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# 1. About This Manual

- This manual contains an introduction to this product, and details on its operation, management, and maintenance. Please note that this manual may be updated without prior notice.
- The availability of certain accessories and features described in this manual may vary depending on your country or region.
- All images displayed in this manual are for demonstrative purposes only. Please refer to the actual product received. The following examples are based on the **US_EPA** version.
- If you are reading this manual in PDF format, please note that you can access it online at EcoFlow Support for a better experience and the latest updates.

# 2. Important Safety Information

SAVE THESE INSTRUCTIONS.
WARNING: IMPORTANT SAFETY INSTRUCTIONS.

## 2.1 Disclaimer

Please read the product document and ensure that you understand it fully before using the product. After reading this document, keep it for future reference. Improper use of this product may cause serious injury to yourself or others, or cause product damage and property loss. Once you use this product, it is deemed that you understand, approve and accept all the terms

and content in this document. EcoFlow is not liable for any loss caused by the user's failure to use the product in compliance with the product document. In compliance with laws and regulations, EcoFlow reserves the right to the final interpretation of this document and all documents related to the product. This document is subject to changes (updates, revisions, or termination) without prior notice. Please visit EcoFlow's official website to obtain the latest product information: https://www.ecoflow.com/.

## 2.2 Safety Instructions

### 2.2.1 Symbol Conventions

Your safety and the safety of others, as well as property, are of the utmost importance. Carefully read the safety instructions in this manual and the safety labels on the product. These warnings highlight potential dangers that could cause harm. Each safety warning includes a symbol and one of the following words: **DANGER**, **WARNING**, or **CAUTION**.

Please note that all instructions and warnings on the product or in related documents are intended to supplement local laws and regulations.

**DANGER**

Indicates a hazard which, if not avoided, will result in death or serious injury.

**WARNING**

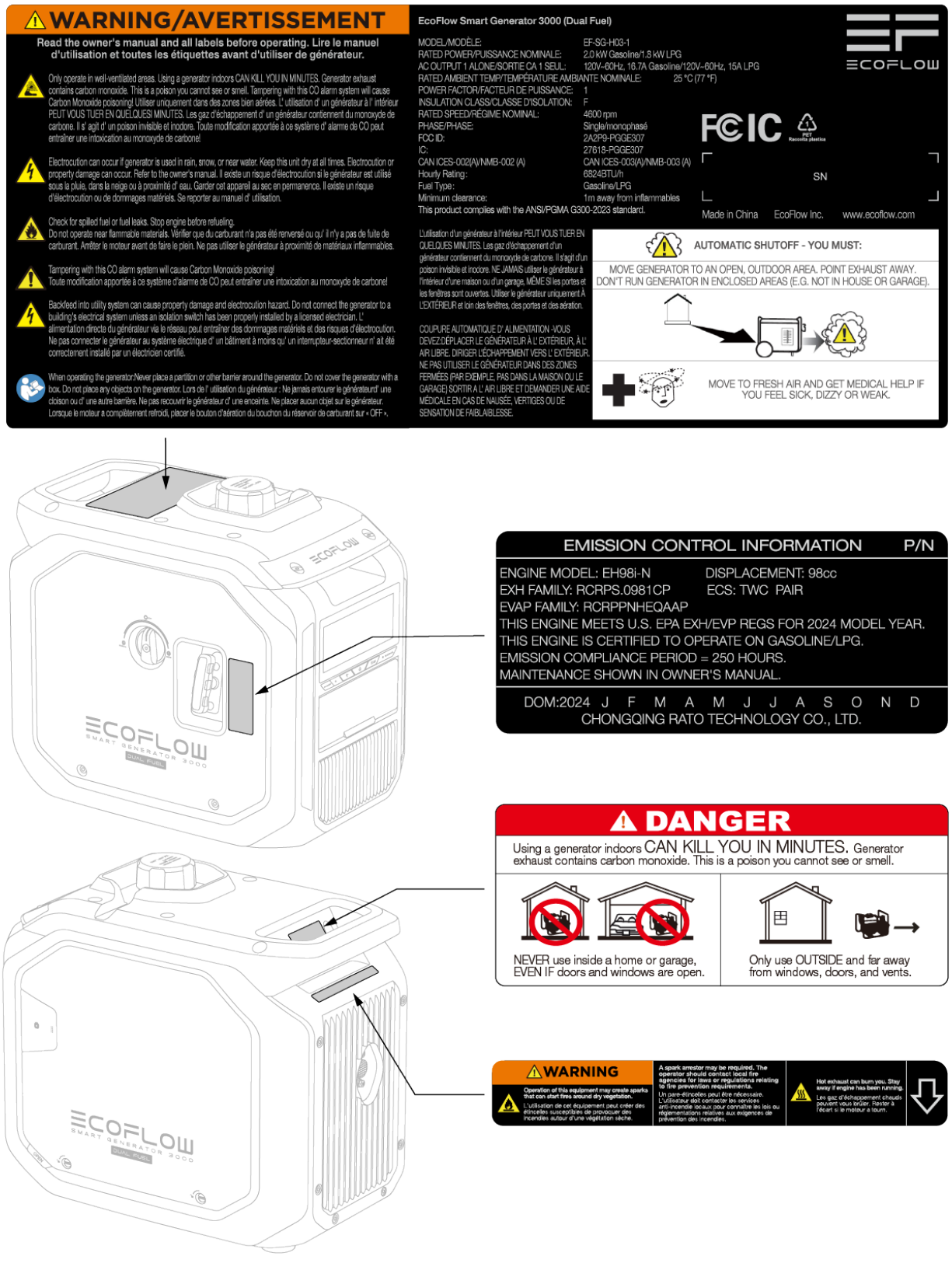
Indicates a hazard which, if not avoided, could result in death or serious injury.

**CAUTION**

Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

### 2.2.2 Safety Label Locations

Read the safety labels on the generator set carefully before any operation. The labels are located at the positions shown below.




## 2.2.3 Safety Guidelines

- Carbon Monoxide Hazards

**DANGER**

1. Exhaust gas from the generator contains toxic carbon monoxide (CO) fumes. Inhaling these fumes may lead to shock, loss of consciousness, or even death.
2. Do not use the generator indoors, including in homes, garages, basements, and other enclosed or partially enclosed areas.
3. Keep the generator away from doors, windows, and vents to prevent CO from entering indoors.
4. Leave at least 3 feet of space on all sides of the generator to ensure adequate ventilation.
5. Install battery-powered carbon monoxide alarms in your home to alert for CO levels.

- Electrical Hazards

⚠️ **DANGER**

6. Do not use the generator in damp environments.
7. Do not operate the generator with a damaged cord or plug.
8. Do not overload the generator. Ensure the connected loads do not exceed the generator's wattage capacity to prevent damage.
9. **Earthing the Generator**: The generator is equipped with a grounding system that connects its frame components to the ground terminal in the AC outlet. Before use, always ensure the grounding terminal is connected to appropriate grounding equipment, such as a grounding rod. Grounding codes can vary by location. Check with your local electrical regulations for specific requirements.
10. **Floating Neutral**: The portable generator stator winding is isolated from the frame and from the AC receptacle ground pin, and; Electrical devices that require a connection between one conductor pin and the grounded receptacle pin may not function properly.
11. **Electrical Backfeeding Hazards**: Do not connect the generator to a building’s electrical system unless a licensed electrician has installed an isolation switch. Check with your local electrical regulations for specific requirements.

- Fire Hazards

⚠️ **WARNING**

12. Keep any combustibles at least 1m / 3ft away. The generator’s components or exhaust system can become very hot during operation.
13. Keep fuel away from sparks, open flames, and any other ignition sources.

- Environmental Requirements

⚠️ **CAUTION**

14. Follow the environment temperature requirements specified in the product specification to use or store the generator. Avoid degradation or damage to the generator, or risks to personal safety due to excessively high or low temperatures.
15. **Usage in High Altitude Areas**: In high altitude areas, the atmospheric pressure may reduce the amount of air intake, decline the performance, and increase the fuel consumption of standard carburetors. Moreover, the dense mixture may contaminate the spark plug and lead to starting difficulties. When the generator is running at high altitudes (above 3000 feet / 914 m), the emissions may increase.

- Other

⚠️ **CAUTION**

16. Use the generator only on a dry, flat, and stable surface.
17. Keep the generator upright to prevent engine oil leaks. Do not lay it down in any direction or tilt it.
18. Keep the generator out of reach of children and pets.
19. Keep the air inlets, muffler, and bottom of the generator clean and clear. Prevent debris, mud, or water from entering. Blocked air inlets can damage the generator, controller, or engine.

- **Restrictions on Use**

⚠️ **CAUTION**

20. **Electromagnetic Interference**: Keep the generator a sufficient distance from precision instruments, electronic controllers, personal computers, and microcomputers to avoid electromagnetic interference and ensure proper operation.
21. **Medical Equipment Limit**: This generator is not intended to power medical devices. Please contact the medical equipment manufacturer for any restrictions on using this generator.

- **Special Requirements**

⚠️ **WARNING**

22. Local laws or regulations may apply to the intended use of the generator set. For further information, please consult with qualified electricians, electrical inspectors, or the local authorities with jurisdiction.
23. In some regions, generator sets must be registered with local utility companies.
24. Generator sets used on construction sites may be subject to related regulations or standards.

### 2.2.4 Button / Coin Battery Information

This product contains a button/coin battery.

This symbol means:
WARNING: CONTAINS COIN BATTERY.

| Component | □ Key | ■ CO alarm | □ Display |
|---|---|---|---|
| Model | / | CR2450 | / |
| Nominal voltage | / | 3V | / |
| Battery type | Contains replaceable battery. | Contains non-replaceable battery. | Contains non-replaceable battery. |

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above 140 Fahrenheit or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.

### 2.2.5 Generator Ground Circuit

In order to prevent electric shock due to shoddy electrical appliances or wrong use of electricity, the generator must be grounded with a good-quality insulated conductor.

Ground Terminal

### 2.2.6 Status of the Neutral Conductor

The portable generator stator winding is isolated from the frame and from the AC receptacle ground pin; and
Electrical devices that require a connection between one conductor pin and the grounded receptacle pin may not function properly.

### 2.2.7 Powercord: Using Extension Cords

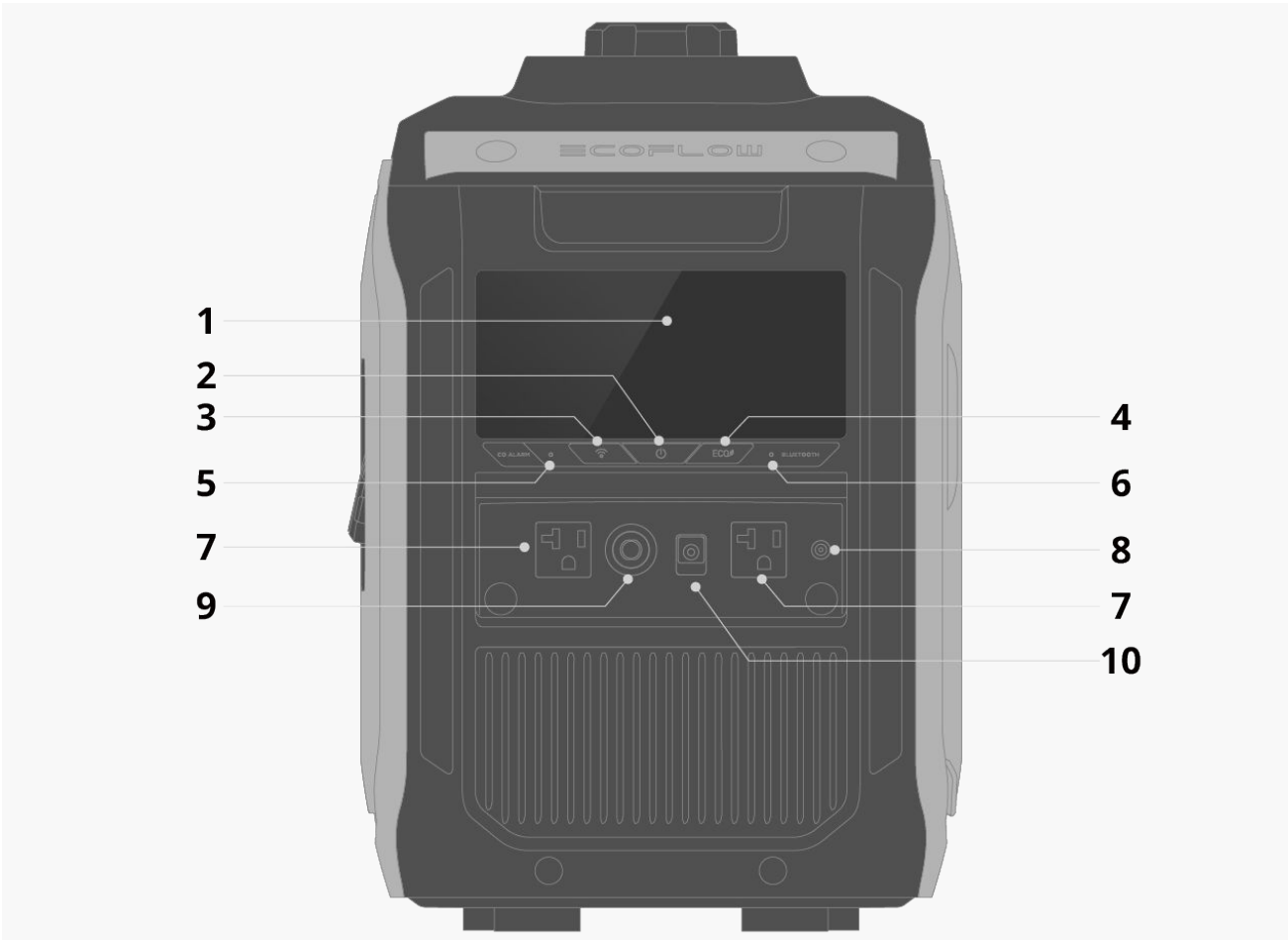
EcoFlow assumes no responsibility for the contents of this table. The use of this table is solely the responsibility of the user only. This table is intended for reference only. The results produced by using this table are not guaranteed to be correct or applicable in all situations as the type and construction of the cards are highly variable. Always check with local regulations and a licensed electrician prior to installing or connecting an electrical appliance.

| Extension Cord Wire Gauge Size / Calibre du fil de la rallonge / 延長線線徑大小 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AMPS | LENGTH OF EXTENSION CORD (ft) / LONGUEUR DE LA RALLONGE (pi) / 延長線長度(英呎) | | | | | | | | |
| | 10 | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 120 |
| 5 | 20 | 18 | 16 | 14 | 12 | 12 | 10 | 10 | 8 |
| 10 | 18 | 16 | 14 | 12 | 12 | 10 | 10 | 8 | 8 |
| 15 | 16 | 14 | 12 | 12 | 10 | 10 | 8 | 8 | 6 |
| 20 | 14 | 12 | 12 | 10 | 10 | 8 | 8 | 6 | 6 |
| 25 | 12 | 12 | 10 | 10 | 8 | 8 | 6 | 6 | 6 |
| 30 | 12 | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 6 |
| 35 | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 6 | 6 |

# 3. Overview

The EcoFlow Smart Generator 3000 (hereinafter referred to as "the generator" or "the product") is a portable power generator designed for convenience and versatility. It offers dual fuel capability, allowing you to power your devices using gasoline or liquefied petroleum gas (LPG).

