

## PowerSmart TGA001.906\_28

# PowerSmart Li-ion Battery User Manual

Model: TGA001.906\_28

## 1. INTRODUCTION

This user manual provides essential information for the safe and effective use of your PowerSmart Li-ion Battery. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of your battery.

This battery is designed as a replacement for specific McCulloch ROB series robotic lawnmowers and compatible Automower models. It offers reliable power with a high capacity for extended operation.

### Compatibility:

- **McCulloch ROB Series:** ROB S400-2019, ROB S500-2019, ROB S600-2019, ROB S800-2019
- **Original Battery Part Numbers:** 584 84 28-02, 584 85 28-01, 584 85 28-02, 584 85 28-03, 584 85 28-04, 584 85 28-05, 58 62-01
- **Automower Models:** 310 and 315 (only compatible with products introduced in 2015, 2016, 2017, 2018)

## 2. SAFETY INFORMATION

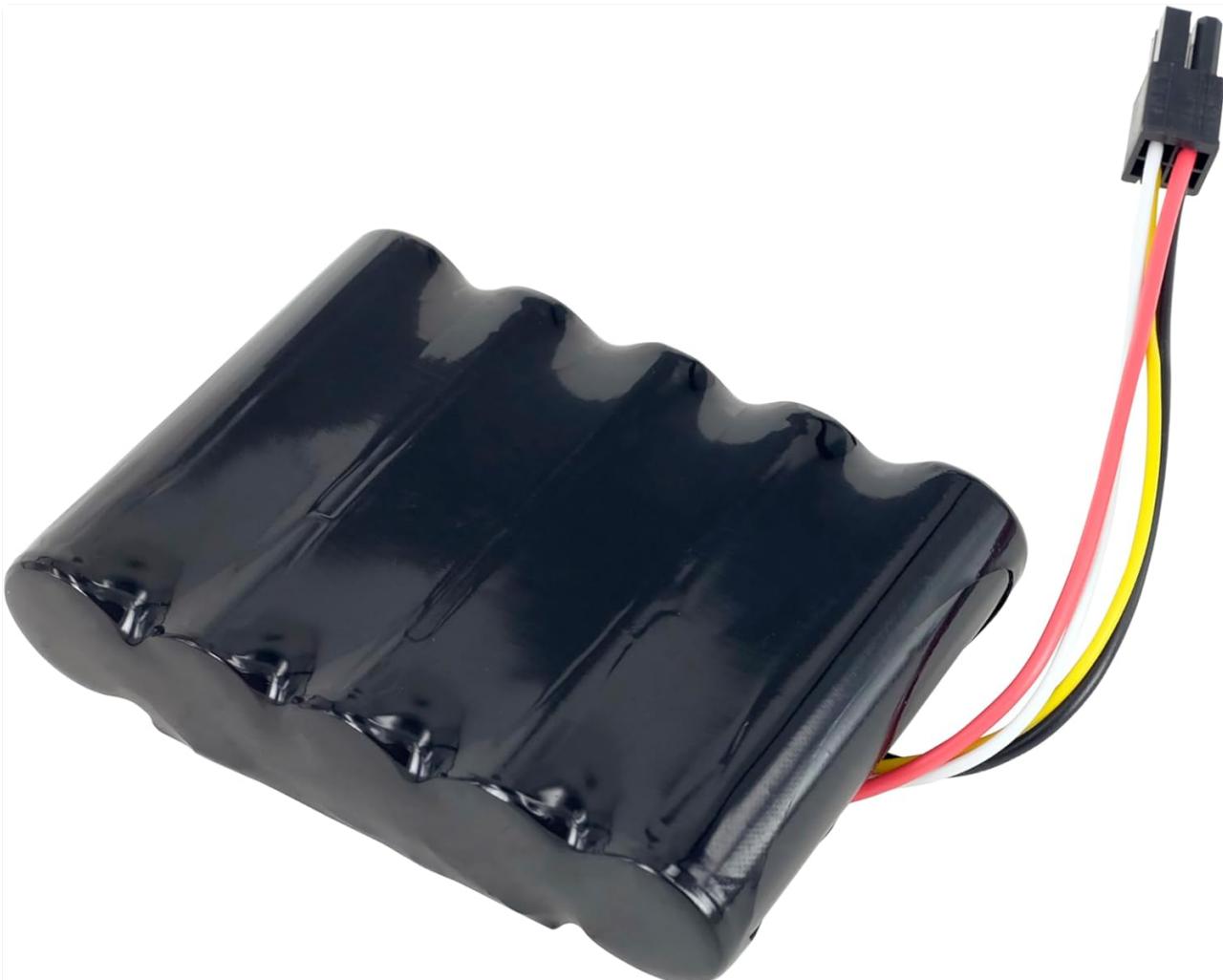
Always observe the following safety precautions to prevent injury or damage to the battery and connected devices:

- **DO NOT DISASSEMBLE** the battery pack. There are no user-serviceable parts inside.
- **USE ONLY WITH ORIGINAL CHARGER** or a charger specifically designed and approved for this battery type and voltage. Using an incompatible charger can lead to fire, explosion, or damage.
- If the battery pack is **CRACKED OR DAMAGED**, do not attempt to use or charge it. Immediately discontinue use and dispose of it properly according to local regulations.
- **DO NOT INSERT IN CHARGER** if the battery is visibly damaged or has been exposed to water.
- **DO NOT INCINERATE** the battery. Lithium-ion batteries can explode when exposed to high temperatures.
- Keep the battery away from extreme temperatures, direct sunlight, and moisture.
- Store the battery in a cool, dry place when not in use.
- Keep out of reach of children and pets.
- In case of leakage, avoid contact with skin and eyes. If contact occurs, rinse immediately with plenty of water and seek medical attention.

### 3. PRODUCT OVERVIEW

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The PowerSmart Li-ion Battery is a high-performance power source designed for robotic lawnmowers. Its compact design and robust construction ensure reliable operation.



**Figure 3.1:** Main view of the PowerSmart Li-ion Battery pack, showing its compact black casing and the attached multi-colored wire harness with a black connector plug.



**Figure 3.2:** Underside view of the battery pack, displaying the product label. The label includes the PowerSmart brand, model number TGA001.906, replacement part number 584 85 28-02, battery specifications (Li-ion 18.5V 3.5Ah/65Wh), and important safety warnings regarding disassembly, charging, and disposal.



**Figure 3.3:** Close-up view of the battery's electrical connector. This four-pin black plastic connector ensures a secure and proper connection to the compatible device or charger.

## 4. SETUP

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Before installing the new battery, ensure your device is turned off and disconnected from any power source. Refer to your device's specific instruction manual for detailed battery replacement procedures.

- 1. Preparation:** Ensure the robotic lawnmower is powered off and in a safe, stable position. If applicable, remove any covers or access panels to expose the battery compartment.
- 2. Remove Old Battery:** Carefully disconnect the old battery's connector from the device's port. Remove the old battery from its compartment. Note its orientation for correct installation of the new battery.
- 3. Install New Battery:** Insert the PowerSmart Li-ion Battery into the battery compartment, ensuring it fits securely.
- 4. Connect Battery:** Align the battery's connector with the device's port and firmly push to connect. Ensure the connection is snug and secure.

5. **Secure Compartment:** Replace any covers or access panels that were removed.
6. **Initial Charge:** It is recommended to fully charge the new battery before its first use. Connect your device to its original charger and allow it to charge until the charging indicator shows a full charge.

## 5. OPERATING

Once the battery is installed and fully charged, your robotic lawnmower is ready for operation. The battery provides consistent power for the device's functions.

- **Normal Use:** Operate your robotic lawnmower as per its original manufacturer's instructions. The PowerSmart battery is designed to provide equivalent or improved runtime compared to the original battery.
- **Monitoring Battery Level:** Refer to your device's display or indicators to monitor the battery charge level. Recharge the battery when it indicates a low charge.
- **Charging Cycles:** Lithium-ion batteries perform best when not fully discharged before recharging. Frequent partial charges are generally better than deep discharges.

## 6. MAINTENANCE

Proper maintenance extends the life of your PowerSmart Li-ion Battery.

### Charging:

- Always use the original charger or a compatible charger specified by the device manufacturer.
- Avoid overcharging or leaving the battery on the charger for extended periods after it's fully charged, although modern chargers often have protection circuits.
- Charge the battery in a well-ventilated area, away from flammable materials.

### Storage:

- If storing the battery for an extended period (more than one month), charge it to approximately 50-60% capacity.
- Store the battery in a cool, dry place, ideally between 0°C and 25°C (32°F and 77°F).
- Avoid storing in direct sunlight or areas with high humidity.
- Recharge the battery every 3-6 months during long-term storage to prevent deep discharge, which can damage the battery.

### Cleaning:

- Wipe the battery pack with a clean, dry cloth. Do not use liquid cleaners or solvents.
- Ensure the connector pins are clean and free of debris to maintain good electrical contact.

