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› PowerSmart 21-inch Gas Lawn Mower with 140cc Briggs and Stratton E550 Engine User Manual

PowerSmart B8621P

PowerSmart 21-inch Gas Lawn Mower User Manual

Model: B8621P with 140cc Briggs and Stratton E550 Engine

1. INTRODUCTION

Thank you for choosing the PowerSmart 21-inch Gas Lawn Mower. This manual provides essential information for the safe operation, assembly, maintenance, and troubleshooting of your lawn mower. Please read this manual thoroughly before operating the machine and keep it for future reference.

This lawn mower is designed for residential use to cut grass in outdoor areas. It features a 140cc Briggs and Stratton E550 engine and offers 3-in-1 cutting capabilities: mulching, bagging, and side-discharge.

2. SAFETY INFORMATION

Always prioritize safety when operating power equipment. Failure to follow safety instructions can result in serious injury or property damage.

General Safety Rules

- Read and understand all instructions in this manual before operating the lawn mower.
- Wear appropriate personal protective equipment (PPE), including eye protection, hearing protection, sturdy footwear, and long pants.
- Keep children, pets, and bystanders at a safe distance (at least 75 feet) from the operating area.
- Never operate the mower when tired, ill, or under the influence of alcohol or drugs.
- Inspect the area to be mowed and remove any objects that could be thrown by the blade, such as rocks, toys, or wires.
- Do not operate the mower in wet grass, as this can cause slipping and loss of control.
- Always turn off the engine and disconnect the spark plug wire before performing any adjustments, cleaning, or maintenance.
- Refuel in a well-ventilated area with the engine off and cool. Do not smoke while refueling.

Slope Operation Safety

- Mow across the face of slopes, not up and down.
- Exercise extreme caution when changing direction on slopes.
- Do not mow excessively steep slopes.
- Avoid starting or stopping on a slope.

3. SETUP AND ASSEMBLY

The PowerSmart 21-inch Gas Lawn Mower is designed for easy assembly. It comes mostly pre-assembled, requiring minimal setup before first use.

Unpacking and Handle Assembly

1. Carefully remove the mower from its packaging.
2. Unfold the handle assembly. Secure the lower handle to the mower deck using the provided knobs and bolts.
3. Attach the upper handle to the lower handle, ensuring all cables are routed correctly and not pinched.



Figure 3.1: Annotated diagram showing key features and assembly points of the PowerSmart lawn mower, including the engine start/stop control, quick unfold design, recoil start, side discharge, 140cc 4-stroke engine, 3-in-1 cutting deck, and 6-position height adjustment.

Adding Engine Oil and Fuel

- The mower comes with engine oil. Add the entire bottle of 10W-30 oil to the engine crankcase. Do not overfill.
- Fill the fuel tank with fresh, unleaded gasoline (minimum 87 octane). Do not use E85 or other ethanol blends exceeding 10%.

KEEP IT RUNNING

B8621P



Figure 3.2: A detailed diagram illustrating various components of the PowerSmart lawn mower, including the foldable handle, grass collector, rear wheel, cable clip, side discharge chute, 10W30 oil, 21-inch blade, and front wheel, along with their respective part numbers for maintenance and replacement.

4. OPERATING INSTRUCTIONS

Starting the Engine

1. Ensure the fuel tank is filled and engine oil is at the correct level.
2. Press the primer bulb 3-5 times (if equipped) until fuel is visible in the bulb.
3. Firmly grasp the recoil start handle and pull it quickly and smoothly until the engine starts.



Figure 4.1: Close-up view of the Briggs & Stratton E550 engine, highlighting the 'Prime 'N Pull' easy start system for reliable engine ignition.

Adjusting Cutting Height

The mower features a double-lever, 6-position height adjustment system, allowing you to change cutting heights from 1.5 inches to 3.9 inches.

1. Turn off the engine and wait for the blade to stop completely.
2. Locate the height adjustment levers near the wheels.
3. Pull each lever outwards and move it to the desired height setting. Ensure both sides are set to the same height.



Figure 4.2: A detailed view of the adjustable cutting height mechanism, showing the lever and notched settings for precise control over grass length.