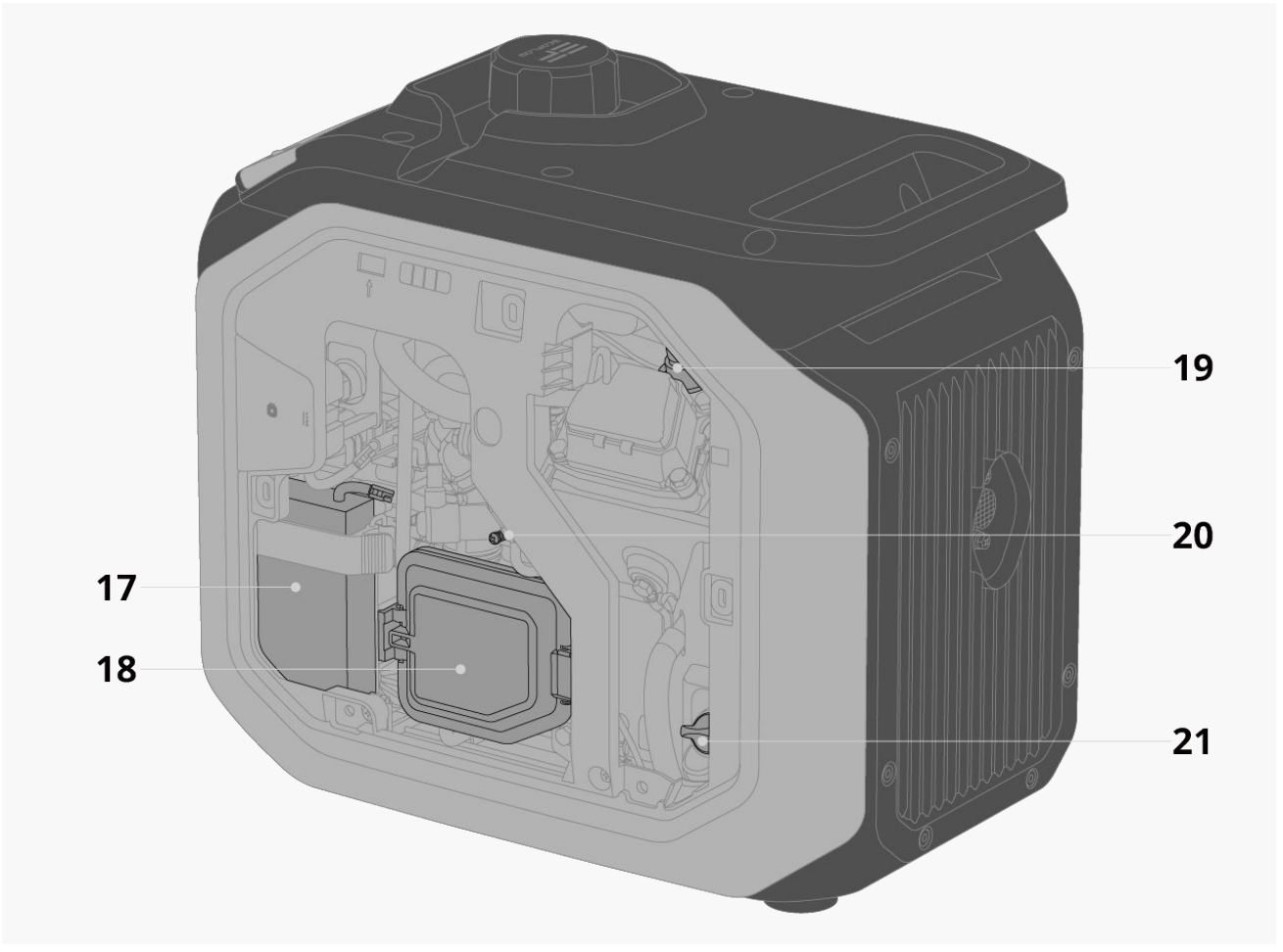
## 3.1 Appearance




| | |
|---|---|
| 1 | Screen Display |
| 2 | Electric Start Button |
| 3 | IoT Button |
| 4 | ECO Mode Button |
| 5 | Carbon Monoxide Alert LED |
| 6 | EcoFlow Device Pairing Status LED |
| 7 | AC Output Socket<br>** AC output sockets adapt according to local standards.* |
| 8 | Internal Battery Charging Port (DC5521) |
| 9 | Thermal Protector Reset Button |
| 10 | Ground Terminal |

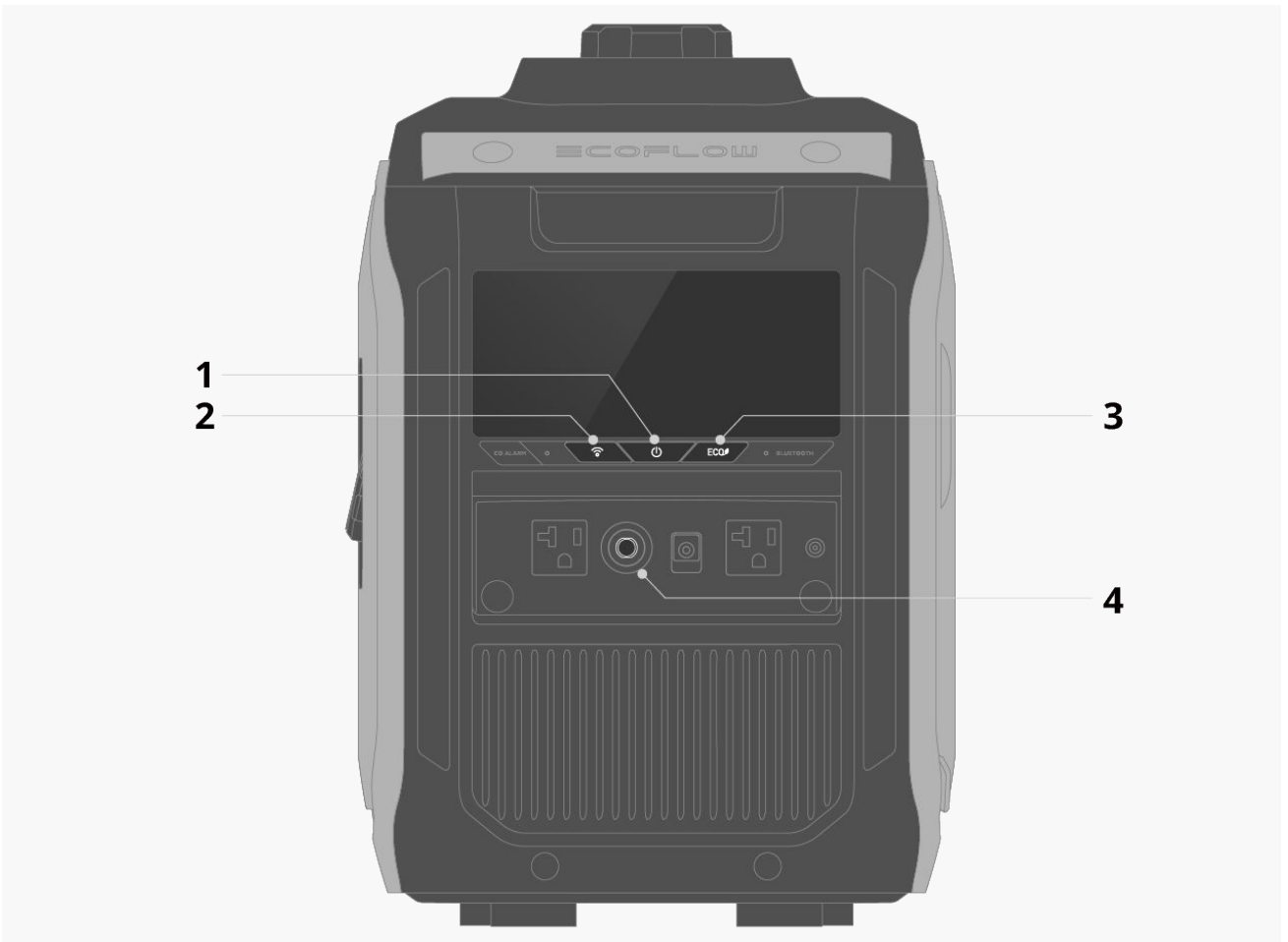

| | |
|---|---|
| 11 | Gasoline Inlet |
| 12 | Engine Switch |
| 13 | Starter Grip |


| | |
|---|---|
| 14 | LPG Inlet |
| 15 | Maintenance Cover |
| 16 | Muffler |




| | |
|---|---|
| 17 | Internal Battery |
| 18 | Air Filter |
| 19 | Spark Plug |
| 20 | Oil Drain Bolt |
| 21 | Engine Oil Dipstick |

## 3.2 Control Buttons




| | | |
|---|---|---|
| 1 | Electric Start Button | The button servers the following functions:<br>• **Power On / Off:** Press and hold the button for 2 seconds to start or shut down the generator.<br>• **Screen On / Off:** Press once to turn the screen on or off. |

| | | |
|---|---|---|
| 2 | IoT Button | The button servers the following functions:<br>• **EcoFlow Device Bluetooth Pairing**: To pair the generator with an EcoFlow power station, press this button once when the Engine Switch is set to "AUTO" and the power station is connected. This will override any existing pairing (if applicable).<br>**Note**: This function is currently supported when working with an EcoFlow DELTA 3 Power Station or an EcoFlow DELTA 3 Plus Power Station. For the most up-to-date compatibility info, check the official website: www.ecoflow.com.<br>• **IoT Reset**: Press and hold the button for 5 seconds to reset the Wi-Fi connection and unbind the generator from your EcoFlow account. |
| 3 | ECO Mode Button | Press once to enable or disable ECO mode. In ECO mode, the generator will automatically match the revolutions per minute (RPM) according to the power output level to reduce fuel consumption and noise. ECO mode is enabled by default. |
| 4 | Thermal Protector Reset Button | The internal thermal protector will be triggered in case of overtemperature or overload. To restore the AC output, wait for the temperature to return to a normal level and then press the thermal protector reset button again. |

## 3.3 LED Indicators

### Carbon Monoxide Alert LED

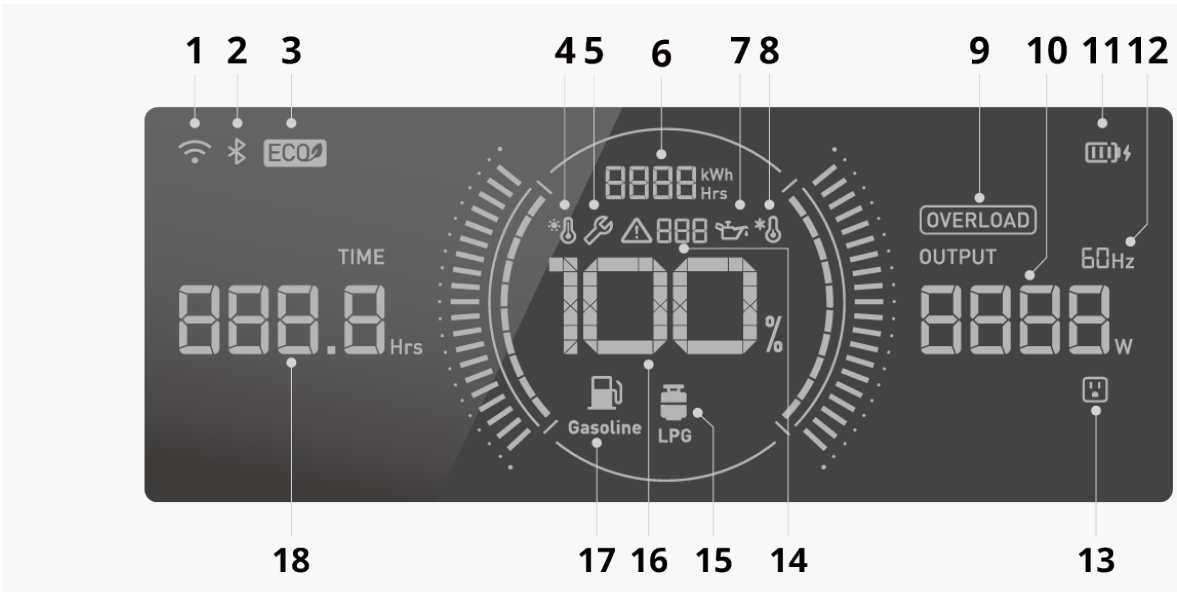

This LED indicates the current carbon monoxide level.
**Solid Green**: The carbon monoxide self-test system is starting.
**Flashing Red**: High carbon monoxide level detected. The generator will automatically shut down. Wait until the CO concentration decreases before attempting to restart.

### EcoFlow Device Pairing LED


This LED indicates the Bluetooth pairing status between the generator and an EcoFlow power station.
**Solid Green**: The generator is paired with an EcoFlow power station and properly connected through an AC socket.
**Solid Red**: The generator is paired with an EcoFlow power station, but there is no physical connection. Connect the power station to the generator's AC outlet and try again.
**Off**: The generator is not paired with any EcoFlow power station.

> Notice:
> Bluetooth pairing between the generator and EcoFlow power station is unavailable when the engine switch is switched to "MANUAL".

## 3.4 Display Screen




| | | |
|---|---|---|
| 1 | Wi-Fi Status | **On**: The generator is connected to the internet via a wireless network.<br>**Flashing**: The generator has cleared its Wi-Fi settings.<br>**Off**: Wi-Fi disconnected. |
| | | **On**: The generator is connected to a Bluetooth device. |

| | | |
|---|---|---|
| 2 | Bluetooth Status | **Flashing**: The generator has cleared its Bluetooth pairing information (excluding pairing with EcoFlow power stations).<br>**Off**: Bluetooth disconnected. |
| 3 | ECO Mode | **On**: ECO mode is enabled. In this mode, the generator will automatically adjust the RPM (Revolutions Per Minute) based on the power output level to reduce fuel consumption and noise. |
| 4 | High Temperature Alert | **On**: High temperature alert has been triggered. Stop operation and move the generator to a well-ventilated area. The alert will automatically disappear once the temperature returns to normal operating levels. |
| 5 | Maintenance Reminder | **On**: The generator requires maintenance or servicing. Visit the EcoFlow app for detailed instructions to inspect or maintain the generator components. |
| 6 | Total Running Time / Total Power Generation | **On**: Displays total running time or total power generation. |
| 7 | Engine Oil Alert | **On**: Engine oil alert has been triggered. Check if the engine oil level is sufficient. If it's low, add the appropriate amount of oil and wait for the error code to clear automatically. |
| 8 | Low Temperature Alert | **On**: Low temperature alert has been triggered. The alert will automatically disappear once the temperature returns to normal operating levels. If you need to use the generator right away, allow the generator to run without any device for 3 minutes to warm up, then connect your device to the generator. |
| 9 | Output Overload Alert | **Flashing**: Output overload alert has been triggered. Disconnect some devices connected to the generator to reduce total power output. The alert will automatically disappear once the power output returns to normal levels. |
| 10 | Output Power | **On**: Displays total output power. |
| 11 | Internal Rechargeable Battery Level | **On**: Displays the battery level of the internal battery.<br>**Flashing**: The battery level is low or the battery is having an issue. |
| 12 | Operating Frequency | **On**: Displays operating power frequency. |
| 13 | AC Output Socket | **On**: The generator has successfully started and the AC output sockets are available. |
| 14 | Error Code | **On**: An error has occurred. Check the EcoFlow in-app instructions for troubleshooting. |
| 15 | Fuel-LPG | **On**: An LPG cylinder is connected to the LPG inlet. The generator use LPG as the fuel source. |
| 16 | Fuel Level | **On**: Displays the current fuel level. By default, this icon displays the fuel level of gasoline and shows '88' when using |

| | | |
|---|---|---|
| | | LPG as the fuel source. To check the current LPG level, first enable "LPG Level Monitoring" via the EcoFlow app. |
| 17 | Fuel-Gasoline | **On**: No LPG cylinder is connected. The generator uses gasoline as the fuel source. |
| 18 | Remaining Running Time | **On**: Displays the estimated remaining running time based on the current fuel level. |

# 4. Management

## 4.1 Download EcoFlow App

EcoFlow offers a companion app for device management. With this mobile application, you can:

- Enjoy all-in-one control of your EcoFlow devices from anywhere.
- Monitor power consumption details seamlessly with real-time updates.
- Personalize your energy scheme with an array of customizable options.
- Promptly receive in-app troubleshooting and firmware updates.

Scan the QR code or download it at:
https://download.ecoflow.com/app

## 4.2 Bind Device and Set Up Internet

After successfully registering an EcoFlow account, bind your EcoFlow devices to your account to ensure remote access to the device's settings.

To bind a new EcoFlow device:

1. Visit the EcoFlow app and log into your EcoFlow account.
2. Tap the Add Device button or ➕ icon in the top right corner to search for new EcoFlow devices.
3. Select your EcoFlow device and follow the pop-up instructions to complete device binding and Wi-Fi setup.

## 4.3 Control via Phone

With the EcoFlow app, you can manage all your EcoFlow binding devices on your phone.
The generator supports Wi-Fi and Bluetooth connections, adapting to varying network conditions to ensure convenient access to device settings.

- **With Internet**
  When Wi-Fi is stable, you can access the device settings via the internet. This method is always recommended to ensure your EcoFlow device can receive timely firmware updates and pushes.

- **Without Internet**
  If the Wi-Fi connection is limited, you can access the device settings locally via Bluetooth.

# 5. Get Started

## 5.1 Prerequisite

### 5.1.1 Engine Oil

Engine oil ensures the engine works normally by providing essential lubrication, cooling, cleaning, and protection. Before each use, check the engine oil level, and if it is low, fill it properly.

