

# 3000 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 #52519

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 3000 lb Adjustable 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 3000 lb Adjustable Gantry Crane is ideal for shops where heavy level lifting is essential.

# **Technical Specifications**

Capacity: 3000 lb

Adjustable Height: 7' 11" - 11' 9"

Casters: 5"

# Important Safety Information

## **MWARNING**

- 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 tool. 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 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. 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.

## **MWARNING**

 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 product 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 product.

## **MWARNING**

#### **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.

#### **ACAUTION**

#### **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.

# **Specific Operation Warnings**

## **MWARNING**

- To prevent serious injury or property damage read and understand the owner's manual before use.
- DO NOT exceed the rated load capacity.
- Operate on a hard, level surface.
- DO NOT operate crane if the beam is not level.
- Be sure the trolley stoppers have been fixed to both ends of the beam.
- Ensure the load is centered before lifting.
- DO NOT use to lift people or animals.
- Keep persons and property clear from under the load.

- DO NOT leave loads suspended when the gantry crane is unattended.
- DO NOT allow the load to swing or roll against the support members.
- Inspect the crane for damaged parts and loose bolts before each use.
- DO NOT use crane if there are damaged parts. Replace parts before continuing use.
- DO NOT adjust height or disassemble crane while loaded.
- Secure trolley and hoist in the center of the beam when adjusting height.
- DO NOT push or pull crane with a forklift or other vehicle.
- Push the crane, not the load
- When moving loaded crane, keep the load close to the floor and position the load in the center of the beam.
- DO NOT anchor the legs to the floor.
- Secure trolley and hoist in the center of the beam when adjusting height.

# **Assembly Instructions**

## **AWARNING**

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.

#### Step 1

Attach the two plates (#20) from the two sides to the one end of the crossbeam (#19). Secure them with bolts (#1), washers (#2), spring washers (#3), and nuts (#4). Repeat for the other end.

## Step 2

Attach each inner vertical post assembly (#21) to the crossbeam (#19), secure with 8 bolts (#1), washers (#2), spring washers (#3), and nuts (#4).

## Step 3

Attach the four swivel casters (#27) to the base assembly (#26). Apply grease to the zerk in each caster.

#### Step 4

Attach each outer vertical post assembly (#23) to each base assembly (#26) making certain that the slot at each of the two sides of the outer vertical post assembly are facing the castors' direction. From the top, insert two bolts (#14) through the base of the outer vertical post assembly, and into the base assembly (#26). Slip on a washer (#2), spring washer (#3), and secure by tightening on with 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), spring washer (#7) and secure with a 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 of the pins with the chain (#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 the outer vertical post. Insert the bolt (#10) from the inside, slip on the washer spring washer and secure with the nut (#11). Make sure the pin (#18) holds the two ends. Repeat for the other post assembly.

## Step 7

Tighten all of the bolts and nuts securely and make sure that the entire crane assembly is tight and secure.

#### Step 8

Test the crane according to this manual and the ANSI/ASME B30.17 standards.

# **Operating Instructions**

#### **AWARNING**

- DO NOT exceed the rated load capacity.
- Operate on a hard, level surface.
- DO NOT operate crane if the beam is not level.
- Be sure the trolley stoppers have been fixed to both ends of the beam.
- Ensure the load is centered before lifting.
- DO NOT use to lift people or animals.
- Keep persons and property clear from under the load.
- DO NOT leave loads suspended when the gantry crane is unattended.
- DO NOT allow the load to swing or roll against the support members.

## Step 1

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

#### Step 2

Securely fasten the item to be moved to the crane with the appropriate trolley or hoist.

#### Step 3

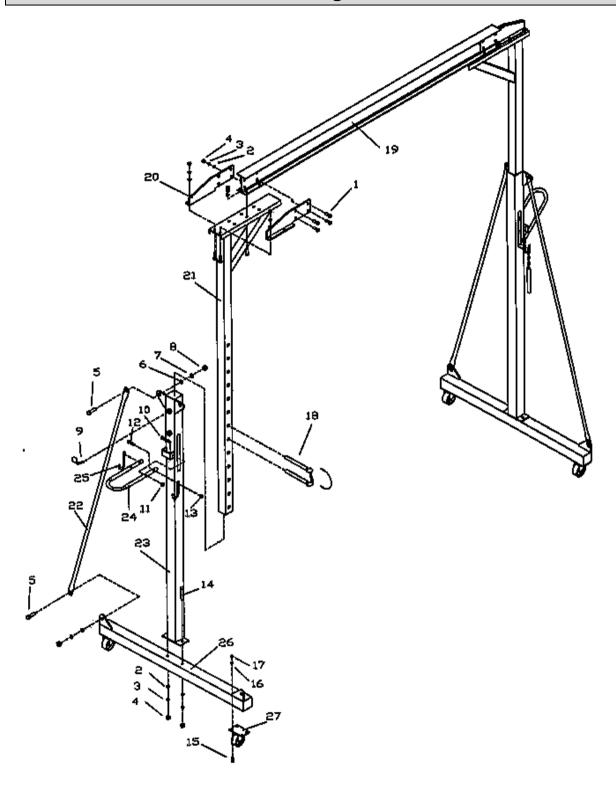
Raising and lowering the crossbeam requires two people. There is a handle (#24) on each of the outer vertical post assemblies. To raise the crossbeam, press the handle and the inner vertical post will move up one hole. Insert the other pin into this hole to hold the position. Pull out the original pin and hook the handle in with the new positioned pin. Repeat this to reach the height needed. The inner vertical post assembly has thirteen different stop positions.

#### Maintenance

- The gantry crane should be maintained daily, monthly, and every 12 months or after overloading.
- Only trained and qualified personnel should maintain the crane.
- Clear a large enough area for maintenance, at least 1.5 times the span (L) and 2.5 times the height 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 as instructed in this manual.
- Replace all roller pins used for locking. Also replace all damaged, worn, bent, and lost parts, such as warning labels.

# Parts Diagram



# **Parts List**

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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