3-in-1 Cutting Functions

Your PowerSmart mower offers three cutting options:

- **Mulching:** The mower finely cuts grass clippings and redistributes them back onto the lawn as natural fertilizer. Ensure the

side discharge chute and rear bag are removed, and the mulching plug (if applicable) is inserted.

- **Rear Bagging:** Collects grass clippings in the attached rear bag for easy disposal. Attach the grass collector bag securely to the rear of the mower.
- **Side-Discharge:** Disperses grass clippings out of the side of the mower. Attach the side discharge chute to the mower deck.



3-IN-1 CUTTING FEATURE

MULCH, BAGGING, DISCHARGE

Figure 4.3: An overhead perspective of the lawn mower, illustrating its versatile 3-in-1 cutting capabilities, including mulching, bagging, and side-discharge, adaptable to various lawn care needs.

5. MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your lawn mower. Always disconnect the spark plug wire before performing any maintenance.

Engine Oil Check and Change

- Check engine oil level before each use. Add oil if necessary, ensuring it does not exceed the 'Full' mark on the dipstick.

- Change engine oil after the first 5 hours of operation, then every 25 hours or annually, whichever comes first.

Air Filter Cleaning

- Inspect the air filter every 25 hours or more frequently in dusty conditions.
- Clean or replace the air filter as needed to ensure proper engine performance.

Spark Plug Inspection

- Inspect the spark plug annually or every 50 hours. Clean or replace if electrodes are fouled or worn.

Blade Maintenance

- Regularly inspect the cutting blade for sharpness and damage. A dull blade tears grass, leading to an unhealthy lawn.
- Sharpen or replace the blade as necessary. Always use genuine PowerSmart replacement parts.



Figure 5.1: Underside view of the lawn mower, showcasing the durable 21-inch steel cutting deck and the sharp blade, essential for effective grass cutting.

Cleaning and Storage

- Clean the mower deck after each use to prevent grass buildup, which can affect performance and cause rust.
- For storage, especially during off-season, ensure the fuel tank is empty or treated with a fuel stabilizer. Store in a dry, protected area.
- The foldable handle design allows for compact storage.



Figure 5.2: The PowerSmart lawn mower shown in its folded configuration, demonstrating the space-saving design for convenient storage in garages or sheds.

6. TROUBLESHOOTING

This section provides solutions to common operational issues. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Engine will not start	No fuel; old fuel; spark plug issue; engine oil level incorrect	Add fresh fuel; replace old fuel; check/replace spark plug; verify oil level

Problem	Possible Cause	Solution
Engine runs poorly	Dirty air filter; old fuel; spark plug issue	Clean/replace air filter; replace fuel; check/replace spark plug
Mower leaves uneven cut	Dull blade; incorrect cutting height setting; wheels not aligned	Sharpen/replace blade; ensure height levers are set equally; check wheel alignment
Excessive vibration	Bent blade; loose components; engine issue	Inspect blade for damage; tighten all fasteners; consult service center
Mower smokes	Overfilled oil; wrong oil type; engine tilted improperly	Check oil level and drain excess; use recommended oil; keep mower level during operation

7. SPECIFICATIONS

Key technical specifications for the PowerSmart 21-inch Gas Lawn Mower, Model B8621P.

Feature	Specification
Brand	PowerSmart
Model	B8621P
Engine	140cc Briggs and Stratton E550
Power Source	Gasoline-Powered
Cutting Width	21 Inches
Cutting Height Adjustment	6 Positions (1.5 in. to 3.9 in.)
Cutting Functions	3-in-1 (Mulch, Rear Bagging, Side-Discharge)
Material	Iron Deck
Item Weight	62 Pounds
Product Dimensions	59.8"D x 22.8"W x 38.4"H
UPC	840432701157

8. WARRANTY AND SUPPORT

PowerSmart products are backed by a manufacturer's warranty. For specific warranty details, please refer to the warranty card included with your product or visit the official PowerSmart website. Keep your proof of purchase for warranty claims.

Customer Support

For technical assistance, replacement parts, or service inquiries, please contact PowerSmart customer support. You can find contact information on the PowerSmart website or in your product packaging. PowerSmart has over 500 certified repair centers in the U.S. and provides full replacement parts through its IL headquarters.

Online Support: Visit the [PowerSmart Store on Amazon](#) for FAQs and product information.

ASK A QUESTION ABOUT THIS MANUAL

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