



Wheeled Sprinklers

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 #s 49508, 49509, 49521, 49522

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.

These wheeled sprinklers are designed for certain applications only. Northern Tool and Equipment cannot be responsible for issues arising from modification or use of these products in applications for which they were not designed. We strongly recommend that these products not be modified and/or used for any application other than that for which they were designed.

For technical questions, please call **1-800-222-5381**.

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Intended Use

These larger, wheeled sprinklers provide watering coverage to an area up to 150 feet in diameter to irrigate very large areas such as gardens, yards, and playgrounds. The sprinklers include brass sprinkler heads with 2-5 nozzles to match sprinkler output with water supply capability. The heads can be set to a full- or partial-circle water spray pattern.

Technical Specifications

49508, 3/4" Sprinkler

Property	Specification
Wheel	8" Heavy Poly Tires
Swivel Connection Fitting	3/4" FPT to 3/4" FGH
Flow Rate	6 - 10 GPM
Pressure	25 - 80 PSI
Vertical Trajectory	23°
Coverage	100 feet in diameter (7800 sq. ft.)
Dimensions (L x W x H)	22" x 19" x 24"
Weight	13 lbs.

49509, 1" Sprinkler

Property	Specification
Wheel	8" Solid Rubber Tires
Swivel Connection Fitting	1" FPT to 3/4" FGH
Flow Rate	7 - 14 GPM
Pressure	22 - 60 PSI
Vertical Trajectory	28°
Coverage	120 feet in diameter (11,000 sq. ft.)
Dimensions (L x W x H)	22" x 25.5" x 36"
Weight	29 lbs.

49521, 1-1/4" Sprinkler

Property	Specification
Wheel	8" Solid Rubber Tires
Connection Fitting	1-1/4" male fitting
Flow Rate	23 - 63 GPM
Pressure	22 - 70 PSI
Vertical Trajectory	28°
Coverage	150 feet in diameter (17,000 sq. ft.)
Dimensions (L x W x H)	34.5" x 38.5" x 24"
Weight	38 lbs.

49522, 1-1/4" Sprinkler

Property	Specification
Wheel	10" Flat-Free Tires
Connection Fitting	1-1/4" male fitting
Flow Rate	23 - 63 GPM
Pressure	22 - 70 PSI
Vertical Trajectory	28°
Coverage	150 feet in diameter (17,000 sq. ft.)
Dimensions (L x W x H)	34.5" x 38.5" x 36"
Weight	40 lbs.

Important Safety Information

⚠ WARNING

- Read and understand all instructions before using this tool. The operator must follow basic precautions to reduce the risk of personal injury and/or damage to the equipment.
- 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 this product until they have read this manual and have developed a thorough understanding of how the product works.
- DO NOT modify the 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 a 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

- This sprinkler contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. ***Do not drink water from this sprinkler. Wash hands after use.***

⚠ WARNING

WORK AREA SAFETY

- Do not allow the sprinkler to come into contact with an electrical source. It is not insulated and contact will cause electrical shock.
- Be aware of all power lines, electrical circuits and mechanical hazards in the area.

PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the sprinkler. Do not use it while you are tired or under the influence of drugs, alcohol, or medication.
- 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 get caught.
- Use ANSI-Z87.1 compliant safety goggles or safety glasses with side shields, or when needed, a face shield. Also use non-skid safety shoes, gloves, and hearing protection when appropriate.
- DO NOT point sprinkler at another person's face. Serious injury could result
- DO NOT drink from sprinkler. A sprinkler can be exposed to the following conditions that are harmful to humans:
 - Mold & bacteria
 - Lawn & garden chemicals
 - Animal waste
 - Insects
 - Stagnant water
 - Other harmful substances

Assembly

1. Slide both wheels (7) onto the axle (6) and fasten the wheels using washers, pins and caps (1 - 3).



49508



49509 & 49521



49522

2. Attach the water pipe (4) to the axle (6) with the two 40*8mm bolts & nuts (8).



3. Attach the sprinkler head (5) to the water pipe (4) and tighten with a wrench.



49508



49509



49521 & 49522

Before Each Use

- Inspect the area before each use.
- Check for damaged parts before each use. Carefully check that the tool will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the tool with a damaged part.

Operating Instructions

⚠ WARNING

- Irrigation water should never contact electric power lines or any other power source. Never let any part of the sprinkler, the round base, any irrigation fittings, or the water pipe come in contact with an electric power source.
- Pressurized water from the sprinkler head could cause serious damage to people or objects. Never allow small children to play close to operating sprinkler heads!
- Minimize distractions in the environment. Distractions can cause loss of control of the sprinkler.

49508, 3/4" Sprinkler

The sprinkler head is a fully adjustable sprinkler that will operate in a full circle pattern or any part of a circle by adjusting the stops at the base of the sprinkler. Refer to the instructions below to set sprinkler head to the desired operating pattern.

For full circle operation, the reverse trip lever may be raised in an idle position as shown in the figure at right. This will allow the reverse trip lever to miss the adjustable sprinkler stops allowing the sprinkler head to operate in a full circle mode.



For part circle operation, the reverse trip lever may be put down in an engaged position as shown at right. This will allow the reverse trip lever to engage the adjustable sprinkler stops allowing the sprinkler head to operate in a part circle mode.

The adjustable stop wires may be moved around to any position on the sprinkler base to facilitate part circle operation. One stop wire will be the right side stop for the reverse trip lever to engage and the other stop wire will be the left side stop for the reverse trip lever to engage. The sprinkler will then operate back and forth between the stop wires in the desired pattern set by the adjustable stop wires.



