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› WARN 78980 SERIES 20XL-LP Industrial Hydraulic Winch User Manual

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WARN 78980 SERIES 20XL-LP Industrial Hydraulic Winch User Manual

Model: 78980

1. INTRODUCTION

This manual provides essential information for the safe and effective operation, installation, and maintenance of your WARN 78980 SERIES 20XL-LP Industrial Hydraulic Winch. Please read this manual thoroughly before operating the winch to ensure proper usage and to prevent injury or damage.

The WARN SERIES 20XL-LP Industrial Hydraulic Winch is engineered for demanding applications such as wreckers, trailers, and other severe-duty tasks. It features a robust design with a 20,000 lb. pulling capacity, optimized for hydraulic systems operating below 3000 psi.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions could result in serious injury or death.

- Always wear appropriate personal protective equipment (PPE) when operating or maintaining the winch.
- Ensure the winch is securely mounted and all connections are tight before operation.
- Never exceed the rated pulling capacity of the winch.
- Keep hands and clothing clear of the winch drum, rope, and fairlead during operation.
- Do not operate the winch if any components are damaged or worn.
- Always use a tree trunk protector or similar anchor point when winching to avoid damaging trees.
- Disconnect power to the winch before performing any maintenance or adjustments.
- This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

3. PRODUCT OVERVIEW

The WARN 78980 SERIES 20XL-LP Industrial Hydraulic Winch is a high-performance unit designed for heavy-duty pulling. Key features include:

- **Hydraulic System Compatibility:** Optimized for hydraulic systems operating below 3000 psi.
- **Powerful Motor:** Equipped with an 11.9 cubic-inch high-performance motor.
- **High Pulling Capacity:** Delivers a 20,000 lb. pulling capacity.
- **Braking System:** Features spring-applied disc brakes designed to hold full-rated load.
- **Geartrain:** Hardened aircraft-grade nickel chromoly two-stage planetary geartrain for speed and reliability.
- **Clutch and Drum:** Includes a manual clutch and standard drum.
- **Compliance:** Meets SAE J706 and CE specifications.

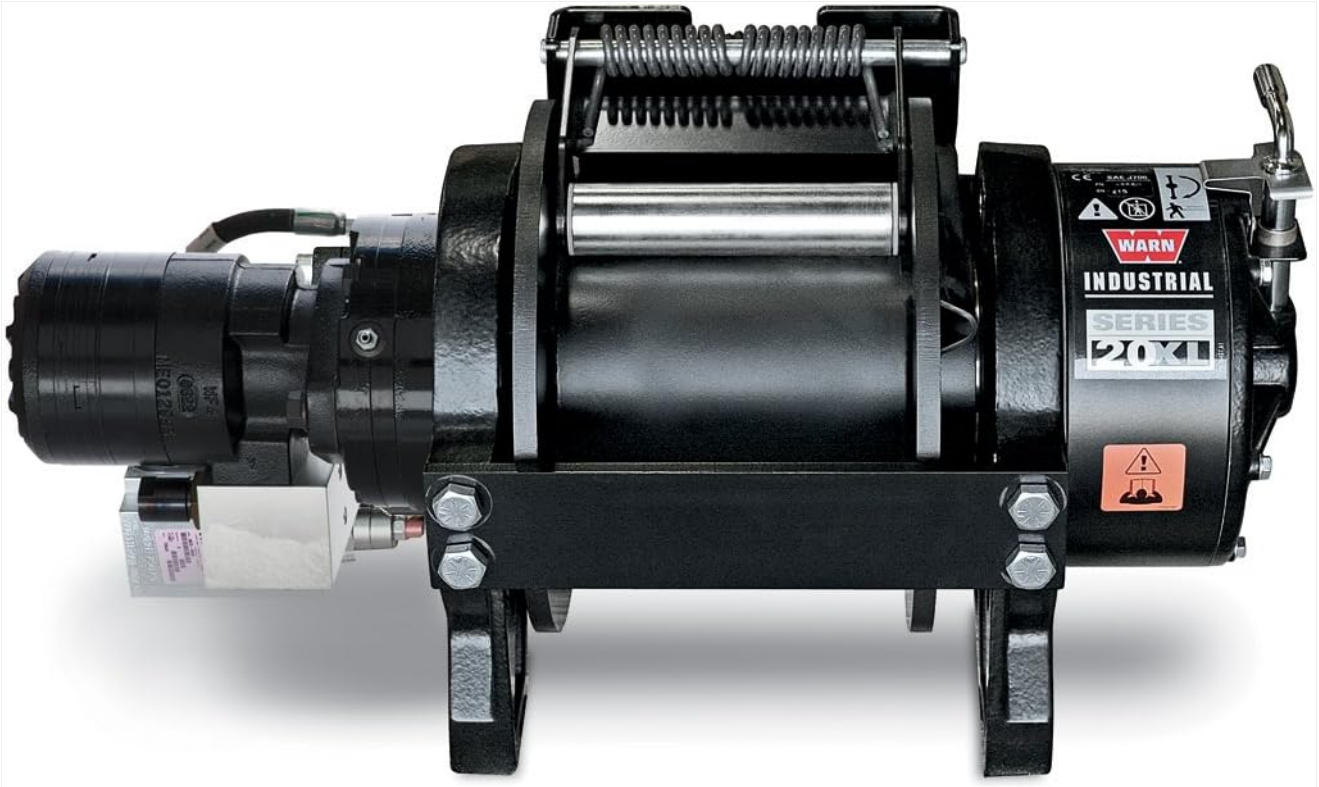


Figure 3.1: Side view of the WARN 78980 SERIES 20XL-LP Industrial Hydraulic Winch, showcasing its robust black housing, hydraulic motor, drum, and manual clutch lever. The winch is designed for heavy-duty industrial applications.

4. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your winch. It is recommended that installation be performed by a qualified professional.

1. **Mounting:** Securely mount the winch to a flat, rigid surface capable of withstanding the maximum rated pull. Use high-grade fasteners appropriate for the application.
2. **Hydraulic Connections:** Connect the winch to your vehicle's hydraulic system. Ensure all hydraulic lines are clean, free of debris, and properly routed to avoid kinks or abrasion. Use appropriate fittings and sealants to prevent leaks.
3. **Rope Installation:** If not pre-installed, carefully spool the winch rope onto the drum. Ensure the rope is spooled evenly and under light tension to prevent tangling and damage during operation.
4. **Initial Test:** After installation, perform a light load test to ensure all components are functioning correctly and there are no leaks in the hydraulic system.

5. OPERATING INSTRUCTIONS

Follow these steps for safe and effective winch operation:

1. **Assess the Situation:** Before winching, evaluate the load, terrain, and potential anchor points. Plan your pull

carefully.

2. **Engage Clutch:** To free-spool the rope, disengage the manual clutch. To begin winching, engage the clutch fully.
3. **Connect Rope:** Securely attach the winch rope to a suitable anchor point using appropriate rigging equipment (e.g., shackles, tree trunk protector).
4. **Operate Winch:** Use the hydraulic controls to slowly and steadily pull the load. Maintain tension on the rope to ensure even spooling.
5. **Monitor Operation:** Continuously observe the winch, rope, and load during operation for any signs of stress or malfunction.
6. **Disengage and Store:** Once the pull is complete, disengage the clutch (if needed for free-spooling), and carefully rewind the rope onto the drum. Store all rigging equipment properly.

Note: Always refer to specific vehicle or equipment manuals for hydraulic system operation and integration.

6. MAINTENANCE

Regular maintenance ensures the longevity and reliability of your WARN winch.

- **Inspect Rope:** Regularly inspect the winch rope for frays, kinks, or other damage. Replace damaged rope immediately.
- **Check Fasteners:** Periodically check all mounting bolts and fasteners for tightness. Re-torque as necessary.
- **Hydraulic System:** Inspect hydraulic lines and fittings for leaks or damage. Ensure hydraulic fluid levels are correct according to your vehicle's specifications.
- **Cleanliness:** Keep the winch clean and free of dirt, mud, and debris. This prevents corrosion and ensures smooth operation of moving parts.
- **Lubrication:** Consult a qualified technician for internal lubrication requirements.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your winch.

Problem	Possible Cause	Solution
Winch does not operate	Insufficient hydraulic pressure; Clutch disengaged; Hydraulic lines blocked or damaged.	Check hydraulic fluid level and pump operation; Ensure clutch is fully engaged; Inspect hydraulic lines for obstructions or damage.
Winch operates slowly or weakly	Low hydraulic pressure; Overload; Worn hydraulic motor.	Verify hydraulic system pressure; Reduce load; Consult a qualified technician for motor inspection.
Rope spools unevenly	Insufficient tension during spooling; Damaged fairlead.	Respool rope under light tension; Inspect and replace damaged fairlead if necessary.
Hydraulic fluid leaks	Loose fittings; Damaged seals or hoses.	Tighten all hydraulic fittings; Inspect and replace damaged seals or hoses.

For issues not listed here, or if solutions do not resolve the problem, please contact WARN customer support.

8. SPECIFICATIONS

Attribute	Value
Model Name	WARN 78980 SERIES 20XL-LP Industrial Hydraulic Winch
Part Number	78980
Pulling Capacity	20,000 lbs (9,072 kg)
Motor	11.9 cubic-inch high-performance hydraulic motor
Hydraulic System Compatibility	Operates below 3000 psi (207 bar)
Geartrain	Two-stage planetary, hardened aircraft-grade nickel chromoly
Brake Type	Spring-applied disc brake
Clutch Type	Manual
Drum Type	Standard
Dimensions (L x W x H)	Approx. 29.02 x 14.49 x 14.02 inches (73.7 x 36.8 x 35.6 cm)
Weight	Approx. 104326 Grams (230 lbs)
Compliance	Meets SAE J706 and CE specifications

9. WARRANTY INFORMATION

The WARN 78980 SERIES 20XL-LP Industrial Hydraulic Winch is covered by WARN's standard warranty. For specific details regarding warranty coverage, terms, and conditions, please refer to the warranty documentation included with your product or visit the official WARN website.

10. CUSTOMER SUPPORT

For technical assistance, parts, or further information regarding your WARN winch, please contact WARN customer support or visit their official website:

WARN Official Website: WARN Store on Amazon

Please have your model number (78980) and serial number ready when contacting support.