

Technical Precision SC500 24 VOLTS 2 PACK

User Manual

TECHNICAL PRECISION REPLACEMENT BATTERY PACK Model: SC500 24 VOLTS 2 PACK

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your Technical Precision Replacement Battery Pack for the NILFISK-Advance SC500. Please read this manual thoroughly before installation and operation to ensure proper handling and to maximize the lifespan of your batteries.

2. SAFETY INFORMATION

Always observe the following safety precautions when handling batteries:

- Wear appropriate personal protective equipment, including safety glasses and gloves, when handling batteries.
- Do not short-circuit battery terminals. This can cause severe burns, fire, or explosion.
- Keep batteries away from open flames, sparks, and heat sources.
- Ensure adequate ventilation when charging batteries to prevent the accumulation of flammable gases.
- Do not attempt to open or disassemble the battery pack. There are no user-serviceable parts inside.
- Dispose of old batteries according to local regulations. Do not discard with household waste.
- In case of contact with battery acid, flush immediately with plenty of water and seek medical attention.

3. PRODUCT OVERVIEW

The Technical Precision Replacement Battery Pack is designed to provide reliable power for your NILFISK-Advance SC500 equipment. This pack consists of two 12-volt batteries, intended to be connected in series to achieve the required 24-volt system voltage. The battery cell composition is NiMH (Nickel-Metal Hydride).



Figure 1: Two 12-volt deep cycle batteries, labeled Trojan J150, which are components of the 24-volt replacement pack. These batteries are designed for robust performance in demanding applications.

3.1. What's in the Box

- Two (2) Technical Precision Replacement Batteries (12 Volts each)

4. SETUP AND INSTALLATION

Follow these steps for safe and correct installation of the replacement battery pack:

1. **Preparation:** Ensure the NILFISK-Advance SC500 equipment is turned off and disconnected from any power source. Wear safety glasses and gloves.
2. **Remove Old Batteries:** Carefully disconnect the cables from the old batteries, noting the positive (+) and negative (-) connections. Typically, disconnect the negative terminal first. Remove the old batteries from the equipment.
3. **Install New Batteries:** Place the two new Technical Precision 12-volt batteries into the battery compartment of the NILFISK-Advance SC500. Ensure they are securely positioned.
4. **Connect in Series:** To achieve 24 volts, connect the positive terminal of one 12-volt battery to the negative terminal of the other 12-volt battery using a suitable jumper cable (not included, typically part of the equipment's wiring harness).
5. **Connect to Equipment:** Connect the remaining positive terminal of one battery to the positive terminal of the NILFISK-Advance SC500 equipment. Connect the remaining negative terminal of the other battery to the negative terminal of the equipment. Always connect the positive terminal last.
6. **Secure Connections:** Ensure all cable connections are tight and secure to prevent arcing or poor performance.
7. **Initial Charge:** After installation, it is recommended to fully charge the new battery pack before initial use. Refer to the 'Operating' section for charging instructions.

Important: Incorrect wiring can damage the batteries and equipment, and pose a safety hazard. If you are unsure about the installation process, consult a qualified technician.

5. OPERATING INSTRUCTIONS

5.1. Charging the Battery Pack

For optimal performance and longevity, follow these charging guidelines:

- Use a charger specifically designed for 24-volt NiMH battery packs. Using an incompatible charger can damage the batteries.
- Connect the charger to the NILFISK-Advance SC500 equipment's charging port.

- Ensure the charging area is well-ventilated.
- Allow the battery pack to charge completely. Refer to your equipment's manual for typical charging times.
- Avoid overcharging, as this can reduce battery life. Most modern chargers have automatic shut-off features.

5.2. Discharging and Use

Operate your equipment as usual. It is generally recommended to avoid deep discharges (running the batteries completely flat) frequently, as this can shorten the lifespan of NiMH batteries. Recharge the battery pack when the equipment indicates low power.

6. MAINTENANCE

Proper maintenance will help extend the life and performance of your battery pack:

- **Regular Cleaning:** Keep the battery terminals and surrounding area clean and free of dirt, dust, and corrosion. Use a dry cloth or a brush. If corrosion is present, clean with a mixture of baking soda and water, then rinse with clean water and dry thoroughly.
- **Terminal Inspection:** Periodically check all cable connections to ensure they are tight and free from damage. Loose connections can lead to power loss and heat buildup.
- **Storage:** If the equipment will not be used for an extended period, store the battery pack in a cool, dry place. NiMH batteries should ideally be stored with a partial charge (around 40-50% capacity) to prevent deep discharge and maintain cell health. Avoid storing in extreme temperatures.
- **Recharge During Storage:** For long-term storage, recharge the battery pack every 3-6 months to prevent self-discharge below critical levels.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your battery pack.

Problem	Possible Cause	Solution
Battery pack not charging	<ul style="list-style-type: none"> • Charger not connected properly • Faulty charger • Loose battery connections • Battery pack too hot or too cold 	<ul style="list-style-type: none"> • Ensure charger is securely plugged into both the wall outlet and the equipment. • Test the charger with another battery (if possible) or consult the charger's manual. • Check and tighten all battery terminal connections. • Allow battery pack to reach room temperature before charging.
Reduced operating time	<ul style="list-style-type: none"> • Battery pack not fully charged • Aging battery pack • Operating in extreme temperatures • High power demand from equipment 	<ul style="list-style-type: none"> • Ensure battery pack is fully charged before use. • Battery packs have a finite lifespan; consider replacement if significantly degraded. • Operate equipment within recommended temperature ranges. • Reduce power consumption if possible.

Problem	Possible Cause	Solution
Equipment not powering on	<ul style="list-style-type: none"> Battery pack discharged Loose or incorrect connections Equipment fault 	<ul style="list-style-type: none"> Charge the battery pack. Verify all battery connections are correct and secure. Consult the NILFISK-Advance SC500 equipment manual for troubleshooting equipment-specific issues.

If you continue to experience issues after attempting these solutions, please contact Technical Precision customer support.

8. SPECIFICATIONS

The following are the general specifications for the Technical Precision Replacement Battery Pack:

- **Product Type:** Replacement Battery Pack
- **Compatibility:** NILFISK-Advance SC500
- **Voltage:** 24 Volts (achieved by two 12-volt batteries in series)
- **Battery Cell Composition:** NiMH (Nickel-Metal Hydride)
- **Reusability:** Rechargeable
- **Quantity:** 2 Batteries per pack
- **Model Number:** SC500 24 VOLTS 2 PACK

9. WARRANTY INFORMATION

As a replacement part, this product is typically covered by a manufacturer's limited warranty against defects in materials and workmanship. Specific warranty terms and duration may vary. Please retain your proof of purchase. For detailed warranty information, including coverage and how to make a claim, please refer to the documentation provided with your purchase or contact Technical Precision directly.

10. CUSTOMER SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please contact Technical Precision customer support through the following channels:

- **Website:** Visit the [Technical Precision Store on Amazon](#) for product information and support resources.
- **Contact:** Refer to your purchase documentation for direct contact methods, such as phone number or email address.

