ULTRA-TOW™

Worm Gear Winch

2000 Lb. Capacity

Owner's Manual



⚠WARNING: Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item #52813

SAVE THESE INSTRUCTIONS

Thank you very much for choosing an Ultra-Tow™ product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: _____

Purchase Date: _____

Save the receipt, warranty, and this manual. It is important that you read the entire manual to become familiar with this product before you begin using it.

This winch is designed for certain applications only. Northern Tool & Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

For technical questions, please call **1-800-222-5381**.

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Intended Use

The Ultra-Tow Worm Gear Winches are built for multi-purpose hauling and pulling operations that require a positive mechanism for braking. These winches are not to be used as hoists for lifting, supporting, or transporting people or for loads over areas where people could be present.

The winch design allows the reel to automatically stop when the handle is released. No minimum loading is required for winch operation. Applications requiring safe, controlled movement of loads need worm gear winches.

Technical Specifications

Property	Specification
Rated Capacity	2000 lbs.
Drum Capacity	5/16in. x 32ft. Wire Cable (not included)
Gear Ratio	41:1
Speed	1-Speed
Drum Size	5 in.
Handle Size	7 7/8 in.
Mounting Plate	5 5/6 X 5 in.
Mounting Hardware	3 M10 Bolts

Important Safety Information

⚠WARNING

- Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.
- The warnings, cautions, and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using this winch. Always be aware of the environment and ensure that the tool is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the winch until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this winch in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- Use the right tool for the job. DO NOT attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. Products are safer and do a better job at the capacity for which they are intended. DO NOT use this equipment for a purpose for which it was not intended.
- Industrial or commercial applications must follow OSHA requirements.

⚠WARNING

- This product may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

⚠WARNING

WORK AREA SAFETY

- Inspect the work area before each use. Keep work area clean, dry, free of clutter, and well-lit. Cluttered, wet, or dark work areas can result in injury. Using the winch in confined work areas may put you dangerously close to other cutting tools and rotating parts.
- Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the winch.

⚠CAUTION

WINCH USE AND CARE

- Do not force the winch. Products are safer and do a better job when used in the manner for which they are designed. Plan your work, and use the correct product for the job.
- Check for damaged parts before each use. Carefully check that the winch will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the winch with a damaged part.
- Store the winch when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your winch. Accessories that may be suitable for one product may create a risk of injury when used with another tool. Never use an accessory that has a lower operating speed or operating pressure than the tool itself.

⚠WARNING

PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the winch. Do not use the tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
- Do not overreach. Keep proper footing and balance at all times.

Specific Operation Warnings

⚠WARNING

- Do not exceed the rated load capacity. Be aware of dynamic loading! Sudden load movement may briefly create excess load causing product failure.
- Do not use for overhead lifting.
- Do not lengthen the handle for additional leverage.
- Keep hands clear from the gear, drum and rolling cable. Always wear gloves when using the winch.
- Never leave winch unattended while supporting a load.
- Follow all instructions when replacing the cable of strapping.
- Always maintain a minimum of four (4) full turns of cable or strap around the drum of the winch. Never apply load to winch fully extended.
- Operate winch manually only.
- After moving the item, be sure to secure it. The winch is intended for short term use only.

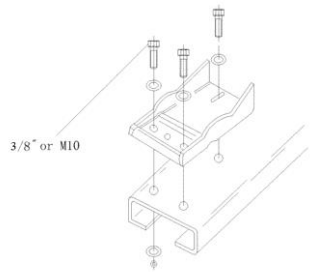
- Do not use to transport people of animals.
- Not for use by or around children.

Winch Mounting and Cable Attachment

⚠WARNING

- Inspect before every use. Do not use if damaged or parts loose. Examine the Winch for structural cracks, bends, damage, frayed or kinked cable, and any other conditions that may affect the safe operation of the winch.
- Do not use the winch even if minor damage appears. Keep cable straight to avoid kinking it. A kink permanently weakens the cable, even after it is straightened out. Kinked cable can fail suddenly and must not be used.
- Do not use a recovery strap while winching. They are designed to stretch and can suddenly whip back towards the operator during a winching operation.

- The winch is designed for attachment to a mounting plate or structure capable of supporting the load that is intended to pull (lift). The mounting location and hardware must support your winch and load.
- Place the winch on the mounting surface and mark the locations of the mounting holes to fit your application. Before drilling, verify that the mounting surface has no hidden components or structural pieces that will be damaged.
- For maximum strength and safety, this winch should be mounted with three 3/8" or M10 bolts, washers, and lock washers (not included, sold separately). The bolt should attach the winch to the mounting structure utilizing the outside rear holes or slots. The third bolt should be inserted through the winch frame and mounting structure in a manner to utilize the foremost remaining frame slot (hole).



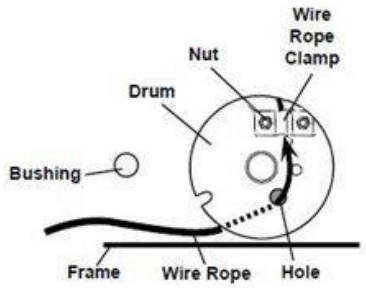
- Select a winch line with breaking strength at least 1-1/2 times the winch rating and a hook 1-1/2 times stronger than the line.
- Installing the wire rope:

a. Route the wire rope end under bushing and through the hole to outside of drum.