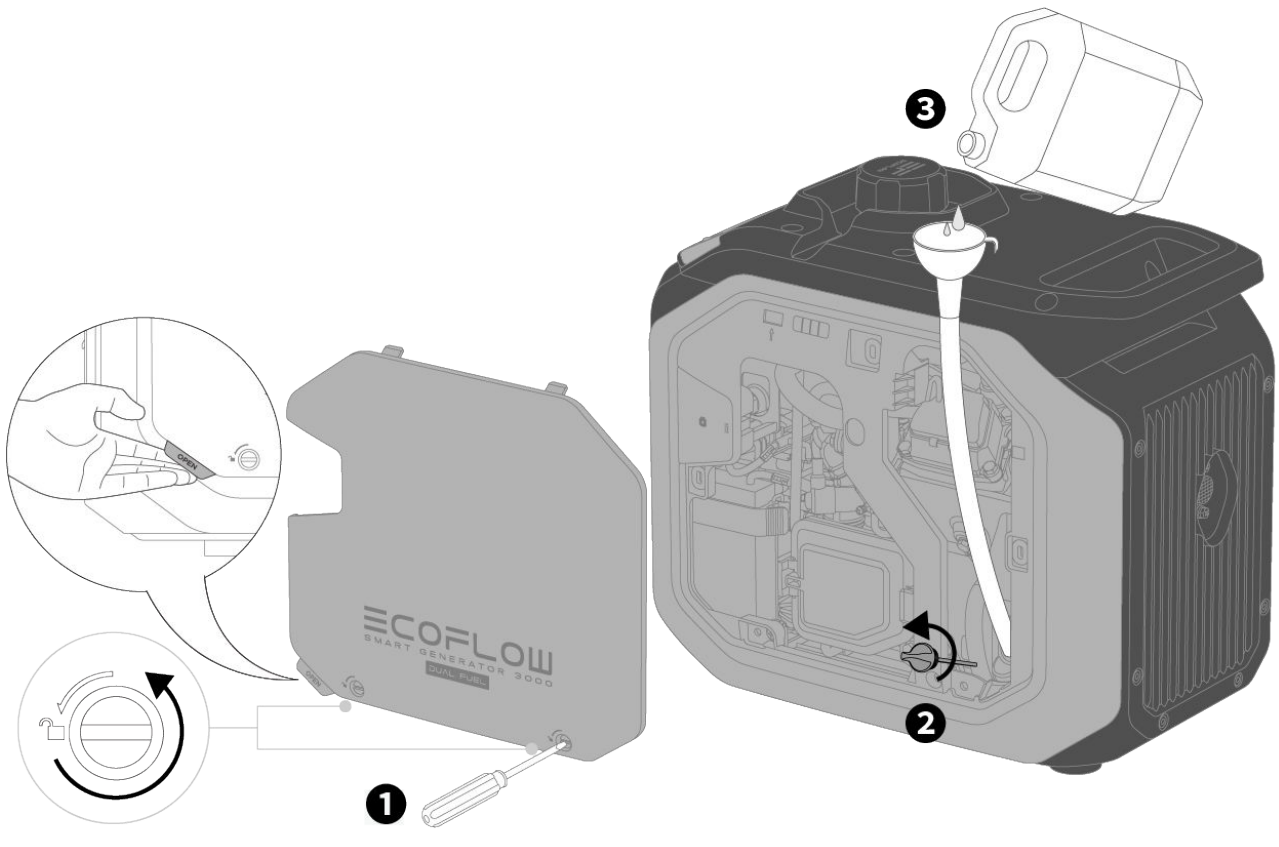
- **Adding Engine Oil**

Place the generator on a level surface and do not tilt it.

1. Use the screwdriver (Slotted-head) provided in the package to unscrew the maintenance cover, and then remove the cover.
2. Remove the oil dipstick.
3. Use the provided oil funnel to add the oil.
4. Reinstall the oil dipstick.

Tip:

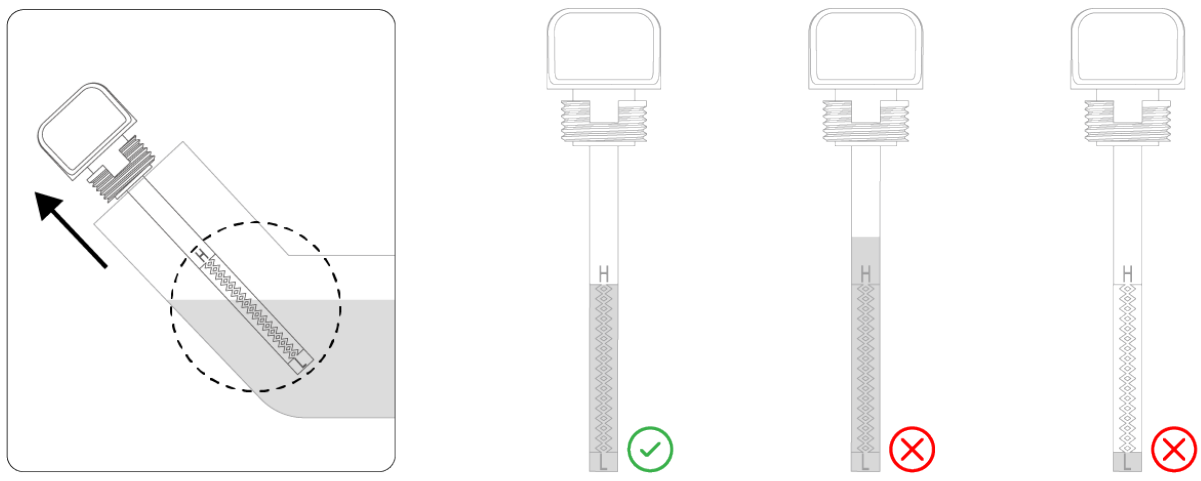
- Engine oil type: SAE SJ 10W-40
- Engine oil grade: API Grade SJ or higher
- Engine oil capacity: 400 ml / 0.423 quarts




- **Checking Engine Oil**

Place the generator on a level surface and do not tilt it.

1. Use the screwdriver (Slotted-head) provided in the package to unscrew the maintenance cover, and then remove the cover.
2. Remove the dipstick and wipe it clean.
3. Dip the oil dipstick into the oil filler without screwing it in, then take it out again to read the oil level.
4. If the oil level is low, add the proper amount of engine oil. If the level is too high, tilt the generator to drain excess oil.
5. Reinstall the oil dipstick.




### 5.1.2 Fuel

**Option 1: Gasoline**

To use gasoline as fuel, add unleaded gasoline to the fuel tank. Leaded fuel can seriously damage the generator's internal parts, make sure to use unleaded fuel only. After refueling, clean up any spilled fuel to avoid damaging the rubber shell. Also, be careful not to overfill the fuel tank, as fuel may expand and spill out when the tank warms up.

- **Adding Gasoline**

1. Remove the fuel tank cap on the top of the generator.
2. Fill the fuel tank with unleaded gasoline up to the red ring, which indicates

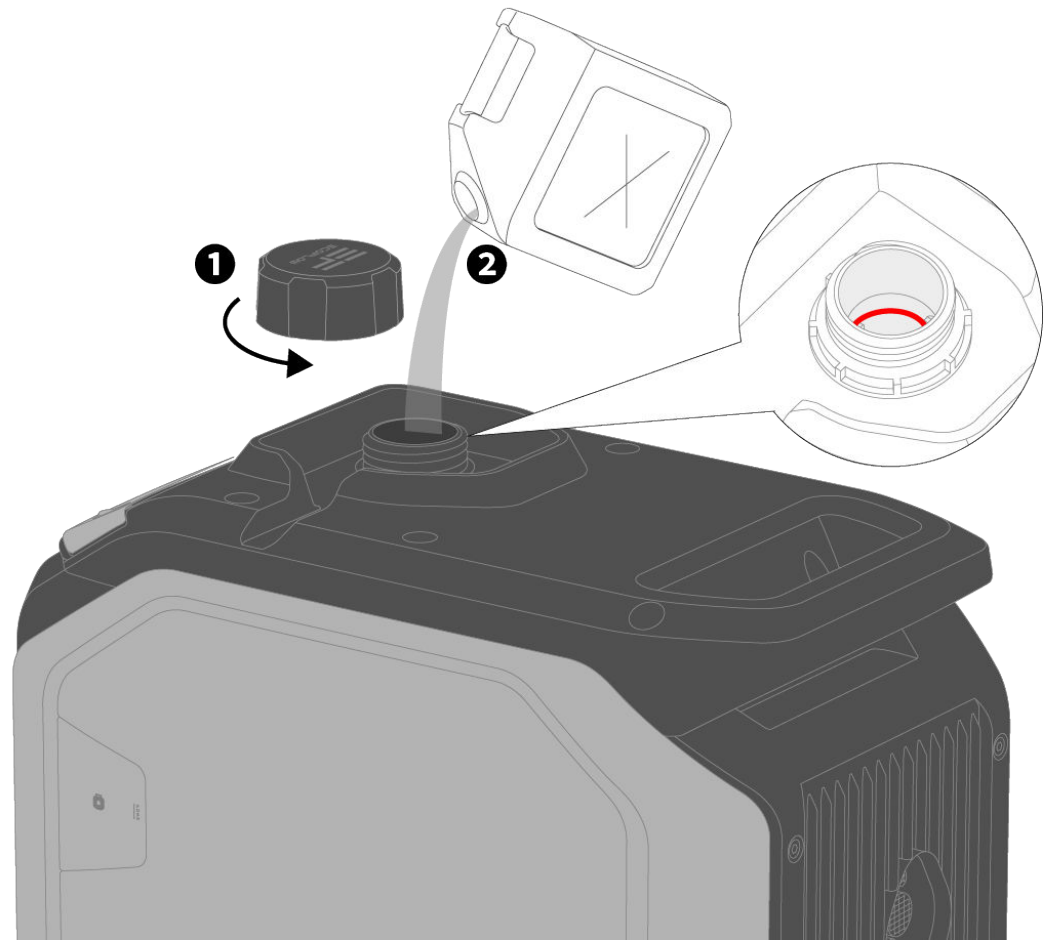
the upper fuel level limit.

**Note**: Never handle fuel near smoke and flames.

3. Close the fuel cap tightly after fueling.

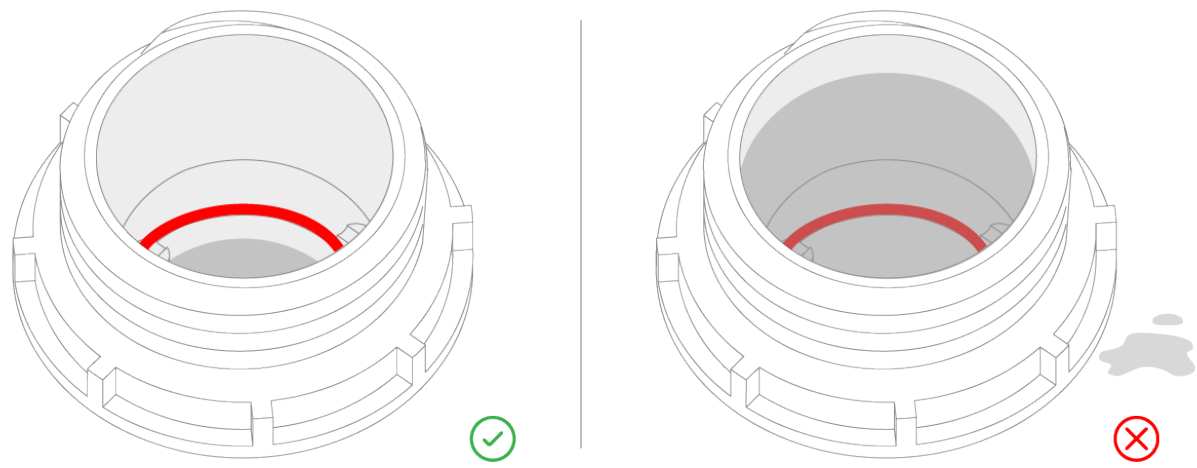
Tip:

- Fuel type: unleaded gasoline
- Fuel tank capacity: 4 L / 1.06 gal.




- **Checking Gasoline Level**

  Ensure the gasoline is not overfilled, and wipe off any spilled fuel with a clean and soft cloth.



**Option 2: LPG**

Connect an LPG cylinder to the LPG inlet if you want to use LPG as fuel. Before connecting an LPG cylinder, ensure it is within the test due date and that its safety valve is closed. Place the cylinder on a flat surface and keep it upright with the valve on top. Do not place the cylinder and hose near the exhaust path of the generator's muffler, or other heat sources and potential ignition sources.

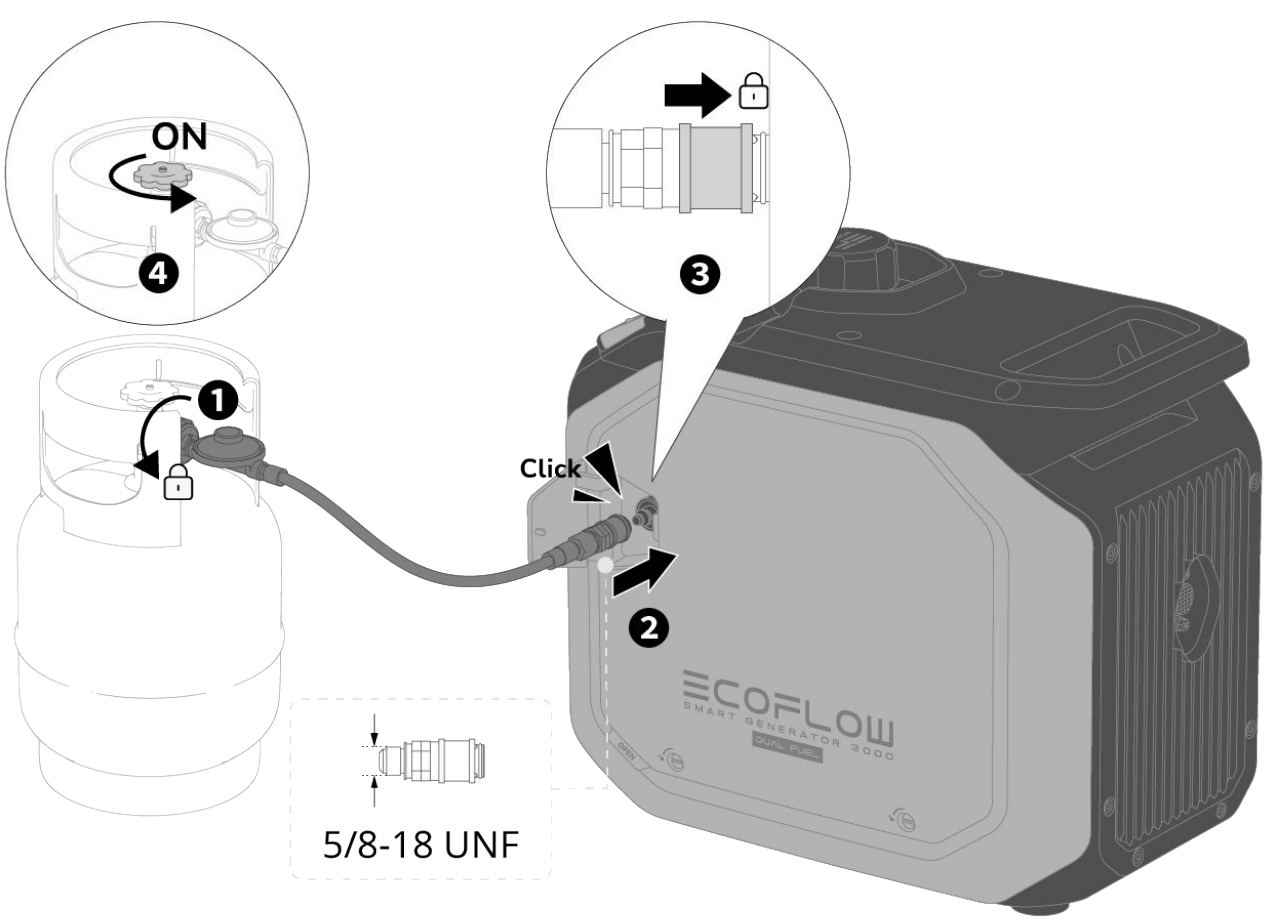
After installing the LPG, check for any leaks before starting the generator.

- **Installing LPG Cylinder**

1. Connect the LPG hose to the LPG cylinder valve and tighten it. Avoid excessive bending or twisting of the LPG hose.
2. Insert the LPG hose's female connector into the LPG inlet. Push it in until you hear a click.
3. Move the outer ring of the female connector forward to secure the connection.
4. Turn the LPG supply on.

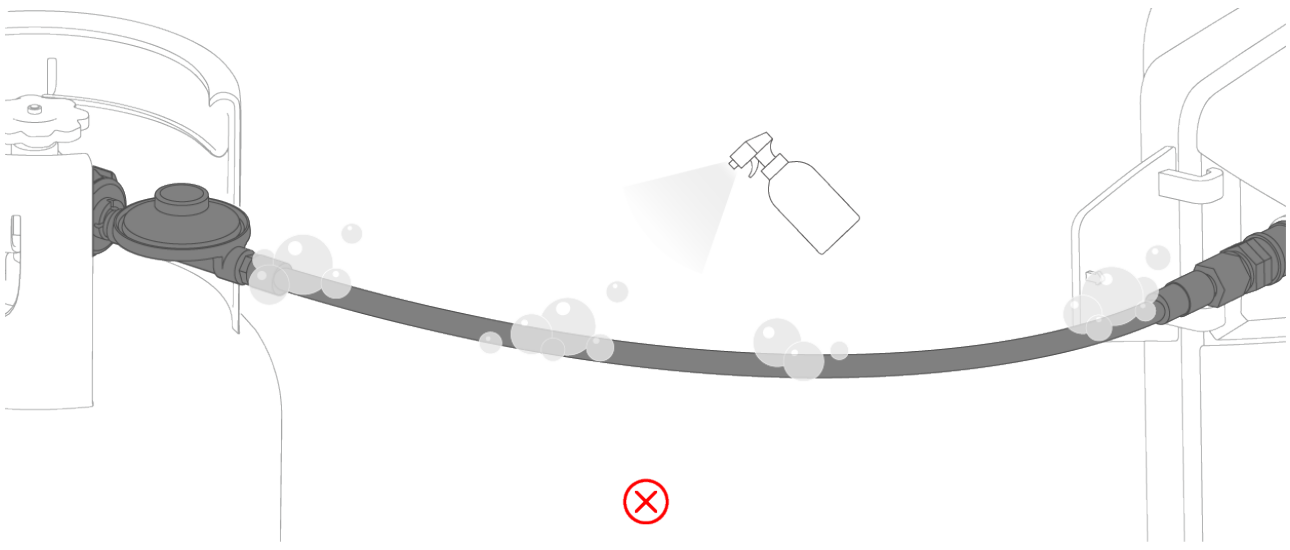
Tips:

1. Cylinder Requirement: Use standard 20, 30, or 40-pound capacity LPG cylinders with this generator. Ensure the LPG cylinder is approved and equipped with an OPD (Overfill Prevention Device).
2. When an LPG cylinder is connected, the generator prioritizes using LPG as fuel. To switch to gasoline, disconnect the LPG cylinder.




