TERMINAL

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



### TRANSFER SWITCH

Choke & Run & Off & Stop

NOTE: One-button start and remote control start do not include the function to manually close the choke.

Choke: Engage the choke.

NOTE: Engage the choke position when starting the engine while it's cold, and switch to the Run position when the engine is hot.

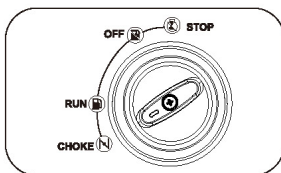
Run: The generating set operates normally.

Off: Cuts off fuel without stopping the engine. This position allows the generator to consume remaining fuel, enhancing its reliability.

NOTE: If you don't plan to use the generator soon, use this function, or drain the fuel inside the carburetor through the carburetor drain bolt.

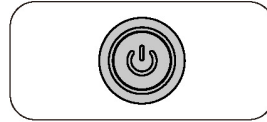
Stop: Shuts down the generator.

NOTE: After unloading the generating set, let it run for 3 minutes without load to stabilise the temperature before stopping it.



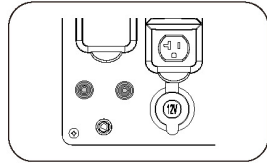
### SWITCH BUTTON (if Applicable)

You can start the generator by pressing the button with your finger.



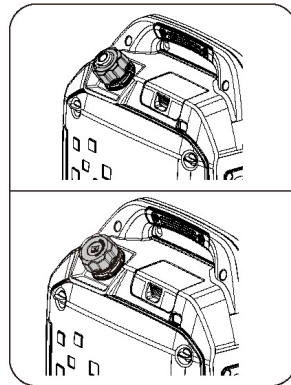
### PARALLEL KIT TERMINAL

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

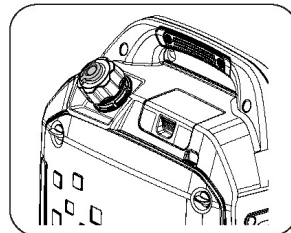


### FUEL TANK CAP

Remove the fuel tank cap by rotating it anticlockwise



### VENTILATION KNOB (if Applicable)



The fuel cap is fitted with a ventilation knob to prevent fuel leakage. During operation, ensure the ventilation knob is in the "ON" position for the generator to function properly. When the generator will not be used for an extended period or needs to be transported, switch the ventilation knob to the "OFF" position to prevent fuel leakage.

## SPECIFICATIONS

<b>Model</b>	<b>LGBQH3300EII</b>
Engine Model	165FED/P
Displacement (cc)	149
Start System	Recoil
Type	Petrol Engine
Rated Power (kW)	2.7
Oil Type	SAE 10W-30
Fuel Capacity (L)	5.8
Oil Capacity (L)	0.5
Frequency (Hz)	50-60
Max Site Altitude of Installation	1500m
Measured Sound Pressure Level dB (A)	72
Measurement Uncertainty dB (A)	1.5
Guaranteed Sound Power Level dB (A)	93
Weight	21

Note: Any engine and related data of pump changes may not be informed. Engine may difference in various areas, please contact your local dealer for engine information.



# OPERATING

## 1. OPERATING CHECKLIST

### OPERATING LOCATION

- Only operate the generator outdoors and ensure it is placed in a well-ventilated area.
- Operate the generator on a flat, level surface and in a clean, dry environment.
- Maintain a clearance of two feet on all sides of the generator while it is operating outdoors.
- Follow specified operating areas. If any issues arise during operation, please contact your local LawnMaster Dealer.
- In some areas, generators must be registered with the local utility.
- Generators used at construction sites may be subject to additional rules and regulations.

### DANGER - TOXIC FUMES

The exhaust of the generating set contains carbon monoxide, Using engine indoors **CAN KILL YOU!** NEVER use inside any building or any kind of enclosure, **EVEN IF** doors and windows are open. Place the generating set in a well-ventilated and clean area. Note the wind direction and air current when place the generating set.