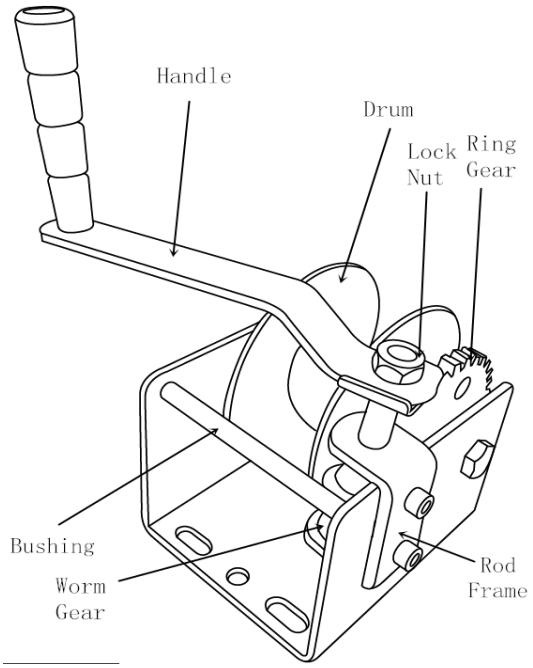
b. Loosen the nut and then install the wire rope under the wire rope clamp.

c. Tighten the nut securely.

d. Test winch for proper operation.



Main Parts of Winch



Assembly Instructions

Insert the handle and secure with a lock nut.

Before Each Use

⚠WARNING

CHECK BEFORE USE

- Check the safety devices and the safe condition of the produce:
- Check whether there are any visible defects.
- Check whether all parts of the product are firmly attached.
- Check that the safety devices are in faultless condition.

Operating Instructions

⚠WARNING

- The handle and nut must be tightened against the drive shaft before operating the winch.
- The wire rope must be properly wrapped on the drum to be able to support a load without damaging the wire rope Moving or Tensioning Loads

Winding/unwinding the cable without load

1. Place the ratchet lever in the center position.
2. The cable reel now moves freely in both directions.
3. Pull the steel cable at the fixed hook until the hook can be attached to the load to be moved.
4. Wind back the excessive cable by turning the crank clockwise.

Winding up the cable under load (towing, loading)

1. Hold the crank firmly and push gently to relieve the ratchet lever.
2. Place the ratchet lever at position.
3. Turn the crank clockwise to evenly wind up the steel cable.

Unwinding the cable under load (lowering & unloading)

1. Hold the crank firmly and push gently to relieve the ratchet lever.
2. Place the ratchet lever at position.
3. The steel cable should be fully retracted again after use.

Ratchet switch

1. There are 3 positions for this ratchet switch: The higher position is for pulling, the lower position is for releasing, the middle position is for both pulling and releasing, but can only be used when the winch is loaded. Hold the crank handle tightly if you want to change the switch position.
2. Before using, install the winch on a firm and flat surface. To install it, put the ratchet switch on the middle position and pull the cable out until the holes on the bottom of the base are visible. Then use at least 3 sets of 3/8in. bolts and locking nuts, in a triangular pattern, to attach the base to the surface. Use an extra metal or hardwood board when necessary.
3. Install the crank handle to the axis bolt with nut.
4. Put the ratchet switch on the higher position and turn the crank handle clockwise to pull. Put the ratchet switch on the lower position and turn the crank handle counterclockwise to release.
5. When finished, attach the hook to the paw bushing.

After Each Use

- Wipe external surfaces of the winch with a clean cloth.
- Periodically, lubricate the wire rope with light oil. Lubricate the gear with gear grease.

Maintenance

⚠WARNING

- This winch has been fully lubricated at the factory; but, for continued smooth performance and increased life, occasional greasing of gears and reel shaft and an occasional drop of oil on drive shaft bearings are recommended.
- Periodically inspect all parts, steel cable, accessories and replace them if damaged or used.

- Have damaged parts replaced by an authorized service center.
- Check the nuts periodically and tighten them if they are loose.
- Keep winch in good working order. Damaged or severely-worn parts create unnecessary dangers and could result in personal injury or property damage.
- Always lock up product and keep out of children.

Maintain the winch by adopting a program of conscientious repair and maintenance in accordance with the following recommended procedures. It is recommended that the general condition of any tool be examined before it is used. Keep your tool in good repair. Keep all cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control. Keep handles dry, clean, and free from oil and grease. Also refer to the engine manufacturer's instruction manual for additional information about engine maintenance. The following chart is based on a normal operation schedule.

Maintenance Interval	**Maintenance Point**
Daily before operating	Periodically inspect all parts, steel cable, accessories and replace them if damaged. Have damaged parts replaced by an authorized service center. Check the nuts periodically and tighten if loose.
After the first 20 operating hours	Follow the instructions for lubricating periodically Lubricate the cable and hook regularly with slight grease. Grease the gears every 6 months. Use any good quality waterproof grease.