- Checking for LPG Leaks

  Turn on the LPG supply, and use soapy water to check for leaks. Ensure that all fittings are secure and all components are intact. LPG is highly flammable, so never use an open flame to check for leaks, as igniting any escaping gas or vapor could cause a fire or explosion. If you see bubbles, this indicates a leak. Immediately turn off the valve and contact EcoFlow support for assistance.

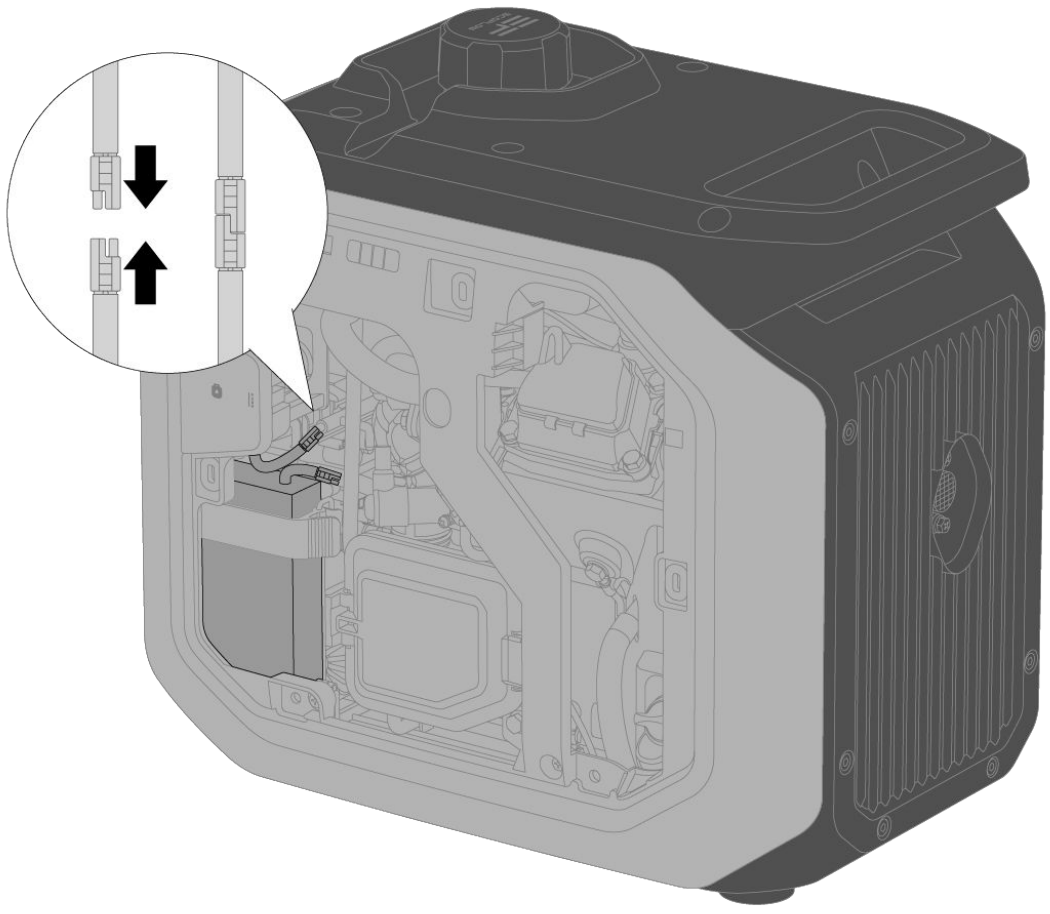


### 5.1.3 Internal Rechargeable Battery

The internal battery powers the display screen and allows you to start the generator using the Electric Start Button.

- **Connecting Internal Battery**

1. Use the screwdriver (Slotted-head) provided in the package to unscrew the maintenance cover, and then remove the cover.
2. Connect the positive and the negative wires of the battery.

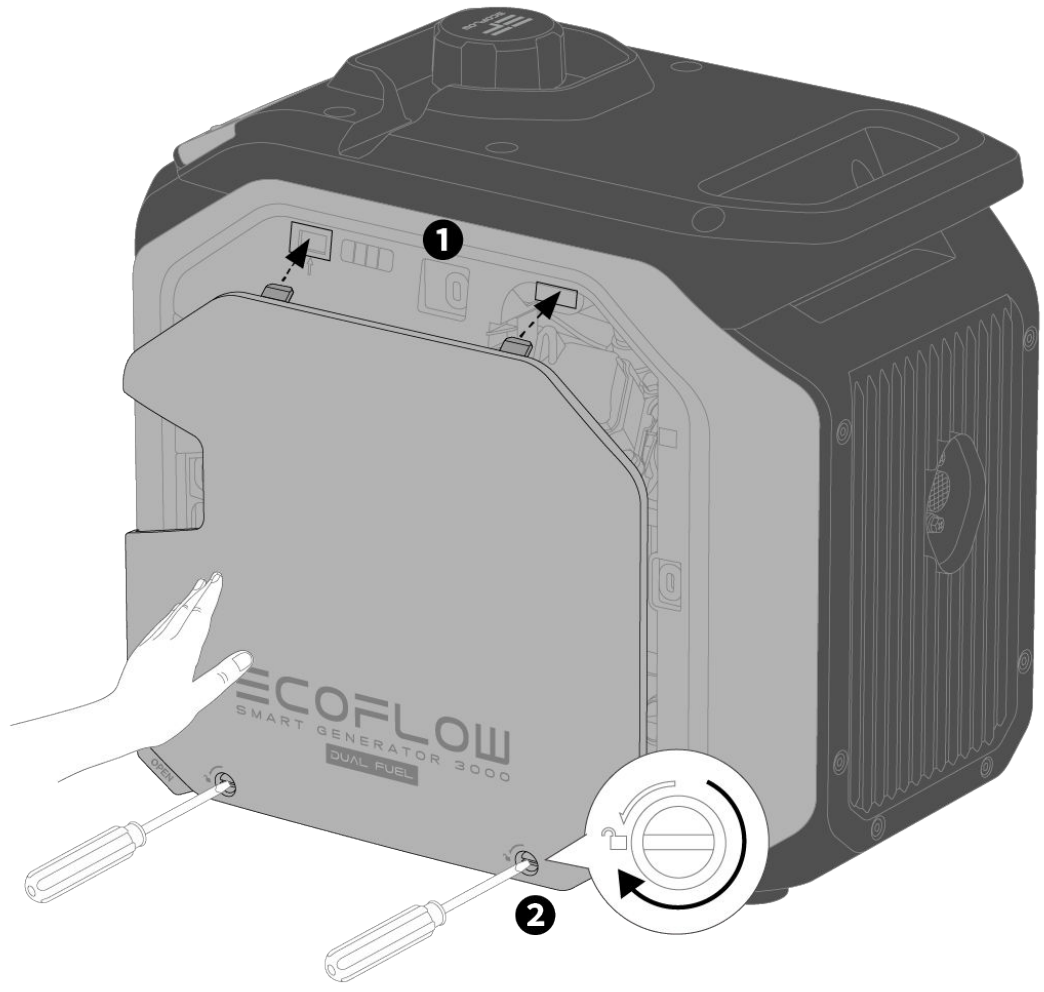


### 5.1.4 Maintenance Cover

Ensure the maintenance cover is securely tightened.

- **Installing Maintenance Cover**

1. Align the cover panel to the slots on the generator and press it into place.
2. Install and tighten the screws to secure the maintenance cover.




### 5.1.5 Grounding Terminal

Connect the grounding terminal to a copper rod. Grounding codes can vary by location. If you are not familiar with them, check with a local electrician or other qualified professional for specific requirements.


## 5.2 Checklist Before Each Use

Carefully check the following items each time before starting the generator.

| | |
|---|---|
| 1 | **Engine oil level** |
| | □ Proper engine oil level<br>□ No oil leaks |

2 LPG (when using LPG)

- ☐ Cylinder positioned safely away from exhaust path and other heat sources
- ☐ Valid cylinder inspection date
- ☐ No LPG leaks
- ☐ No bending or twisting of the LPG hose

3 Gasoline (when using gasoline)

- ☐ Proper fuel level
- ☐ No spilled fuel

4 Internal Battery

- ☐ Battery connected

5 Grounding

- ☐ Proper grounding

## 5.3 Power Appliances and Devices

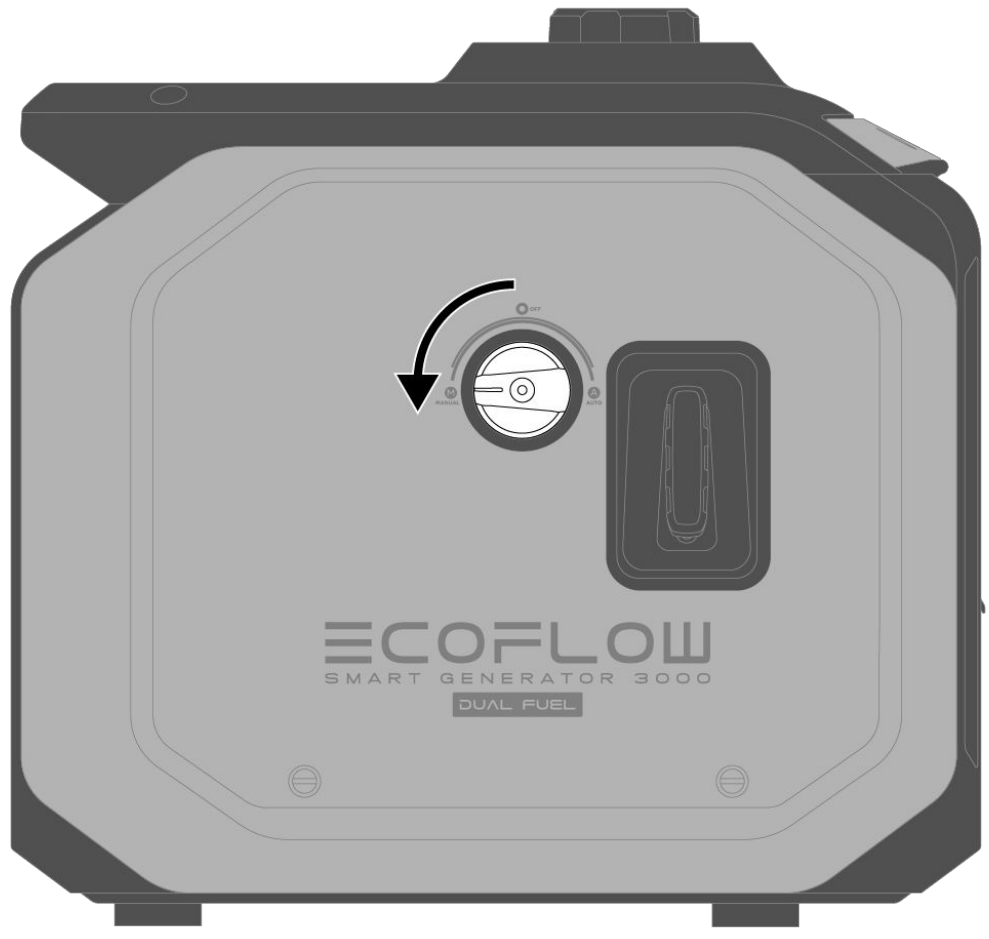
The generator supports powering your appliances or other essential devices through AC outlets.
In this scenario, always start and shut down the generator with no load connected. Before connecting appliances or devices to the generator, ensure they are off. All electrical equipment, including wires and plugs, should be in good condition.
The total load should remain within the generator's rated capacity.

| **Load Type** | Resistive Load | Inductive and resistive loads | Inductive Load |
|---|---|---|---|
| **Power Factor** | 1 | 0.8-0.95 | 0.4-0.75 (Efficiency 0.85) |
| **Power Output** | <2200W(Gasoline) ≤2000W(LPG) | <1760W(Gasoline) ≤1600W(LPG) | <880W(Gasoline) ≤800W(LPG) |

### 5.3.1 Starting Up the Generator

**Step 1: Start the engine**

Turn the Engine Switch to the "**MANUAL**" position.




### Step 2: Start the generator

Start the generator using one of the following methods:

#### Method 1: Electric Start Button

Press and hold the Electric Start Button for 2 seconds to start the generator.
**Note**: To save battery power, the generator will automatically shut down after 3 minutes if it fails to start. The display screen will also turn off. To restart the generator, press the Electric Start Button again to activate the display screen, then, hold the button for 2 seconds to execute the start-up program.

#### Method 2: Starter Grip

Pull the Starter Grip until the line tightens and push it by force.
**Note**: When starting the generator manually, hold the generator to prevent it from bumping. Pull the cord slowly until you feel resistance, then pull rapidly to avoid kickback. Do not let the starter handle spring back towards the generator.

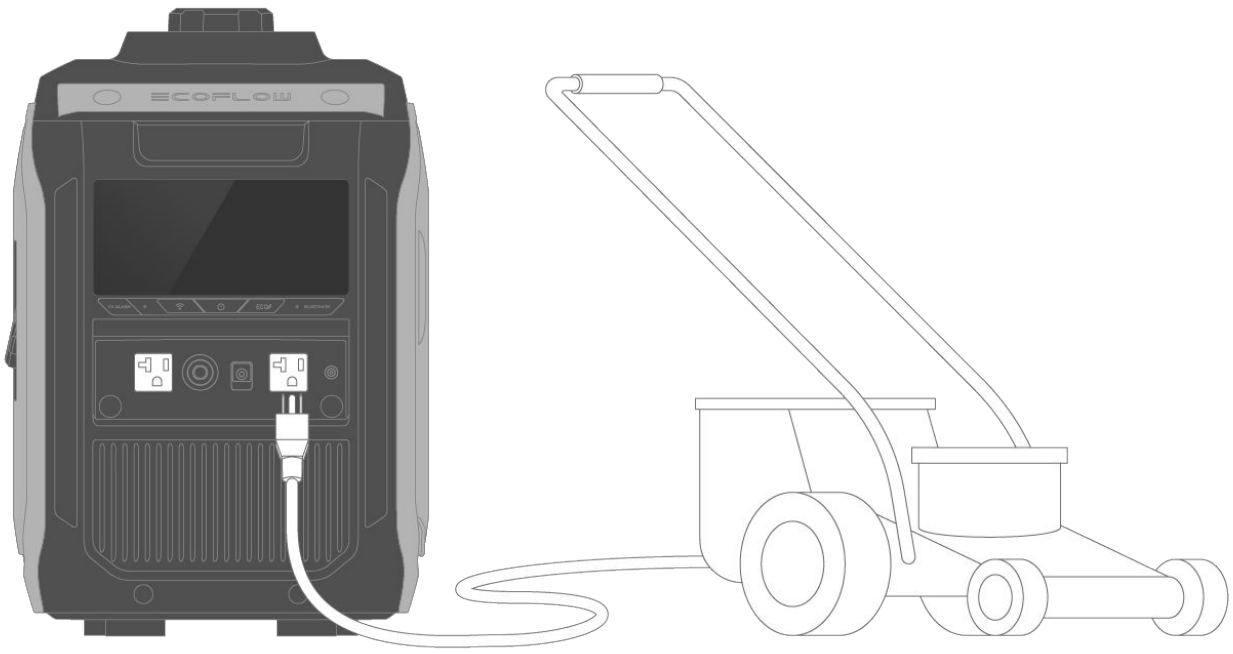
Gently return the handle to its original position to avoid damaging the starter.


### Method 3: EcoFlow App

Open the EcoFlow app and access the device settings page to turn on the generator.

