

## Superwinch 90-32492

# Superwinch 90-32492 Solenoid Instruction Manual

FOR TIGER SHARK 9500, 11500, 35000, SX10, AND SX12 WINCHES

## 1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your Superwinch 90-32492 Solenoid. This solenoid is designed as a replacement part for various Superwinch models, including the Tiger Shark 9500, 11500, 35000, SX10, and SX12 winches. Please read this manual thoroughly before attempting any installation or operation to ensure safety and optimal performance.

## 2. Safety Information

Always prioritize safety when working with electrical components and winches. Failure to follow these safety guidelines may result in personal injury or damage to equipment.

- **Disconnect Power:** Always disconnect the vehicle's battery before performing any electrical work on the winch or solenoid.
- **Professional Installation:** If you are not experienced with automotive electrical systems, it is recommended to have the solenoid installed by a qualified professional.
- **Correct Wiring:** Ensure all wiring connections are correct, secure, and insulated to prevent short circuits. Refer to your winch's specific wiring diagram.
- **Avoid Contact:** Do not touch live electrical terminals.
- **Use Proper Tools:** Use insulated tools appropriate for electrical work.

## 3. Package Contents

Verify that all items are present and undamaged upon opening the package.

- 1 x Superwinch 90-32492 Solenoid

## 4. Setup and Installation

The Superwinch 90-32492 Solenoid is a critical component in the winch's electrical system, controlling the power flow to the winch motor. Proper installation is essential for safe and reliable operation.

1. **Preparation:** Ensure the vehicle's battery is disconnected. Identify the location of the existing solenoid pack on your winch.
2. **Removal of Old Solenoid:** Carefully disconnect all wiring from the old solenoid, noting the position of each wire (e.g., motor terminals, battery terminals, control wires). Take photos if necessary for reference. Remove the old solenoid from its mounting.
3. **Mounting the New Solenoid:** Position the new Superwinch 90-32492 Solenoid in the designated mounting location. Secure it using appropriate fasteners.
4. **Wiring Connections:** Connect the wires to the new solenoid according to the wiring diagram provided with your winch or the markings on the solenoid itself. Ensure all connections are tight and corrosion-free. The solenoid typically has four large terminals for the motor and battery connections, and smaller terminals for control signals.



**Figure 1:** Top view of the Superwinch 90-32492 Solenoid, showing the four main copper terminals with nuts and washers for secure electrical connections. The black housing protects the internal components.



**Figure 2:** Side view of the solenoid, featuring a printed wiring diagram (ZJSF-41X-12V) indicating the internal relay configuration and terminal numbering. This diagram is crucial for correct electrical hookup.



**Figure 3:** A different side perspective of the solenoid, highlighting the integrated mounting tabs on the base. These tabs allow for secure attachment to the winch frame or a mounting plate.



**Figure 4:** An angled view of the solenoid, providing a comprehensive look at both the main power terminals and the smaller control terminals located on the bottom section. This view helps in visualizing the overall connection points.

**Important:** Always refer to the specific wiring diagram for your Superwinch model to ensure correct connections. Incorrect wiring can damage the solenoid, winch, or vehicle electrical system.

## 5. Operation

The solenoid acts as an electrical switch, controlled by the winch's remote or dash switch. When the control signal is received, the solenoid engages, allowing high current from the battery to flow to the winch motor, enabling it to spool in or out. When the control signal is released, the solenoid disengages, cutting power to the motor.

- Ensure all connections are secure before operating the winch.
- Operate the winch according to its specific instruction manual.
- Listen for a distinct 'click' sound when activating the winch, indicating the solenoid is engaging.

## 6. Maintenance

Regular inspection and basic maintenance can extend the life of your solenoid.

- **Inspect Connections:** Periodically check all electrical connections for tightness and signs of corrosion.



Clean any corrosion with a wire brush and apply dielectric grease.

- **Check for Damage:** Inspect the solenoid housing for any cracks, melting, or other physical damage.
- **Keep Clean:** Keep the solenoid free from dirt, mud, and excessive moisture.
- **Avoid Overheating:** While designed for high current, prolonged heavy use of the winch can cause the solenoid to heat up. Allow for cooling periods during extensive winching operations.

