



## 48in. Dethatcher

### 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 # 49176**

09072016

**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, the 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 40" Dethatcher is designed for certain applications only. Northern Tool and Equipment cannot be responsible for issues arising from modification or use of this product in 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**.

## Table of Contents

Intended Use.....	4
Technical Specifications .....	4
Important Safety Information .....	4
Specific Operation Warnings .....	6
Assembly .....	7
Before Each Use.....	11
Operating Instructions.....	11
After Each Use.....	11
Maintenance .....	11
Parts Diagram.....	12
Parts List – Main Body.....	12
Parts Diagram.....	13
Parts List - Hardware .....	13
Parts Diagram.....	14
Parts List.....	14
Replacement Parts .....	15
Limited Warranty.....	16

## Intended Use

This tow-behind 40" Dethatcher helps prevent roots, leaves, grass clippings, and other small vegetation from inhibiting the growth of your lawn. The Dethatcher has 20 oil-tempered, spring tines that comb the matter layer of thatch onto the surface where it can be easily bagged or mulched.

## Technical Specifications

Property	Specification
Working width	48"
Tires	7" Poly
Construction	Steel
Hitch style	Pin-style

## 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 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 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 do the job better and more safely 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**

#### **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 aerator in confined work areas may put you dangerously close to other cutting tools and rotating parts.
- Do not allow the aerator to come into contact with an electrical source. The tool 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 aerator.
- 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.

## **⚠ 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.
- Do not use the tool when tired or under the influence of drugs, alcohol or medication.
- Remove keys or wrenches before connecting the tool to an air supply, power supply, or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may cause personal injury.
- 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**

### **DETHATCHER USE AND CARE**

- Do not force the dethatcher. Dethatchers do a better and safer job when used in the manner for which they are designed. Plan your work and use the correct dethatcher for the job.
- Check for damaged parts before each use. Carefully check that the dethatcher will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the dethatcher with a damaged part.
- Store the dethatcher when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the dethatcher for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your dethatcher. Accessories that may be suitable for one dethatcher may create a risk of injury when used with another dethatcher.
- Do not leave the dethatcher or tow vehicle running unattended.
- Inspect the dethatcher for damage or excessive wear before each use. If you find damage, do not use the dethatcher.

## Specific Operation Warnings

### **⚠ WARNING**

- Lower equipment to ground, stop engine, remove key and set brake before dismounting tractor.
- DO NOT use if equipment is damaged. Repair equipment before continuing use.
- DO NOT exceed this implement's maximum speed of 5 MPH. Exceeding this speed may result in loss of control during transport or braking.
- Keep seat belt securely fastened while operating. Falling off can result in impalement or being run over.
- If equipped, parking stands must be functional, kept in good repair, and stored on the unit. Park and store on a hard, level surface.
- Operate from tractor seat only.
- Never allow riders on equipment.
- Keep bystanders at least 20 feet away while operating.
- Sharp points can cause injury. Be cautious when replacing tines.
- Store out of reach of children. Not for use by or around children.

#### **FALLING OFF CAN RESULT IN IMPALEMENT OR BEING RUN OVER**

- Tractor must be equipped with Roll Over Protection Structure (or ROPS CAB) and seat belt. Keep foldable ROPS system in "locked up" position at all times.
- Keep seat belt securely fastened.
- Never allow riders on equipment.

## Assembly

### Tools Required:

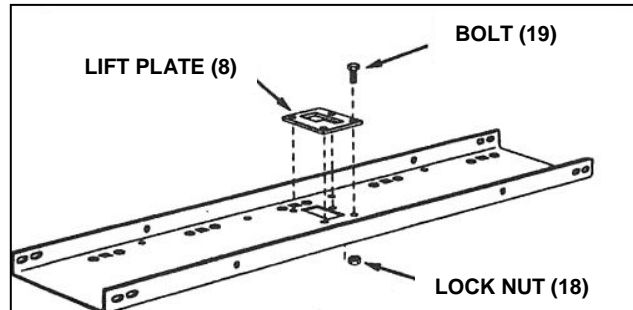
- 2 – 1/2" wrenches
- 1 – 3/4" wrench
- 1 – 9/16" wrench
- 1 – Medium pliers

### Step 1: Attach lift plate to main body

#### Step 1 Hardware Needed:

- 4 – Bolt 5/16" x 1" (19)
- 4 – Lock Nut 5/16" (18)

Attach Lift Plate (8) to Main Body (6) using Bolts (19) and Lock Nuts (18). Tighten bolts fully. See Step 1.