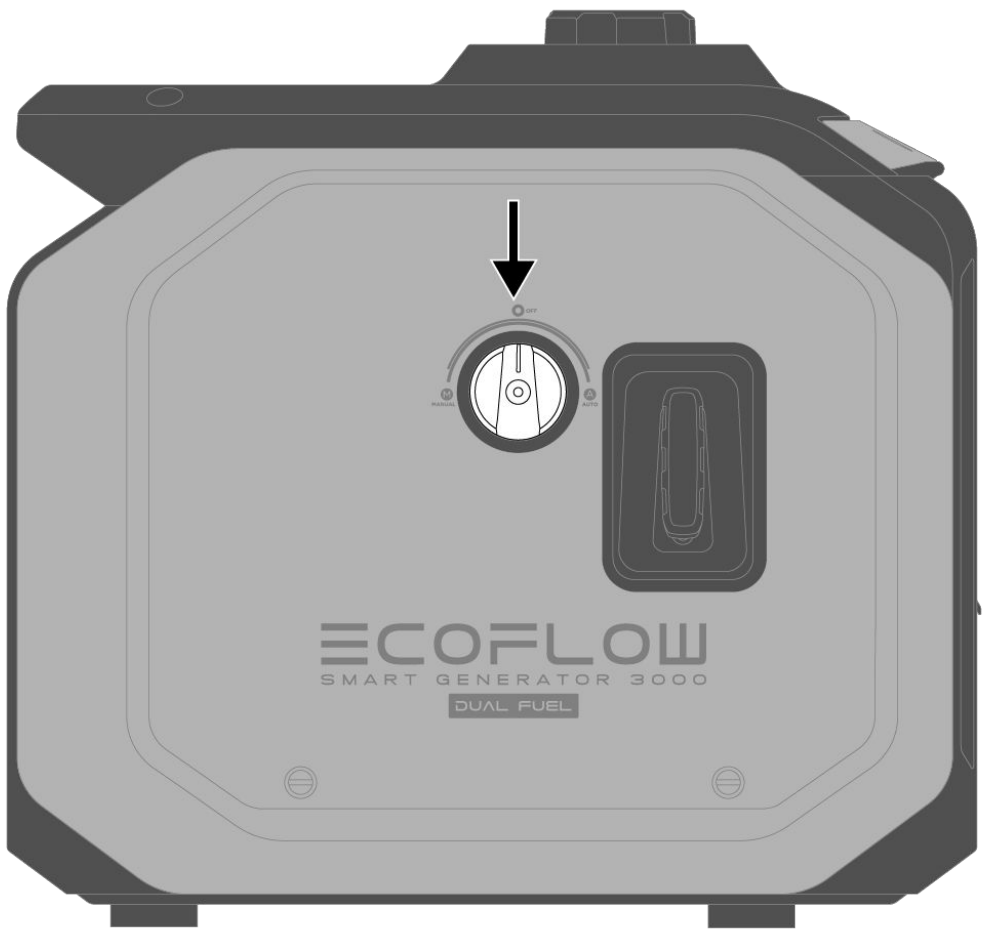

## Step 3: Connect to a device

After the generator is turned on, connect your device to the generator's AC outlet, then turn on the device.



### 5.3.2 Shutting Down the Generator

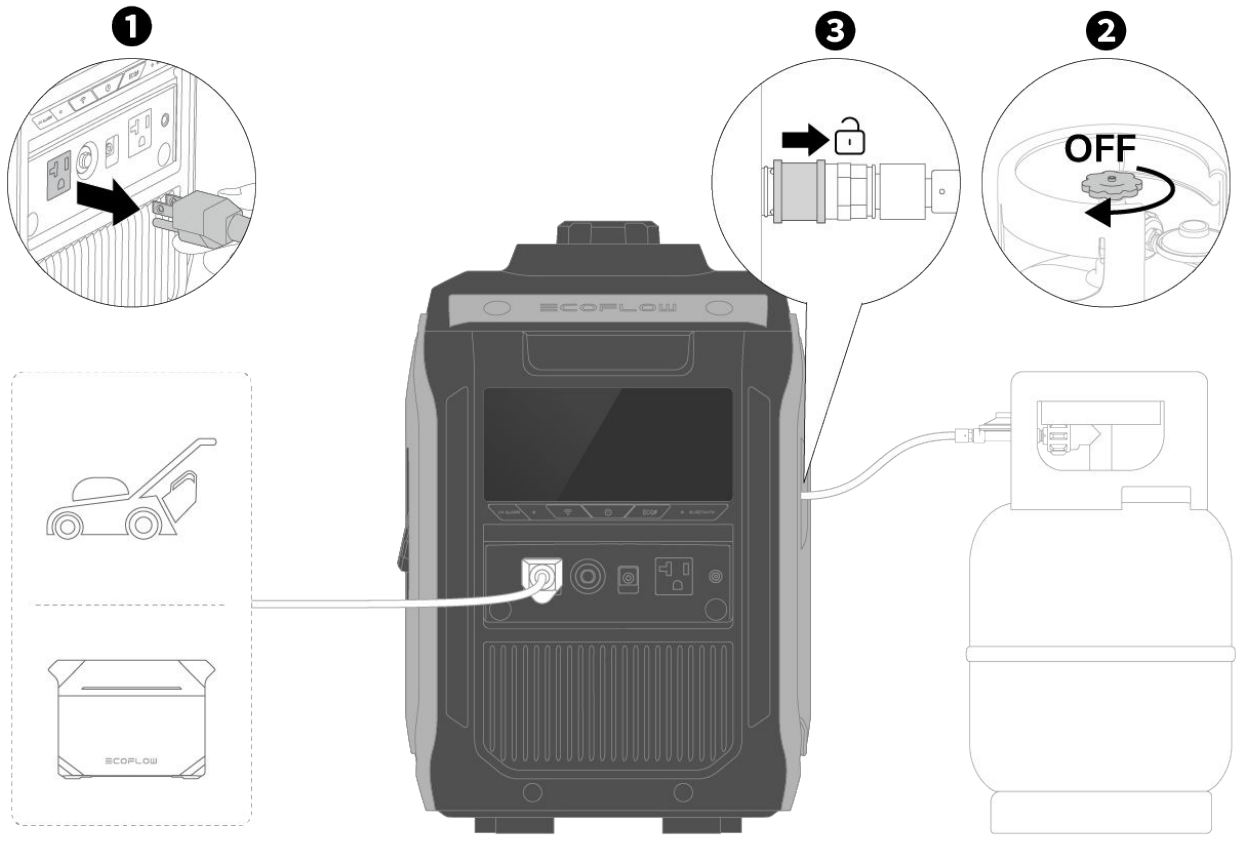
- **Emergency Shutdown**
  In an emergency, turn the Engine Switch to "**OFF**" to shut down the generator immediately.




- **Regular Shutdown**

**Step 1: Disconnect Devices and Fuel**

Turn off and disconnect all electrical devices connected to the generator. If you are using LPG as fuel, turn off the LPG cylinder valve to stop the fuel supply. Allow the generator to run until it consumes the remaining fuel in the hose and shuts down automatically. Then, disconnect the LPG hose.




## Step 2: Stop the Generator

Stop the generator using one of the following methods:

### Method 1: Electric Start Button

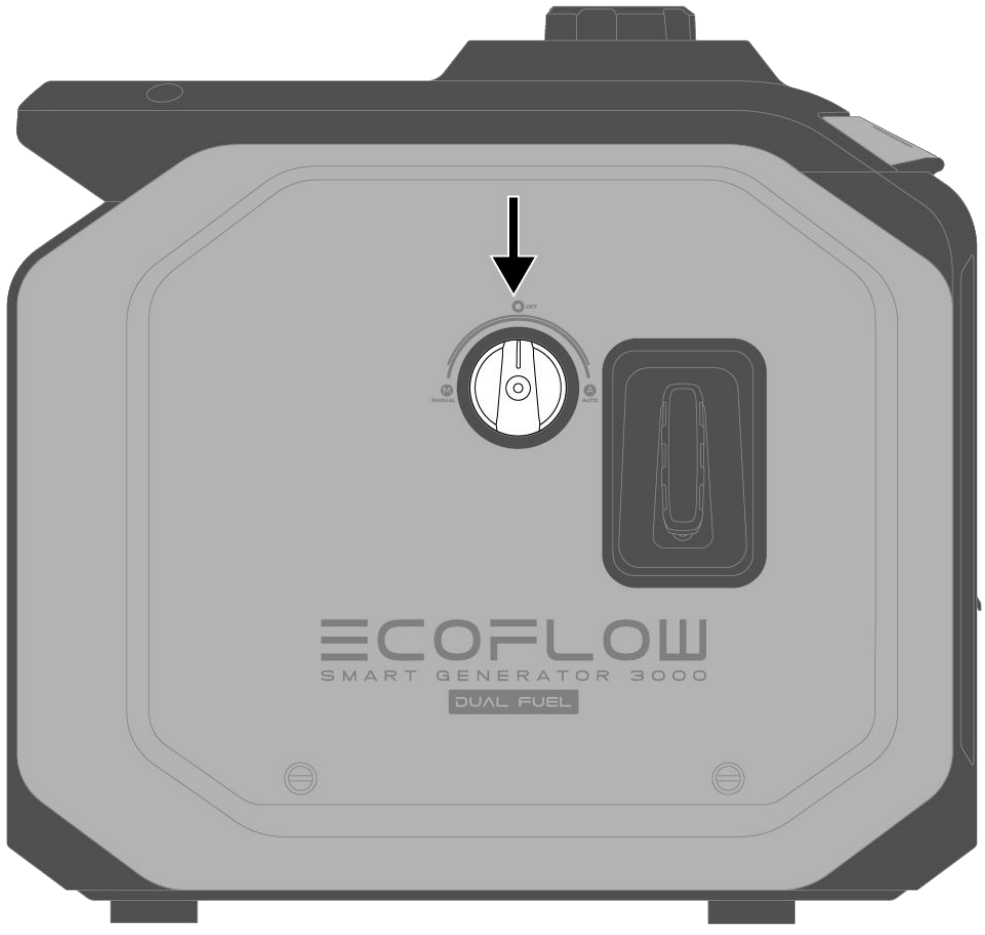
Press and hold the Electric Start Button for 2 seconds to stop the generator.
**Note**: To save battery power, the generator will automatically shut down after 3 minutes if it fails to start. The display screen will also turn off. To restart the generator, press the Electric Start Button again to activate the display screen, then, hold the button for 2 seconds to execute the start-up program.

### Method 2: EcoFlow App

Open the EcoFlow app and access the device settings page to turn off the generator.


**Step 3: Completely Shut Down the Generator**

Turn the engine switch to "**OFF**" to fully shut down the generator.




## 5.4 Charge EcoFlow Power Station

The generator supports automatic start and stop when charging an EcoFlow power station through an AC outlet.

In this scenario, you need to pair the generator with an EcoFlow power station using Bluetooth for the first-time setup. Once paired, the generator will automatically start or stop operation based on the power station's battery level.

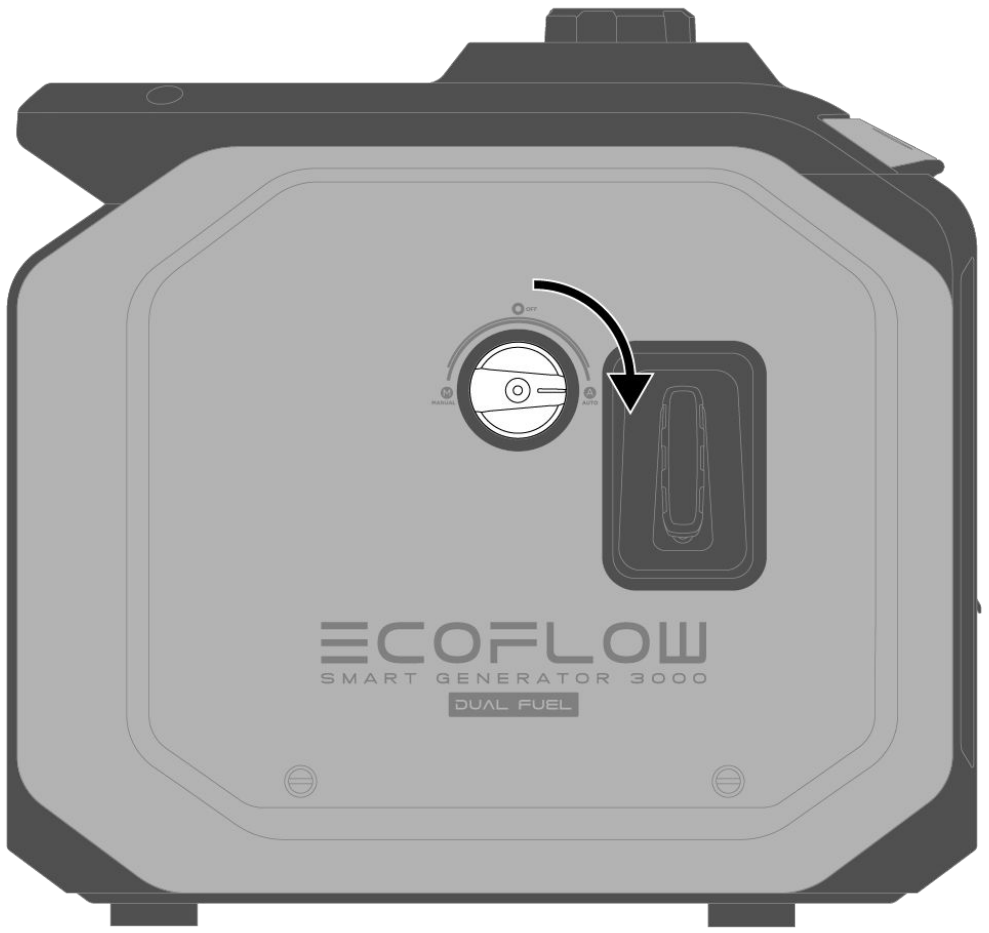
Tip:

The auto start/stop function is currently supported when working with EcoFlow DELTA 3 Power Station or EcoFlow DELTA 3 Plus Power Station. Compatibility information may be updated. Please check the official website for the latest details.

### 5.4.1 Pairing the Generator

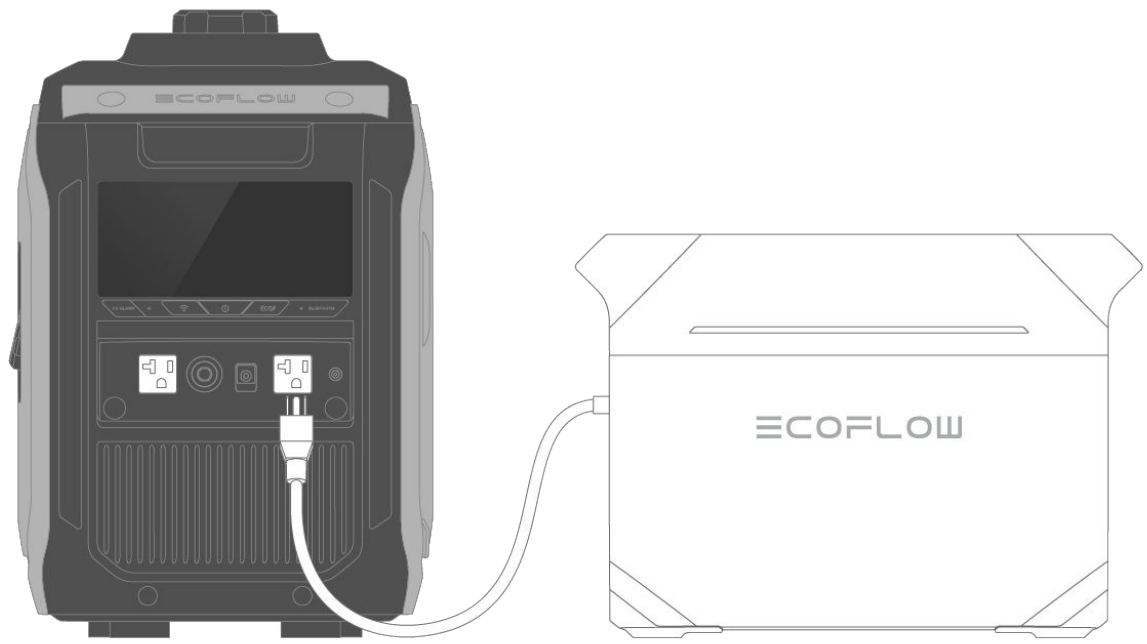
**Step 1: Start the engine**

Turn the Engine Switch to the "**AUTO**" position.



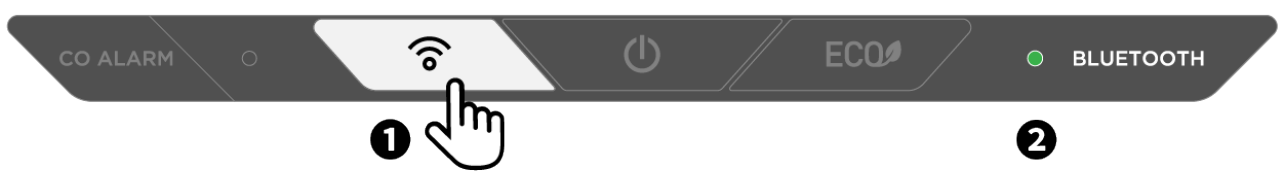

**Step 2: Connect to an EcoFlow Power Station**

Connect an EcoFlow power station to the generator’s AC outlet, then turn on the power station.




