

Superwinch 1140220

Superwinch LT4000ATV Winch (Model 1140220) Instruction Manual

Your guide to safe and effective operation.

INTRODUCTION

This manual provides essential information for the safe installation, operation, and maintenance of your Superwinch LT4000ATV Winch, Model 1140220. Please read this manual thoroughly before using the winch to ensure proper function and to prevent injury or damage.

The Superwinch LT4000ATV is a 12 VDC winch designed for ATV applications, featuring a 4,000 lb. load capacity, 50 ft steel rope, a sealed solenoid, and both handheld remote and handlebar switch controls.

SAFETY INFORMATION

WARNING: Failure to follow these instructions may result in serious injury or property damage.

- Always wear heavy-duty gloves when handling the wire rope.
- Keep hands and clothing clear of the wire rope, hook, and fairlead during operation.
- Never exceed the rated line pull capacity of 4,000 lbs.
- Ensure the winch is securely mounted to a structure capable of withstanding the maximum rated load.
- Do not operate the winch if the wire rope is frayed, kinked, or damaged. Replace damaged rope immediately.
- Maintain a safe distance from the winch and cable during operation. Do not stand in line with the cable.
- Never use the winch to lift people or for overhead lifting.
- Always ensure the vehicle's engine is running during winching operations to maintain battery charge.
- Disengage the clutch when free spooling the rope. Ensure the clutch is fully engaged before winching.
- Avoid shock loads. Apply power smoothly.

- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (Proposition 65 Warning)

PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Superwinch LT4000ATV Winch
- Hardware kit (includes mounting bolts, nuts, washers)
- Installation instructions (this manual)
- Handheld remote control
- Handlebar switch
- Sealed solenoid
- Wire rope with hook
- 4-way roller fairlead



Image: All components included in the Superwinch LT4000ATV Winch kit, including the winch unit, wiring, controls, and mounting hardware.

SETUP AND INSTALLATION

Proper installation is crucial for the safe and effective operation of your winch. If you are unsure about any step, consult a qualified professional.

1. Mounting the Winch

Mount the winch to a flat, rigid surface on your ATV, such as a winch plate or bumper, using the provided hardware. Ensure the mounting location can support the full rated load of the winch (4,000 lbs).



Image: The Superwinch LT4000ATV Winch, showing the main unit, roller fairlead, and attached hook with a safety strap.

2. Electrical Wiring

The winch operates on a 12 VDC electrical system. Connect the winch to your ATV's battery following the wiring diagram provided with your hardware kit. Pay close attention to polarity.

- **Solenoid:** The sealed solenoid controls the power to the winch motor. Mount it in a dry, protected location.
- **Circuit Breaker:** A circuit breaker is included to protect the electrical system. Install it as close to the battery's positive terminal as possible. It is recommended to insulate any exposed terminals on the circuit breaker to prevent accidental short circuits. Some users prefer to mount the circuit breaker on the ground side for added safety if exposed parts touch the frame.
- **Remote Control Connections:** Connect the handheld remote and handlebar switch to the solenoid as per the wiring diagram.



Image: A detailed view of the motor housing of the Superwinch LT4000ATV, displaying warning labels and electrical connection points.

3. Roller Fairlead and Hook Installation

Attach the roller fairlead to the winch mounting plate. The roller fairlead guides the wire rope onto the drum evenly and reduces wear. Secure the winch hook to the end of the wire rope using the clevis pin and cotter pin. Always use the safety strap on the hook when not in use to prevent it from retracting fully into the fairlead.





Image: A close-up view of the heavy-duty forged steel winch hook, featuring a safety latch and attachment pin.

OPERATING INSTRUCTIONS

1. Engaging and Free Spooling the Clutch

The winch features a clutch knob on the side of the drum. To free spool the wire rope (pull it out manually),

rotate the clutch knob to the "FREESPOOL" position. To engage the clutch for winching, rotate the knob to the "ENGAGED" position. Ensure the clutch is fully engaged before applying power.



Image: A close-up of the yellow clutch knob on the winch, indicating "ENGAGED" and "FREESPOOL" settings.

