

1000-Ib Hydraulic Hitch-Mount Truck Crane

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 #52533

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/LotDate 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 1000-Ib Hydraulic Hitch-Mount Truck Crane 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 1000-lb Hydraulic Hitch-Mount Truck Crane mounts in the 2 inch receiver hitch of your vehicle to make loading and unloading of bulky and heavy equipment safe and easy. No permanent installation or drilling is required. Just install it on the hitch when you need it and remove it when you're done. The load is supported and distributed to the two adjustable legs of the crane to prevent overload on your vehicle's hitch receiver.

Technical Specifications

Property	Specification
3 Boom Positions and Weight Capacities	500, 750 and 1,000 lbs
Lift Range	22" to 79"
For Use With	2" x 2" Class III and IV Receiver Hitch
Crane Swivel	360 Degrees

Important Safety Information

- 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 crane. Always be aware of the environment and ensure that the crane is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the crane until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this crane in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the crane. There are specific applications for which the crane 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. It will
 be safer and do a better job at the capacity for which it was intended. DO NOT use this crane for
 a purpose for which it was not intended.
- Industrial or commercial applications must follow OSHA requirements.

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 crane in confined work areas may put you dangerously close to 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 crane.

∆WARNING

PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the tool. 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.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents on the tool often cover moving parts and should be avoided.
- Wear the proper personal protective equipment when necessary. Use ANSI Z87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- Do not overreach. Keep proper footing and balance at all times. Do not reach over or across running machines
- Secure the work with clamps or a vise instead of your hand when practical. This safety precaution allows for proper tool operation using both hands.

CRANE USE AND CARE

- Do not force the crane. Products do a better job and are safer 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 crane will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the crane with a damaged part.
- Store the crane when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the crane for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your crane. 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.

Specific Operation Warnings

- Engage the parking brake before use. Do not move the vehicle with a load attached to the crane.
- Do not exceed the rated load capacity.
- Use only slings or chains with a rated capacity greater than the weight of the load being lifted.
- Keep load steady. Do not allow the load to swing or drop violently while lowering or moving.
- Keep persons and property clear from under the load.
- Do not transport people or animals.
- Operate on a hard level surface.
- Always wear the proper personal protective gear such as gloves and steel toed boots.
- No alteration shall be made to this product. Do not adjust the safety valve.
- Not for use by or around children.

Main Parts of Product

Reference	Subassembly
1	Base
2	Legs
3	Jack
4	Post
5	Boom



2. Attach the leg extender (23) to the leg (6), then use the snapper pin (22) to assemble the link bar.



3. Use the link bar (7) to attach the legs (6) to the base assembly (4) with snapper pins (22).



4. Attach the T shape connector (5) to the base assembly (4), and mount it to a truck or anywhere that would stabilize the base.



5. Insert the post (2) to the base assembly (4).



6. Assemble the boom (1) to the post (2). Then connect the long ram jack (3) to the boom and the post.



7. Assemble the hook with chain (8) to the end of the boom (1).



Before Each Use

Inspect the general condition of the tool. Check for:

- Loose hardware
- Misalignment or binding of moving parts
- Cracked or broken parts
- Proper ram operation
- Frayed, kinked or damaged cable
- Any other condition that may affect its safe operation

Operating Instructions

- Engage the parking brake before use. Do not move the vehicle with a load attached to the crane.
- Keep load steady. Do not allow the load to swing or drop violently while lowering or moving.
- Keep persons and property clear from under the load.
- Do not transport people or animals.
- Operate on a hard level surface.
- Connect the T-shape connector with the Truck



• Adjust the link bar (7) with the snapper pin (22) to set the base position to the desired height.



• Attach the T-shape connector with the assembled base and crane to get the tool ready to operate.



• To lift the crane, use the jack handle (15) to lock the jack valve, then put the handle into the fulcrum and lift the jack.





15 Jack Handle

• To lower the crane, use the jack handle (15) to release the jack valve.



Jack Handle

Note: The crane can swivel 360°. Insert the stop pin (#18) into the hole. The crane can only swivel 180° due to the two stops (#19, #20).



After Each Use

- Before driving the vehicle, retract the winch cable completely, position the boom over the truck's wheel well, and insert the post pin to prevent the boom from swiveling.
- Fold the boom and tie it with the strap.
- Disconnect the T-shape connector with the truck and move it to the innermost area of the base rod. Use one pin (#32 or #33) to fix its position on the rod.

Maintenance

- It is recommended that the general condition of any tool be examined before it is used. Keep your crane in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, stop using the crane immediately and have the problem corrected before further use. Have necessary repairs made by qualified service personnel.
- Use only soap and a damp cloth to clean your tools. Many household cleaners are harmful to plastics and other insulation. Never let liquid get inside a tool.
- When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this crane.
- To add oil, fully collapse the jack and then add oil to move the oil level up to the oil plug. Use only hydraulic jack oil.
- Lubricate the grease fitting with a grease gun once a month or when the boom becomes difficult to swivel on the post.
- If the crane will be exposed to wet conditions, more frequent lubrication may be necessary to prevent a build-up of rust.

Maintenance Interval	Maintenance Point
	Check the fuel level.
Daily before operating:	Check the hardware.
	Check for broken parts.
Every month or if the boom becomes difficult to swivel on the post:	Lubricate the grease fitting with a grease gun.
After operating one year:	Change the lubrication oil.

Troubleshooting

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
Ram will not lift at its weight capacity. Hook lowers under load.	Air bleeding from the jack.	Fully close the release valve.
Hook will not lift all the way.	Low on oil.	Check the oil level and refill if needed.
Oil leaking from fill plug.	Too much oil.	Check fluid level and adjust if needed.



Parts List

Part#	Description	Quantity
1	Boom	1
2	Post	1
3	Long Ram Jack	1
4	Base Assembly	1
5	T-Shaped Connector	1
6	Leg	2
7	Link Bar	2
8	Hook with Chain	1
9	Bolt	1
10	Lock Nut	1
11	Bolt	1
12	Lock Nut	1
13	Bolt	1
14	Lock Nut	1
15	Jack Handle	1
16	Bolt	1
17	Lock Nut	1
18	Stop Pin	1
19	Stop I	1
20	Stop II	1
22	Snapper Pin	6
23	Leg Extender	2
24	Foot Plate	2
25	Bolt	2
26	Lock Nut	2
27	Bolt	2
28	Lock Nut	2
29	Pin	1
30	R-Pin	1
31	Bolt	2
32	Hitch Pin	1
33	Safety Pin	1
34	Bearing	1
35	Thrust Bearing	1
36	Bearing Cover	1
37	Protecting Housing	1
38	Strap	1
39	Strap	2
40	Retaining Ring	1
41	Cap Plate	1

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 reference 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 <u>one year</u> 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.



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