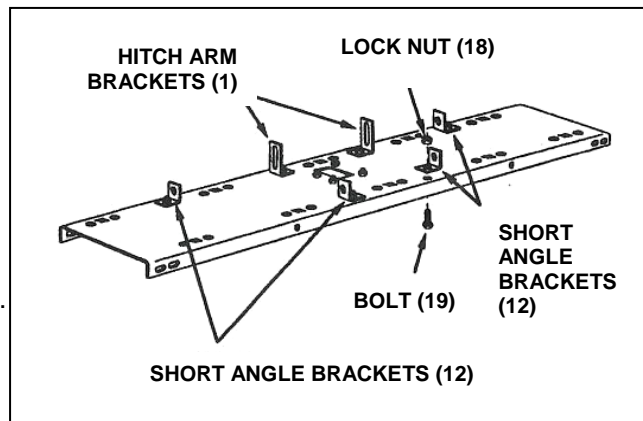
Step 1

### Step 2: Attach angle brackets to main body

#### Step 1 Hardware Needed:

- 6 – Bolt 5/16" x 1" (19)
- 6 – Lock Nut 5/16" (18)

Turn over the main body as shown in Step 2. Attach four Short Angle Brackets (12) and two Hitch Arm Brackets (1) into the round holes in the back row of holes, using Bolts (19) and Lock Nuts (18). Refer to Step 2 for bolt locations.



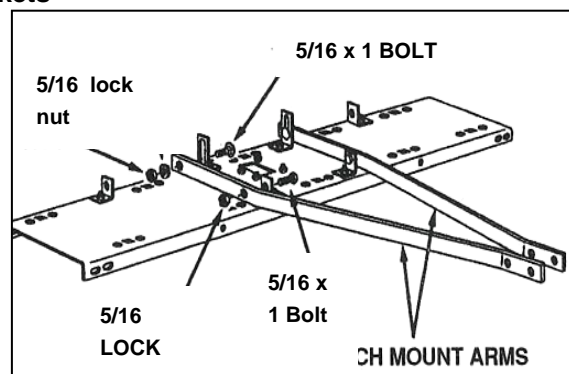
Step 2

### Step 3: Attach hitch mount arms to angle brackets

#### Step 3 Hardware Needed:

- 4 – Bolt 5/16" x 1" (19)
- 4 – Lock Nut 5/16" (18)

Attach each of the Hitch Arms (7) to the outside of the angle brackets, using Bolts (19) and Lock Nuts (18). See Step 3 for hitch arm locations. Do not fully tighten bolts.



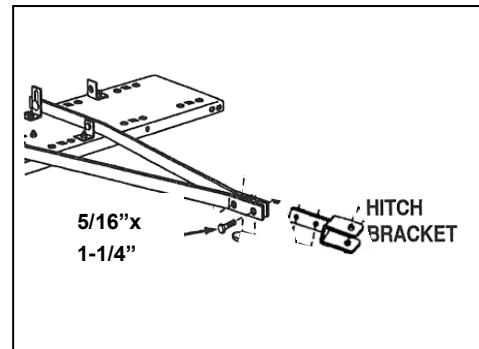
Step 3

#### Step 4: Attach Hitch Brackets

Step 4 Hardware Needed:

- 2 – Bolt 5/16" x 1-1/4" (22)
- 2 – Lock Nut 5/16" (18)

Attach the Hitch Bracket(2) to the two Hitch Arms(7) using Bolts (22) and Lock Nuts (18). Do not tighten at this point. See Step 4.



Step 4

#### Step 5: Fully tighten bolts in the following order

Step 5 Hardware Needed:

- 1 – Hitch Pin (23)
- 1 – Cotter Pin (24)

**Fully tighten bolts in the order listed below:**

1. Front hitch arm bolts in Step 4.
2. Hitch arm bracket bolts in Step 5.
3. All angle bracket bolts from Step 2.
4. All angle bracket bolts from Step 3.
5. Insert Hitch Pin (23) into the hitch pin brackets as shown in Step 4.
6. Insert the Cotter Pin (24) into the hitch pin to hold in place.