2. Using the Remote Controls

The winch can be operated using either the handheld remote control or the handlebar-mounted switch.

- **Handheld Remote:** Plug the remote into the designated port. Use the "IN" button to retract the rope and the "OUT" button to extend it. The 12 ft cord provides a safe operating distance.
- **Handlebar Switch:** Mount the switch on your ATV's handlebars for convenient operation. Press "IN" to retract and "OUT" to extend the rope.



Image: The wired handheld remote control with "IN" and "OUT" buttons and a long coiled cord.



Image: The handlebar-mounted switch with "IN" and "OUT" controls, designed for easy access during ATV operation.

3. Winching Procedures

1. Ensure the ATV's engine is running to provide adequate power.
2. Select a secure anchor point (e.g., tree, rock, other vehicle). Use a tree saver strap if anchoring to a tree.
3. Free spool the wire rope to the anchor point, ensuring at least five wraps remain on the drum.
4. Secure the hook to the anchor point.
5. Engage the clutch.
6. Clear the area of bystanders.
7. Begin winching by pressing the "IN" button on your chosen remote. Spool the rope evenly onto the drum.
8. If the winch motor becomes hot, allow it to cool down before continuing.
9. Once the recovery is complete, disengage the clutch, remove the hook from the anchor, and carefully rewind the rope onto the drum.

