

# 4000 lb. Adjustable Gantry 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 #52523

# SAVE THESE INSTRUCTIONS

Thank you very much for choosing a Strongway™ 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 Gantry Crane is designed for certain applications only. Northern Tool and 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 Gantry Crane is ideal for shops where heavy level lifting is essential.

## **Technical Specifications**

Capacity: 2 Ton Adjustable Height: 7' 11" - 11' 9"

Casters: 5"

# Important Safety Information

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- 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 tool 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 product 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 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. 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.

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- This product may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
- Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:
  - lead from lead-based paints,
  - crystalline silica from bricks and cement and other masonry products, and
  - arsenic and chromium from chemically-treated lumber.
- Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

### **AWARNING**

#### 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 product in confined work areas may put you dangerously close to other cutting tools and rotating parts.
- Do not use the crane where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The product can create sparks, which may ignite the flammable liquids, gases, or dust.
- Do not allow the crane to come into contact with an electrical source. The crane is not insulated and contact will cause electrical shock.
- Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the product.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.

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#### PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the crane. Do not use it 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 ANSIZ87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. 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.
- 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.

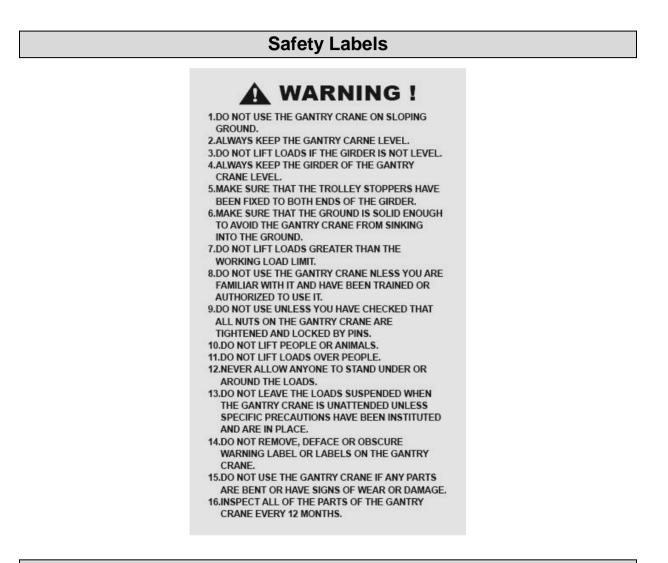
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#### CRANE USE AND CARE

- 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 product 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 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 product.

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.

• Keep guards in place and in working order. Never operate the crane without the guards in place.



# **Assembly Instructions**

### WARNING

Assemble the crane loosely until the entire assembly is complete. Make certain that you have a large, clean, and uncluttered area for assembly. As the crane is large and heavy, you may have to lay out the different parts on their sides, and tighten and erect the entire assembly once complete.

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Step 1) Attach two Plates (#20) from two sides to the one end of the Crossbeam (#19). Secure with the four Bolts (#1), Washers (#2), Spring Washers (#3), and Nuts (#4). Repeat for the other end.



Step 2) Attach each Inner Vertical Post Assembly to the Crossbeam (#19). Secure with the 8 Bolts (#1), Washers (#2), Spring Washers (#3), and Nuts (#4)



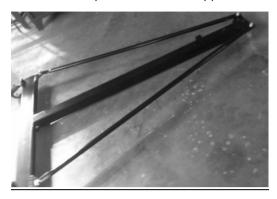
Step 3) Attach the four Swivel Casters with Brake (#27) to the Base Assembly (#26). Apply grease to the zerk in each Caster.



Step 4) Attach each Outer Vertical Post Assembly (#24) to each Base Assembly (#26), making certain that the slot at two sides of the Outer Vertical Post Assembly are facing the Casters' direction. From the top, insert two (2) Bolts (#14) through the base of the Outer Vertical Post Assembly, and into the Base Assembly (#26). Slip on the Washer (#2) and Spring Washer (#3) and secure by tightening the Nuts (#4).



Step 5) Attach two Support Tubes (#22) to each Outer Vertical Post Assembly (#23). Insert the Bolt (#5) through the top of the Support Tube, and through the Eyelet. Slip on a Washer (#6) and Spring Washer (#7) and secure with the Nut (#8). Attach the other end of the Support Tube to the Base Assembly with Bolts, Washers, Spring Washers, and Nuts. Repeat for all four Support Tubes.



Step 6) Insert the Inner Vertical Post (#21) into the Outer Vertical Post (#23). Insert one (1) Pin of the Pins with Chain (part #18) through the slot and the Inner Vertical Post Hole so that it goes all the way through to the other pin. Attach the Handle (#24) to the bracket on the side of Outer Vertical Post, insert the Bolt (#10) from the inside, slip on the Washer (#14) and Spring Washer (#15) and secure with the Nut (#11). Make sure the two (2) hooks of the Handle hold the two ends of the Pin (#18). Repeat for the other Post Assembly.