#### Step 6: Attach axle bracket to main body

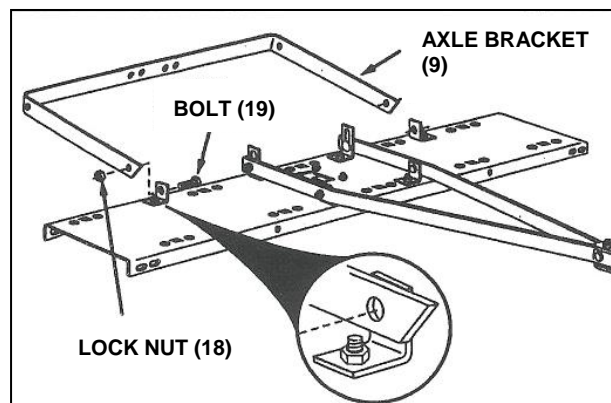
Step 6 Hardware Needed:

- 2 – Bolt 5/16" x 1" (19)
- 2 – Lock Nut 5/16" (18)

Attach the Axle Bracket (9) to the outside of the Short Angle Brackets, using Bolts (19) and Lock Nuts (18).

See Step 6.

Tighten to snug fit, so that the Axle Bracket (4) can move up and down.



Step 6



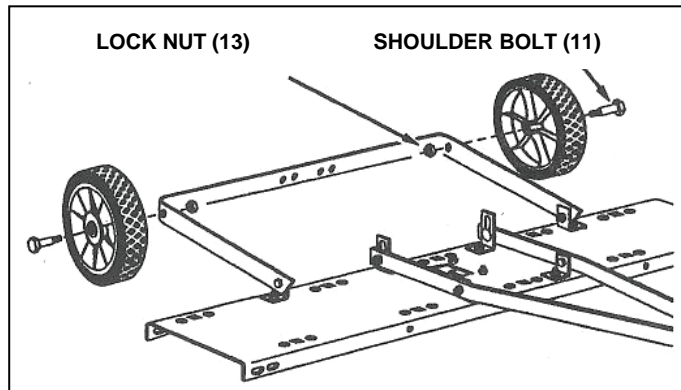
### Step 7: Attach the wheels

Step 7 Hardware Needed:  
2 – Shoulder Bolt (11)  
2 – Lock Nut (13)

Attach each Wheel (5) using a Shoulder Bolt (11) and Lock Nut (13). Tighten the bolts.

**Note:** Only tighten the bolts to the end of the threads. The Wheels (5) need to spin freely on the bolts.

See Step 7.



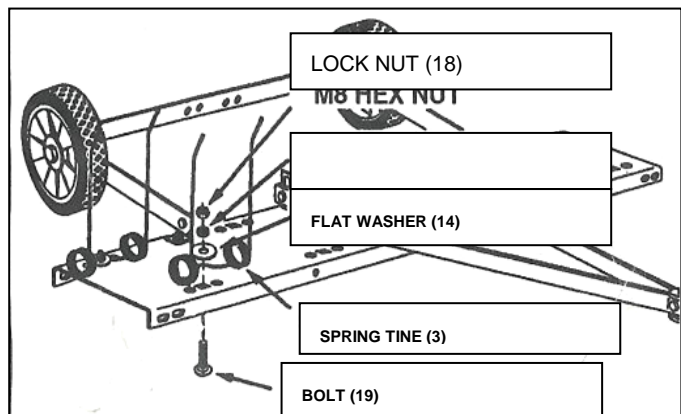
Step 7

### Step 8: Attach spring tines to the main body

Step 8 Hardware Needed:  
12 – Bolt 5/16" x 1" (19)  
12 – Flat Washer (14)  
12 – Lock Nut 5/16" (18)

Attach each Spring Tine (3) using a Bolt (19), Flat Washer (14), and Lock Nut (18).

See Step 8 for the position of the tine. The Tine should sit between the metal bumps on main body. Fully tighten.



Step 8

### Step 9: Attach lift handle

Step 9 Hardware Needed:

3 – Bolt 5/16" x 1" (19)

3 – Lock Nut 5/16" (18)

Turn dethatcher upright onto the tines and wheels.

