

Generac 8946

Generac 3800-Watt Dual-Fuel Portable Inverter Generator

MODEL 8946 USER MANUAL

Brand: Generac

Introduction

This user manual provides essential information for the safe and efficient operation of your Generac 3800-Watt Dual-Fuel Portable Inverter Generator, Model 8946. Please read this manual thoroughly before operating the generator to ensure proper usage and to prevent injury or damage. Keep this manual for future reference.

Setup

Unpacking and Initial Assembly:

- Carefully remove the generator and all components from the packaging.
- Attach the integrated handle and never-flat wheels as per the quick-start guide. Tools are included for this process.

What's in the box?



Engine Oil



Oil Funnel



Battery
(for electric start)



Tool Kit



**Propane
Hose w/
Regulator**



**Owner's
Manual**

Figure 1: Included Components. The box contains engine oil, an oil funnel, a battery for electric start, a tool kit, a propane hose with regulator, and the owner's manual.

Adding Engine Oil:

- Place the generator on a level surface.
- Remove the oil fill cap/dipstick.
- Using the provided oil funnel, slowly pour the included engine oil into the oil fill opening until it reaches the upper mark on the dipstick. Do not overfill.
- Securely replace the oil fill cap/dipstick.

Adding Fuel:

- **Gasoline:** Ensure the generator is off and cool. Open the fuel cap and carefully fill with fresh, unleaded gasoline (minimum 87 octane). Do not overfill.
- **Propane (LPG):** Connect the provided propane hose with regulator to a propane tank and to the LPG connection port on the generator. Ensure all connections are tight.
- Use the fuel selector switch on the control panel to choose between GAS or LPG.

Battery Connection (for Electric Start):

- Locate the battery compartment.
- Connect the battery terminals, ensuring correct polarity (red to positive, black to negative).
- Close the battery compartment securely.

Operating Instructions



Control Panel

- | | |
|--------------------------|------------------------|
| 1. 20A, 120V 5-20R GFCI | 7. Grounding Location |
| 2. 30A, 120/240V L14-30R | 8. 20A Circuit Breaker |
| 3. USB-A & USB-C | 9. 30A Circuit Breaker |
| 4. Fuel Selector | 10. Economy Switch |
| 5. LPG Connection | 11. Electric Start |
| 6. Parallel Outlets | 12. Main On/Off Switch |

Figure 2: Control Panel Overview. Key features include 20A and 30A GFCI outlets, USB-A & USB-C ports, fuel selector, LPG connection, parallel outlets, grounding location, circuit breakers, economy switch, electric start button, and main on/off switch.

Starting the Generator:

1. Ensure the generator is on a level surface and all connected devices are turned off or unplugged.
2. Select your desired fuel type (GAS or LPG) using the fuel selector switch.
3. Turn the main ON/OFF switch to the 'ON' position.
4. **Electric Start:** Press and hold the Electric Start button until the engine starts. The generator features auto-choke for easy starting.
5. **Pull Start:** If electric start is unavailable, pull the recoil starter handle firmly and smoothly until the engine starts.
6. Allow the generator to run for a few moments to stabilize. The 'Output Ready' indicator light will illuminate.

Connecting Devices:

- Plug your devices into the appropriate 120V AC outlets (20A or 30A GFCI).
- For charging sensitive electronics, use the USB-A and USB-C ports.
- Do not exceed the generator's rated running wattage (3000W) or starting wattage (3800W).

Economy Mode:

- Engage the Economy Switch to reduce engine speed, noise, and fuel consumption when power demands are low.
- Disengage Economy Mode for full power output when needed.

COsense Technology:

- The integrated COsense technology continuously monitors carbon monoxide levels.
- If unsafe CO levels are detected, the generator will automatically shut down to protect users.
- Always operate the generator outdoors in a well-ventilated area, far from windows and doors.

Shutting Down:

1. Turn off and unplug all connected devices.
2. Turn the main ON/OFF switch to the 'OFF' position.
3. If using LPG, close the valve on the propane tank.

Maintenance

Regular maintenance is crucial for the longevity and optimal performance of your generator. Refer to the owner's manual for detailed schedules and procedures.

Key Maintenance Tasks:

- **Oil Changes:** Check engine oil level before each use. Change engine oil after the first 25 hours of operation, and every 50-100 hours thereafter, or seasonally.
- **Spark Plug Inspection:** Inspect and clean the spark plug every 100 hours or annually. Replace if worn or fouled.
- **Air Filter Cleaning:** Clean the air filter element every 50 hours or more frequently in dusty conditions.
- **Fuel System:** For gasoline, use a fuel stabilizer if storing for extended periods. For propane, ensure the hose and connections are free of leaks.
- **General Cleaning:** Keep the generator clean and free of debris. Ensure cooling vents are unobstructed.

Troubleshooting

Problem	Possible Cause	Solution
Generator won't start	No fuel, low oil, choke not set, battery low (electric start)	Add fuel, check/add oil, adjust choke, charge/check battery.
No power output	Circuit breaker tripped, overload, 'Output Ready' light off	Reset circuit breakers, reduce load, ensure generator is running stably.
Overload indicator on	Too many devices connected, device malfunction	Unplug devices, reduce load, check devices for faults.

Problem	Possible Cause	Solution
Low oil indicator on	Engine oil level is low	Check oil level and add oil as needed.
COsense shutdown	High carbon monoxide levels detected	Move generator to a well-ventilated outdoor area. Allow to cool and restart.

Specifications

Feature	Detail
Brand	Generac
Model Name	iQ3800 DF (Model 8946)
Starting Wattage	3800 Watts
Running Wattage	3000 Watts
Fuel Type	Gasoline, Liquefied Petroleum Gas (LPG)
Power Source	Fuel Powered
Voltage	120 Volts (AC)
Engine Type	4 Stroke
Ignition System	Electric Start
Tank Volume	12 Liters (approx. 3.17 Gallons)
Item Weight	107 Pounds
Product Dimensions	37.2"L x 20.3"W x 22.4"H
Special Features	CO Sensor (COsense), Dual Fuel, Electric Start, Fully Enclosed Design, USB Port
Included Components	Engine Oil, LP Hose, Oil Funnel, Battery, Tool Kit
Total Power Outlets	2 (AC 120V) + USB ports

Warranty

The Generac 3800-Watt Dual-Fuel Portable Inverter Generator, Model 8946, comes with a limited warranty:

- **Residential Use:** 3 Year Limited Warranty
- **Commercial Use:** 2 Year Limited Warranty

For full warranty details, terms, and conditions, please refer to the official warranty documentation included with your product or visit the Generac website.

Support

For technical assistance, parts, or service inquiries, please contact Generac Customer Support:

- **Website:** Visit the official Generac website for FAQs, support resources, and service center locators.
- **Phone:** Refer to your product registration card or the Generac website for the most current customer service contact numbers.

When contacting support, please have your generator's model number (8946) and serial number ready.