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› PowerSmart 21-Inch 144cc Gas Powered Walk-Behind Push Lawn Mower Instruction Manual

PowerSmart PRT-LAWN MOWER

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Model: PRT-LAWN MOWER

1. SAFETY INSTRUCTIONS

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.

1.1 General Safety Rules

- Always keep children and pets at a safe distance from the mowing area.
- Never operate the mower when barefoot or wearing open-toed sandals. Always wear substantial footwear.
- Thoroughly inspect the area where the equipment is to be used and remove all objects which can be thrown by the machine.
- Do not operate the mower in wet grass, as this can cause slipping and loss of control.
- Always be sure of your footing on slopes. Mow across the face of slopes, never up and down.
- Never pull the mower towards you while operating.
- Stop the engine and disconnect the spark plug wire before cleaning, repairing, or inspecting the mower.

1.2 Personal Safety

- Wear appropriate personal protective equipment (PPE), including eye protection, hearing protection, and sturdy gloves.
- Do not operate the mower while under the influence of drugs, alcohol, or medication.
- Stay alert and watch what you are doing. A moment of inattention while operating power tools can result in serious personal injury.

2. PRODUCT OVERVIEW

The PowerSmart 21-Inch 144cc Gas Powered Walk-Behind Push Lawn Mower is designed for efficient lawn care. It features a powerful engine and versatile cutting options.



Figure 2.1: Full view of the PowerSmart 21-inch gas lawn mower.

2.1 Key Features

- **High Efficiency Engine:** Equipped with a high-performance 144cc 4-stroke OHV engine and an auto choke for easy starting, delivering reliable power.
- **3-in-1 Functionality:** Offers bagging, side-discharge, and mulching capabilities for versatile lawn maintenance. The easy-to-empty rear bag collects grass clippings.
- **21-Inch Cutting Width:** A durable steel deck and heavy blade provide a 21-inch cutting width, allowing for efficient mowing.
- **Adjustable Cutting Height:** Dual-lever height adjustment provides 6 cutting positions, ranging from 1.5 inches to 3.9 inches.
- **Easy Storage:** Foldable design reduces storage space by 70%, making it convenient to store and transport.

3. SETUP AND ASSEMBLY

Follow these steps to properly set up your PowerSmart lawn mower before its first use.

KEEP IT RUNNING

DV8621P



Figure 3.1: Exploded diagram showing various parts of the PowerSmart lawn mower, including the grass collector, spark plug, air filter, and wheels.

3.1 Unpacking

1. Carefully remove all components from the packaging.
2. Verify that all parts listed in the packing list are present.
3. Remove any protective materials or shipping restraints.

3.2 Handle Assembly

1. Unfold the lower handle section and secure it into position.
2. Attach the upper handle section to the lower handle using the provided knobs and bolts. Ensure the handle is securely fastened.
3. Route the control cables along the handle and secure them with the cable clips.

3.3 Adding Engine Oil

The engine is shipped without oil. You must add engine oil before starting the mower.

1. Place the mower on a level surface.

2. Remove the oil fill cap/dipstick.
3. Slowly pour the recommended engine oil (10W-30, included) into the oil fill opening until the oil level reaches the full mark on the dipstick. Do not overfill.
4. Replace the oil fill cap/dipstick securely.

3.4 Adding Fuel

Use fresh, unleaded gasoline with an octane rating of 87 or higher. Do not use E85 fuel.

1. Ensure the engine is off and cool.
2. Remove the fuel tank cap.
3. Carefully pour gasoline into the fuel tank, filling it to approximately 1 inch below the top of the tank to allow for expansion.
4. Replace the fuel tank cap securely.

4. OPERATING INSTRUCTIONS

Familiarize yourself with the operating procedures for safe and effective use of your lawn mower.

4.1 Starting the Engine

1. Ensure the fuel tank is filled and engine oil is at the correct level.
2. Push the primer bulb 3-5 times (if equipped) until fuel is visible in the bulb.
3. Grip the starter handle firmly and pull it quickly and smoothly until the engine starts.
4. Allow the engine to warm up for a few moments before beginning to mow.