## 7. TROUBLESHOOTING

If you encounter issues with your PowerSmart Li-ion Battery, refer to the following common problems and solutions:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Battery not charging.	<ul style="list-style-type: none"> <li>◦ Charger not connected properly.</li> <li>◦ Faulty charger.</li> <li>◦ Battery connector dirty or damaged.</li> <li>◦ Battery is deeply discharged.</li> <li>◦ Battery is damaged.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Ensure charger is securely plugged into both the wall outlet and the device.</li> <li>◦ Test the charger with another device if possible, or try a different compatible charger.</li> <li>◦ Clean battery and device connectors. Inspect for damage.</li> <li>◦ Leave on charger for a longer period; some deeply discharged batteries take time to initiate charging.</li> <li>◦ If battery is damaged (swollen, cracked), discontinue use and replace.</li> </ul>
Short operating time.	<ul style="list-style-type: none"> <li>◦ Battery not fully charged.</li> <li>◦ Battery nearing end of life.</li> <li>◦ Device power consumption is high.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Ensure battery is fully charged before use.</li> <li>◦ Battery capacity naturally degrades over time. Consider replacement if performance is significantly reduced.</li> <li>◦ Check device settings or operating conditions that might increase power draw.</li> </ul>
Battery gets hot during charging/use.	<ul style="list-style-type: none"> <li>◦ Normal operation (slight warmth).</li> <li>◦ Overcharging or faulty charger.</li> <li>◦ Internal battery fault.</li> </ul>	<ul style="list-style-type: none"> <li>◦ Slight warmth is normal. If it's excessively hot, disconnect immediately.</li> <li>◦ Ensure correct charger is used. Discontinue use if overheating persists.</li> <li>◦ If battery is excessively hot, swollen, or emitting odor, discontinue use immediately and dispose of safely.</li> </ul>

If problems persist after attempting these solutions, please contact PowerSmart customer support or your retailer for further assistance.

## 8. SPECIFICATIONS

Feature	Specification
Brand	PowerSmart
Model Number	TGA001.906_28
Battery Type	Li-ion (Lithium-ion)
Voltage	18.5 V
Capacity	3500 mAh
Energy Rate	65 Wh
Dimensions (L x W x H)	93.30 x 67.50 x 22.50 mm

Feature	Specification
Reusability	Rechargeable

## 9. WARRANTY AND SUPPORT

Information regarding specific warranty terms for this PowerSmart battery may vary by region and retailer. Please retain your proof of purchase.

For warranty claims, technical support, or further inquiries, please contact the retailer where you purchased the product or refer to the official PowerSmart website for customer service contact information.

*Note: Availability of spare parts information is not provided in the product details.*

### Related Documents - TGA001.906\_28

	<p><a href="#"><u>PowerSmart 36V Lithium-Ion Cordless Lawn Mower PS76215A: Instruction Manual &amp; Safety Guide</u></a>  Comprehensive instruction manual for the PowerSmart 36V Lithium-Ion cordless lawn mower (Model PS76215A). Includes safety guidelines, assembly, operation, maintenance, troubleshooting, and warranty information.</p>
	<p><a href="#"><u>PowerSmart DB2801 80V Cordless Snow Thrower Instruction Manual</u></a>  Comprehensive instruction manual for the PowerSmart DB2801 80V Cordless Single Stage Snow Thrower, covering safety, assembly, operation, maintenance, and warranty information.</p>
	<p><a href="#"><u>PowerSmart PS5040 4400W Inverter Generator Instruction Manual</u></a>  Comprehensive instruction manual for the PowerSmart PS5040 4400W Open Frame Inverter Generator, covering safety, operation, maintenance, and troubleshooting. Includes technical specifications and warranty information.</p>



### [PowerSmart DB2322SR 22" 3-in-1 Gas Self-Propelled Lawn Mower Instruction Manual](#)

This instruction manual provides essential information for the safe operation, maintenance, and troubleshooting of the PowerSmart DB2322SR 22" 3-in-1 gas self-propelled lawn mower. Includes technical data, safety guidelines, and parts list.



### [PowerSmart PSM2521SR 21-Inch 3-in-1 Gas Self-Propelled Lawn Mower Instruction Manual](#)

This instruction manual provides detailed information on the safe operation, maintenance, and troubleshooting of the PowerSmart PSM2521SR 21-inch 3-in-1 gas self-propelled lawn mower.



### [PowerSmart 21-inch 3-in-1 Gas Push Lawn Mower PSM2521PH Instruction Manual](#)

Comprehensive instruction manual for the PowerSmart 21-inch 3-in-1 Gas Push Lawn Mower, model PSM2521PH. Covers technical data, safety guidelines, operation, maintenance, troubleshooting, and parts information for safe and efficient lawn care.