Attach Tall Angle Bracket (25) to the Axle Bracket (9) using Bolt (19) and Lock Nut (18).

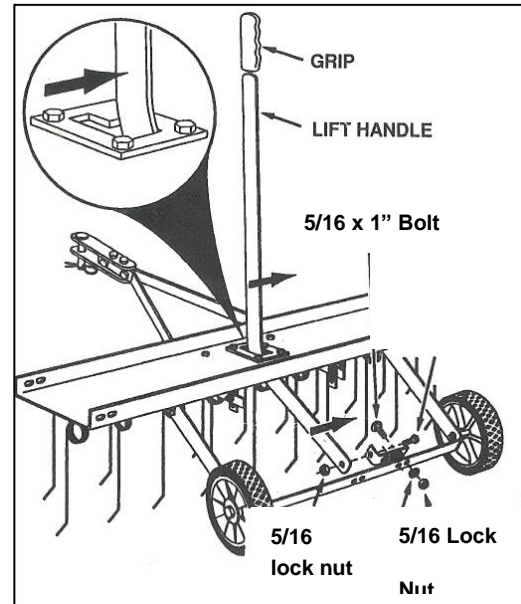
Do not tighten.

Next, position the Lift Handle (10) through the Lift Plate (8) on the Main Body.

Attach the Lift Handle (10) to the Tall Angle Bracket (1) using Bolt (19) and Lock Nut (18).

Now tighten all bolts in this step.

See Step 9.



Step 9

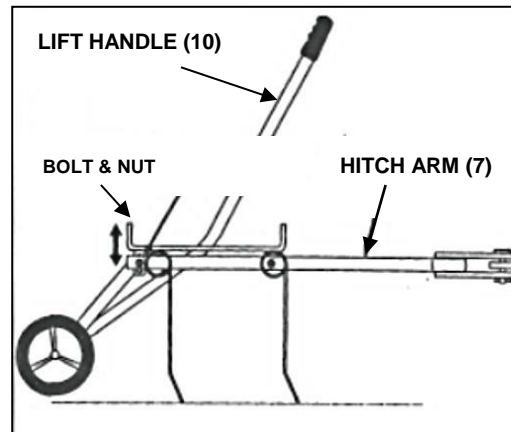
### Step 10: Adjust to towing vehicle

**Note:** Make sure you are on a level surface when making this adjustment.

See Step 10.

Attach the fully assembled dethatcher to the towing vehicle. Next, lower the Lift Arm to place the dethatcher in operating position. Adjust the bolts at the back of the mounting arms until the front and back rows of tines equally touch the ground. Re-tighten carriage bolts.

**Note:** Adjustment must be changed for each towing vehicle.



Step 10

## Before Each Use

Check that all connections are tight before each use. Weight may be added to the top of the main body. Secure added weight to the main body.

## Operating Instructions

**WARNING:** Do not operate this dethatcher above 5 mph.

## After Each Use

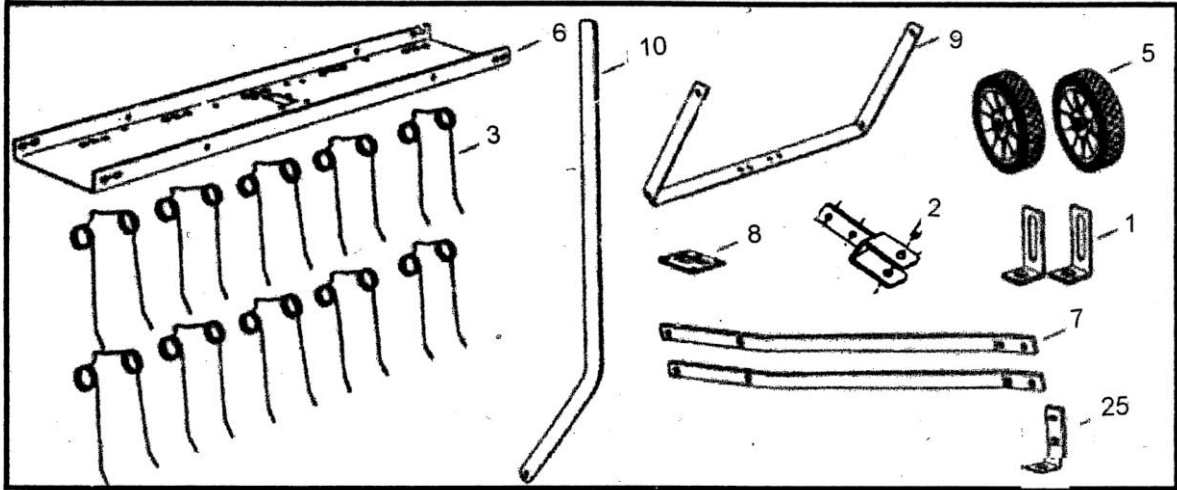
Lubricate the wheels and wheel shoulder bolts regularly as needed. Store in a dry place away from moisture or water to avoid rusting.