4.2 Stopping the Engine

To stop the engine, release the engine control bail lever. The engine will shut off automatically.

4.3 Adjusting Cutting Height

The mower features dual-lever height adjustment with 6 positions, from 1.5 inches to 3.9 inches.



Figure 4.1: Close-up of the dual-lever cutting height adjustment mechanism on the PowerSmart lawn mower.

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

4.4 3-in-1 Functionality

Your PowerSmart lawn mower offers three cutting modes: bagging, side discharge, and mulching.



Figure 4.2: A person operating the PowerSmart lawn mower, illustrating its 3-in-1 capabilities (mulch, discharge, rear bag).



DURABLE STEEL DECK

21.5" DECK, 21" BLADE

Figure 4.3: Underside view of the PowerSmart lawn mower's durable steel deck and cutting blade.

4.4.1 Bagging

For collecting grass clippings.

1. Lift the rear discharge door.
2. Hook the grass catcher onto the mower frame. Ensure it is securely in place.

4.4.2 Side Discharge

For discharging clippings to the side.

1. Ensure the grass catcher is removed.
2. Lift the side discharge cover.
3. Slide the side discharge chute into place under the cover.

4.4.3 Mulching

For finely cutting and returning clippings to the lawn.

1. Remove the grass catcher and side discharge chute.
2. Ensure the rear discharge door and side discharge cover are closed.

5. MAINTENANCE

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

5.1 General Maintenance Schedule

Item	Before Each Use	Every 25 Hours / Seasonally	Every 50 Hours / Annually
Engine Oil Level	Check		Change
Air Filter	Check	Clean	Replace
Spark Plug		Inspect/Clean	Replace
Cutting Blade	Inspect	Sharpen/Balance	Replace if damaged
Mower Deck	Clean		

5.2 Cleaning

After each use, clean the mower deck and exterior to prevent grass buildup and corrosion.

- Disconnect the spark plug wire.
- Tilt the mower onto its side (with the carburetor facing up) to access the underside of the deck.
- Scrape off any accumulated grass clippings with a plastic or wooden tool. Do not use metal tools that could damage the blade or deck.
- Clean the exterior with a damp cloth.

5.3 Blade Care

A sharp blade ensures a clean cut and healthy lawn.

- Inspect the blade for sharpness and damage before each use.
- If the blade is dull or nicked, it should be sharpened or replaced. Always ensure the blade is balanced after sharpening.
- When replacing the blade, use only genuine PowerSmart replacement parts.

5.4 Spark Plug

Inspect and clean the spark plug periodically. Replace it annually or if it shows signs of wear.

- Remove the spark plug boot.
- Use a spark plug wrench to remove the spark plug.
- Inspect for carbon buildup or damage. Clean with a wire brush if necessary.
- Check the gap with a feeler gauge and adjust if needed (refer to engine manual for specific gap).
- Reinstall the spark plug and reconnect the boot.

5.5 Air Filter

A clean air filter is essential for proper engine performance.

- Locate and open the air filter cover.

- Remove the foam or paper filter element.
- Clean foam filters with warm, soapy water, rinse, and allow to air dry completely. Lightly oil foam filters before reinstalling.
- Replace paper filters if they are dirty or damaged.
- Reinstall the filter and close the cover.

5.6 Storage

Proper storage protects your mower during off-season periods.



Figure 5.1: The PowerSmart lawn mower with its handle folded for compact storage.