**Step 3: Pair the generator with the EcoFlow Power Station**

Press the IoT button once to start pairing. Once the EcoFlow Device Pairing LED turns green, Bluetooth pairing is complete.



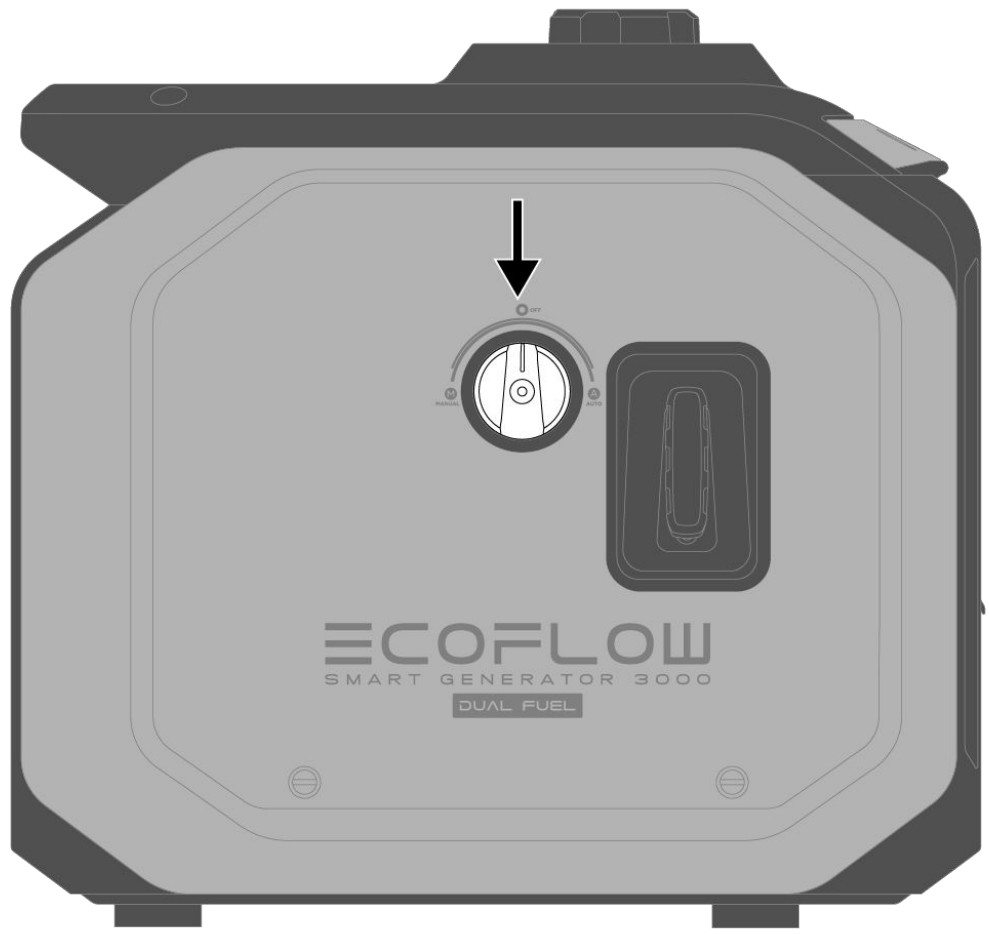

## 5.4.2 Starting Up the Generator

The generator will automatically start if the power station's battery level falls below the threshold set in the EcoFlow app.

### 5.4.3 Shutting Down Your Generator

The generator will automatically stop if the power station's battery level reaches the threshold set in the EcoFlow app. However, if you need to shut down the generator and stop using it, follow these steps:

- **Emergency Shutdown**
  In an emergency, turn the Engine Switch to "**OFF**" to shut down the generator immediately.




- **Regular Shutdown**

**Step 1: Disable Self-start**
Open the EcoFlow app to access device settings. In the generator's settings, turn off the "Self-start" function. Then, turn off the "Smart Generator Auto On/Off" function in the power station's settings.

**Step 2: Remove the power station**
Turn off the power station according to its manual, then disconnect it from the generator.

**Step 3: Stop the Generator**
Stop the generator using one of the following methods:

**Method 1: Electric Start Button**

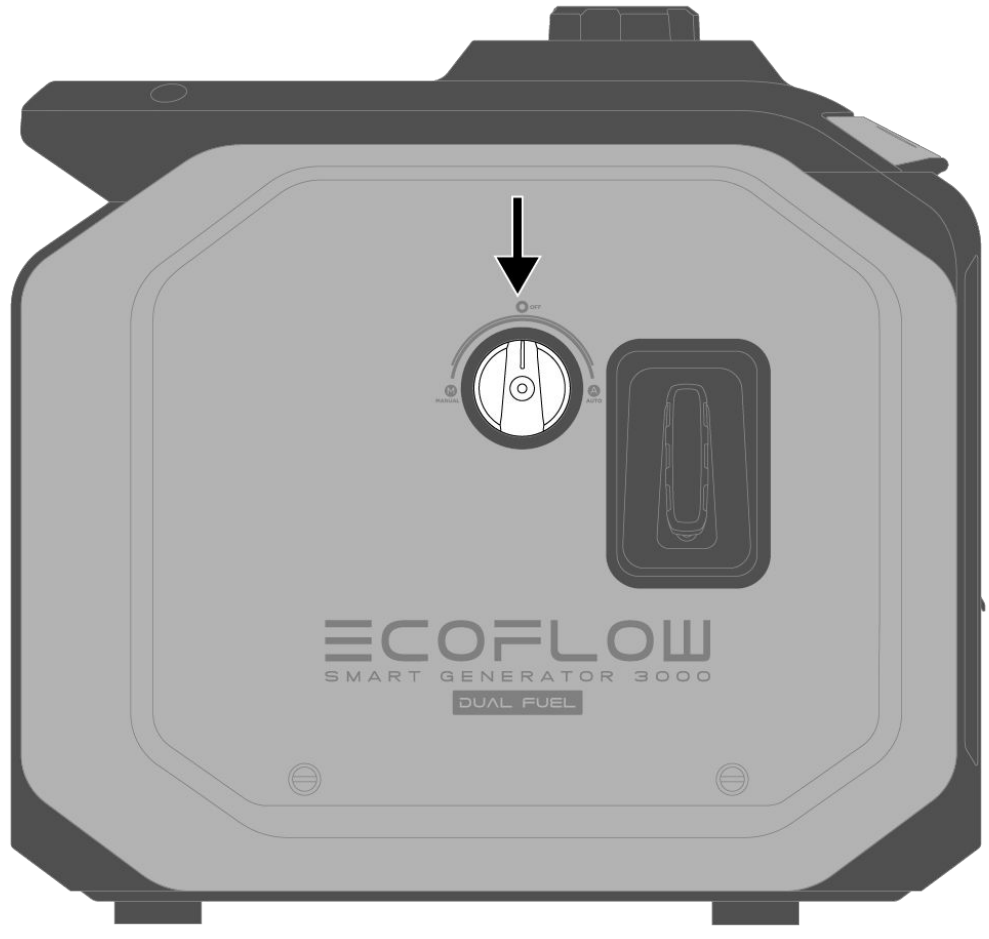
Press and hold the Electric Start Button for 2 seconds to stop the generator.


Method 2: EcoFlow App

Open the EcoFlow app and access the device settings page to turn off the generator.


Step 4: Completely Shut Down the Generator

Turn the engine switch to "**OFF**" to fully shut down the generator.




# 6. Maintenance and Servicing

## 6.1 Maintenance Precautions

Proper maintenance and servicing are essential to ensure safe, economical, and reliable usage. This also helps minimize your environmental impact.

Before undertaking any maintenance, carefully review the following safety precautions:

1. **Disconnect from power**: Shut down the generator before beginning any maintenance or servicing.
2. **Beware of burns**: Allow the generator to cool down completely before touching any part of it, as the engine and other components, including the exhaust system, can remain extremely hot even after shutdown.
3. **Prevent accidental starts**: Separate the spark plug cap from the spark plug to prevent the generator from starting up.
4. **Ventilate the work area**: Ensure the working area is well-ventilated to avoid inhaling exhaust gas, which may cause personal shock, loss of consciousness, or even death.
5. **Fuel safety**: Fuel is highly combustible. Keep it away from heat and ignition sources while performing maintenance tasks.
6. **Level ground**: Place the generator on a flat and stable surface to ensure stability.

## 6.2 Maintenance Schedule

Regularly check and service your generator to keep it in optimal condition based on the maintenance schedule.
**Note:** Maintenance is based on runtime or calendar time, whichever comes first.

**Before Each Use**

- Check/add engine oil
- Check/add air filter element

**Within the First month, or After 20 Hours of Operation**

- Replace engine oil
- Clean air filter element

**Every 3 Months, or Every 50 Hours of Operation**

- Replace engine oil
- Replace air filter element
- Clean spark plug arrester

**Annually, or Every 100 Hours of Operation**

- Clean fuel filter strainer
- Clean/adjust spark plug †
- Clean/adjust valve clearance ‡
- Clean fuel filter ‡

**Every 2 Years, or Immediately if Necessary**

- Check/replace LPG hose ‡
- Check/replace fuel pipe ‡

**Every 300 Hours**

- Remove any carbon deposits of cylinder head and piston ‡

† These items should be replaced if necessary.
‡ These items should be serviced by their respective dealers unless the user has the appropriate tools and maintenance capacity.

Notices:

1. If the generator set operates under the condition of high temperatures and heavy loads, replace the engine oil every 25 hours.
2. If the generator set operates in dusty or harsh environments, clean the air filter element every 10 hours and replace it every 25 hours (if necessary). Spot-check items based on the cycle or time length, whichever comes first.
3. If the generator reaches a servicing interval, perform the servicing as soon as possible according to the requirements in the table.

## 6.3 Maintenance Instructions

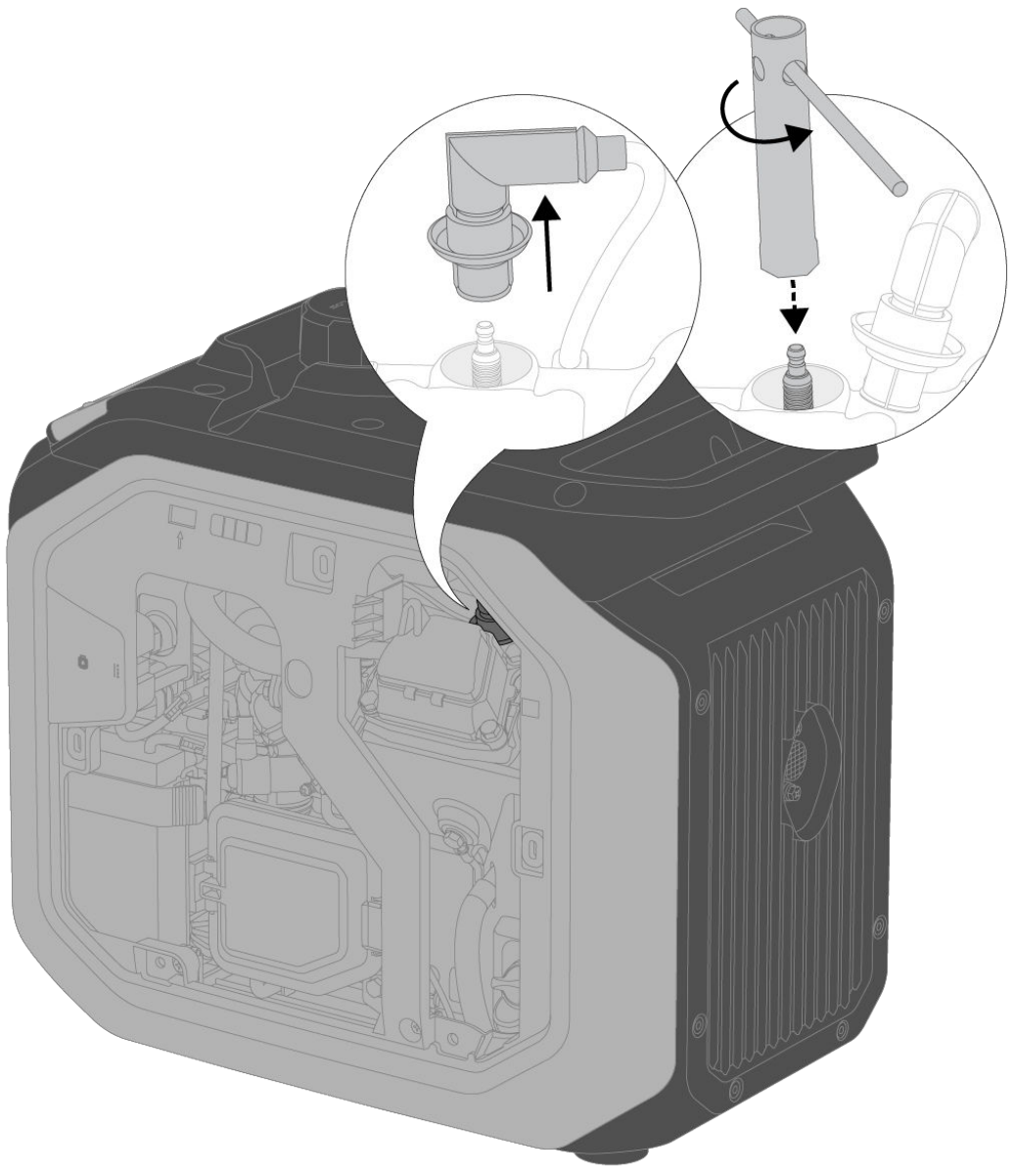
### 6.3.1 Inspecting the Spark Plug

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

1. Use the screwdriver (Slotted-head) provided in the package to unscrew the

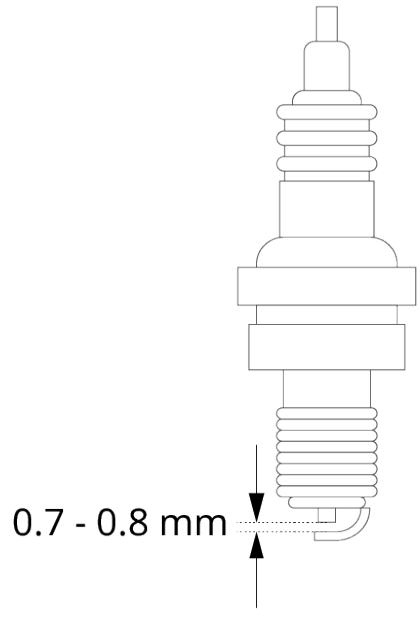
maintenance cover, and then remove the cover.

2. Take off the spark plug cap.
3. Use the spark plug socket and breaker bar to remove the spark plug.



4. Check for any color fading and remove any carbon deposits. The porcelain around the spark plug center electrode should be light brown if it is in good condition. Replace the electrode if it is worn, or if the insulation is peeling, cracked, or dirty.
5. Check the spark plug model and ensure it has sufficient clearance. If needed, adjust the gap.

   **Note**: Incorrect spark plug gap may cause engine damage.




Tip:

- Standard spark plug: A5RTC
- Spark plug gap: 0.7-0.8 mm

6. Reinstall the spark plug with a torque of 13.5±1.5(N ×m).
   **Note**: If you don't have a torque wrench, tighten the spark plug until snug, then continue turning an additional 1/4 to 1/2 rotation.
7. Reinstall the spark plug cap.
8. Reinstall the maintenance cover.

### 6.3.2 Adjusting the Carburetor

The carburetor is an important part of the engine and should be adjusted by a dealer with professional knowledge, data, and equipment to ensure proper adjustment.