## Maintenance

Maintain your dethatcher. It is recommended that the general condition of any dethatcher be examined before it is used. Keep your dethatcher in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. 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.

## Parts Diagram

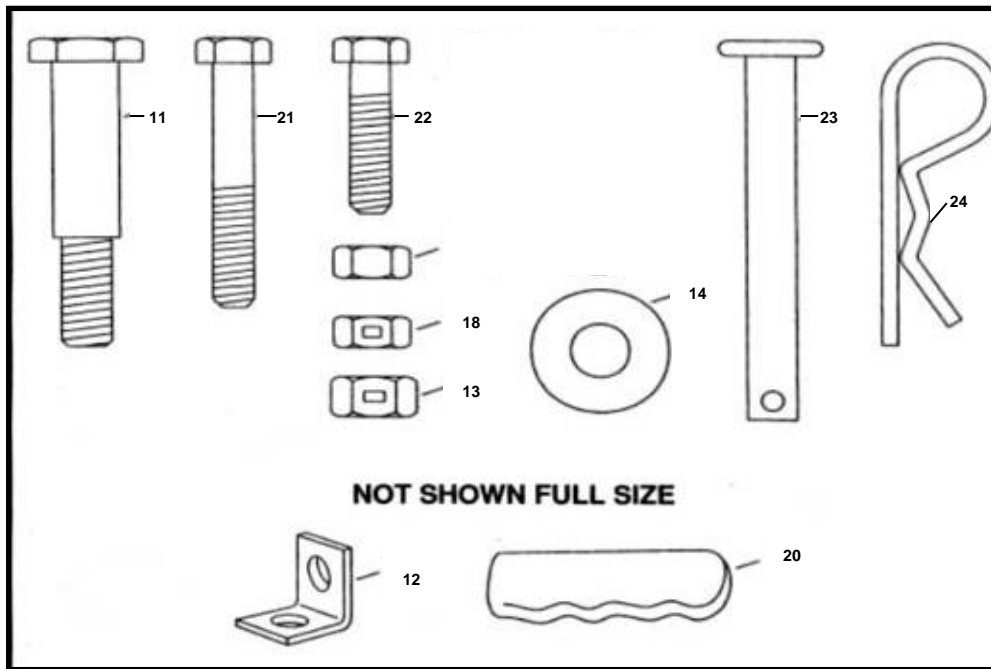
**Main Parts:**



## Parts List – Main Body

Reference No.	Description	Quantity
1	Hitch Arm Bracket	2
2	Hitch Bracket	1
3	Spring Tine	12
5	7" Poly Wheels	2
6	Main Body	1
7	Hitch Arm	2
8	Lift Plate	1
9	Axle Bracket	1
10	Lift Handle	1
25	Tall Angle Bracket	1