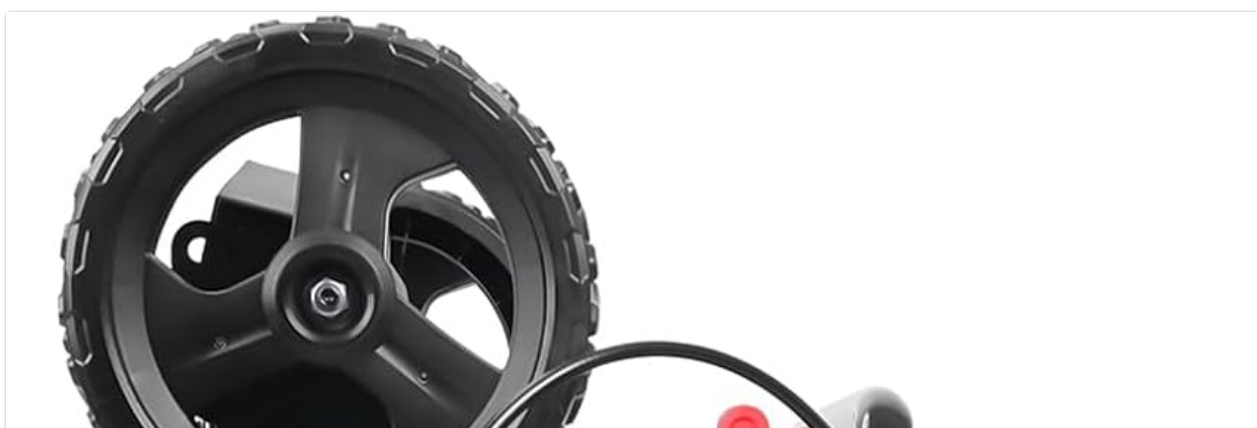




Figure 5.2: The PowerSmart lawn mower stored vertically in a folded position.

1. Clean the entire mower thoroughly.
2. Drain the fuel tank or add a fuel stabilizer. Run the engine until it stops to consume all fuel in the carburetor.
3. Change the engine oil.
4. Remove the spark plug and pour a small amount of engine oil into the cylinder. Slowly pull the starter cord a few times to distribute the oil, then reinstall the spark plug.

5. Store the mower in a clean, dry area, away from direct sunlight and extreme temperatures. The foldable handle allows for compact storage.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your lawn mower.

Problem	Possible Cause	Solution
Engine will not start	No fuel Old or stale fuel Spark plug faulty Engine oil level too low	Add fresh fuel Drain and refill with fresh fuel Clean or replace spark plug Fill engine oil to correct level
Engine runs poorly	Dirty air filter Spark plug fouled Stale fuel	Clean or replace air filter Clean or replace spark plug Drain and refill with fresh fuel
Mower leaves uneven cut	Dull or bent blade Wheels set to different heights	Sharpen or replace blade Ensure all wheels are at the same cutting height
Excessive vibration	Bent or unbalanced blade Loose engine bolts	Inspect and replace/balance blade Check and tighten all engine mounting bolts
Mower smokes	Engine overfilled with oil Mower tilted incorrectly during maintenance	Drain excess oil Ensure correct tilting procedure (carburetor up)

7. TECHNICAL SPECIFICATIONS

Specification	Value
Brand	PowerSmart
Model Number	PRT-LAWN MOWER
Power Source	Gas Powered
Engine Displacement	144cc
Cutting Width	21 Inches
Cutting Height Adjustment	Dual-lever, 6 positions
Minimum Cutting Height	1.5 Inches
Maximum Cutting Height	3.9 Inches
Operation Mode	Manual (Push)
Product Dimensions (DxWxH)	57"D x 22"W x 43"H
Item Weight	62 Pounds
Material	Iron
Color	Red
UPC	840432702369

8. WARRANTY AND CUSTOMER SUPPORT

8.1 Warranty Information

PowerSmart products are designed and manufactured to high-quality standards. For specific warranty details, including coverage period and terms, please refer to the warranty card included with your product or visit the official PowerSmart website. Keep your proof of purchase for warranty claims.

8.2 Contact Support

If you have any questions, require technical assistance, or need to order replacement parts, please contact PowerSmart customer support. Contact information can typically be found in the product packaging, on the official PowerSmart website, or through your retailer.

PowerSmart is headquartered in Itasca, Illinois, and provides support through 500+ certified repair centers in the U.S. and offers full replacement parts through its IL headquarters.