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› PowerSmart Amerisun AV8621S1 21-inch Self-Propelled Gas Lawn Mower User Manual

PowerSmart AV8621S1

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Model: AV8621S1 | Brand: PowerSmart

INTRODUCTION

This manual provides essential information for the safe operation, assembly, maintenance, and troubleshooting of your PowerSmart Amerisun AV8621S1 21-inch Self-Propelled Gas Lawn Mower. Please read and understand all instructions before using the product. Keep this manual for future reference.

SAFETY INSTRUCTIONS

WARNING: Failure to follow these safety instructions can result in serious injury or death.

- Always wear appropriate personal protective equipment, including eye protection, hearing protection, and sturdy footwear, when operating the lawn mower.
- Keep hands and feet away from rotating parts. The blade is sharp and can cause severe injury.
- Ensure the area is clear of other people, especially children and pets, before and during operation.
- Never operate the mower in wet grass or rain, as this can lead to slipping and loss of control.
- Handle fuel with extreme care. It is highly flammable. Store fuel in approved containers and in a well-ventilated area.
- Do not refuel a hot engine. Allow the engine to cool before adding fuel.
- Before performing any maintenance or clearing blockages, always turn off the engine and disconnect the spark plug wire.
- Inspect the mower for damage before each use. Do not operate if any parts are damaged or missing.
- Mow across the face of slopes, not up and down, to reduce the risk of losing control.

PRODUCT OVERVIEW

The PowerSmart Amerisun AV8621S1 is a 21-inch self-propelled gas lawn mower designed for efficient lawn maintenance. Key features include:

- **Powerful 170cc OHV Engine:** Equipped with a forced air-cooling system for consistent performance.
- **Self-Propelled System:** Rear-wheel drive reduces user fatigue, making mowing easier.
- **3-in-1 Mowing Options:** Offers mulching, side discharge, and rear bagging capabilities.
- **Durable 21-inch Steel Deck:** Provides a wide cutting path for faster coverage.
- **6-Position Height Adjustment:** Easily adjust cutting height from 1.5 inches to 3.9 inches with a single lever.
- **Foldable Handle:** Designed for compact storage and transport.



Figure 1: Overall view of the Amerisun 21-inch Self-Propelled Gas Lawn Mower.

SETUP

1. Unpacking and Inspection

Carefully remove the lawn mower and all components from the packaging. Inspect for any shipping damage. Ensure all parts listed in the packing list are present.

2. Handle Assembly

Unfold the handle and secure it in the operating position using the provided knobs or levers. Ensure the handle is locked firmly to prevent movement during operation.

