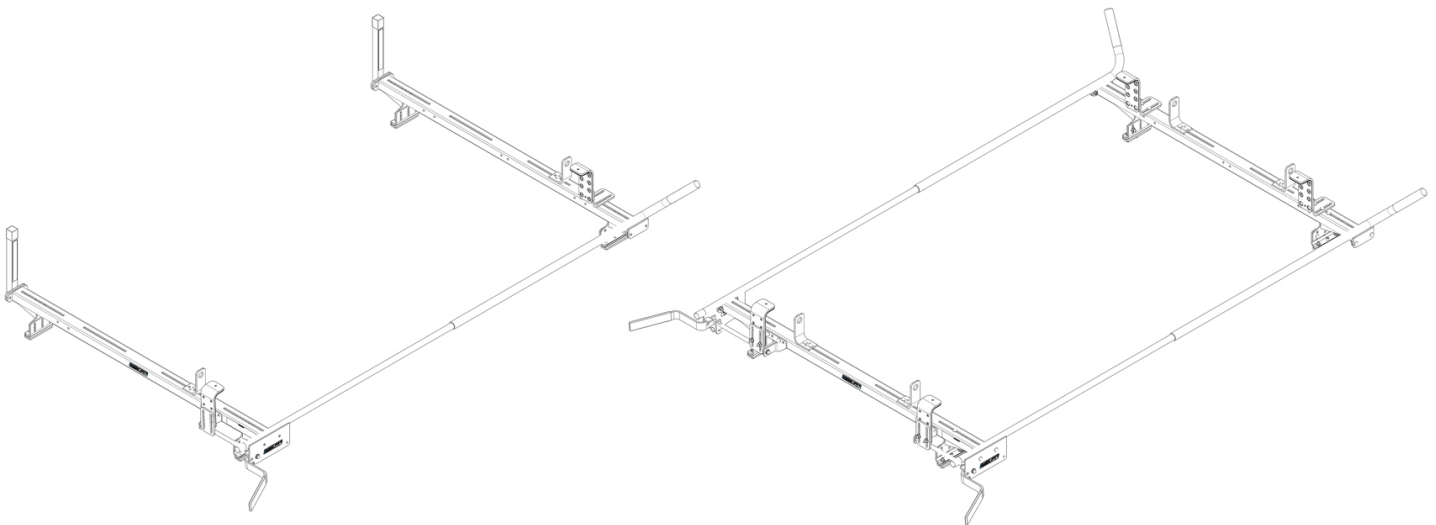




**VAN SOLUTIONS**  
FOR THE WAY YOU WORK™

## **ASSEMBLY AND INSTALLATION INSTRUCTIONS FOR COMPACT SINGLE & DUAL SIDED QUICK CLAMP RACK**



### **MODELS 223-3-03 AND 224-3-03**

Weather Guard / Knaack  
420 E. Terra Cotta Ave.  
Crystal Lake, IL 60014 USA

800-456-7865 (Toll Free)  
800-334-2981 (Fax)  
Knaack.OrderEntry@wernerco.com

Weather Guard / Knaack  
9133 Leslie St. Unit 105  
Richmond Hill, ON L4B4N1

888-562-2251 (Toll Free)  
888-456-8460 (Fax)  
Knaack.OrderEntry.Canada@wernerco.com



**ATTENTION: PLEASE READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS BEFORE ASSEMBLING, INSTALLING OR USING THIS PRODUCT.**

**! BEFORE YOU BEGIN**

- WEATHER GUARD® ladder racks are designed to work with OEM side gutters or with WEATHER GUARD® Mounting Channel kits to provide the best support for your ladders and to take advantage of OEM provided roof mounting points. If you have not already installed the mounting channel kit to the van roof, install it now before proceeding.
- We recommend that you use mounting channels to mount the ladder rack on to the roof due to the mounting channels being able to distribute the load more evenly. We have provided spacers that can be used to mount directly to the roof, but please consult the vehicle manufacturer to determine the load capacity allotted for the roof.
- Review vehicle manufacturer’s roof mount recommendation.
- Perform the installation on a leveled surface.
- Always wear protective eyewear to keep debris out of your eyes when installing WEATHER GUARD® Van Products.
- All of the nylon lock nuts are torqued to 17 ft-lb when ready.

**MOUNTING LONG LADDERS ON VANS**

Ladders transported on a vehicle should be properly supported and the overhang of the ladders beyond supporting points should be limited. Transporting a ladder with excessive overhang can result in reduced ladder life. Inspect your ladder before each use. Follow ANSI 14.2-2007 for direction on securing ladders to ladder racks.

Follow manufacturer’s guidelines for maximum allowable roof load. Do not overload the vehicle’s roof.