Troubleshooting

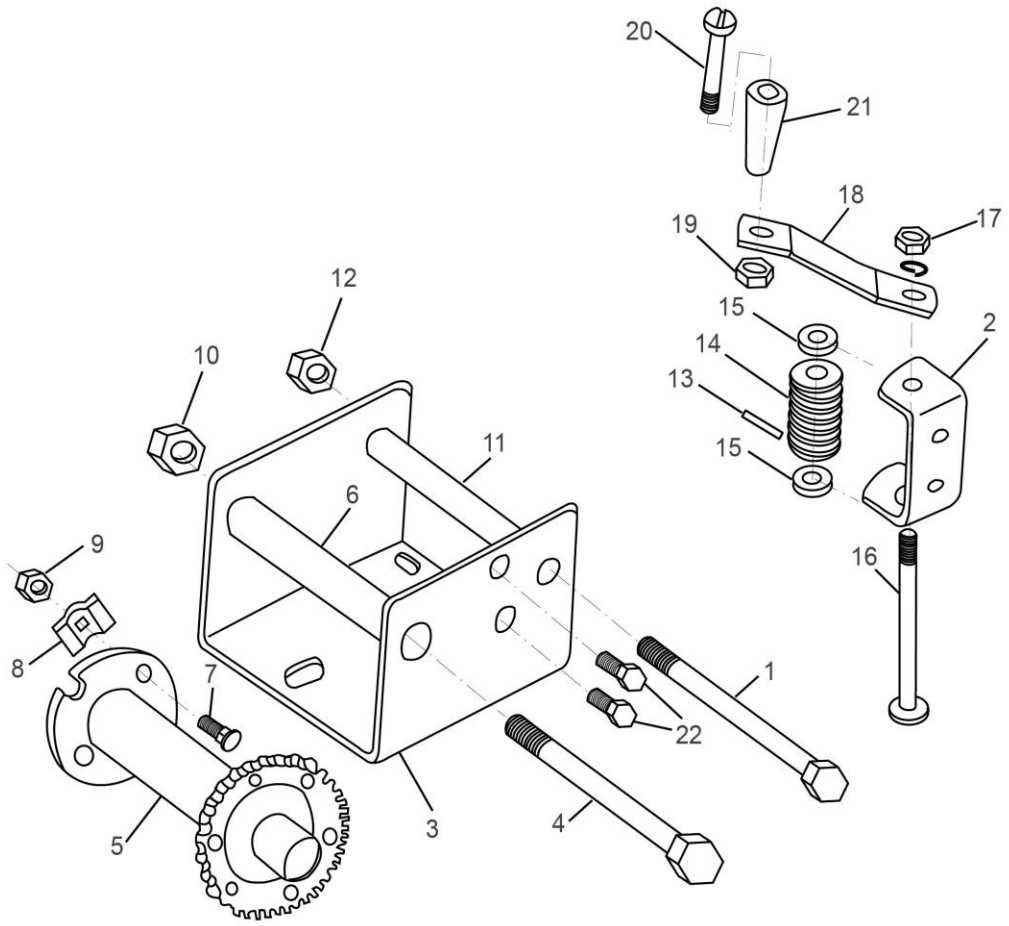
⚠WARNING

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Use the table below to troubleshoot problems before contacting service personnel or your local dealer. If the problem continues after troubleshooting, call your local dealer for assistance.

Failure	**Possible Cause**	**Corrective Action**
Cannot crank or crank is difficult to use	Overloaded	Change to a heavier winch
Gear deviation	Overused	Change winch
	Gear worn	
	Out of durable years	
Ratchet does not work	Ratchet worn	Change winch
Cable worn	Overused	Change cable
Strap worn	Overused	Change strap

Parts Diagram



Parts List

Part Number	Item Description	Qty	Part Number	Item Description	Qty
1	Bushing Bolt	1	12	Bushing Nut	1
2	Worm Bracket	1	13	Shear Pin	1
3	Frame	1	14	Worm Gear	1
4	Drum Bolt	1	15	Worm Gear Bushing	2
5	Drum	1	16	Worm Gear Shaft	1
6	Drum Bushing	1	17	Worm Gear Nut	1
7	Cable Bolt	1	18	Handle Arm	1
8	Cable Clamp	1	19	Handle Nut	1
9	Cable Nut	1	20	Handle Shaft	1
10	Drum Nut	1	21	Handle	1
11	Bushing	1	22	Worm Bolt	2

Replacement Parts

- For replacement parts and technical questions, please call Customer Service at **1-800-222-5381**.
- Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part number.
- The distributor reserves the rights to make design changes and or improvements to product lines and manuals without notice.

Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or '"Us") warrants to the original purchaser only ("You" or “Your”) that the Ultra-Tow product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of one year from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

Obligations of Purchaser

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-800-222-5381, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

Remedy Limits

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your property incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

Assumption of Risk

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction for any disputes relating to this warranty.

ULTRA-TOW™

Distributed by:

Northern Tool & Equipment Company, Inc.

Burnsville, Minnesota 55306

www.northerntool.com

Made in China