## 7. Troubleshooting

If your winch is not functioning correctly, the solenoid may be a point of failure. Use the following table to diagnose common issues.

Problem	Possible Cause	Solution
Winch does not operate, no click from solenoid.	No power to control terminals, faulty remote/switch, or internal solenoid failure.	Check control wiring and remote/switch. Test for voltage at control terminals. If control power is present and no click, replace solenoid.
Winch operates slowly or weakly.	Poor main power connections, low battery voltage, or partially failed solenoid contacts.	Check battery charge and main power cable connections for corrosion or looseness. If connections are good, solenoid may be failing.
Solenoid clicks but winch does not operate.	Internal solenoid contacts are engaging but not passing current, or motor issue.	This often indicates a failed solenoid. Verify motor is not seized. Replace solenoid if motor is functional.
Solenoid gets excessively hot.	Overload on winch, prolonged operation, or internal resistance.	Reduce load on winch, allow cooling periods. If heat persists under normal load, solenoid may be faulty.

## 8. Specifications


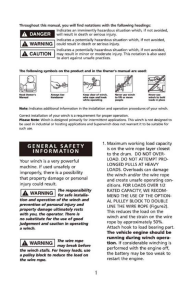

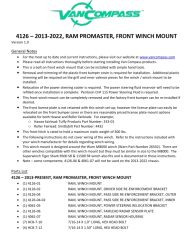
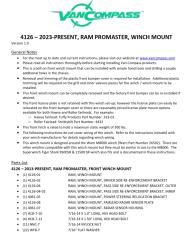
Feature	Detail
Model Number	90-32492
Brand	Superwinch
Item Weight	2 pounds
Product Dimensions	4 x 4 x 2 inches
Exterior Finish	Powder Coated
Material	Steel
Color	Black

## 9. Warranty and Support

For warranty information and technical support, please refer to the official Superwinch website or contact their customer service directly. Keep your purchase receipt as proof of purchase.

**Superwinch Customer Service:** Please visit the [Superwinch Store on Amazon](#) or their official website for contact details.

## Related Documents - 90-32492

	<p><a href="#">SUPERWINCH SX10 &amp; SX12 Recovery Winches Installation and Operation Manual</a></p> <p>Comprehensive installation and operation guide for SUPERWINCH SX10 and SX12 Recovery Winches, covering setup, wiring, remote features, safe operation, rigging, de-rigging, and troubleshooting for optimal performance and safety.</p>
	<p><a href="#">Superwinch Electric Winch User Manual and Safety Guide</a></p> <p>Comprehensive guide to the safe installation, operation, and maintenance of Superwinch electric winches. Includes safety warnings, operating procedures, troubleshooting, and parts lists.</p>
	<p><a href="#">Superwinch Product Catalog: Winches and Recovery Gear</a></p> <p>Explore the comprehensive Superwinch product catalog featuring a wide range of winches, recovery gear, bumpers, and accessories for automotive, ATV/UTV, industrial, and export applications. Discover proven performance and durability.</p>
	<p><a href="#">Van Compass 4126 Front Winch Mount Installation Guide for Ram ProMaster (2013-2022)</a></p> <p>Detailed installation instructions for the Van Compass 4126 Front Winch Mount for Ram ProMaster vehicles (2013-2022). Includes parts list, tools needed, and step-by-step guidance for bumper and component modifications.</p>
	<p><a href="#">Van Compass 4126 Winch Mount Installation Guide for Ram ProMaster</a></p> <p>Comprehensive installation guide for the Van Compass 4126 winch mount designed for 2023-present Ram ProMaster vehicles. Includes detailed steps, tools needed, and parts list for a successful installation.</p>

Westin Public Safety  
2025 Retail Price List

Product	Price
LED Light Bar	\$129.99
Nerf Step Bar	\$89.99
Running Board	\$149.99
Grille Guard	\$199.99
Winch	\$249.99

[Westin Public Safety 2025 Retail Price List: Automotive Accessories & Lighting](#)

Comprehensive 2025 retail price list for Westin Public Safety automotive accessories, featuring LED light bars, nerf step bars, running boards, grille guards, winches, and more for various vehicle makes.