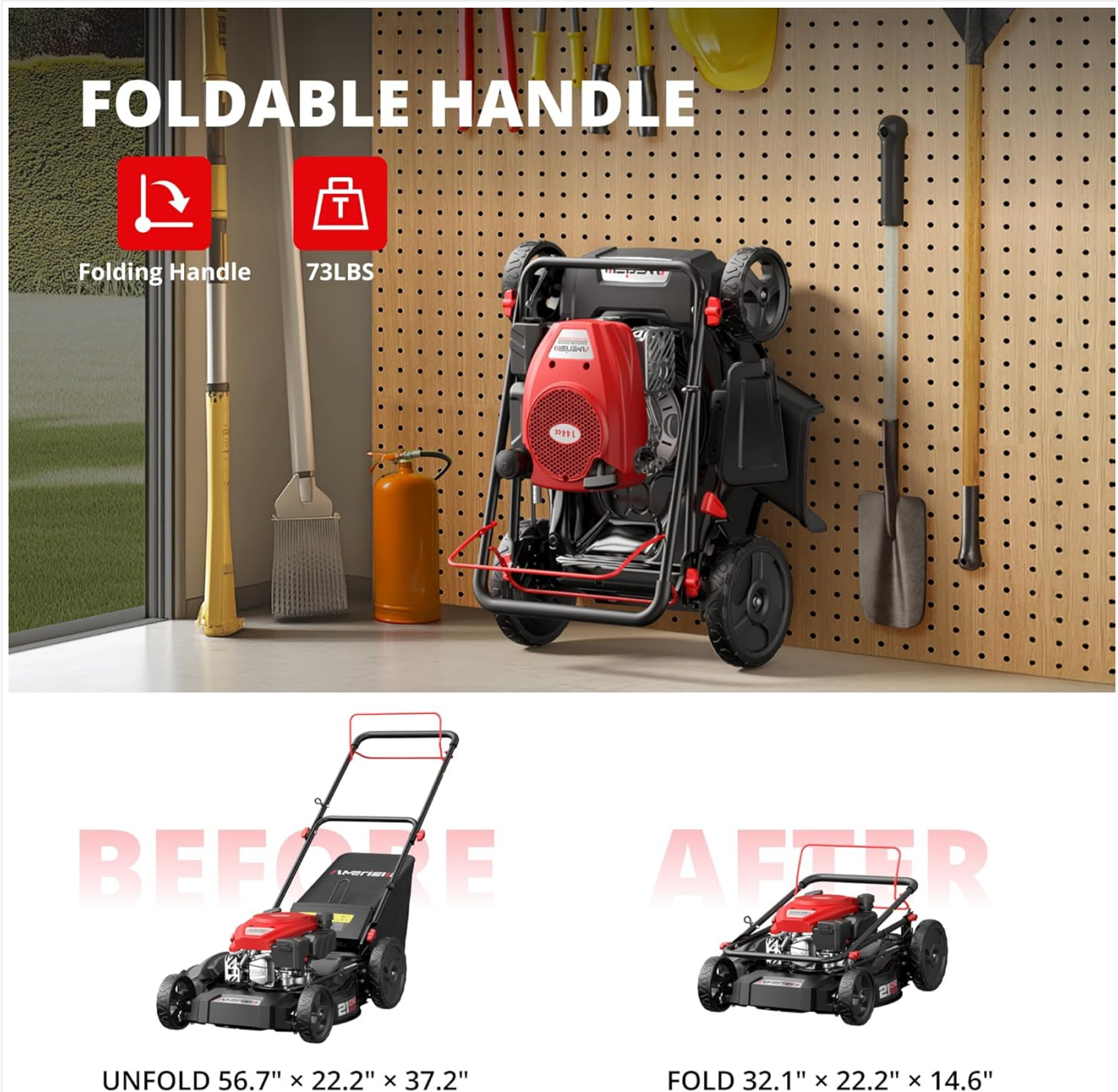


Figure 2: The foldable handle design allows for compact storage. Ensure it is securely locked before use.

3. Adding Engine Oil

Locate the oil fill cap. Remove the cap and slowly pour the recommended engine oil (typically SAE 30 or 10W-30, refer to engine manual for exact type and quantity) into the engine until it reaches the 'FULL' mark on the dipstick. Do not overfill.



170CC

4-STROKE ENGINE

Durable & Powerful

Figure 3: Close-up of the 170cc OHV engine, showing the air-cooling system. The oil fill cap is typically located near the engine block.

4. Adding Fuel

WARNING: Use fresh, unleaded gasoline with an octane rating of 87 or higher. Do not use E85 or fuel containing more than 10% ethanol. Never refuel indoors or near open flames.

Remove the fuel cap and fill the fuel tank with gasoline. Do not fill to the brim; leave space for fuel expansion. Securely replace the fuel cap.

5. Attaching Grass Bag (for Rear Bagging)

Lift the rear discharge door and hook the grass bag onto the mower chassis. Ensure it is securely attached to prevent grass clippings from escaping.

OPERATING INSTRUCTIONS

1. Pre-Operation Checks

- Check engine oil level.

- Ensure fuel tank is adequately filled.
- Inspect the blade for sharpness and damage.
- Clear the mowing area of any debris, rocks, or foreign objects.
- Ensure all guards and safety devices are in place and functioning correctly.

2. Adjusting Cutting Height

The mower features a 6-position height adjustment system. To adjust, pull the single lever located near the wheels outwards and move it to the desired height setting (from 1.5 inches to 3.9 inches). Ensure all wheels are set to the same height.



Figure 4: The single lever for adjusting the cutting height across 6 positions.

3. Starting the Engine

- Ensure the spark plug wire is securely connected.
- Push the primer bulb (if equipped) 3-5 times until fuel is visible.
- Move the choke lever to the 'CHOKE' position (for cold starts).
- Hold the engine brake lever against the handle.

