



AIR CURTAIN (36/48/60IN.)

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.

Items #49947, #49948, #49949

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 air curtain is designed for certain applications only. The distributor 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**.

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Intended Use

The Strongway Air Curtain ventilates, circulates, and cools specific areas or tasks.

Technical Specifications

Item	Size	LOW				HIGH			
		Current (Amps)	Power (Watts)	Outlet Velocity (m/s)	Noise (dB)	Current (Amps)	Power (Watts)	Outlet Velocity (m/s)	Noise (dB)
49947	36in.	2.1	255	16	56	2.85	345	20	59
49948	48in.	2.65	320	16	56	3.5	425	20	59
49949	60in.	3.6	440	16	56	4.8	5.75	20	59

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 air curtain. Always be aware of the environment and ensure that the air curtain 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 fan 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

- 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.

- Handling power cords on corded products may expose you to lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. Wash your hands after handling.

⚠ 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 air curtain in confined work areas may put you dangerously close to other cutting air curtain and rotating parts.
- Do not use the product 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 air curtain to come into contact with an electrical source. The air curtain is not insulated and contact will cause electrical shock.
- Keep children and bystanders away from the work area while operating the air curtain. Do not allow children to handle the air curtain.
- 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 air curtain. Do not use the air curtain while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the air curtain 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 air curtain 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 air curtain when tired or under the influence of drugs, alcohol or medication.
- Ensure the power switch is off prior to plugging in the air curtain.

⚠ WARNING

ELECTRICAL SAFETY

- Grounded products must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the products should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
- Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
- Do not allow the product to come into contact with an electrical source. The air curtain is not insulated and contact will cause electrical shock.
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Do not expose the air curtain to rain or wet conditions. Water entering an air curtain will increase the risk of electric shock.
- Do not abuse the power cord. Never use the power cord to carry the air curtain or pull the plug from an outlet. Keep the power cord away from heat, oil, sharp edges, or moving parts. Replace damaged power cords immediately. Damaged power cords increase the risk of electric shock.

⚠ CAUTION

FAN USE AND CARE

- Check for damaged parts before each use. Carefully check that the fan will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the fan with a damaged part.
- Do not use a fan with a malfunctioning switch. Any fan that cannot be controlled with the power switch is dangerous and must be repaired by an authorized service representative before using.
- Disconnect the power from the fan and place the switch in the locked or off position before making any adjustments, changing accessories, or storing the fan. Such preventive safety measures reduce the risk of starting the fan accidentally.
- Store the fan when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the fan for good working condition prior to storage and before re-use.
- Keep guards in place and in working order. Never operate the fan without the guards in place.
- Do not leave the fan running unattended.

Specific Operation Warnings

⚠ WARNING

- Electric shock hazard. Do not expose to water or rain.
- Be sure equipment is properly grounded.
- Use only outdoor-rated extension cords of proper size.
- Do not use this product with any solid-state speed control device.
- Rotating Blade Hazard. Can cause serious injury or cut. Keep hands clear.
- DO NOT operate without guards in place.
- Turn power OFF before servicing.
- This fan is not intended for use by people (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning use of the fan by a person responsible for their safety. Supervise children to ensure they do not play with the fan.
- Not for use by or around children.

Grounding

⚠ WARNING

- This machine must be grounded while in use to protect the operator from electrical shock. This drill press is equipped with an electrical cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching receptacle that is properly installed and grounded in accordance with ALL local codes and ordinances.
- **DO NOT MODIFY THE PROVIDED PLUG.** If it will not fit the receptacle, have the proper receptacle installed by a qualified electrician.
- **CHECK** with a qualified electrician or service person if you do not completely understand the grounding instructions, or if you are not sure the air curtain is properly grounded.

Grounded Tools: Tools with 3-Prong Plugs

Tools marked with **Grounding Required** have a 3-wire cord and 3-prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See Figure A.)

The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically live terminal.

Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration.

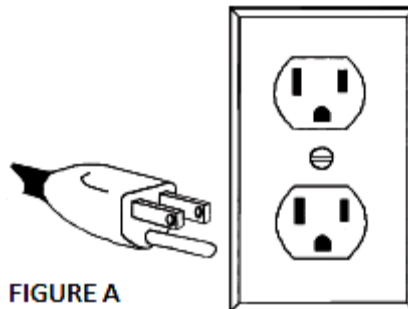


FIGURE A

Double Insulated Tools: Tools with Two-Prong Plugs

Tools marked **Double Insulated** do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. (See Figure B.)

Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration.

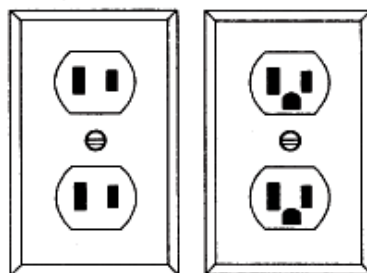


FIGURE B

Extension Cords

⚠ WARNING

- **USE A PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and cause overheating.
- Be sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

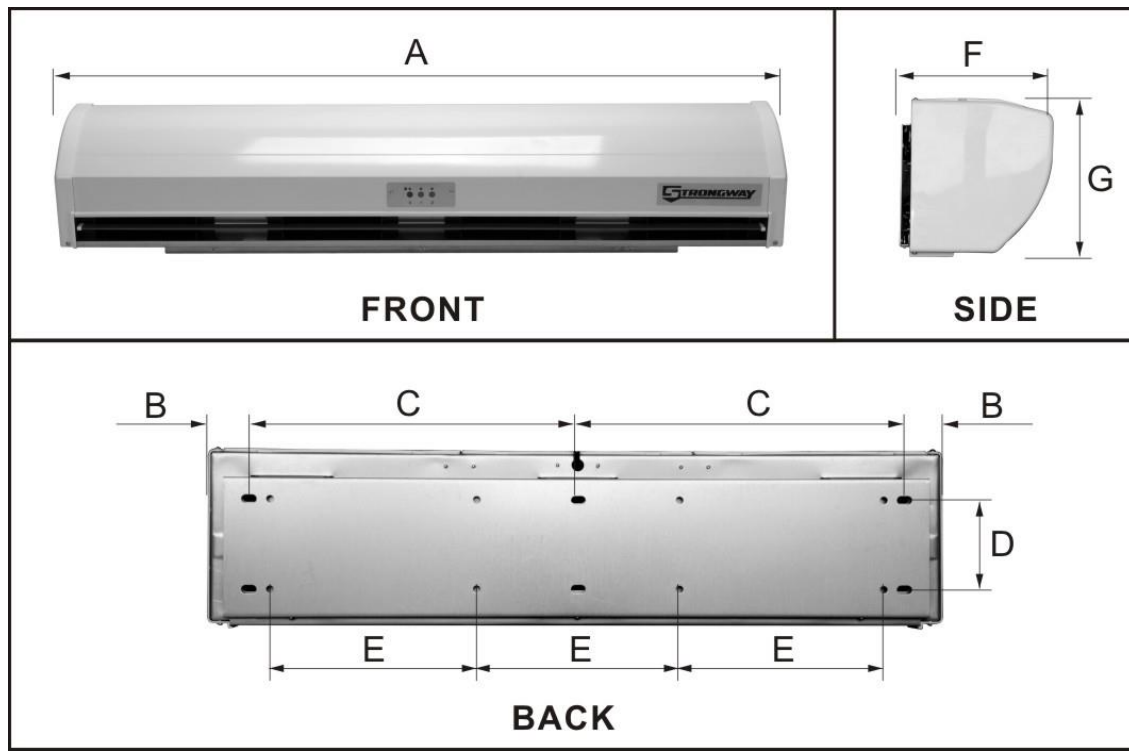
- Grounded tools require a 3-wire extension cord. Double Insulated tools can use either a 2- or 3-wire extension cord.
- As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage.
- The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14-gauge cord can carry a higher current than a 16-gauge cord. Minimum extension cord wire size is shown in the following table:

Minimum Wire Size Of Extension Cords				
Nameplate AMPS	Cord Length			
	25'	50'	100'	150'
0-6	18 AWG	16 AWG	16 AWG	14 AWG
6-10	18 AWG	16 AWG	14 AWG	12 AWG
10-12	16 AWG	16 AWG	14 AWG	12 AWG
12-16	14 AWG	12 AWG	NOT RECOMMENDED	

- When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required.
- If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size.
- If you are using an extension cord outdoors, make sure it is marked with the suffix **W-A** (**W** in Canada) to indicate it is acceptable for outdoor use.
- Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
- Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

Installation

INSTALLATION DIMENSIONS (inch)



A	B	C	D	E	F	G
36	2	16	4 1/3	10	8 1/2	8 5/8
48	8	16	4 1/3	10	8 1/2	8 5/8
60	14	16	4 1/3	10	8 1/2	8 5/8

INSTALLATION METHOD:

WARNING: INSTALLATION AND ELECTRICAL CONNECTION MUST BE PERFORMED BY QUALIFIED TECHNICIAN.