49509, 1" Sprinkler

The sprinkler head is a fully adjustable sprinkler that will operate in a full circle pattern or any part of a circle pattern by adjusting the stops at the base of the head. Refer to the instructions below to set the sprinkler head to the desired operating pattern.

For full circle operation, loosen the sprinkler stops and slide the stops all the way down the brass sprinkler base so they do not contact the reverse lever on the back of the sprinkler head as shown at right. Re-tighten the set screws to hold the stops in place. This will allow the sprinkler head to operate in a full-circle mode.



For part circle operation, loosen the sprinkler stops and raise the stops so they will contact the reverse lever on the back of the sprinkler head as shown at right. Re-tighten the set screws to hold the stops in the desired sprinkling angle. This will allow the sprinkler head to operate in a part-circle mode.



49521/49522, 1-1/4" Sprinkler

The sprinkler head is a fully adjustable sprinkler that will operate in a full circle pattern or any part of a circle pattern by adjusting the stops at the base of the head. Refer to the instructions below to set sprinkler head to the desired operating pattern.

For full circle operation, loosen sprinkler stops and slide stops all the way down the brass sprinkler base so they do not contact the reverse lever on the back of the sprinkler head as shown at right. Re-tighten the set screws to hold the stops in place. This will allow the sprinkler head to operate in a full circle mode.



For part circle operation, loosen the sprinkler stops and raise the stops so they will contact the reverse lever on the back of the sprinkler head as shown at right. Re-tighten the set screws to hold the stops in the desired sprinkling pattern. This will allow the sprinkler head to operate in a part circle mode.



After Each Use

After use, disconnect the water hose and drain any water in the sprinkler (also drain the hose). Wipe off the sprinkler to remove any dirt and reduce mineral residue from water drying on the sprinkler.

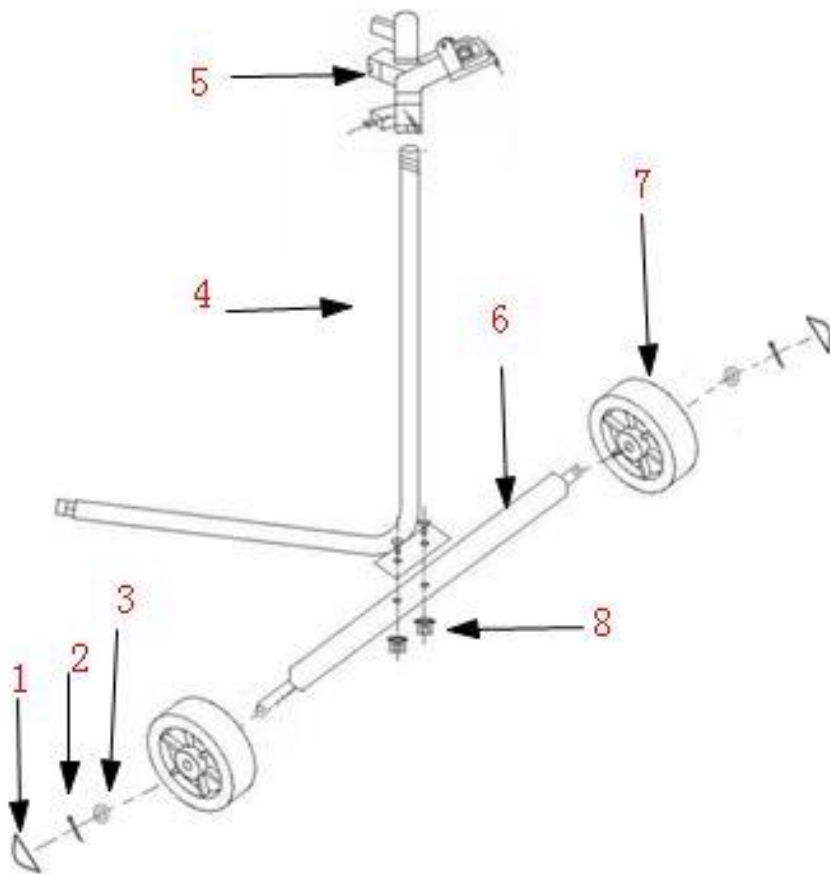
Store the tool when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.

Maintenance

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

- When any malfunction occurs, stop using the sprinkler and correct it.
- Clean the sprinkler head nozzle frequently to reduce build-up from mineral residue.
- Use only identical replacement parts. Parts that may be suitable for one sprinkler may not work well when used with another sprinkler.

Parts Diagram



Parts List

Part No.	Description	Quantity
1	Cap	2
2	Pin	2
3	Washer	2
4	Water Pipe	1
5	3/4" Sprinkler Head (49508)	1
	1" Sprinkler Head (49509)	
	1-1/4" Sprinkler Head (49521 & 49522)	
6	Axle	1
7	8" Heavy Poly Tires (49508)	2
	8" Solid Rubber Tires (49509 & 49521)	
	10" Flat-Free Tires (49522)	
8	8*40mm Bolt & Nut (49508)	2
	8*55mm Bolt & Nut (49509, 49521, & 49522)	

Troubleshooting

Problem	Solution
The sprinkler head is partly clogged and only a small amount of water comes out.	Clean out the sprinkler head
Not enough water volume or pressure at the machine inlet.	Increase volume and/or pressure at the water supply

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

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