### HIGH ALTITUDE

This generating set may require a high altitude carburetor kit to ensure correct operation at high altitudes. Consult your local LawnMaster dealer for a high altitude kit if you always operate the generator above 1.5 meters.

### CAUTION

Even with carburetor modification, the horsepower of the generating set will decrease by about 3.5% for every 300 meters increase in altitude. Without carburetor modification, the effect of altitude on horsepower will be even greater.

Operating the engine at altitudes below 1,500 meters with a modified carburetor may cause the generating set to overheat, leading to serious engine damage. Please restore the carburetor to factory specifications at the dealer when using the engine in low-altitude areas.

## 2. OPERATING CONDITIONS

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

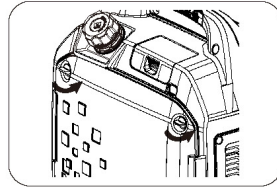
### WARNING

Failing to correct problem(s) before operation could result in property damage, serious injury or DEATH.

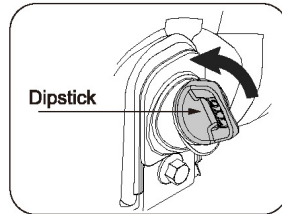
- Clean the dirt or foreign objects on the surface around exhaust and air intake of generator.
- DO NOT move or tip the generating set during operation.
- Use generating set only for intended uses. If you have questions about intended use, ask your local dealer.

### ENGINE OIL CHECK

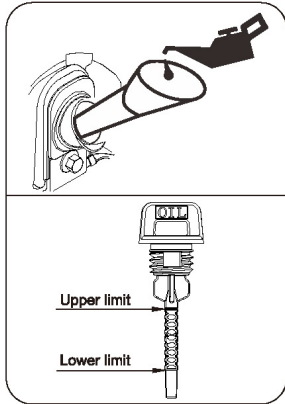
1. Place the engine on a level surface with engine stopped.
2. Check the engine oil level.
3. Remove the oil maintenance cover.



4. Remove the dipstick and wipe it clean.



5. Reinstall dipstick into hole; rest on oil fill neck, DO NOT thread cap into hole.
6. Remove the dipstick again and check oil level. Level should be between the upper and lower limit.
7. Fill to the upper limit of the dipstick with the recommended oil if the oil level is too low.
8. 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. USE 10W-30 oil which is recommended in the MAINTENANCE section of this manual.

### CAUTION

Operate generating set only on leveled surfaces. The engine is equipped with a low oil sensor (applicable types) that will automatic stop the engine when the oil level falls below the safe limit. To avoid the inconvenience of an unexpected shutdown. Fill to the upper limit and check the oil level regularly.

This engine is not filled with oil before send out to 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.

### GENERATING SET FUEL CHECK

- With the engine stopped, check the fuel level. Refill the fuel tank if necessary.
- Use clean, fresh, regular unleaded petrol.
- DO NOT mix oil with petrol.
- Always wipe up any spilled fuel.

### CAUTION

Pressure can build up in the fuel tank. Allow the generating set to cool for at least two minutes before removing fuel cap. Loosen the fuel cap slowly to relieve any pressure in the tank.

Be sure not to fill above the upper limit mark. Always allow room for fuel expansion.  
Fuel capacity (rated): See parameters.

### DANGER - FIRE OR EXPLOSION

- Petrol is highly flammable and extremely explosive.
- Ensure flammable items are kept away while handling petrol.
- Fill the fuel tank outdoors and in a well-ventilated area with the generating set stopped.
- Always wipe off spilled petrol and wait until it has dried before starting the generating set.
- DO NOT operate the generating set with known leaks in the fuel system. Regularly check for any leaks in the fuel system.
- Follow proper fuel storage and handling procedures. DO NOT store petrol or other flammable materials nearby.
- Keep a fire extinguisher handy and be prepared in case of a fire.

### DANGER

Do not fill the fuel tank above the upper limit. Over fill will result in engine die or damage the carbon canister (if equipped) and void your warranty.