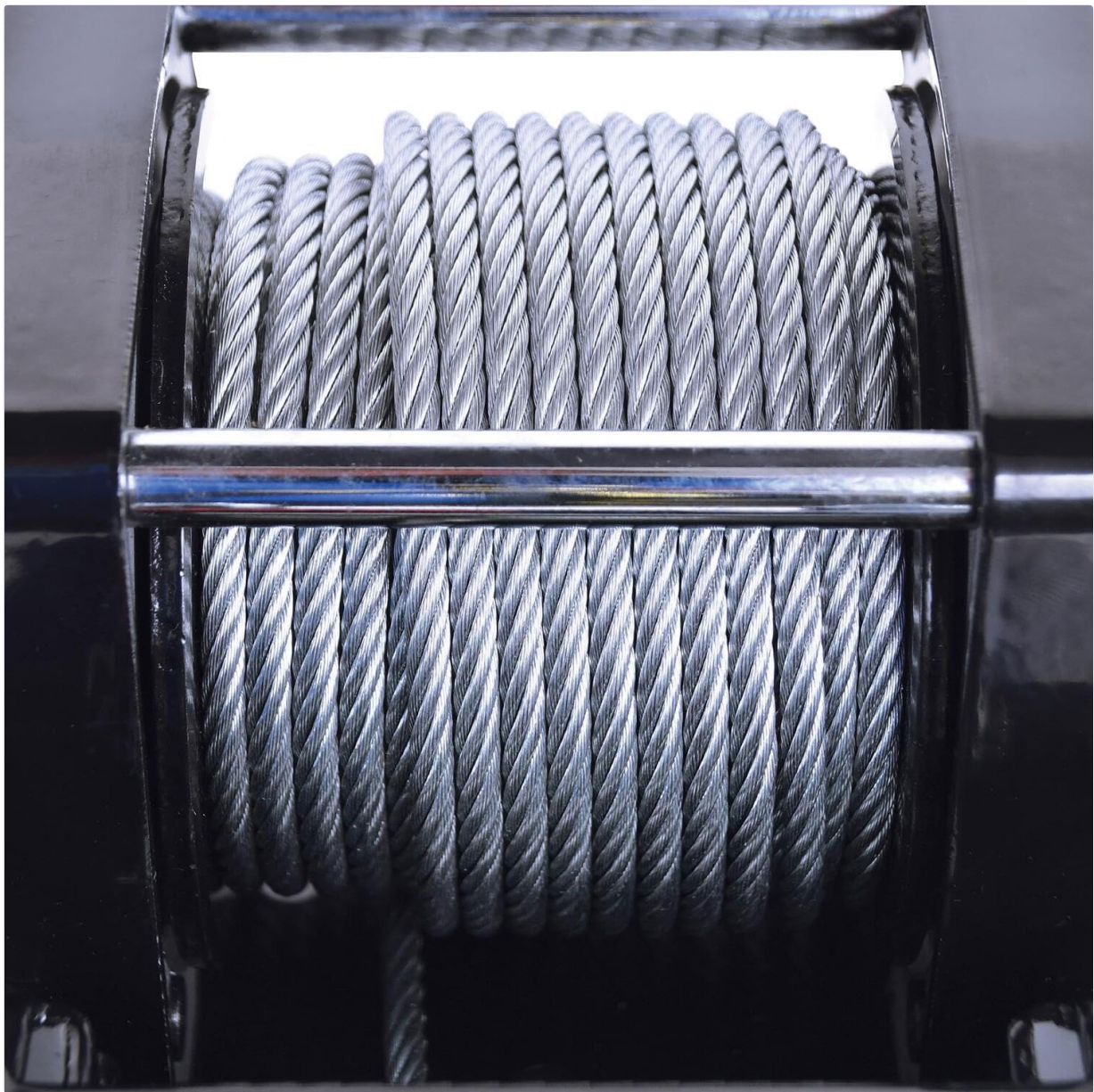


Image: A close-up view of the steel wire rope, showing it neatly wound around the winch drum.

MAINTENANCE

Regular maintenance ensures the longevity and reliable performance of your Superwinch LT4000ATV.

- **Wire Rope Inspection:** Regularly inspect the wire rope for kinks, fraying, broken strands, or corrosion. Replace the rope if any damage is found.
- **Electrical Connections:** Check all electrical connections for corrosion, tightness, and damage. Ensure the battery terminals are clean and secure.
- **General Cleaning:** Keep the winch clean from dirt, mud, and debris. A mild detergent and water can be used, but avoid high-pressure washing directly on electrical components.
- **Lubrication:** The winch is designed with sealed components. Refer to the manufacturer's guidelines for any specific lubrication requirements, typically found in the full installation manual.
- **Fairlead:** Ensure the rollers on the fairlead spin freely and are not obstructed.

TROUBLESHOOTING

If you encounter issues with your winch, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Winch does not operate.	No power to the winch; loose electrical connections; tripped circuit breaker; faulty remote/switch; clutch disengaged.	Check battery connections; inspect all wiring for damage; reset circuit breaker; test remote/switch; ensure clutch is fully engaged.
Winch operates slowly or with reduced power.	Low battery voltage; undersized wiring; excessive load.	Ensure ATV engine is running; check battery charge; verify wiring gauge; reduce load if possible.
Wire rope spools unevenly.	Improper winching angle; damaged fairlead rollers.	Adjust anchor point for a straighter pull; inspect and clean fairlead rollers.
Winch motor gets hot quickly.	Overload; continuous operation without rest.	Reduce load; allow motor to cool down between pulls.

SPECIFICATIONS

- **Model:** 1140220
- **Rated Line Pull:** 4,000 lbs (1814 kg)
- **Motor:** 1.4 Hp, 12 VDC
- **Gear Ratio:** 166:1
- **Gear Type:** 3-stage planetary
- **Brake:** Automatic load holding, mechanical and dynamic
- **Clutch:** Free spooling
- **Rope:** 50 ft (15.2 m) steel wire rope
- **Fairlead:** 4-way roller fairlead
- **Controls:** 12 ft handheld remote control and handlebar switch
- **Solenoid:** Sealed
- **Item Weight:** Approximately 24 pounds (10.9 kg)
- **Product Dimensions:** Approximately 15 x 10 x 6 inches (38.1 x 25.4 x 15.2 cm)

WARRANTY INFORMATION

For specific warranty details, please refer to the documentation included with your purchase or visit the official Superwinch website. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase. Keep your proof of purchase for warranty claims.

CUSTOMER SUPPORT

If you require further assistance, have questions regarding installation, operation, or maintenance, please contact Superwinch customer support or the retailer from whom you purchased the product. You can often

find contact information on the official Superwinch website.
For more information, visit the [Superwinch Store on Amazon](#).