1) Fastener bag:

6 sets of (M8X60L) fastening bolts, spring washers, and (M8) nuts.

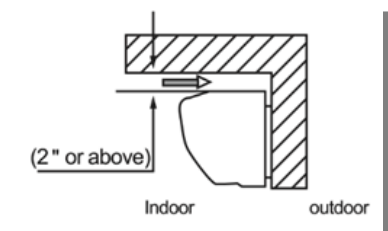
2).Check to ensure the voltage/frequency on rating label is compliant with the local power source before use.

3) Follow the diagram (AT RIGHT) for installation position

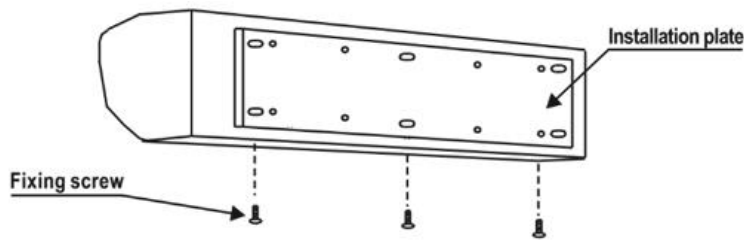
4) Coverage height: 99 inches (For horizontal air curtain installation)

5) **Installation on concrete wall:**

A. Take off INSTALLATION PLATE (unscrew the FIXING SCREWS)

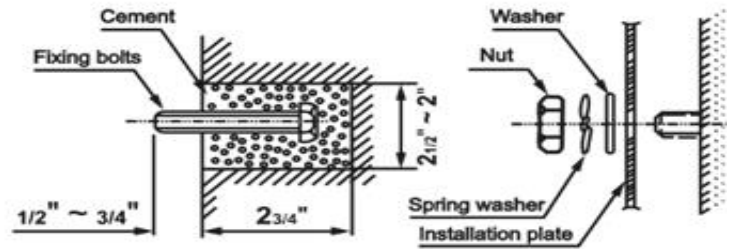


See diagram below.



B. Install INSTALLATION PLATE on the wall:

- Fix position of installation
- Insert **FIXING BOLT(S)** and fill with cement for consolidation
- After cement solidifies, install **INSTALLATION PLATE** on **FIXING BOLT(S)** and fasten it with **WASHER(S)**, **SPRING WASHER(S)**, and **NUT(S)**. (See diagram on right)

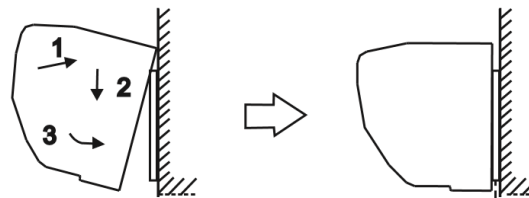


-Insure **INSTALLATION PLATE** is mounted securely.

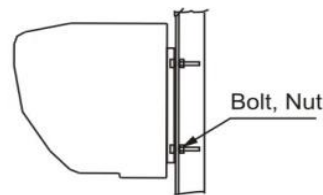
C. Install BODY of Unit. Hang up **BODY of Unit** onto the **INSTALLATION PLATE**.

Check to insure it is secure, and then tighten the **FIXING SCREWS**.

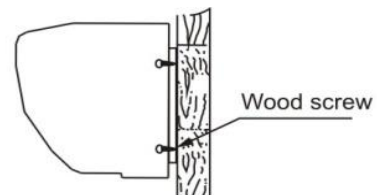
6) Other installation methods (See following diagram)



NOTE: Use more than one unit of air curtain with appropriate length to fill up the width of the doorway.



Installation on steel framework



Installation on wooden framework

IMPORTANT: The recommended distance between 2 adjacent sets of air curtain is to be 1-2 inches.