NEVER use engine or carburetor cleaner products in the fuel tank, as permanent damage may occur.

It's crucial to prevent the formation of gum deposits in essential fuel system parts such as the carburetor, fuel filter, fuel hose, or tank during storage. Experience indicates that alcohol-blended fuels (referred to as gasohol, ethanol, or methanol) can attract moisture, leading to separation and the formation of acids during storage. Acidic fuel can damage the fuel system of the generating set while in storage. Be sure to review the instructions provided in the "Storage" section.

Petrol/alcohol blends containing up to 10% alcohol and 90% unleaded petrol by volume are approved as fuel. Other petrol/alcohol blends are not approved.

Please note that the effects of old, stale, or contaminated fuel are not covered by warranty.

### CAUTION

To minimise gum deposits in your fuel system and to insure easy starting, always use fresh fuel when operating the Inverter Generator.

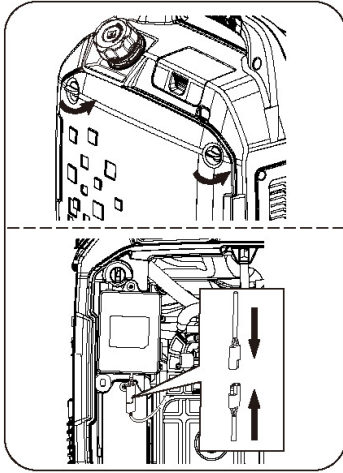
## CAUTION

Allow the generating set to cool for at least two minutes before removing fuel cap when adding fuel. Loosen the fuel cap slowly to relieve any pressure in the tank.

## BATTERY CONNECTION

(If Applicable)

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



## ELECTRICAL DEVICES

Disconnect all electrical devices from the generating set and switch off the AC circuit breaker before start the engine.

The generating set may be hard to start with electrical devices connected.

The power of connected electrical devices cannot exceed the generating set max power, specific power see parameter sheet for reference.

## GENERATING SET GROUNDING

The generator must be correctly connected to a suitable ground. This helps prevent electrical shock in case of a ground fault condition in the generator or connected electrical devices, especially when the unit is equipped with a wheel kit. Proper grounding also aids in dissipating static electricity, which can accumulate in ungrounded devices.

## DANGER - ELECTRIC SHOCK

Failure to properly ground the generating set can result in electric shock.

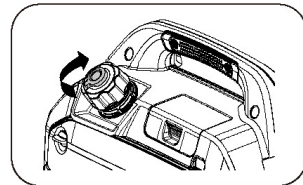
A ground terminal is available on the generating set. For remote grounding, use a copper wire that is no smaller than (4mm<sup>2</sup>) to connect the generator ground terminal to the ground.

Grounding requirements vary in different regions, so we strongly recommend consulting a qualified LawnMaster dealer in your area. Additionally, it's advisable to consult with a qualified electrician for specific grounding requirements in your area.

## 3. STARTING THE GENERATOR

1. Perform operating checklist and remove all loads.
2. Turn the ventilation knob of fuel cap to the "ON" position to ensure fuel flow.

NOTE: You don't need to follow this step, if your generator has no carbon cannister.



Suitable for hand start

## 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.

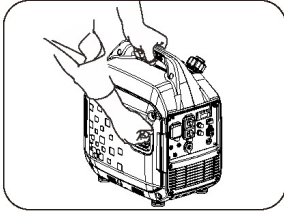
Select according to the actual configuration of the user

## RECOIL START

## WARNING

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

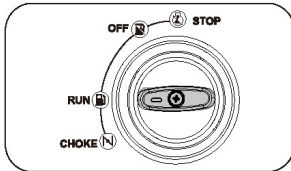
1. When starting the engine, grip the recoil starter handle and pull slowly until you feel resistance. Then, pull rapidly to avoid kickback. While pulling the recoil starter, ensure to firmly grasp the generator to prevent it from tipping over or causing personal injury due to tipping.



