PowerSmart PS5046CE

PowerSmart 4800-Watt Portable Inverter Generator (Model PS5046CE) User Manual

Brand: PowerSmart | Model: PS5046CE

1. Introduction and Overview

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your PowerSmart 4800-Watt Portable Inverter Generator, Model PS5046CE. This generator is designed to provide clean, stable power for various applications, including residential backup, camping, and tailgating events.
Key features include:

- **Power Output:** 4800 starting watts and 3800 running watts of clean power (less than 3% THD).
- **Run Time:** Approximately 10 hours at 50% load.
- **Portability:** Equipped with a wheel and handle kit for easy transportation, weighing approximately 85 lbs.
- **Quiet Operation:** Operates at 59 dBA from 23 feet at 25% load, and 70 dBA from 23 feet at full load.
- **Output Panel:** Features four 120V 20 Amp receptacles, one 120V 30 Amp receptacle, one 12V DC Outlet, and two 5V USB ports.
- **Safety Features:** Includes Eco Mode, Low Oil Shutdown, Overload Reset, and Carbon Monoxide Auto Shutdown.
- **Starting System:** Electric Start for convenient operation.
- **Parallel Capable:** Allows connection of two inverter generators for increased power output.



Figure 1: Generator Control Panel and Power Specifications. This image highlights the 4800 starting watts, 3800 running watts, and the various outlets including AC 120V (x5), DC 12V (x1), and USB (x2).



Figure 2: Easy Transport. The generator features a wheel and handle kit for convenient mobility.

2. Safety Information

Always read and understand this manual before operating the generator. Failure to follow safety instructions can result in serious injury or death.

- **Carbon Monoxide Hazard:** Generators produce carbon monoxide, a colorless, odorless, poisonous gas. Operate the generator outdoors only, far away from windows, doors, and vents. Never operate indoors, in a garage, or in any enclosed space.
- **Electrical Shock Hazard:** Do not operate the generator in wet conditions. Ensure all electrical connections are dry and properly grounded. Use a ground fault circuit interrupter (GFCI) when operating in damp or wet locations.
- **Fire Hazard:** Gasoline is highly flammable. Refuel in a well-ventilated area with the engine off and cool. Do not smoke or allow open flames near the generator. Store fuel in an approved container away from heat sources.
- **Hot Surfaces:** The generator's engine and muffler become very hot during operation and remain hot for some time after shutdown. Avoid contact with hot surfaces to prevent burns.

- **Hearing Protection:** Wear appropriate hearing protection when operating the generator for extended periods to prevent hearing damage.
- **Children and Pets:** Keep children and pets away from the generator at all times.

3. Setup

Before first use, perform the following setup steps:

1. **Add Engine Oil:** Remove the oil fill cap/dipstick. Add the recommended amount and type of engine oil (refer to specifications for details). Do not overfill.
2. **Add Fuel:** Ensure the generator is on a level surface. Open the fuel cap and carefully pour fresh, unleaded gasoline into the fuel tank. Do not overfill. Securely close the fuel cap.
3. **Connect Battery (Electric Start Models):** For electric start models, connect the battery cables as instructed.



Figure 3: Electric Start Setup Guide. Follow these steps to connect the battery for electric starting.

4. **Positioning:** Place the generator on a firm, level surface outdoors, at least 20 feet away from any buildings,

vehicles, or other combustible materials. Ensure adequate ventilation.

4. Operating Instructions

4.1 Starting the Generator

1. Ensure all electrical devices are disconnected from the generator.
2. Turn the fuel valve to the "ON" position.
3. Move the choke lever to the "CHOKE" position (if the engine is cold).
4. **For Electric Start:** Press and hold the electric start button until the engine starts. Release the button once the engine is running.
5. **For Recoil Start:** Pull the recoil starter handle firmly and smoothly until the engine starts.
6. Once the engine starts, gradually move the choke lever to the "RUN" position.
7. Allow the engine to warm up for a few minutes before connecting electrical loads.

4.2 Connecting Electrical Loads

- Connect appliances or tools to the appropriate outlets. Do not exceed the generator's rated wattage.
- For sensitive electronics, ensure the generator is operating in Eco Mode (if available and desired) for stable power.

4.3 Eco Mode Operation

The Eco Mode switch allows the engine speed to automatically adjust to the load, improving fuel efficiency and reducing noise when less power is required. Flip the Eco Mode switch to "ON" for this feature.



Figure 4: Quiet and Reliable Operation. The generator is designed for low noise output, making it suitable for various outdoor activities.

4.4 Parallel Operation

This generator is parallel capable, allowing you to connect two identical PowerSmart inverter generators to double the power output. Refer to the parallel kit instructions for detailed connection procedures.



Figure 5: Parallel Capable. Connect two inverter generators for twice the power output.

4.5 Stopping the Generator

1. Disconnect all electrical loads from the generator.
2. Turn the engine switch to the "OFF" position.
3. Turn the fuel valve to the "OFF" position.

5. Maintenance

Regular maintenance ensures optimal performance and extends the life of your generator. Always perform maintenance with the engine off and cool.

- **Engine Oil:** Check oil level before each use. Change oil after the first 20 hours of operation, then every 50-100 hours or annually.
- **Air Filter:** Inspect the air filter every 50 hours or monthly. Clean or replace if dirty.
- **Spark Plug:** Inspect the spark plug every 100 hours or annually. Clean or replace as needed.

- **Fuel Filter:** Inspect and replace the fuel filter as necessary.
- **Storage:** For long-term storage, drain the fuel tank and carburetor, or use a fuel stabilizer. Store in a clean, dry area.

6. Troubleshooting

Problem	Possible Cause	Solution
Engine will not start	No fuel, low oil, choke incorrect, spark plug issue, battery disconnected (electric start)	Add fuel, add oil, adjust choke, check/replace spark plug, connect battery.
Low power output	Overload, Eco Mode engaged with high load, dirty air filter	Reduce load, turn off Eco Mode, clean/replace air filter.
Engine runs rough	Stale fuel, dirty air filter, spark plug issue	Use fresh fuel, clean/replace air filter, check/replace spark plug.
No electrical output	Circuit breaker tripped, overload, loose connections	Reset circuit breaker, reduce load, check all connections.

7. Specifications

- **Brand:** PowerSmart
- **Model Number:** PS5046CE
- **Starting Wattage:** 4800 Watts
- **Running Wattage:** 3800 Watts
- **Fuel Type:** Gasoline
- **Engine Type:** 4 Stroke
- **Ignition System:** Electric Start
- **Voltage:** 120 Volts
- **Current Rating:** 30 Amps
- **Tank Volume:** 1.9 Gallons
- **Item Weight:** 85 Pounds
- **Product Dimensions:** 25.4"L x 17.8"W x 23.5"H
- **Sound Level:** 59 dBA (at 25% load, 23 ft)
- **Special Features:** Portable, Super Quiet, CO Protect, Parallel Capable
- **Included Components:** Wrench
- **Manufacturer:** Amerisun Inc.
- **UPC:** 840432701218



Figure 6: Generator Dimensions. This diagram provides the length, width, height, and weight of the unit.

8. Warranty and Support

Your PowerSmart generator comes with a**2-Year Warranty**. For warranty claims, technical assistance, or to locate a certified repair center, please contact Amerisun Inc. headquarters in Itasca, Illinois. PowerSmart has over 500 certified repair centers in the U.S. and provides full replacement parts through its IL headquarters.
For any issues, please contact PowerSmart customer support.

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