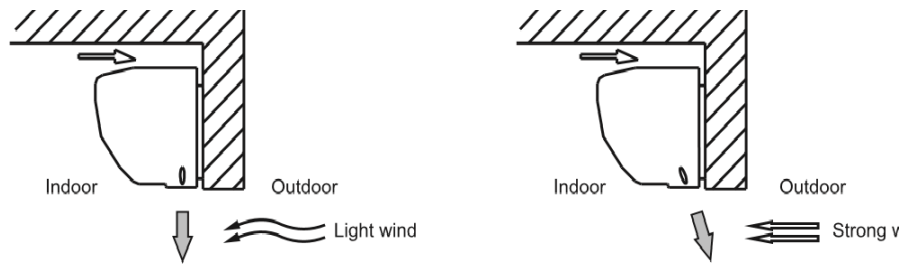
Before Each Use

Be sure fan housing has not been opened or damaged.

Operating Instructions

- 1) Connect electric power
- 2) Press the keystroke of OFF, LO, HIGH on the switch to set speed to OFF, LO and HIGH
Press relevant function key stroke for remote controlling unit

3) Adjust air direction louvers to preferred positions (according to arrow in the following diagram)



Maintenance

- 1) Install onto firm surface firm
- 2) Do not install air curtain in locations with exposure to water or with permanent exposure to high temperature and places close to explosive and corrosive gases.
- 3) Have reliable grounding set when in use.
- 4) In case of damage or breakdown, consult a qualified technician
- 5) Clean air curtain periodically (see instructions below).

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

1. Depending on the usage and severity, a regularly scheduled inspection should be established.
2. Check for unusual noises when circulator is running.
3. Periodically inspect and tighten all bolts, screws and set screws.

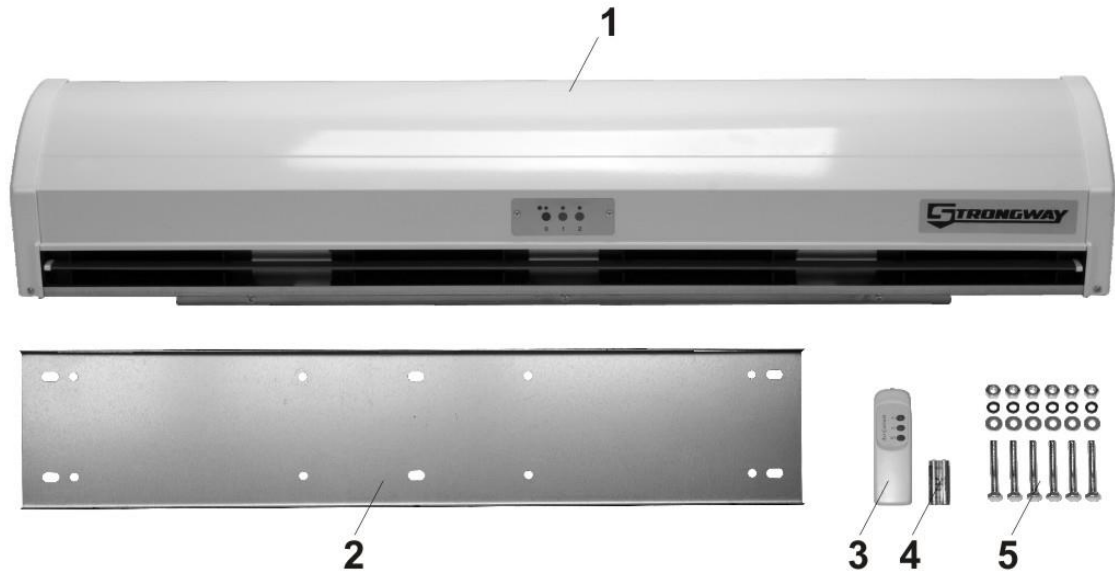
⚠ WARNING

Unplug from electrical supply before cleaning.

Cleaning

1. Use a soft, damp cloth (water only) for cleaning, then wipe with dry cloth.
2. Don't not use cleaners that harm paints or plastics (i.e., bleach or ammonia).
3. Do not bend blades.

Parts Diagram



Parts List

Part#	Description	Qty.	Part#	Description	Qty.
1	AIR CURTAIN	1	4	5# BATTBRY	2
2	MOUNTING PLATE	1	5	BOLT, WASHER, SPRING-WASHER, NUT	6 each
3	REMOTE CONTROL	1			

Troubleshooting

If fan does not operate, disconnect electric for 30 seconds. Then reconnect electric.

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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