### WARNING - KICKBACK

The starter cord retracting quickly can pull your hand and arm towards the engine before you can release it. This can lead to unintended startup, causing entanglement, traumatic amputation, or laceration, and resulting in broken bones, fractures, bruises, or sprains.

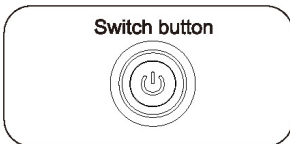
2. Turn the Transfer switch to "RUN" position.



### ELECTRIC START (If Configured)

#### SWITCH BUTTON:

Cold / hot engine start (electric start): Turn the combination switch to "Run" position. Press the Switch button 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 6 times, please allow the generator to cool for 1 minute and start again.

NOTE: If electric start fails, you may try manual start.

### CAUTION

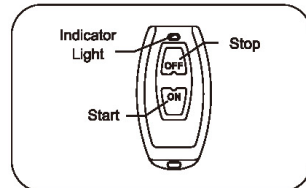
Never continue to start the generator without removing the fault. It's forbidden to start the generator after changing to another battery without authorisation.

### WARNING

- If the generator cannot be started due to long-term storage or improper use, follow the manual start steps to control the choke manually and start the generator. After normal operation, the generator will automatically recharge the lithium battery.
- If you attempt to start the generator three times and it still fails to start or shuts down after starting, troubleshoot to identify the cause.
- If the generator is equipped with an oil alarm, it will not start if the oil level in the crankcase is below the minimum level.
- During the break-in period, regularly inspect the oil and perform maintenance at the recommended intervals. Refer to the maintenance chapter for details.
- The engine should not exceed 15 seconds for each continuous start. If it fails to start, allow the generator to cool for 1 minute before attempting to start again. Failure to do so may damage the starter motor.

### WIRELESS REMOTE CONTROL

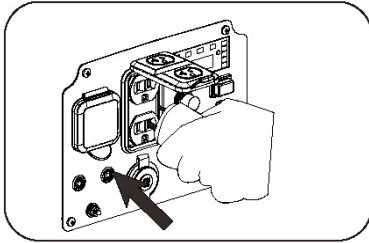
(If Applicable)



1. Turn on the remote control switch.
2. Press the START button and hold for more than 0.3s for startup.

NOTE: 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 button, it may indicate a low battery. Charge the battery before operation or start by recoil start.

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.

**4. CONNECTING TO ELECTRICAL DEVICES**

1. Before use, inspect the power cord for any damage to avoid the risk of electrical shock from crushing, cutting, or heat damage.
2. Ensure the generating set is properly grounded. If electric devices require grounding, the generating set must be grounded accordingly.
3. Confirm that all electric devices are switched to the "OFF" position.
4. Allow the engine to stabilize and warm up for a few minutes after starting.
5. Connect and start the electric devices.
6. Turn off all electric devices and disconnect them from the generating set when finished.
7. If the generating set supplies power to multiple loads or electric devices, start with the smallest load first and the largest one last.

**DANGER**

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

**DANGER - ELECTRIC 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 generating set or electrical cords while standing in water, while barefoot, or while hands or feet are wet.

**LOADING CAPACITY**

**WARNING - DO NOT overload the generating set.**

Exceeding the generating set's capacity can damage the generating set and/or electric devices connected to it.

Ensure that your generating set can supply enough rated (running) and starting watts for all electrical devices simultaneously. Follow these steps to calculate the necessary running and starting watts for your needs:

1. Count the number of electrical devices you will power simultaneously.
2. Determine the total rated (running) watts required for these devices.
3. Estimate the starting power needed by adding the maximum power of all devices to the total power calculated in step 2, as not all devices start at the same time.

**WARNING**

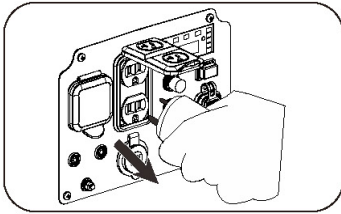
It's essential to have a circuit protector or switch to isolate the generating set from the electric utility, especially when the generating set is primarily used for backup. Failure to isolate the generating set from the power utility can pose risks of injury or death to electric utility workers and cause damage to the generating set due to backfeed of electrical energy.