**HARDWARE KIT**

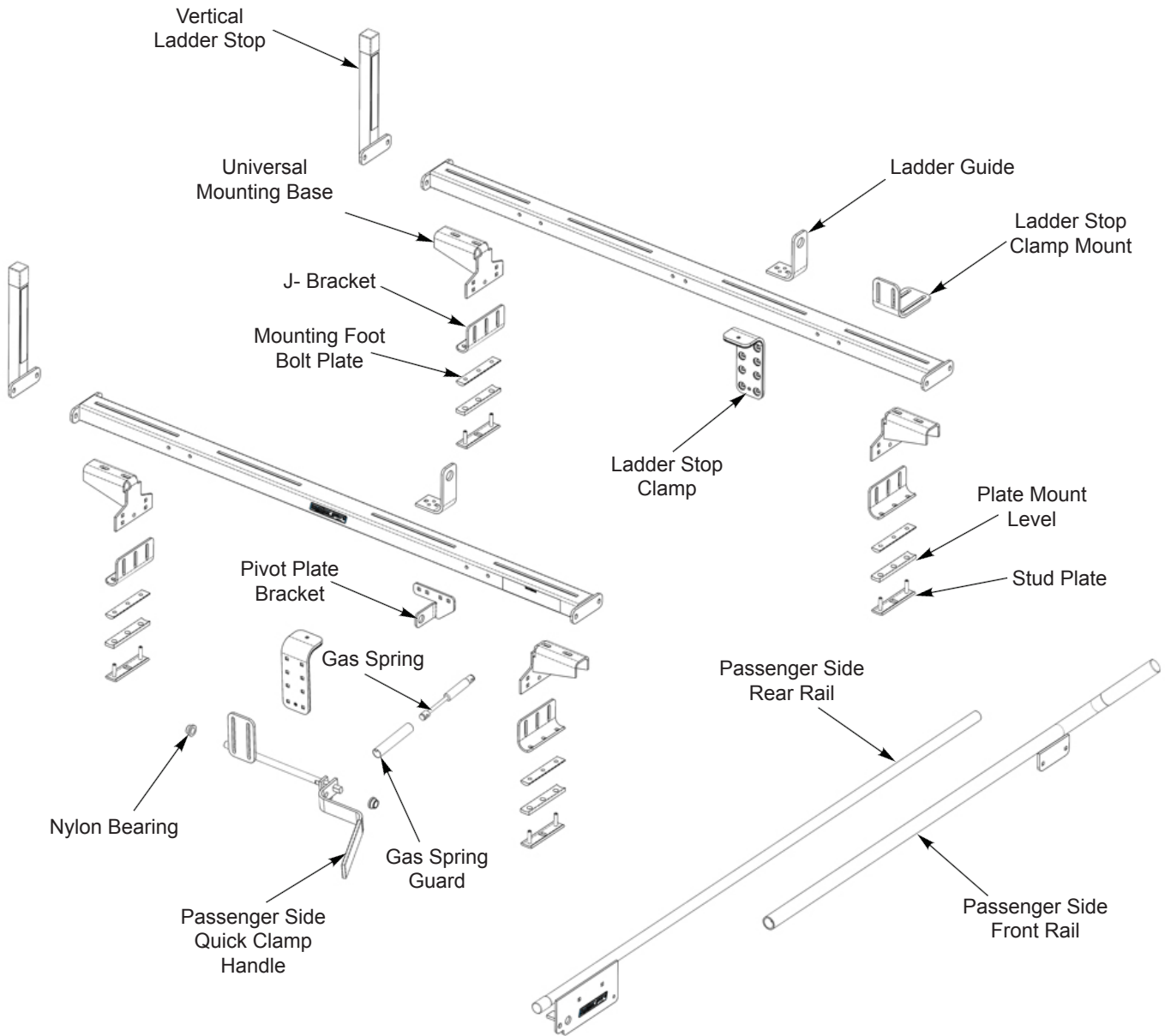
DESCRIPTION	223-3-03	224-3-03
5/16-18 x 1-3/4" SS Carriage Bolt	4	4
5/16-18 x 1-1/4" SS Carriage Bolt	8	8
5/16-18 x 7/8" SS Carriage Bolt	24	32
5/16-18 SS Nylon Lock Nut	44	52
5/16" SS Washer	44	52
1/4-20 x 1/2" SS Taptite Screw	1	2
1/2" OD 1/8" SS Spacers	8	8
M8-1.25 x 40mm SS Cap Screw	4	4

**TOOLS REQUIRED**

- Electric drill-driver
- 1/2" ratchet wrench
- 1/2" and 3/8" socket
- Needle nose pliers
- Open end wrenches 7/16" and 9/16"