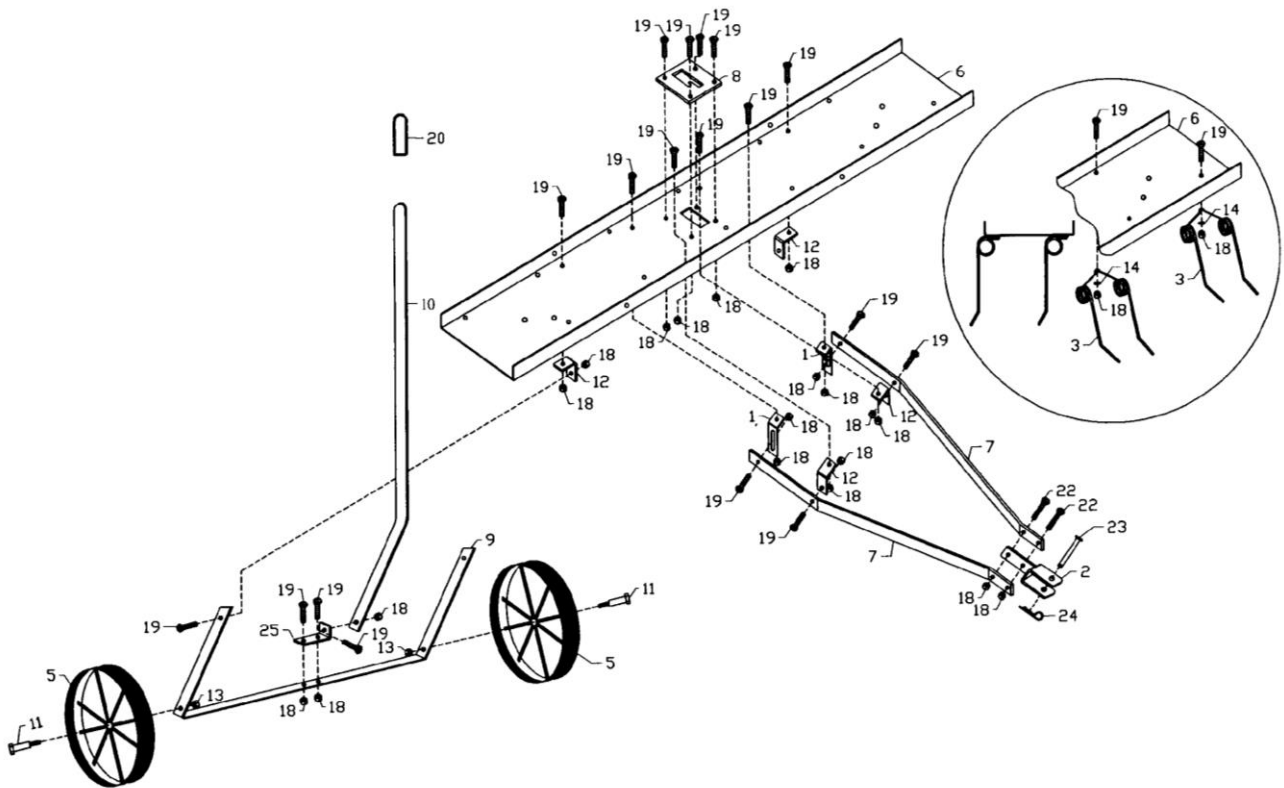
## Parts Diagram



## Parts List - Hardware

Reference No.	Description	Quantity
11	Shoulder Bolt	2
12	Short Angle Bracket	4
13	Lock Nut 3/8"	2
14	Flat Washer 5/16"	12
18	Lock Nut 5/16"	33
19	Bolt 5/16" x 1"	31
20	Handle Grip	1
22	Bolt 5/16" x 1-1/4"	2
23	Hitch Pin	1
24	Cotter Pin	1

## Parts Diagram



## Parts List

Reference No.	Description	Qty.	Reference No.	Description	Qty.
1	Hitch Arm Bracket	2	14	Flat Washer 5/16"	12
2	Hitch Bracket	1	18	Lock Nut 5/16"	33
3	Spring Tine	12	19	Bolt 5/16" x 1"	31
5	7" Poly Wheel	2	20	Handle Grip	1
6	Main Body	1	22	Bolt 5/16" x 1-1/4"	2
7	Hitch Arm	2	23	Hitch Pin	1
8	Lift Plate	1	24	Cotter Pin	1
9	Axle Bracket	1	25	Tall Angle Bracket	1
10	Lift Handle	1			
11	Shoulder Bolt	2			
12	Short Angle Bracket	4			
13	Lock Nut 3/8"	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 will be required: Model Number, Serial Number/Lot Date Code, and Description.
- The distributor reserves the right 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 **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.





Distributed by  
Northern Tool and Equipment Company, Inc.  
Burnsville, Minnesota 55306  
NorthernTool.com

Made in Taiwan