**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

## 5. STOPPING THE GENERATOR

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



### WARNING

NEVER stop the engine with electrical devices connected and running.

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

### WIRELESS REMOTE SHUTDOWN

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.

NOTE: If the control distance is shortened or the indicator light is on but the remote is not functioning properly, please refer to the troubleshooting section for assistance.

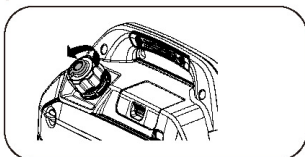
### SWITCH BUTTON

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

### WARNING

If not in use for long, switch off the combination switch. After fuel runs out and the generator stops, turn the knob to "stop" to prevent fuel leakage. Leaving it on risks undercharging the battery, leading to startup failure.

After the generator stops and cools down, turn the fuel tank cap ventilation knob to "OFF" position



## PARALLEL OPERATION

- Ensure the generating set is running well before connecting it to others. Don't exceed the generator's rated power with electric devices.
- When an electric motor starts, the overload indicator (red) will light up, typically stopping within 4 seconds. If not, contact your local dealer.
- During parallel operation, ensure energy-saving switches of generating sets are in the same position.

1. Connect one generating set to the other generating set in parallel. Use the kit to make the parallel connection. (Sold separately)
2. Start the engine in proper order and make sure the running indicator (green) is normal.
3. Connect the plug of electric devices to the AC receptacle of parallel kit.
4. Run the electric devices.

### CAUTION

When overloaded, the red overload indicator blinks or lights up continuously, damaging the generating set. During continuous operation, power shouldn't surpass the generator's rated power. Total power of connected electric devices shouldn't exceed the generator's rating. Manufacturers often list rated power for similar models or serial numbers.

## MAINTENANCE

The operator is responsible for completing all scheduled maintenance promptly. Address any issues before operating the generating set. Always adhere to the inspection and maintenance recommendations and schedules provided in this manual.

### WARNING

Improper maintenance or neglecting to address issues before operation can lead to malfunctions, resulting in property damage, serious injury, or DEATH. Neglecting maintenance will void your warranty.

### DANGER

Accidental starts can cause Severe injury or death. Remove the spark plug cap and ground generating set before performing any service.

### CAUTION

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

# 1. MAINTENANCE SCHEDULE

- Stop the generating set before servicing, disconnect all electric devices and battery (if equipped), and allow the generating set to cool down completely.
- Service the generating set in a clean, dry, and flat area to prevent accidents. Ensure the wheels are in a braked state to prevent accidental movement.
- Follow the service intervals indicated in the chart below. Service your generating set more frequently when operating in adverse conditions.
- Contact your local LawnMaster service dealer for your generating set or engine maintenance needs.

		EACH TIME BEFORE USE	FIRST MONTH OR 10H <sup>*2</sup>	EVERY 3 MONTHS OR 50H <sup>*2</sup>	EVERY 6 MONTHS OR 100H <sup>*2</sup>	EVERY YEAR OR 300H <sup>*2</sup>
<b>Engine Oil</b>	Inspection	✓				
	Replace		✓		✓	
<b>Air Filter</b>	Inspection	✓				
	Clean			✓ <sup>*3</sup>		
<b>Spark Plug</b>	Inspection & Adjustment				✓	
	Clean					✓
<b>Spark Extinguisher</b>	Clean				✓	
<b>Idle Speed</b>	Inspection & Adjustment					✓ <sup>*4</sup>
<b>Valve Clearance</b>	Inspection & Adjustment					✓ <sup>*4</sup>
<b>Carbon Canister</b>	Inspection	Every two years <sup>*4</sup>				
<b>Low Permeability Oil Tube</b>	Inspection	Every two years <sup>*4</sup>				
<b>Oil Tube</b>	Inspection	Every two years <sup>*4</sup>				

\*1: Applicable types (If available).

