

SigmasTek SP12-75 NB

SigmasTek Permobil Playman Wheelchair Deep Cycle Battery 12V 75AH Replacement Manual

Model: SP12-75 NB

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your SigmasTek 12V 75AH Deep Cycle Sealed Lead Acid (SLA) Battery, specifically designed as a replacement for the Permobil Playman Wheelchair. This battery utilizes Absorbent Glass Mat (AGM) technology, offering a maintenance-free and spill-proof solution for deep cycle applications.

Please read this manual thoroughly before installation and operation to ensure proper handling and to maximize the battery's lifespan and performance.

2. SAFETY INFORMATION

Always observe the following safety precautions when handling batteries:

- **Wear Protective Gear:** Always wear safety glasses and gloves when handling batteries to protect against accidental contact with battery terminals or potential acid residue, though AGM batteries are sealed.
- **Avoid Short Circuits:** Do not allow metal objects to bridge the positive (+) and negative (-) terminals. This can cause a short circuit, leading to sparks, heat, and potential injury or battery damage.
- **Keep Away from Heat and Flames:** Batteries can produce flammable gases. Ensure the installation area is well-ventilated and free from sparks, open flames, or other ignition sources.
- **Proper Ventilation:** Although sealed, ensure adequate ventilation during charging to dissipate any minimal gases that may be released.
- **Lifting Precautions:** This battery is heavy (approximately 102 pounds). Use proper lifting techniques or assistance to prevent injury.
- **Disposal:** Dispose of old batteries responsibly according to local regulations. Batteries contain recyclable materials and should not be discarded with general waste.

3. SETUP AND INSTALLATION

Follow these general steps for battery replacement. Always refer to your Permobil Playman Wheelchair's specific instruction manual for detailed battery compartment access and connection procedures.

1. **Prepare:** Ensure the wheelchair is turned off and disconnected from any power source. Gather necessary tools (e.g., wrench for terminals).
2. **Access Battery Compartment:** Locate and open the battery compartment of your Permobil Playman Wheelchair as per its manual.
3. **Disconnect Old Battery:**
 - First, disconnect the **negative (-)** terminal cable (usually black) from the old battery.
 - Then, disconnect the **positive (+)** terminal cable (usually red) from the old battery.
4. **Remove Old Battery:** Carefully remove the old battery from the compartment. Be mindful of its weight.
5. **Inspect Compartment:** Clean the battery compartment if necessary, ensuring no debris or corrosion.
6. **Place New Battery:** Carefully place the new SigmasTek SP12-75 NB battery into the compartment, ensuring it is seated securely.
7. **Connect New Battery:**
 - First, connect the **positive (+)** terminal cable (red) to the new battery's positive terminal. Tighten securely.
 - Then, connect the **negative (-)** terminal cable (black) to the new battery's negative terminal. Tighten securely.
8. **Secure Compartment:** Close and secure the battery compartment.
9. **Initial Charge:** It is recommended to fully charge the new battery before its first use.



Image: SigmasTek 12V 75AH Deep Cycle SLA Battery. This image shows the battery unit with its terminals, illustrating its compact and robust design suitable for wheelchair applications.

4. OPERATING INSTRUCTIONS

The SigmasTek SP12-75 NB battery is designed for deep cycle applications, providing reliable power for your Permobil Playman Wheelchair.

- **Charging:** Always use a charger specifically designed for 12V Sealed Lead Acid (SLA) or AGM batteries. Using an incompatible charger can damage the battery and void the warranty. Follow the charger manufacturer's instructions

for proper charging procedures.

- **Deep Cycle Usage:** This battery is built to withstand repeated deep discharges and recharges, making it ideal for mobility devices. Avoid consistently discharging the battery beyond 80% of its capacity to prolong its life.
- **Regular Charging:** For optimal performance and longevity, keep the battery fully charged when not in use. Avoid leaving the battery in a deeply discharged state for extended periods.
- **Temperature:** Operate the battery within recommended temperature ranges (typically 20°C to 25°C or 68°F to 77°F). Extreme temperatures can affect performance and lifespan.

5. MAINTENANCE

The SigmasTek SP12-75 NB is a Sealed Lead Acid (SLA) AGM battery, which means it is largely maintenance-free. However, some general care practices will help ensure its longevity:

- **Terminal Inspection:** Periodically inspect the battery terminals and connections for cleanliness and tightness. Ensure there is no corrosion. If corrosion is present, clean it carefully with a wire brush and a baking soda/water solution, then rinse and dry.
- **Keep Clean:** Keep the battery casing clean and dry. Wipe away any dust or dirt with a damp cloth.
- **Storage:** If storing the battery for an extended period, ensure it is fully charged before storage. Store in a cool, dry place, and recharge every 3-6 months to prevent self-discharge and maintain capacity.
- **No Water Addition:** Do not attempt to open the battery or add water. This is a sealed unit and does not require electrolyte replenishment.

6. TROUBLESHOOTING

If you encounter issues with your battery, consider the following common troubleshooting steps:

- **Battery Not Charging:**
 - **Check Connections:** Ensure all battery cables are securely connected to the terminals and to the wheelchair's electrical system.
 - **Verify Charger:** Confirm that the battery charger is functioning correctly and is compatible with 12V SLA/AGM batteries. Check the charger's indicator lights.
 - **Power Source:** Ensure the charger is plugged into a working power outlet.
- **Reduced Operating Time/Performance:**
 - **Full Charge:** Ensure the battery is consistently receiving a full charge. Partial charges can lead to reduced capacity over time.
 - **Age of Battery:** All batteries have a finite lifespan. If the battery is several years old, its capacity may naturally diminish.
 - **Environmental Factors:** Operating in extremely cold or hot conditions can temporarily reduce battery performance.
 - **Load:** Excessive load on the wheelchair (e.g., steep inclines, heavy user) can deplete the battery faster.
- **Swelling or Leakage:** If you observe any swelling of the battery casing or leakage, immediately disconnect the battery (if safe to do so) and contact customer support. Do not attempt to charge or use a damaged battery.

If these steps do not resolve the issue, please refer to the Warranty and Support section for further assistance.

7. SPECIFICATIONS

Feature	Specification
Brand	SigmasTek
Model Number	SP12-75 NB
Voltage	12 Volts
Battery Capacity	75 Amp-Hours (AH)
Battery Cell Composition	Sealed Lead Acid (AGM)
Reusability	Rechargeable
Item Dimensions (L x W x H)	10.25 x 6.6 x 8.15 inches
Item Weight	102 pounds
Recommended Uses	Wheelchair

8. WARRANTY

This SigmasTek SP12-75 NB battery comes with a **1 Year Warranty** from the date of purchase. This warranty covers manufacturing defects and ensures the battery meets its stated specifications under normal use.

The warranty does not cover damage resulting from:

- Improper installation or connection.
- Misuse, abuse, or neglect.
- Overcharging or undercharging.
- Operating outside recommended temperature ranges.
- Physical damage or alteration.

Please retain your proof of purchase for warranty claims.

9. SUPPORT

For technical assistance, warranty claims, or any questions regarding your SigmasTek SP12-75 NB battery, please contact the seller or SigmasTek customer support.

When contacting support, please have the following information ready:

- Product Model Number: SP12-75 NB
- Date of Purchase
- Description of the issue

You may also visit the SigmasTek brand store for additional product information and contact details.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question