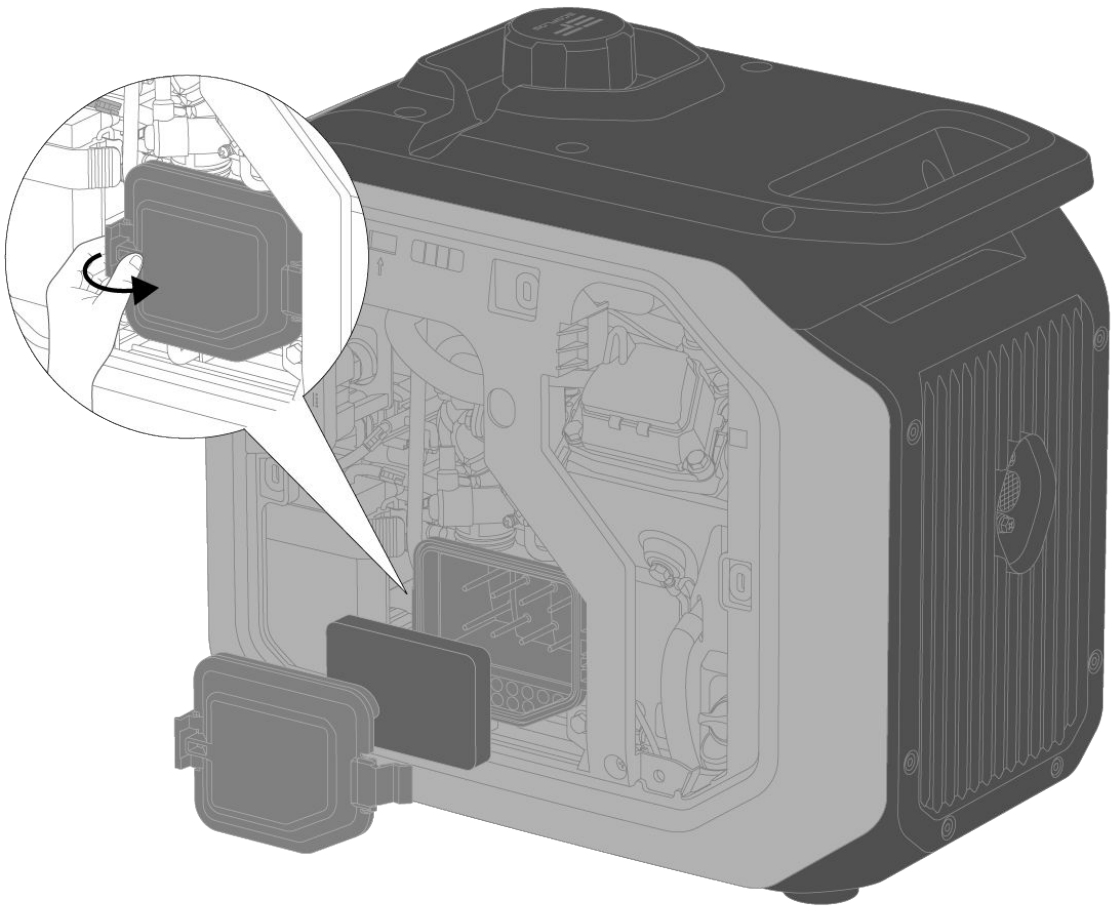
> Notice:
> In high-altitude areas, the atmospheric pressure may reduce the amount of air intake, decline the performance, and increase the fuel consumption of standard carburetors. Moreover, the dense mixture may contaminate the spark plug and lead to starting difficulties. When the generator is running at high altitudes (above 3000 feet / 914 m), the emissions may increase.

### 6.3.3 Replacing the Engine Oil

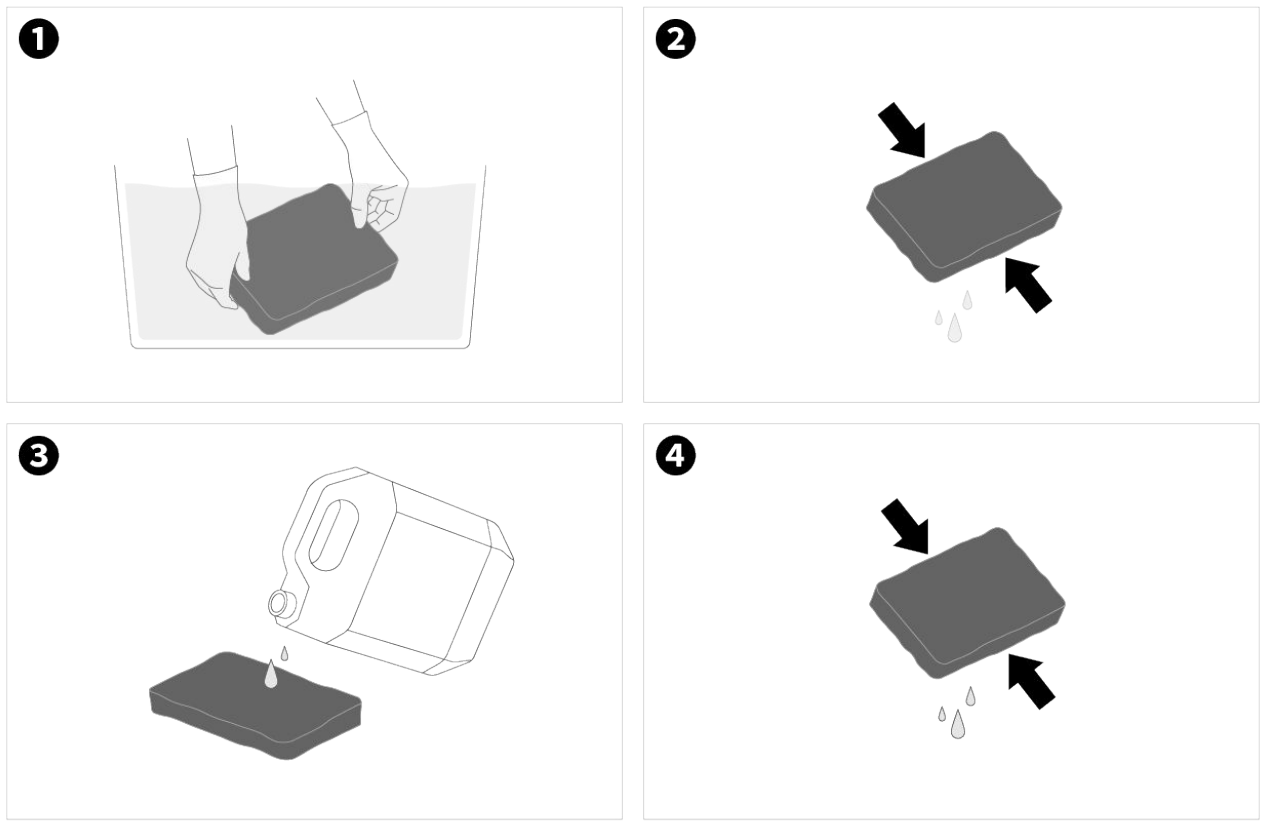
1. Place the generator on a level surface. Start the generator and let it run for a few minutes to warm up the oil. Then, shut down the generator.
   **Note**: The oil temperature will be very high. Take care to avoid burns when draining the oil.
2. Use the screwdriver (Slotted-head) provided in the package to unscrew the maintenance cover, and then remove the cover.
3. Remove the oil dipstick.
4. Place the oil basin under the generator and tilt the generator. The oil will drain quickly.
   **Note**: Improper disposal of engine oil can harm the environment. If you replace the engine oil yourself, dispose of it properly. Store the used oil in a sealed container and take it to a nearby oil recycling center. Do not pour it into trash cans, onto the ground, or down the sewer.
5. Place the generator back in its original horizontal position.
6. Refill the oil to the proper level.
   **Note**: Be careful to prevent any foreign objects from entering the engine.
7. Wipe the oil dipstick clean and remove any spilled oil.
8. Reinstall the oil dipstick.
9. Reinstall the maintenance cover.

### 6.3.4 Cleaning the Air Filter

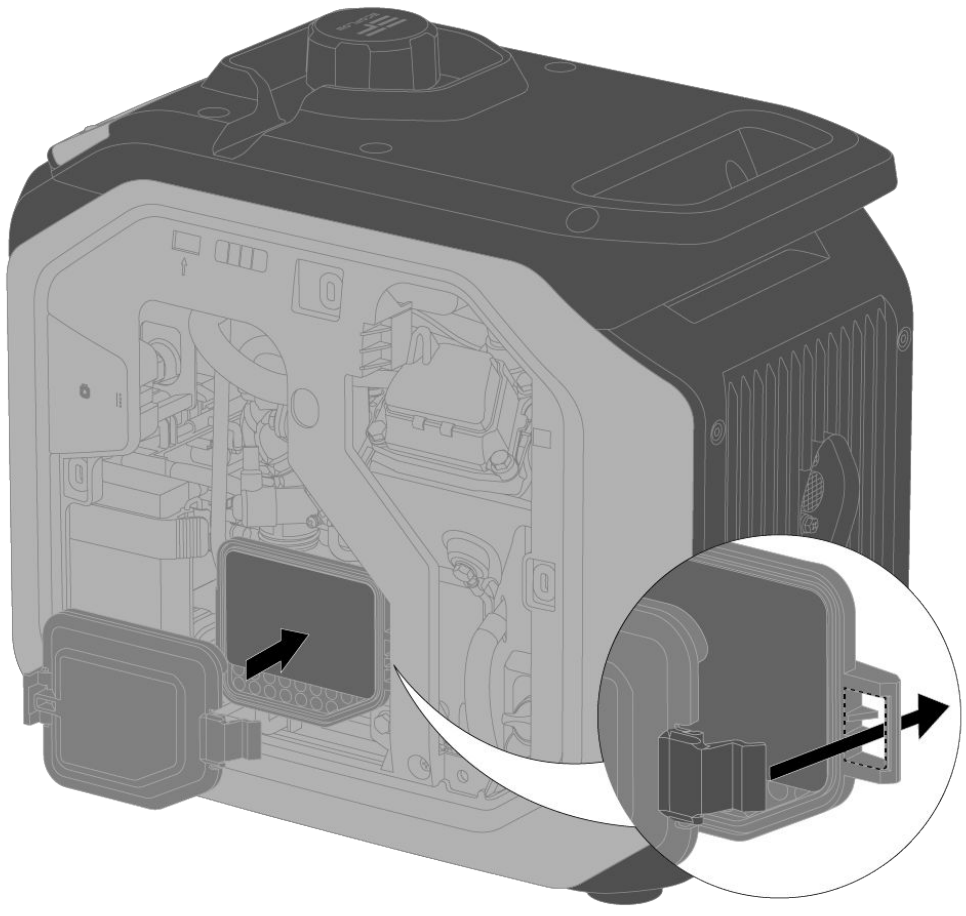
1. Use the screwdriver (Slotted-head) provided in the package to unscrew the maintenance cover, and then remove the cover.
2. Take off the air filter cover and internal foam filter element.



3. Clean the foam filter element with soapy water or a nonflammable solvent, then dry it. Add engine oil to the foam filter element and squeeze out the excess oil. The foam filter element should be wet but not dripping oil.
   **Note**: Do not twist the filter element to avoid damaging it.



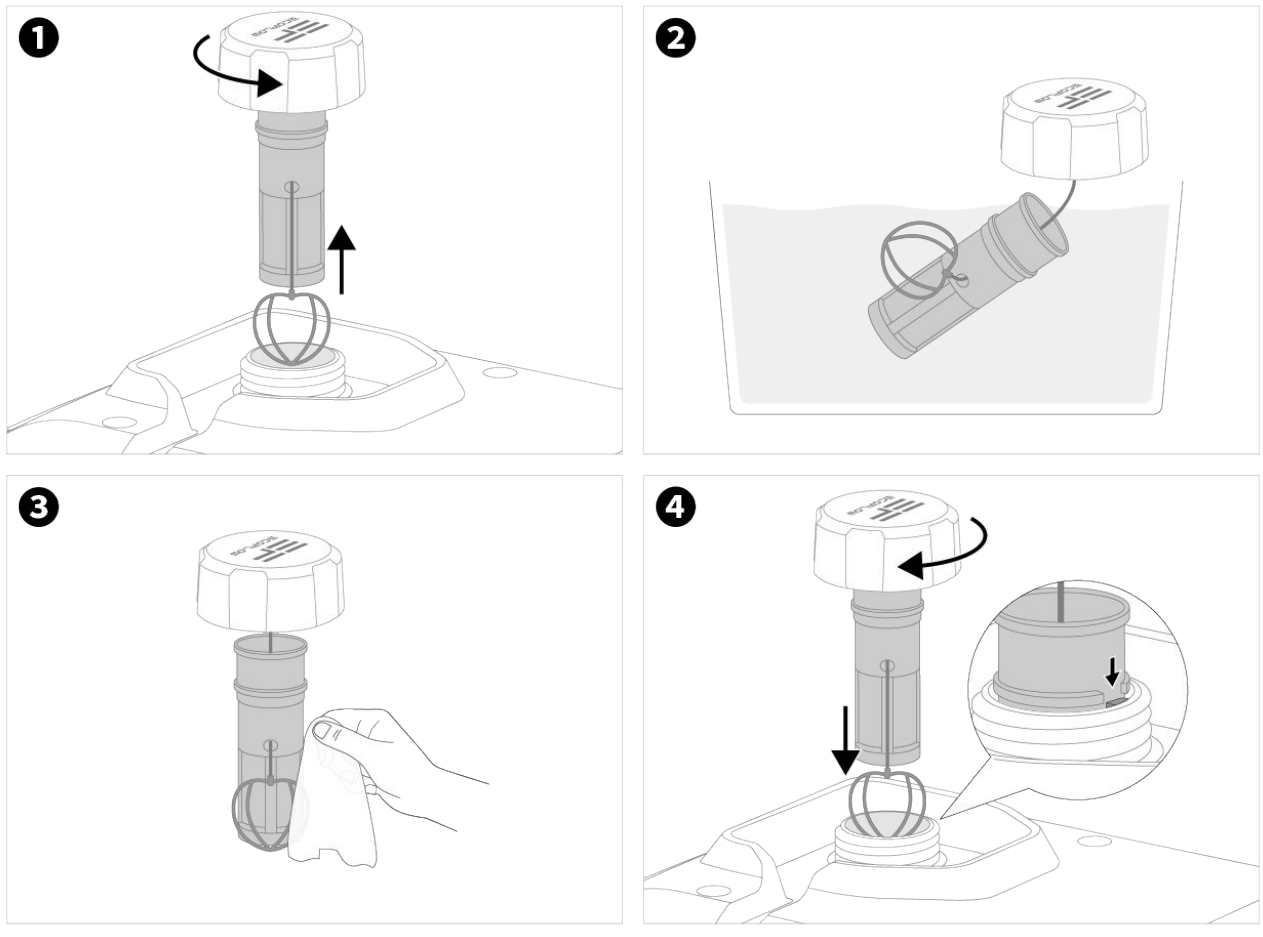

4. Place the foam filter element into the air filter. Then reinstall the cover to its original position and press to secure it.
   **Note**: Ensure that the surface of the foam filter element makes close contact with the air filter, with no gaps between them. Do not start the generator before reinstalling the air filter, as this may produce excessive toxic gases and allow foreign objects to enter the engine, potentially causing damage to the engine block.



5. Reinstall the maintenance cover.

### 6.3.5 Cleaning the Fuel Filter

1. Take off the fuel cap and remove the fuel filter screen.
2. Clean the fuel filter screen with fuel.
   **Note**: Never handle fuel near smoke and flames.
3. Wipe the filter screen and place it back into the fuel tank.
4. Reinstall the fuel cap.




### 6.3.6 Cleaning the Muffler

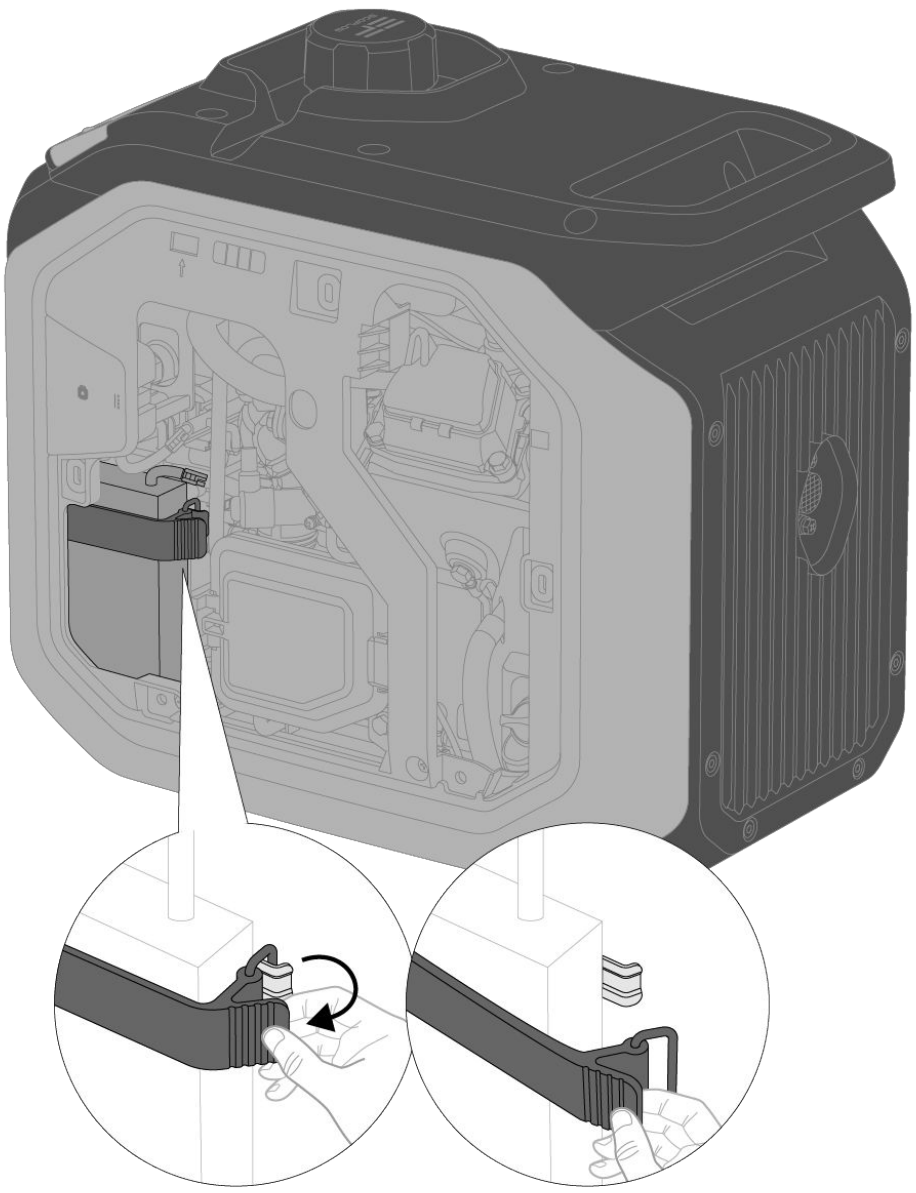
1. Use the screwdriver (Phillips-head) provided in the package to unscrew the muffler.
2. Take off the muffler cap, muffler block, and spark plug arrestor.
3. Gently clean carbon deposits from the muffler block and the spark plug arrestor with a wire brush, without damaging or scratching them.

