



## Large Manual Tire Changer

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 #54413

**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 tire changer 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

Strongway's Large Manual Tire Changer allows you the freedom and ease of changing your own tires.

## Technical Specifications

Property	Specification
Max. Rim Width (in.)	Up to 16.5
Plate Diameter (in.)	11 13/16
Spindle Diameter (in.)	2 3/8
Base Dimensions (in.)	27 1/2 x 18 1/2
Dimensions L x W x H (in.)	27 1/2 x 18 1/2 x 40 1/8
Tire Height (in.)	16–20
Recommended Use	8 inches (trailer tires) to 16 inches (light truck tires)
Ship Weight (lbs.)	37.2

## 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 tire changer. 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 product 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 a safer experience and the product will do a better job at the capacity for which it was 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 tire changer 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 tire changer in confined work areas may put you dangerously close to other cutting tools and rotating parts.

- Do not use the tire changer 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.
- Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the tire changer.

## **⚠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. 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.
- Ensure the power switch is off prior to plugging in the tool.
- 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.

## **⚠CAUTION**

### **TIRE CHANGER USE AND CARE**

- Do not force the product. 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 product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.
- Store the product 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 product without the guards in place.

## **Specific Operation Warnings**

### **⚠WARNING**

- Release tire pressure before using tire changer.

- Wear ANSI Z871. Compliant safety goggles.
- Do not exceed the rated capacity.
- Use on a hard level surface.
- Use an adequate amount of lubricant while mounting and dismounting tire. Be sure that the bead is in the center of the rim during this process.
- No alterations shall be made to this product.
- Only attachments and/or adaptors supplied by the manufacturer shall be used.
- Not for use by or around children.

## Assembly Instructions

1. Bolt the long leg (#1) to the center post (#3) with bolts (#11), nuts (#12), lock washers (#13), and flat washers (#14).



2. Bolt the two short legs (#2) to the long leg base with bolts (#11), nuts (#12), lock washers (#13), and flat washers (#14).

**Note:** The user can bolt the manual tire changer to the floor with the four provided holes.



3. Connect the casting pipe (#4) into the post (#3) with the lock pin (#5) and hair pin (#6).



4. Connect the shovel (#7) to the casting pipe (#4) with the lock pin (#5) and hair pin (#6).



5. Slip the slotted press plate (#8) into the top of the post (#3).



6. Rotate the threaded rod (#9) into the top of post (#3).



## Operating Instructions

### **⚠WARNING**

- Release tire air pressure before using this tire changer.
- Wear ANSI Z871. Compliant safety goggles.
- Keep bystanders away during operation.



## Bead Breaking

Before beginning, use a rubber lubricant (not included). It makes bead breaking, mounting, and demounting easier.

1. Place one piece of the pad on the base of the product.



2. To break the bead from the rim, lay the tire flat on the long leg base (#1).



3. Insert the flat end of the mount /demount bar (#10) into the casting pipe (#4). Set the shovel (#7) on the tire against the edge of the rim. As you work with different sized tires you may need to adjust the shovel height. Adjust the shovel height by removing the pin and moving the shovel (#7) to the appropriate height and reinserting the pin.



4. Push down on the mount/demount bar forcing the bead off the rim. If the bead does not come off all at once, turn the tire and try again in several different locations.



5. Turn the tire over and repeat.

### **Demounting and Mounting Tires**

1. After the bead is broken, place the tire up on the machine with the valve stem facing up and the lug pin sticking up through the lug hole of the rim.



2. Place the slotted press plate (#8) over the center post.



3. Screw the threaded rod (#9) onto the center post. Lock the slotted press plate into place by tightening by hand. Hand tightening should be enough but if you want a little more pressure, place the flat end of the dismount tool through the top of the threaded rod and use the extra leverage to tighten the threaded rod even more.



4. Once the tire is held securely in place, force demounting in between the tire and the rim. This should be done with the flat of the demount end against the rim. Pull the bar toward you across the tire to force the edge of the bead over the rim.



5. Work the bar all the way around the center post to demount the bead completely.



6. Pull the tire up toward the top bead, place the flat end of the demounting bar between the tire and the rim as before, and repeat.
7. To mount the tire back on the rim, with the other hand, pull the bar clockwise around the center post until the bead starts to mount onto the rim. It should only have to move a few inches before you can let go of the tire and use both hands on the bar. If the tire bead starts to seat while you are mounting the mount, continue around the rim until the tire mounts to the tire. To prevent this, push down on the tire so it doesn't seat on the upper edge of the rim during mounting.

**Note:** The bead running across the top of the mounting tool keeps the bar hooked on the edge of the rim. The tire bead will run across the top (flat part of the mounting end of the bar) and against the curved peg when mounting on the rim.

## Maintenance

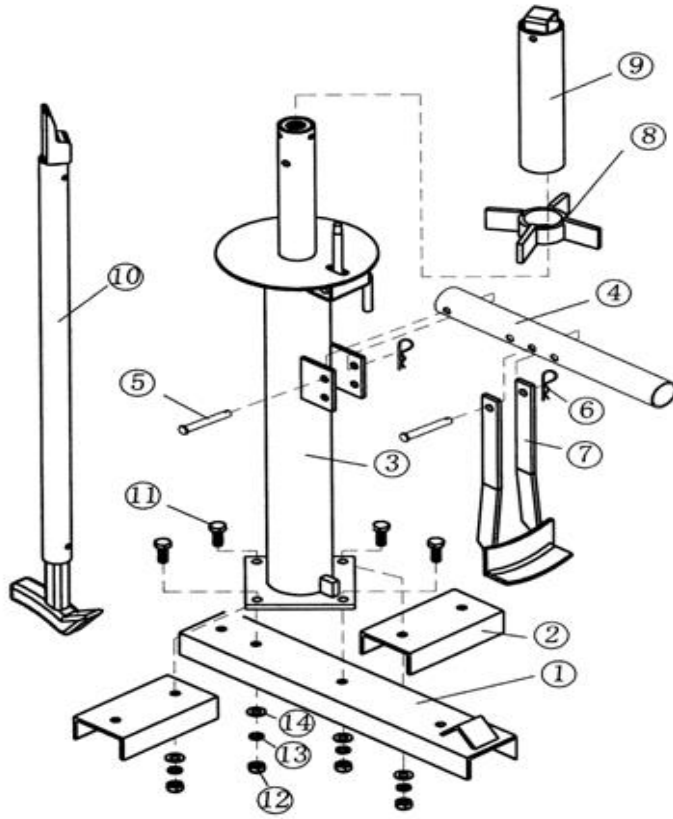
Maintain the product by adopting a program of conscientious repair and maintenance in accordance with the following recommended procedures. It is recommended that the general condition of any tool be examined before it is used. Keep your tool in good repair. Keep all cutting tools sharp and clean. Keep handles dry, clean, and free from oil and grease.

## 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
Poor performance (cannot dismount tire)	Not enough pressure was used on the tire.	Press the tire in many directions to divide the tire and hub.
	The bolts do not fit in the holes when the wheel is placed on the wheel of the changer.	Check and adjust again.

## Parts Diagram



## Parts List

Part Number	Description	Quantity
1	Long Leg	1
2	Short Leg	2
3	Post	1
4	Casting Pipe	1
5	Lock Pin	2
6	Hair Pin	2
7	Arc Shovel	1
8	Slotted Press Plate	1
9	Threaded Rod	1
10	Crowbar	1
11	Bolt M10x25	4
12	Nut M10	4
13	Lock Washer 10	4
14	Flat Washer 10	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 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 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.





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