- Pull the starter rope firmly and steadily until the engine starts.
- Once the engine starts, gradually move the choke lever to the 'RUN' position.

4. Engaging Self-Propelled Drive

Once the engine is running, engage the self-propel lever (typically located on the handle) to activate the rear-wheel drive system. The mower will begin to move forward, reducing the effort required to push it.



Figure 5: A user demonstrating the self-propelled feature, which assists in moving the mower across the lawn.

5. Mowing Techniques and 3-in-1 System

For best results, mow in overlapping rows. The 3-in-1 system allows for versatile grass management:

- **Rear Bagging:** Collects grass clippings in the attached bag. Empty the bag regularly to maintain collection efficiency.
- **Side Discharge:** Directs clippings out of the side chute. Attach the side discharge chute when not using the bag or mulching.
- **Mulching:** Finely cuts and redistributes clippings back onto the lawn as natural fertilizer. Ensure the mulching plug is inserted and the side discharge chute and grass bag are removed.

3 IN 1 DESIGN

Bagging (1.4 Bushels) / Mulching / Side Discharge



Figure 6: Illustration of the 3-in-1 mowing system, showing options for bagging, side discharge, and mulching.



Figure 7: View of the durable 21-inch steel deck and cutting blade, designed for efficient grass processing.

6. Stopping the Engine

Release the engine brake lever. The engine will stop automatically. Wait for all moving parts to come to a complete stop before approaching the mower.

MAINTENANCE

WARNING: Always turn off the engine and disconnect the spark plug wire before performing any maintenance or cleaning.

1. Regular Cleaning

After each use, clean the underside of the mower deck to prevent grass buildup, which can affect cutting performance. Use a stiff brush or scraper. Clean the engine cooling fins to ensure proper airflow.

2. Engine Oil

Check the oil level before each use. Change the engine oil after the first 5 hours of operation, then every 25 hours or

annually, whichever comes first.

3. Air Filter

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

4. Spark Plug

Inspect the spark plug annually or every 50 hours. Clean or replace if fouled or worn. Ensure the gap is set correctly according to the engine manual.

5. Blade Care

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

6. Storage

For long-term storage (over 30 days), drain the fuel tank or add a fuel stabilizer to prevent fuel degradation. Clean the mower thoroughly. Store in a dry, well-ventilated area. The foldable handle allows for more compact storage.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Engine will not start	No fuel; stale fuel; spark plug issue; engine brake not engaged; choke setting incorrect	Add fresh fuel; replace spark plug; engage engine brake; adjust choke
Engine runs poorly	Dirty air filter; stale fuel; spark plug issue; carburetor adjustment	Clean/replace air filter; use fresh fuel; replace spark plug; consult service center
Uneven cut	Dull or bent blade; wheels set at different heights; excessive grass height	Sharpen/replace blade; ensure even height settings; cut tall grass in stages
Excessive vibration	Bent blade; loose blade bolts; engine imbalance	Inspect/replace blade; tighten blade bolts; consult service center
Self-propel not engaging	Drive belt loose or broken; control cable issue	Inspect drive belt; check control cable tension; consult service center

SPECIFICATIONS

Feature	Specification
Brand	PowerSmart (Amerisun)
Model Number	AV8621S1
Engine Type	170cc OHV, 4-Cycle, Forced Air-Cooling
Power Source	Gas Powered
Cutting Width	21 Inches

Feature	Specification
Cutting Height Adjustment	6 Positions (1.5" to 3.9")
Mowing Options	3-in-1 (Mulching, Side Discharge, Rear Bagging)
Deck Material	Steel
Operation Mode	Automatic (Self-Propelled)
Product Dimensions (D x W x H)	32.9" x 16.5" x 22.6"
Material	Steel, Metal/Plastic (Handle)
UPC	840432710449

OFFICIAL PRODUCT VIDEO



Video: An official overview of the AMERISUN Self-Propelled Gas Lawn Mower, highlighting its features and operation.

WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation included with your product or contact PowerSmart customer service. Contact details can typically be found on the manufacturer's website or on the product packaging.