4. Inspect the muffler block and spark plug arrestor for any damage, and replace them if necessary.
5. Reinstall the parts in turn.

### 6.3.7 Replacing the Internal Battery

If you find that the internal battery is no longer functioning, please contact our Customer Service to obtain a new one. The cost of replacement will vary based on your warranty status. Once you have received the new battery, follow these steps to replace the old one:

1. Use the screwdriver (Slotted-head) provided in the package to unscrew the maintenance cover, and then remove the cover.
2. Disconnect both the positive and negative wires from the old battery.
3. Release the strap to
4. Carefully remove the old battery and insert the new one.
5. Fasten the strap back to secure the battery.
6. Reconnect the positive and negative wires of the new battery.



# 7. Storage and Transportation

If you plan to place this generator into long-term storage, take some storage measures to prevent premature aging of the generator.

## 7.1 Draining the Fuel

1. Turn the Engine Switch to “OFF”.
   **Note**: If there's no leftover fuel, skip this step and ensure the LPG inlet is

covered with the dust cover.

2. Open the fuel tank cap, remove the fuel filter screen, drain the fuel into a temporary tank, and reinstall the cap.
3. Start the generator without connecting any electrical equipment. It will run on the remaining fuel and shut off when no fuel is left.
   Note: The run time of the generator depends on the amount of remaining fuel in the tank.
4. Use the screwdriver (Slotted-head) provided in the package to unscrew the maintenance cover, and then remove the cover.
5. Loosen and remove the oil drain bolt on the carburetor and drain the fuel into the temporary fuel tank.
6. Turn the Engine Switch to “OFF” to shut down the generator.
7. Screw in and tighten the oil drain bolt.
8. Reinstall the maintenance cover.
9. Reinstall the fuel tank cap after the engine cools down completely.

## 7.2 Storing the Generator

Take the following steps to protect parts prone to corrosion, such as the engine body and piston rings:

1. Remove the spark plug, inject 10 mL / 0.34 oz. of engine oil, reinstall the spark plug, and pull the Starter Grip for several minutes to fully lubricate the cylinder block.
2. Pull the Starter Grip until it becomes tight to prevent the cylinder block and valves from rusting.
3. Wipe the generator's surface clean, place the generator in a well-ventilated and dry place, and cover it.

## 7.3 Charging the Internal Battery

For generator storage, disconnect the internal battery. However, the battery should be charged every 3 months during storage.
To charge the internal battery, use an adapter with an output range of 9V-24V and a DC5521 cable.


## 7.4 Use after Storage

If the generator is stored with fuel in the fuel tank and carburetor, conduct servicing as required in the table below before using it again.

| Storage Duration | Recommended Servicing Procedure to Prevent Difficult Startups |
| --- | --- |
| Within 1 month | No preparation needed |
| 1 to 2 months | Evacuate the fuel and inject fresh fuel |
| 2 months to 1 year | 1. Evacuate the fuel and inject fresh fuel<br>2. Drain the fuel from the Carburetor Drain Cup †<br>3. Drain the fuel from the fuel strainer ‡ |
| Over 1 year | 1. Evacuate the fuel and inject fresh fuel<br>2. Drain the fuel from the Carburetor Drain Cup †<br>3. Drain the fuel from the fuel strainer ‡ |

† Loosen and remove the oil drain bolt and drain all the fuel out of the carburetor. Drain the fuel into a suitable container, and screw in and tighten the oil drain bolt.
‡ After turning off the Engine Switch, remove the fuel strainer, empty the gasoline, reinstall the fuel strainer, and tighten it.

## 7.5 Transportation

- When moving, storing, or operating the generator, do not place it on its side. Engine oil may leak and damage the engine or your property.
- If the generator needs to be transported after running, shut it down and allow it to cool before loading it onto the vehicle. Hot engines and exhaust

systems can cause burns and ignite certain materials. To prevent fuel spills during transport, securely position the generator upright and turn the engine switch to "OFF."
- During transportation, do not drop the generator or subject it to impacts

# 8. Regulatory and Compliances

### FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
This equipment should be installed and operated with a minimum distance of 20 cm between the radiator & your body.

### IC Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.
This Class A digital apparatus complies with Canadian ICES-003.
When using the product, maintain a distance of 20 cm from the body to ensure compliance with RF exposure requirements.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil nedoit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
Il doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et toute partie de votre corps.

### Exhaust and Evaporative Emissions Control Warranty Statement

YOUR WARRANTY RIGHTS AND OBLIGATIONS
For EPA certified engine/equipment

The United States Environmental Protection Agency and RATO Technology, Inc. (RATO), are pleased to explain the exhaust and evaporative emissions (“emissions”) control system warranty on your 2024/2025 small off-road engine/equipment. In the United States, new equipment that use small off-road engines must be designed, built, and equipped to meet the State’s stringent anti-smog standards. RATO must warrant the emissions control system on your small off-road engine/equipment for the period listed below provided there has been no abuse, neglect or improper maintenance of your small off-road engine/equipment leading to the failure of the emissions control system.

Where a warrantable condition exists, RATO will repair your small off-road engine/equipment at no cost to you including diagnosis, parts and labor.

YOUR WARRANTY RIGHTS AND OBLIGATIONS

For EPA & CARB certified engine/equipment

The California Air Resources Board, the United States Environmental Protection Agency and Chongqing Rato Technology Co., Ltd. (RATO), are pleased to explain the exhaust and evaporative emissions (“emissions”) control system warranty on your 2024/2025 small off-road engine/equipment. In California, new equipment that use small off-road engines must be designed, built, and equipped to meet the State’s stringent anti-smog standards. RATO must warrant the emissions control system on your small off-road engine/equipment for the period listed below provided there has been no abuse, neglect or improper maintenance of your small off-road engine/equipment leading to the failure of the emissions control system.

Your emissions control system may include parts such as the carburetor or fuel-injection system, the ignition system, catalytic converter, fuel tanks, fuel lines (for liquid fuel and fuel vapors), fuel caps, valves, canisters, filters, clamps and other associated components. Also included may be hoses, belts, connectors, and other emission-related assemblies.

Where a warrantable condition exists, RATO will repair your small off-road engine/equipment at no cost to you including diagnosis, parts and labor.

MANUFACTURER’S WARRANTY COVERAGE:

The exhaust and evaporative emissions control system on your small off-road engine/equipment is warranted for two years. If any emissions-related part on your small off-road engine/equipment is defective, the part will be repaired or replaced by RATO.

OWNER’S WARRANTY RESPONSIBILITIES:

As the small off-road engine/equipment owner, you are responsible for performance of the required maintenance listed in your owner’s manual. RATO recommends that you retain all receipts covering maintenance on your small off-road engine/equipment, but RATO cannot deny warranty coverage solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small off-road engine/equipment owner, you should however be aware that RATO may deny you warranty coverage if your small off-road engine/equipment or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

You are responsible for presenting your small off-road engine/equipment to a RATO distribution center or service center as soon as the problem exists. The warranty repairs shall be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact Great Lakes Technologies, LLC. at 855-859-1110 or mail to: techsupport@wenproducts.com.

DEFECTS WARRANTY REQUIREMENTS:

The warranty period begins on the date the small off-road engine/equipment is delivered to an ultimate purchaser.

General Emissions Warranty Coverage. RATO warrants to the ultimate purchaser and each subsequent owner that the engine or equipment is:

(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board; and

(2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.

The warranty on emission-related parts will be interpreted as follows:

(1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions must be warranted for the warranty period defined in Subsection (b)(2). If any such part fails during the period of warranty coverage, it must be repaired or replaced by RATO according to Subsection (4) below. Any such part repaired or replaced under the warranty must be warranted for the remaining warranty period.

(2) Any warranted part that is scheduled only for regular inspection in the written instructions must be warranted for the warranty period defined in Subsection (b)(2). A statement in such written instructions to the effect of "repair or replace as necessary" shall advise owners of the warranty coverage for emissions related parts. Replacement within the warranty period is covered by the warranty and will not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions must be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part must be repaired or replaced by RATO according to Subsection (4) below. Any such part repaired or replaced under warranty must be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions must be performed at no charge to the owner at a warranty station.

(5) Notwithstanding the provisions of Subsection (4) above, warranty services or repairs must be provided at distribution centers that are franchised to service the subject engine/equipment.

(6) The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

(7) RATO is liable for damages to other engine/equipment components proximately caused by a failure under warranty of any warranted part.

(8) Throughout the emissions control system's warranty period set out in subsection (b)(2), RATO must maintain a supply of warranted parts sufficient to meet the expected demand for such parts and must obtain additional parts if that supply is exhausted.

(9) Manufacturer-approved replacement parts that do not increase the exhaust or evaporative emissions of the engine or emissions control system must be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of RATO.

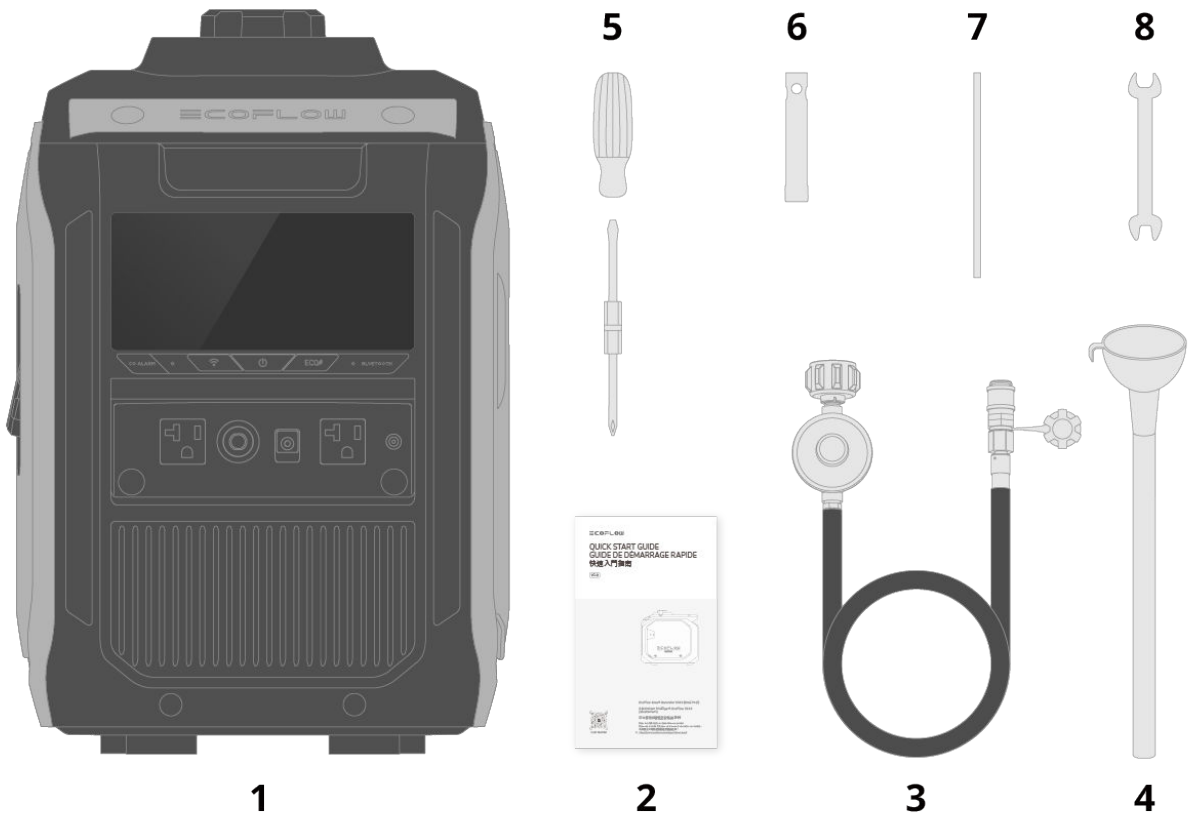
(10) Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts will be grounds for disallowing a warranty claim. RATO will not be liable to warrant failures of warranted parts caused by the use of a non-exempted

add-on or modified part.
(11) RATO issuing the warranty shall provide any documents that describe that warranty procedures or policies within five working days of request by the Executive Officer.
Emission Warranty Parts List for Exhaust
(1) Fuel Metering System
(i) Carburetor and internal parts (and/or pressure regulator or fuel injection system).
(ii) Air/fuel ratio feedback and control system.
(iii) Cold start enrichment system.
(2) Air Induction System
(i) Controlled hot air intake system.
(ii) Intake manifold.
(iii) Air filter.
(3) Ignition System
(i) Spark Plugs.
(ii) Magneto or electronic ignition system.
(iii) Spark advance/retard system.
(4) Exhaust Gas Recirculation (EGR) System
(i) EGR valve body, and carburetor spacer if applicable.
(ii) EGR rate feedback and control system.
(5) Air Injection System
(i) Air pump or pulse valve.
(ii) Valves affecting distribution of flow.
(iii) Distribution manifold.
(6) Catalyst or Thermal Reactor System
(i) Catalytic converter.
(ii) Thermal reactor.
(iii) Exhaust manifold.
(7) Particulate Controls
(i) Traps, filters, precipitators, and any other device used to capture particulate emissions.
(8) Miscellaneous Items Used in Above Systems
(i) Electronic controls.
(ii) Vacuum, temperature, and time sensitive valves and switches.
(iii) Hoses, belts, connectors, and assemblies.
Emission Warranty Parts List for Evap
(1) Fuel Tank
(2) Fuel Cap
(3) Fuel Lines (for liquid fuel and fuel vapors)
(4) Fuel Line Fittings
(5) Clamps*
(6) Pressure Relief Valves*
(7) Control Valves*
(8) Control Solenoids*
(9) Electronic Controls*
(10) Vacuum Control Diaphragms*
(11) Control Cables*
(12) Control Linkages*
(13) Purge Valves*
(14) Gaskets*
(15) Liquid/Vapor Separator
(16) Carbon Canister
(17) Canister Mounting Brackets

(18) Carburetor Purge Port Connector
*Note: As they relate to the evaporative emission control system.
RATO will furnish with each new small off-road engine/equipment written instructions for the maintenance and use of the engine/equipment by the owner.

# 9. Appendix

## Appendix A: What's in the Box




| | |
|---|---|
| 1 | EcoFlow Smart Generator 3000 (Dual Fuel) ×1 |
| 2 | Quick Start Guide and Warranty Card ×1 |
| 3 | LPG Hose ×1 |
| 4 | Oil Funnel ×1 |
| 5 | 2-in-1 Screwdriver (PH/SL) ×1 |
| 6 | Spark Plug Socket ×1 |
| 7 | Breaker Bar ×1 |
| 8 | Double-Ended Spanner ×1 |

## Appendix B: Specifications

| Complete Generator Set | |
|---|---|
| Dimensions (Length × Width × Height) | Approx. 480×300×455 mm |
| Net. Weight | Approx. 21.8 kg |
| Max. Environment | |

| | |
|---|---|
| Temperature | 40°C |
| Max. Operating Altitude | 3000 feet |
| Manufacture Year | For details, refer to the product label |
| **Generator** | |
| Type | Inverter |
| AC Rated Voltage | 120V |
| AC Rated Current | 16.7A (Gasoline)<br>15A (LPG) |
| Operating Frequency | 60Hz |
| Rated Power | Gasoline: 2000W (Max. 2200W)<br>LPG: 1800W (Max. 2000W) |
| **Engine** | |
| Engine Type | Single cylinder, four-stroke, forced-air cooling, overhead valve |
| Engine Displacement | 98 cc |
| Type of Fuel | Unleaded Gasoline / LPG |
| Volume of Fuel Tank | 4 L / 1.06 gal. |
| Continuous Operation Time (Gasoline) | 2.8 H (Nominal load) |
| Noise Level (at a distance of 7 meters) | 69 dB (Nominal load) |
| Generator Engine Oil Volume | 400 ml / 0.423 quarts |
| Spark Plug Model | A5RTC |
| Start Mode | Electric Start, Recoil Start, Auto Start |

## Appendix C: Circuit Diagram