\*2: Before each season and after then (whichever comes first).

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

\*4: To be performed by knowledgeable, experienced owners or the authorised LawnMaster Dealer.

## 2. GENERATING SET MAINTENANCE

- Use a damp cloth to clean exterior surfaces of the generating set. Use a soft brush to clean the dirt and oil.
- Use an air compressor (25 PSI) to clear dirt and debris from the generating set.
- Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

### WARNING

Do not clean the generator with water, as it can enter through cooling slots and damage the windings.

Do not tamper with the generator or the inverter speed. The factory settings for frequency and voltage are correct. Unauthorised adjustments will void the warranty.

## 3. ENGINE MAINTENANCE

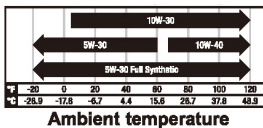
### ENGINE OIL

### WARNING

The engine is not pre-filled with oil at the factory. Operating it before adding the recommended type and amount of oil may damage the engine and void the warranty.

- Only use four-stroke engine oil of SJ, SL or equivalent level which are in accordance with or higher than API standard.
- Check the API label on oil bottle or other container, and make sure the "SJ, SL" or equivalent level letter is in the label.
- SAE 10W-30 is recommended for general, all-temperature use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

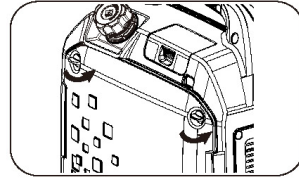
### Recommended Engine Oil Type



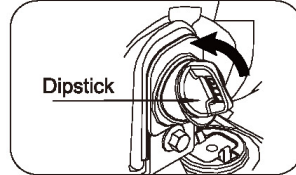
Oil capacity (rated):  
See parameters

### ADD OIL

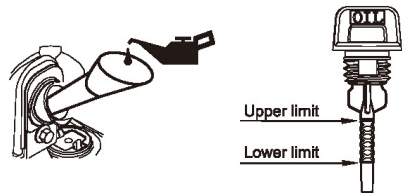
1. Place the engine on a level surface.
2. Remove the right cover



3. Remove the dipstick and wipe it clean.



4. Add recommended oil to the upper limit.



5. Fully tighten the dipstick.
6. Dispose of used oil at an approved waste management facility.

### CAUTION

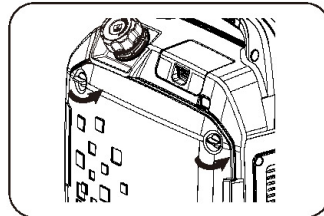
Insert the dipstick into filler port and stay at the filler neck. Do not screw the dipstick into the port, then remove the dipstick and check the oil level.

### CHANGE OIL

### WARNING

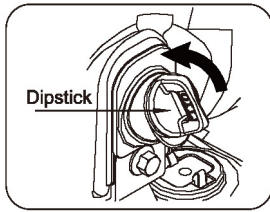
Change oil when the engine is warm from operation. The oil temperature can reach up to 140° C in the warm state, and careful operation should be taken when changing the oil to prevent burns.

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

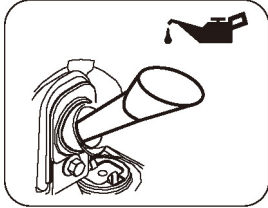


3. Remove the oil dipstick, and tilt the machine to pour the oil.





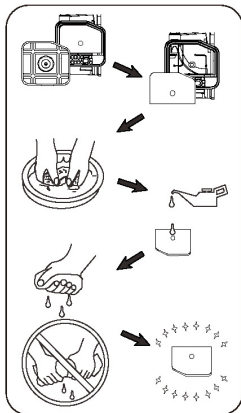
4. Add recommended oil to the upper limit.



5. Fully tighten the dipstick.
6. Properly dispose of any used oil at an approved waste management facility.
7. Reinstall the oil maintenance cover.

