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› PowerSmart 21-Inch Gas Lawn Mower User Manual

PowerSmart B8721S2

PowerSmart 21-Inch Gas Lawn Mower User Manual

Model: B8721S2

Brand: PowerSmart

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, assembly, maintenance, and troubleshooting of your PowerSmart 21-Inch Gas Lawn Mower. This self-propelled mower features a 140CC B&S EX550 engine, a durable steel deck, and 3-in-1 functionality for bagging, mulching, and rear discharge. Please read this manual thoroughly before operating the machine.



Image 1.1: The PowerSmart 21-Inch Gas Lawn Mower, showcasing its design and a bottle of motor oil for initial setup.

2. SAFETY INFORMATION

Always prioritize safety when operating the lawn mower. Failure to follow these instructions may result in serious injury or property damage.

- Read the entire manual before operation.
- Wear appropriate personal protective equipment (PPE), including eye protection, hearing protection, and sturdy footwear.
- Keep hands and feet away from rotating parts.
- Do not operate the mower in wet grass or rain.
- Ensure the area is clear of debris, children, and pets before starting.
- Refuel in a well-ventilated area with the engine off and cool.
- Never leave a running mower unattended.

3. ASSEMBLY AND SETUP

Your PowerSmart lawn mower is designed for straightforward assembly. Follow these steps for initial setup:

1. **Handle Assembly:** Attach the upper handle to the lower handle, ensuring all bolts are securely tightened.
2. **Grass Bag Assembly:** Assemble the grass collection bag according to the instructions provided.
3. **Add Engine Oil:** Before first use, add the recommended engine oil (SAE 30 or 10W-30) to the engine crankcase. Do not overfill.
4. **Add Fuel:** Fill the fuel tank with fresh, unleaded gasoline. Do not use E85 or E15 fuel.
5. **Check Connections:** Ensure all cables and connections are secure.



Image 3.1: Detail of the Briggs & Stratton engine, highlighting its robust construction and the 'Engine Made in the USA' emblem.

4. OPERATION

Operating your PowerSmart lawn mower is efficient and straightforward:

- **Starting the Engine:** Ensure the spark plug wire is connected. Prime the engine if necessary (refer to engine manual). Hold the operator presence control bar against the handle and pull the starter rope firmly. The B&S engine is designed for smooth start-up.

- **Adjusting Cutting Height:** The mower features a 6-position height adjustment lever, allowing you to set the cutting height from 1.5 inches to 3.9 inches. Adjust the height to suit your lawn conditions and desired grass length.
- **3-in-1 Functionality:**
 - **Bagging:** Attach the grass collection bag to collect clippings. The 1.4-bushel bag efficiently gathers cut grass. Empty the bag regularly to maintain performance and prevent it from detaching.
 - **Mulching:** Insert the mulching plug (if applicable) to finely cut and redistribute grass clippings back onto the lawn as natural fertilizer.
 - **Rear Discharge:** Remove the grass bag and mulching plug for direct rear discharge of clippings.
- **Self-Propelled Drive:** Engage the self-propelled lever to activate the rear-wheel drive system. The 10-inch large rear wheels provide excellent traction and maneuverability, especially on slopes or uneven terrain.



Mulching



Rear Discharge



Rear Bagging

Image 4.1: Visual representation of the mower's versatile 3-in-1 capabilities: mulching, rear discharge, and rear bagging.



Image 4.2: A visual guide to the 6-position cutting height adjustment, ranging from 1.5 inches to 3.9 inches.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your lawn mower:

- **Engine Oil:** Check oil level before each use. Change engine oil after the first 5 hours of operation, then every 25 hours or annually.
- **Air Filter:** Clean or replace the air filter regularly, especially in dusty conditions.
- **Spark Plug:** Inspect and clean the spark plug annually. Replace if necessary.
- **Blade Maintenance:** Inspect the cutting blade for sharpness and damage before each use. Sharpen or replace the blade as needed. A dull blade can lead to an uneven cut.
- **Deck Cleaning:** Clean the underside of the mower deck after each use to prevent grass buildup, which can affect cutting performance and lead to rust. The robust steel deck is designed for durability.
- **Storage:** For long-term storage, drain the fuel tank or use a fuel stabilizer. Clean the mower thoroughly and store in

a dry, protected area.

Strong Steel Deck Construction



Image 5.1: View of the mower's underside, emphasizing the strong steel deck construction and the cutting blade.

Large Capacity Grass Bag

From 1.5 to 3.9 inchesFrom 1.5 to 3.9 inches



Image 5.2: A user demonstrating the emptying of the large capacity grass bag, an essential part of routine maintenance.

6. TROUBLESHOOTING

Refer to this section for common issues and their solutions:

Problem	Possible Cause	Solution
Engine does not start	No fuel, stale fuel, loose spark plug wire, clogged air filter, low oil.	Add fresh fuel, check spark plug connection, clean/replace air filter, add oil.
Uneven cut	Dull or bent blade, incorrect cutting height, uneven terrain.	Sharpen or replace blade, adjust cutting height, mow on level ground.

Problem	Possible Cause	Solution
Self-propelled feature not working or slow	Drive belt issue, cable adjustment, worn drive components.	Inspect drive belt and connections. If issues persist, contact customer support.
Pull cord detaches from handle	Improper re-attachment or wear.	Re-attach the pull cord securely to the handle. Ensure the operator presence control bar is depressed when pulling.

7. SPECIFICATIONS

Key technical specifications for your PowerSmart lawn mower:

Specification	Detail
Brand	PowerSmart
Model Number	B8721S2
Power Source	Gas Powered
Engine	140CC B&S EX550
Material	Alloy Steel (Deck)
Cutting Width	21 Inches
Cutting Height Positions	6
Minimum Cutting Height	1.5 Inches
Maximum Cutting Height	3.9 Inches
Operation Mode	Self-Propelled
Product Dimensions (DxWxH)	32.9"D x 16.5"W x 22.6"H
Item Weight	69.9 pounds
UPC	840432709832

8. WARRANTY AND SUPPORT

PowerSmart is committed to providing reliable products and excellent customer service. For warranty information and support, please refer to the following:

- **Product Protection Plans:** Extended protection plans are available for purchase to cover your investment beyond the standard warranty. Options include 2-Year and 3-Year Protection Plans.
- **Customer Support:** For any questions, technical assistance, or warranty claims, please contact PowerSmart customer support.
- **Email Support:** You can reach our expert team for professional assistance by emailing support2@powersmartusa.com. Our team aims to provide assistance within 24 hours.



Our expert team will provide professional assistance for your needs within 24 hours

✉ support2@powersmartusa.com

Image 8.1: The PowerSmart customer support team, ready to provide assistance.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

Which Craftsman mower blade is compatible with the PowerSmart 21-inch self-propelled lawn mower (Model B8721S2)?

The official documentation for the PowerSmart B8721S2 does not list specific cross-compatibility with Craftsman-

branded blades. To ensure a safe and proper fit, it is recommended to use an OEM (Original Equipment Manufacturer) replacement blade...

[Read full answer](#)