Step 7) Tighten all the Bolts and Nuts securely and make certain that the entire assembly is tight and secure.

Step 8) Test the crane according to manual and ANSI/ASME B30.17 standards.

# **Operating Instructions**

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Never force the crane or attachment to do the work of a larger industrial tool. It is designed to do the job correctly and safely in the manner for which it was intended.

Step 1) Move the crane so that it is directly above the item to be lifted.

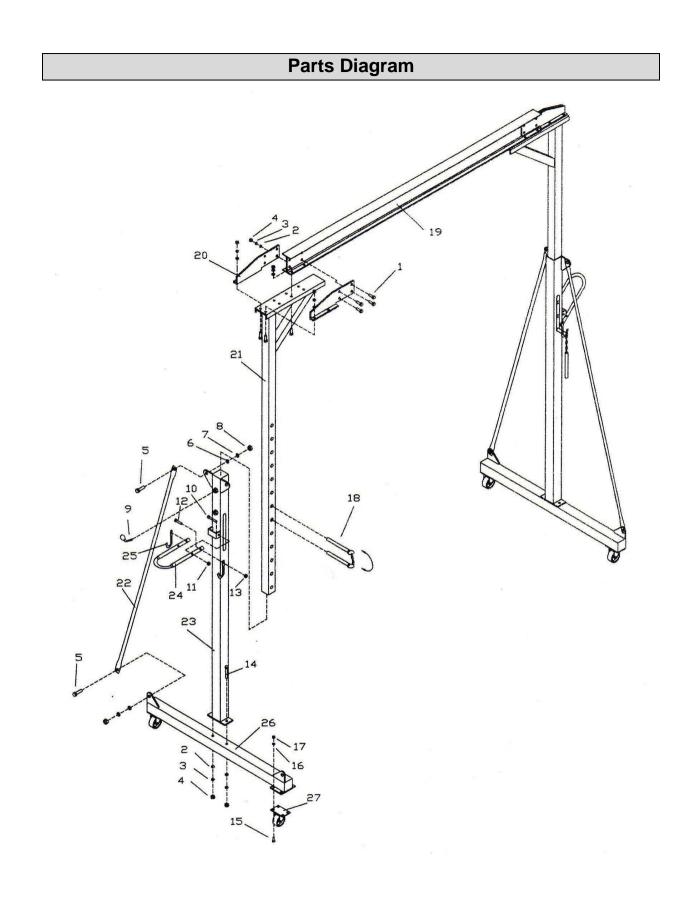
Step 2) Securely fasten the item to the crane with the appropriate trolley or hoist.

Step 3) Raising and lowering the Crossbeam requires two people. There is a Handle (#27) on each of the Outer Vertical Post Assemblies. To raise the Crossbeam, press the handle and the Inner Vertical Post will be up by one hole, insert the other Pin into this hole to hold the position. Pull out the original pin and hook the handle to the new positioned pin. Repeat to reach the height you need. The Inner Vertical Post Assembly has thirteen different stopping positions.

### Maintenance

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- The crane should be maintained daily, monthly, and every 12 months or after overloading.
- The maintenance of the trolley and the hoist should be in accordance with relating manuals and ANSI/ASME B30.11 and B30.16.
- Only trained and qualified personnel should maintain the crane.
- Clear a large enough area for maintenance, at least 1.5 Span (L) X 2.5 Height (H) of the crane's dimensions.
- Land the load if it is attached to the crane.
- All controllers shall be placed in the OFF position. Place warning signs and barriers around the maintenance area.
- Disassemble the crane, inspect all parts of it, and maintain it as instructed in this manual.
- Replace all roller pins used for locking. Replace all damaged, worn, bent, and lost parts, such as warning labels.
- After the maintenance work is completed and before restoring the crane to normal operation, all replaced parts and loose materials should be removed. Reassemble the crane and conduct tests according to this manual and ANSI/ASME B30.17.



#### # 52523 -2T

Part#	Description	Qty.	Part#	Description	Qty.
1	Bolt M12 x 35	24	15	bolt M10 x 30	16
2	Ø12 washer	28	16	Ø10 spring washer	16
3	Ø12 spring washer	28	17	M10 nut	16
4	M12 nut	28	18	pin	4
5	bolt M14 x 40	8	19	cross beam	1
6	Ø14 washer	8	20	plate	4
7	Ø14 spring washer	8	21	inner vertical post	2
8	M14 nut	8	22	support tube	4
9	M12 Bolt	4	23	outer vertical post	2
10	bolt M10 x 60	4	24	handle	2
11	M10 nut	4	25	pin	4
12	bolt M8 x 40	4	26	base assembly	2
13	M8 nut	4	27	swivel casters	4
14	bolt M12 x 150	4			

# **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 Strongway 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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