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PowerSmart DB2321SR

PowerSmart DB2321SR 21-Inch Self-Propelled Gas Lawn Mower Instruction Manual

Model: **DB2321SR** | Brand: **PowerSmart**

1. SAFETY INFORMATION

Read and understand all safety warnings and instructions before operating this lawn mower. Failure to follow these instructions may result in serious injury or death.

General Safety Rules:

- Always wear appropriate personal protective equipment, including eye protection, hearing protection, and sturdy footwear.
- Keep children, pets, and bystanders at a safe distance from the mowing area.
- Never operate the mower when barefoot or wearing open sandals.
- 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 maintenance, cleaning, or clearing blockages.

Fuel Safety:

- Store fuel in an approved container in a cool, well-ventilated area, away from sparks or open flames.
- Never refuel the engine while it is running or hot. Allow the engine to cool before adding fuel.
- Do not smoke while handling fuel.
- Wipe up any spilled fuel immediately.

2. PRODUCT OVERVIEW

The PowerSmart DB2321SR is a 21-inch self-propelled gas lawn mower designed for efficient lawn care. It features a powerful 170cc engine and a versatile 3-in-1 cutting deck.



Figure 2.1: Front view of the PowerSmart DB2321SR lawn mower.

Key Features:

- **Powerful 170cc 4-Cycle OHV Engine:** Equipped with a recoil start for easy starting.
- **21-Inch Cutting Width:** Ideal for medium to large yards.
- **Self-Propelled Rear-Wheel Drive:** Reduces effort, especially on varied terrain and inclines.
- **3-in-1 Versatility:** Offers mulching, bagging, and side discharge capabilities.
- **Dual-Lever 5-Position Height Adjustment:** Easily adjust cutting height from 1.2 to 3 inches.

3. SETUP AND ASSEMBLY

Follow these steps for initial setup and assembly of your lawn mower.

3.1 Handle Assembly:

1. Unfold the upper and lower handles. Ensure the cables are not pinched.

2. Secure the handle sections using the provided knobs and bolts.

3.2 Grass Bag Attachment:

1. Lift the rear discharge flap.
2. Hook the grass bag onto the mower chassis. Ensure it is securely seated.



Figure 3.1: Side view of the mower with the grass bag attached.

3.3 Adding Oil and Fuel:

- Before first use, add the recommended engine oil to the crankcase. Refer to the engine manual for oil type and capacity.
- Fill the fuel tank with fresh, unleaded gasoline. Do not overfill.



POWERFUL GAS ENGINE

170cc/4-Cycle/OHV, easy pull starter

Figure 3.2: Close-up view of the 170cc 4-cycle OHV engine.

4. OPERATING INSTRUCTIONS

Proper operation ensures efficient mowing and extends the life of your lawn mower.

4.1 Starting the Engine:

1. Ensure the fuel tank is filled and the oil level is correct.
2. Push the primer bulb 3-5 times (if equipped) until fuel is visible.
3. Hold the engine brake lever against the handle.
4. Pull the starter rope with a brisk, continuous motion until the engine starts.

4.2 Engaging Self-Propel:

To engage the self-propel function, squeeze the drive control lever towards the handle. Release the lever to disengage the drive.

SELF-PROPELLED MOW MORE WITH LESS EFFORT



Figure 4.1: The self-propelled feature reduces effort during mowing.

4.3 Adjusting Cutting Height:

The mower features a dual-lever height adjustment system. To change the cutting height:

1. Ensure the engine is off and the blade has stopped.
2. Locate the height adjustment levers near the wheels.
3. Pull each lever outwards and move it to the desired height setting. Ensure all wheels are set to the same height.

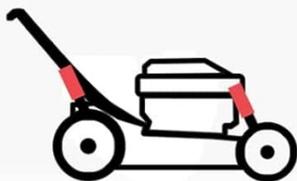


Figure 4.2: The dual-lever system allows for 5 cutting height positions, from 1.2 to 3.0 inches.

4.4 Mowing Techniques (3-in-1 Deck):

Your mower offers three cutting options:

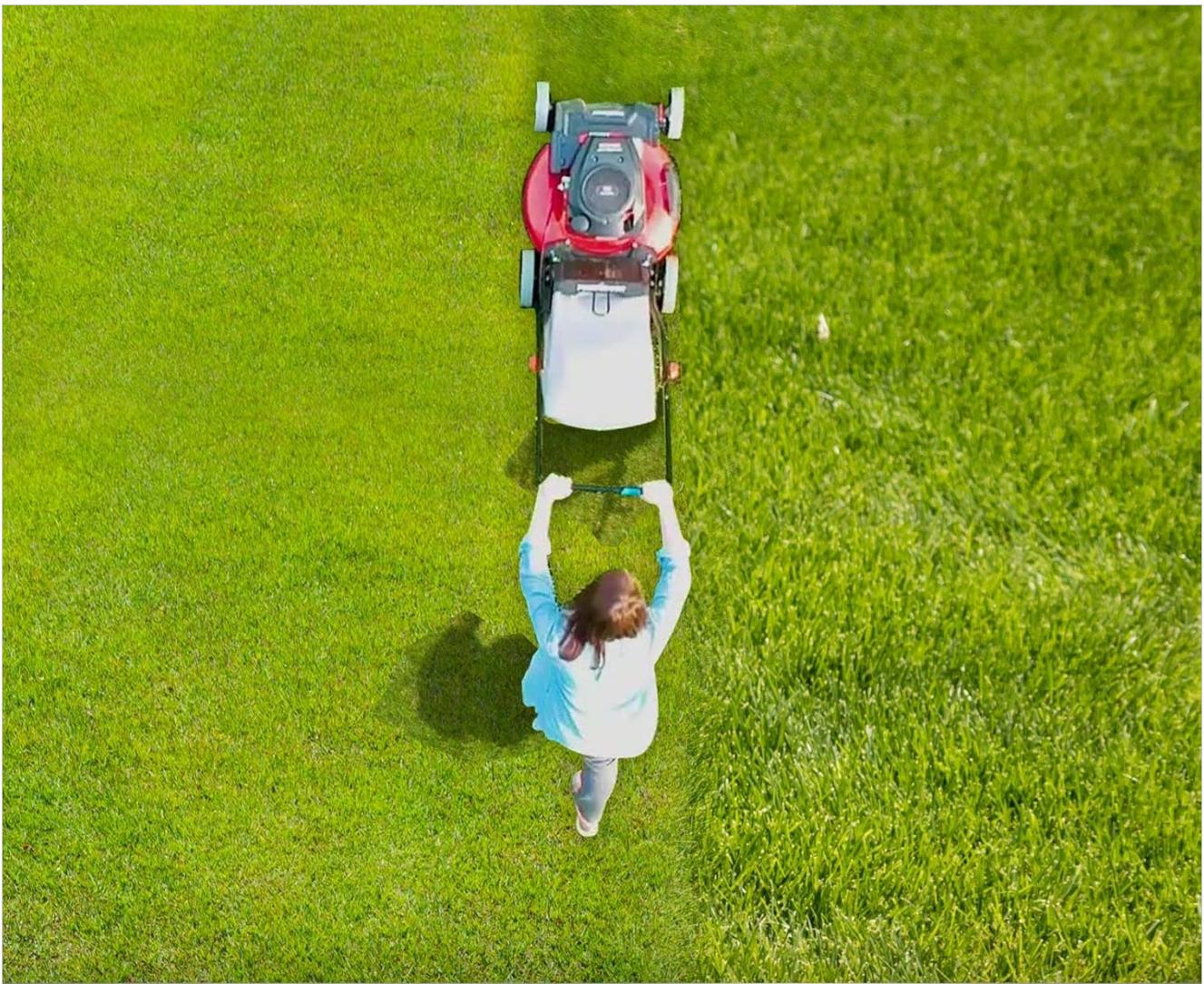
- **Mulching:** For finely cut grass clippings that return nutrients to the lawn. Ensure the side discharge chute and grass bag are removed, and the mulching plug (if included) is installed.
- **Bagging:** For collecting grass clippings. Attach the grass bag securely.
- **Side Discharge:** For discharging clippings out the side. Attach the side discharge chute.



3-IN-1 CUTTING DECK

Side discharge, mulching and rear bag

Figure 4.3: The 3-in-1 cutting deck provides options for mulching, bagging, or side discharge.



21 INCH CUTTING DECK

Trimming your lawn fast

Figure 4.4: The 21-inch cutting deck allows for efficient trimming of your lawn.

5. MAINTENANCE

Regular maintenance is crucial for the longevity and optimal performance of your lawn mower.

5.1 General Cleaning:

- After each use, clean the underside of the mower deck to prevent grass buildup.
- Wipe down the engine and exterior surfaces.

5.2 Blade Maintenance:

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

5.3 Engine Maintenance:

- **Oil Change:** Change the 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.

5.4 Storage:

- For long-term storage, drain the fuel tank or add a fuel stabilizer.
- Clean the mower thoroughly and store it in a dry, protected area.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your lawn mower.

Problem	Possible Cause	Solution
Engine will not start	No fuel, stale fuel, clogged fuel filter, faulty spark plug, engine brake not engaged.	Check fuel level, replace stale fuel, clean/replace filter, inspect/replace spark plug, ensure engine brake is held.
Engine runs poorly or stalls	Clogged air filter, dirty spark plug, carburetor issues, low oil.	Clean/replace air filter, clean/replace spark plug, consult service center for carburetor, check oil level.
Mower not self-propelling	Drive belt loose or broken, drive cable not engaged, wheel assembly damaged.	Inspect drive belt and cable, ensure drive lever is fully engaged, check wheel assembly for damage.
Uneven cut	Dull or bent blade, wheels set to different heights, uneven terrain.	Sharpen or replace blade, ensure all wheels are at the same height, adjust mowing pattern for terrain.
Excessive vibration	Bent or unbalanced blade, loose engine bolts.	Inspect and replace blade if bent, tighten engine mounting bolts.

7. SPECIFICATIONS

Key technical specifications for the PowerSmart DB2321SR lawn mower.

Feature	Specification
Brand	PowerSmart
Model Number	DB2321SR
Engine Type	170cc 4-Cycle OHV Gas Engine
Cutting Width	21 Inches
Cutting Height Adjustment	Dual-lever, 5 positions (1.2 to 3 inches)
Drive System	Self-Propelled, Rear-Wheel Drive
Deck Material	Steel

Feature	Specification
Discharge Options	Mulch, Bag, Side Discharge
Product Dimensions	63.3"D x 23.1"W x 18.6"H
Item Weight	67 pounds
Assembly Required	Yes

8. WARRANTY AND SUPPORT

PowerSmart provides a **3-year limited warranty** for the DB2321SR lawn mower, covering defects in materials and workmanship under normal use.

For technical assistance, replacement parts, or warranty claims, please contact PowerSmart customer service. PowerSmart, an Amerisun Inc. brand, maintains over 500 certified repair centers across the U.S. and provides full replacement parts through its Illinois headquarters.

For more information, visit the [PowerSmart Store](#) or contact their support team directly.