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› PowerStar PM9A-BS-085 Battery User Manual

PowerStar PM9A-BS-085

PowerStar PM9A-BS-085 Battery User Manual

For Allis-Chalmers Riding Mower 405, 508

INTRODUCTION

This manual provides essential information for the safe and effective use of your PowerStar PM9A-BS-085 Valve Regulated Sealed Lead Acid (VRLA) battery. This battery is designed for use with Allis-Chalmers Riding Mower models 405 and 508. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of your battery.



Figure 1: PowerStar PM9A-BS-085 Valve Regulated Sealed Lead Acid Battery. This image shows the compact, black battery unit with the PowerStar logo, model number PM9A-BS, and 12V9AH (10HR) rating clearly visible on its side. Positive and negative terminals are located on the top.

SAFETY INFORMATION

Always observe the following safety precautions when handling batteries:

- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when handling batteries.
- Do not short-circuit the battery terminals. This can cause severe burns, fire, or explosion.
- Keep batteries away from open flames, sparks, and heat sources.
- Do not disassemble, puncture, or damage the battery.
- Store batteries in a cool, dry place, away from direct sunlight and extreme temperatures.
- In case of contact with battery acid, flush the affected area with water immediately and seek medical attention.
- Dispose of batteries according to local regulations. Do not dispose of in household waste.

Proposition 65 Warning: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SETUP AND INSTALLATION

1. **Preparation:** Ensure the riding mower's ignition is off and the key is removed. Disconnect any external power sources.
2. **Locate Battery Compartment:** Refer to your Allis-Chalmers Riding Mower's manual to locate the battery compartment.
3. **Remove Old Battery (if applicable):**
 - First, disconnect the *negative* (-) terminal cable.
 - Then, disconnect the *positive* (+) terminal cable.
 - Carefully remove the old battery from the compartment.
4. **Install New Battery:**
 - Place the PowerStar PM9A-BS-085 battery securely into the battery compartment.
 - First, connect the *positive* (+) terminal cable to the positive terminal of the new battery. Tighten securely.
 - Then, connect the *negative* (-) terminal cable to the negative terminal of the new battery. Tighten securely.
 - Ensure all connections are clean and tight to prevent poor conductivity.
5. **Secure Battery:** Use any existing battery hold-down straps or clamps to secure the battery in place, preventing movement during operation.

OPERATING INSTRUCTIONS

The PowerStar PM9A-BS-085 is a maintenance-free, sealed lead-acid battery. Once properly installed, it requires no regular fluid checks or additions.

- **Initial Charge:** While batteries are typically shipped with a partial charge, it is recommended to fully charge the battery before its first use for optimal performance and lifespan. Use a compatible 12V battery charger designed for sealed lead-acid batteries.
- **Starting the Mower:** Follow the starting procedures outlined in your Allis-Chalmers Riding Mower's owner's manual.

The battery provides the necessary power for the starter motor.

- **Charging:** The mower's charging system will recharge the battery during operation. If the mower is stored for extended periods, periodic charging (e.g., once a month) with a trickle charger or battery maintainer is recommended to prevent discharge and extend battery life.
- **Avoid Deep Discharge:** Do not allow the battery to fully discharge. Deep discharges can significantly reduce battery lifespan.

MAINTENANCE

The PowerStar PM9A-BS-085 is a "maintenance-free" battery, meaning it does not require water additions. However, some general maintenance practices will ensure its longevity:

- **Terminal Inspection:** Periodically inspect the battery terminals for corrosion. If corrosion is present, disconnect the battery (negative first, then positive) and clean the terminals with a wire brush and a baking soda/water solution. Rinse and dry thoroughly before reconnecting (positive first, then negative).
- **Cleanliness:** Keep the battery top clean and dry. Dirt and moisture can create conductive paths, leading to self-discharge.
- **Storage:** If storing the mower or battery for an extended period (e.g., off-season), disconnect the battery to prevent parasitic drains. Store the battery in a cool, dry place and recharge it every 4-6 weeks to maintain its charge.
- **Temperature:** Extreme temperatures can affect battery performance and lifespan. Avoid operating or storing the battery in excessively hot or cold conditions.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Mower does not start or cranks slowly.	Low battery charge. Loose or corroded battery terminals. Faulty starter or charging system (mower issue).	Charge the battery fully. Inspect and clean/tighten battery terminals. Consult your mower's service manual or a qualified technician.
Battery not holding a charge.	Battery sulfation due to deep discharge or prolonged storage. Faulty charging system on mower. Battery has reached end of life.	Attempt a reconditioning charge with a smart charger (if available). Have mower's charging system checked. Replace the battery.
Battery appears swollen or leaking.	Overcharging or internal damage.	Immediately disconnect the battery. Do not attempt to use or charge. Dispose of safely according to local regulations. This indicates a severe internal fault.

SPECIFICATIONS

Feature	Detail
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Feature	Detail
Model Number	PM9A-BS-085
Battery Type	Valve Regulated Sealed Lead Acid (VRLA)
Voltage	12V
Capacity	9AH (10HR)
Dimensions (L x W x H)	5.31 x 2.95 x 5.47 inches (13.49 x 7.49 x 13.89 cm)
Weight	7 lbs (3.18 kg)
Manufacturer	PowerStar
UPC	747925103354

WARRANTY AND SUPPORT

For warranty information and technical support regarding your PowerStar PM9A-BS-085 battery, please refer to the warranty card included with your purchase or visit the official PowerStar website. Keep your proof of purchase for warranty claims.

Contact Information: Please refer to the packaging or the PowerStar official website for the most current customer service contact details.