#### AIR FILTER

1. Remove the appearance cover.
2. Loosen the filter fix clamp and remove the cover of the air filter.
3. Remove the foam filter element.
4. Wash in liquid detergent and warm water.
5. Squeeze thoroughly dry in a clean cloth.
6. Saturate in clean engine oil.
7. Squeeze in a clean absorbent cloth to remove all excess oil.
8. Assemble the filter element onto the filter unit.
9. Assemble the filter fix clamp.
10. Reinstall the appearance cover.



#### WARNING

DO NOT run the engine without the air filter, as serious damage to the engine can result.

#### 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 was broken or worn, replace with a 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.
6. Carefully thread the plug into the engine by hand.
7. After the spark plug is seated, use spark plug wrench to tighten the plug.
8. Attach the spark cap to the plug and connect the spark plug wire to the plug.

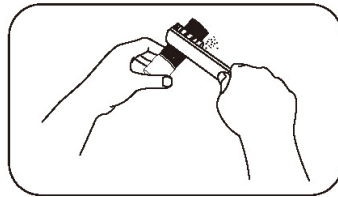
Spark plug gap: 0.6mm-0.8mm

Spark Plug Tighten Torque:  
15-20 N.



#### SPARK ARRESTER

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.



Clean carbon deposit

## TROUBLE ANALYSIS & TROUBLE-SHOOTING

Failure	Problem Shooting	Solution
Generating set fails to start.	Transfer switch is in "OFF" or "STOP" position.	When the engine is cold, set the switch to "CHOKE" and follow the starting procedure. When the engine is hot, set the switch to "RUN" and follow the starting procedure.
	Lack of fuel.	Fill the fuel tank
	Lack of engine oil.	Check the oil level. The engine has a low oil sensor and will not start if the oil is below the minimum level.
	No ignition.	Remove the spark plug cap and clean any dirt around the plug base. Remove the spark plug and install it in the plug cap. Set the switch to "RUN" and ground the electrode to any engine ground. Pull the recoil starter to check for a spark. If there is no spark, replace the plug. Reinstall the plug and start the engine following the manual's instructions. 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 manually starting the generator for at least 30 minutes. After manually closing the choke, start the generator following the manual's 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.

## STORAGE & TRANSPORTATION

### STORAGE

Start the generator at least once every 2 weeks and run it for at least 20 minutes. For storage of 2 months or more, follow the instructions below.

### DANGER - FIRE OR EXPLOSION

Petrol 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 transfer switch in "STOP" position to cut off the fuel.
5. Remove the oil drain plug to drain out the oil (See "Engine oil" section).
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

For transporting or short-term storage, keep the generator in its normal operating position and secure it vertically to prevent fuel leakage. Set the combination switch to "stop" and turn the fuel cap knob to "OFF."

### WARNING

Do not overfill the tank. Do not operate the generator while it is on a vehicle. Remove it and use it in a well-ventilated area, avoiding direct sunlight. Leaving the generator in an enclosed vehicle for hours can cause fuel vaporization and possible explosion. Avoid driving on rough roads with the generator on board. If necessary, drain the fuel before transporting on rough roads.

## WARRANTY

Subject to the following conditions, this unit is covered by a comprehensive three-year warranty.

The unit is designed for domestic purposes only, issues and faults due to commercial use may not be covered by warranty. The warranty covers all manufacturing faults but excludes normal wear and tear, misuse, neglect, accidental damage or defects arising from failure to comply with instructions as outlined in this owners manual. Only genuine spare parts can be used for repairs and this must be carried out by an authorised LawnMaster Services Dealer to maintain warranty.

Warranty does not cover the cost of transportation of any part(s) but does cover the labour/parts cost incurred in repairing or replacing any defective part(s) consequential or special damages and / or expenses resulting from any defect.

If the unit requires further repairs or services please visit [www.lawnmaster.co.nz](http://www.lawnmaster.co.nz) to find your local LawnMaster dealer.

For all other enquiries contact **Steeffort Customer Services +64 6 350 1350**

# LawnMaster®

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