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PowerSmart HB5020C

PowerSmart HB5020C Inverter Generator

MODEL: HB5020C

User Instruction Manual

Introduction

The PowerSmart HB5020C 2500W Inverter Generator is a compact and portable power solution designed for various applications, including home backup and outdoor activities. It delivers a starting wattage of 2500W and a rated wattage of 1900W, providing reliable power for essential devices. Engineered for efficiency, it offers an impressive runtime of 5.5 hours at 50% load from its 1.06-gallon fuel tank. Key features include a built-in CO alarm for enhanced safety and quiet operation at 69dB from 23 feet away, minimizing noise disturbance.



Figure 1: Overview of the PowerSmart HB5020C Inverter Generator, showcasing its compact design and red and black casing.

Safety Information

WARNING: Carbon Monoxide (CO) Hazard. Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell. NEVER use inside a home or garage, EVEN IF doors and windows are open. ONLY use OUTSIDE and far away from windows, doors, and vents.

- Always operate the generator in a well-ventilated outdoor area.
- Ensure the CO alarm is functioning correctly. The HB5020C features a built-in CO sensor that will shut down the generator if carbon monoxide levels become unsafe.
- Do not operate the generator in wet weather or in wet conditions.
- Allow the engine to cool for at least 2 minutes before refueling. Gasoline is flammable.

CO
SENSOR

CARBON MONOXIDE DETECTION AUTO SHUT OFF



CO Sensor technology will shut down the generator before carbon monoxide reaches harmful levels in the area where the generator is operating.

Figure 2: The CO Sensor technology integrated into the PowerSmart HB5020C, designed to automatically shut down the generator if carbon monoxide reaches harmful levels.

Setup

Before first use, the generator requires initial setup, including adding engine oil and fuel.

1. Add Engine Oil:

- Locate the oil fill cap and drain plug. For initial setup, you may need to remove a side panel (secured by screws) to access the oil reservoir and air filter.
- Add the recommended engine oil (refer to the full manual for oil type and capacity) until it reaches the proper level on the dipstick. Do not overfill.

2. Add Fuel:

- Ensure the generator is turned OFF and has cooled down.
- Unscrew the fuel cap and carefully pour fresh, unleaded gasoline into the fuel tank. The tank capacity is 1.06

gallons.

- Securely replace the fuel cap.



Figure 3: The control panel of the generator, showing various outlets and indicators. This panel is accessed after initial setup.

Operating Instructions

Follow these steps to operate your PowerSmart HB5020C Inverter Generator.

1. Starting the Generator:

- Ensure the generator is on a level surface and in a well-ventilated outdoor area.
- Turn the engine switch to the "ON" position.
- If starting a cold engine, move the choke lever to the "CHOKE" position. For a warm engine, leave it in the "RUN" position.
- Pull the recoil starter handle firmly until the engine starts.

- Once the engine starts, gradually move the choke lever to the "RUN" position.

2. Eco Mode:

- The generator features an ECO mode switch. When activated, this mode automatically adjusts engine speed to match the load, improving fuel efficiency and reducing noise levels during light loads.
- Switch ECO mode "ON" for quieter operation and better fuel economy when powering smaller devices. Switch "OFF" for full power output.

3. Connecting Devices:

- The control panel includes two 120V AC outlets, two USB-A ports (5V DC, 1A/2.1A), and a 12V DC outlet.
- Plug your electrical devices into the appropriate outlets. Ensure the total wattage of connected devices does not exceed the generator's rated wattage (1900W).
- The generator also has a parallel connection terminal, allowing you to connect two compatible PowerSmart inverter generators for increased power output (parallel kit sold separately).

4. Stopping the Generator:

- Disconnect all electrical devices from the generator.
- Turn the engine switch to the "OFF" position.
- Turn the fuel tank vent knob to "OFF" (if applicable, refer to full manual).

2500W INVERTER GENERATOR

PEAK

2500

RATED

1900

**HALF LOAD
RUN TIME**

**5.5
HOURS**

OUTLETS



(2) USB



Figure 4: Key performance specifications of the generator, including peak and rated wattage, half-load run time, and number of outlets.



Figure 5: Illustration of two PowerSmart generators connected for parallel operation, doubling the available power.

Maintenance

Regular maintenance ensures optimal performance and longevity of your generator.

- **Check Engine Oil:** Regularly check the engine oil level before each use and top up as needed. Change the oil according to the schedule in the full user manual.
- **Clean Air Filter:** Inspect and clean the air filter periodically. A dirty air filter can reduce engine performance and increase fuel consumption.
- **Spark Plug:** Inspect and clean the spark plug as recommended. Replace if necessary.
- **Fuel System:** For long-term storage, drain the fuel tank and carburetor to prevent fuel degradation issues.
- **General Cleaning:** Keep the generator clean and free of debris. Ensure cooling vents are not obstructed.

Troubleshooting

If you encounter issues with your generator, consider the following common troubleshooting steps:

- **Engine Does Not Start:**

- Check fuel level.
- Ensure engine switch is in "ON" position.
- Verify choke position (use "CHOKE" for cold starts).
- Check engine oil level (low oil shutdown feature).
- Inspect spark plug.

- **No Power Output:**

- Check for tripped circuit breakers or overload indicators on the control panel. Press the reset button if tripped.
- Ensure devices are properly plugged in.
- Verify the generator is running at proper RPM (check ECO mode setting).

- **Engine Runs Poorly:**

- Check for stale fuel.
- Inspect air filter for clogging.
- Ensure proper ventilation.

For more detailed troubleshooting, please refer to the complete user manual provided with your generator.

Specifications

Feature	Detail
Brand	PowerSmart
Model Name	HB5020C
Starting Wattage	2500 Watts
Running Wattage	1900 Watts
Fuel Type	Gasoline
Tank Volume	1.06 Imperial Gallons
Runtime (50% Load)	5.5 hours
Noise Level	69dB (from 23 feet)
Special Features	Super Quiet, Lightweight, Low Oil Shutdown, Fuel Efficient, CO Sensor
Product Dimensions	12"L x 20"W x 20"H
Item Weight	44.2 pounds
Total Power Outlets	2 x 120V AC, 2 x USB-A, 1 x 12V DC

Warranty and Support

For information regarding product warranty, technical support, or replacement parts, please refer to the official PowerSmart website or the complete user manual included with your purchase. Keep your proof of purchase for warranty

claims.

You can also visit the [PowerSmart Store on Amazon](#) for additional product information and support resources.