**NOTE:** 5/16-18 x 1-3/4" SS Carriage Bolts are not used.

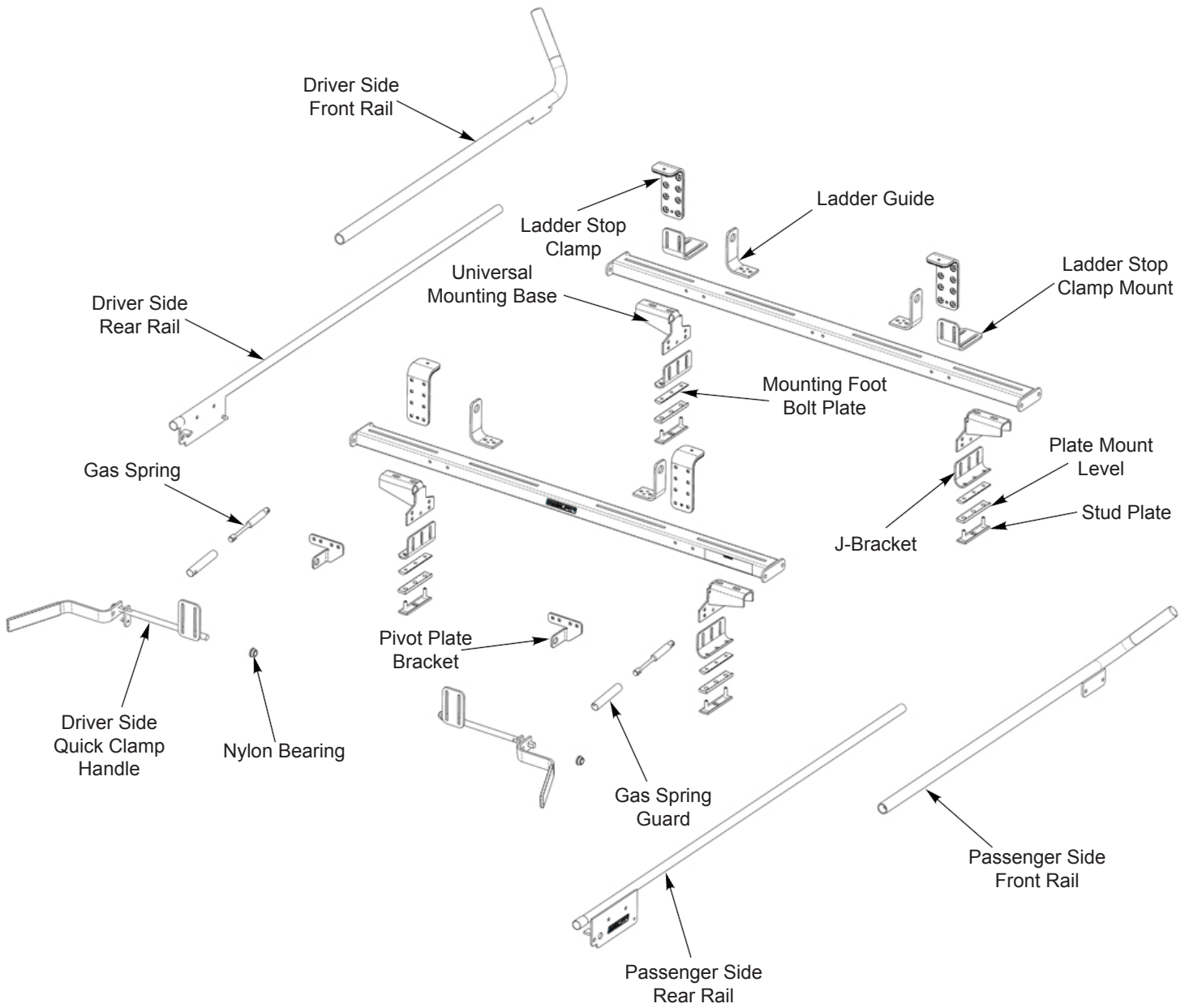
## 223-3-03 COMPACT SINGLE QUICK CLAMP RACK PARTS LIST



DESCRIPTION	QTY.
Cross Member	2
Ladder Guide	2
Ladder Stop Clamp / Mount	2 / 1
Universal Mounting Base	4
Mounting Level Plate	4
Mounting Foot Bolt Plate	4
Curved Mounting foot Bracket	4
Stud Plate	4

DESCRIPTION	QTY.
Front Rails	1 (PS)
Rear Rails	1 (PS)
Quick Clamp Handle	1 (PS)
QC Handle Pivot Plate	1
QC Nylon Bearing	2
Vertical Ladder Stop	2
Gas Spring	1
Gas Spring Guard	1

## 224-3-03 COMPACT DUAL QUICK CLAMP RACK PARTS LIST



DESCRIPTION	QTY.
Cross Member	2
Ladder Guide	4
Ladder Stop Clamp / Mount	4 / 2
Universal Mounting Base	4
Mounting Level Plate	4
Mounting Foot Bolt Plate	4
Curved Mounting foot Bracket	4
Stud Plate	4

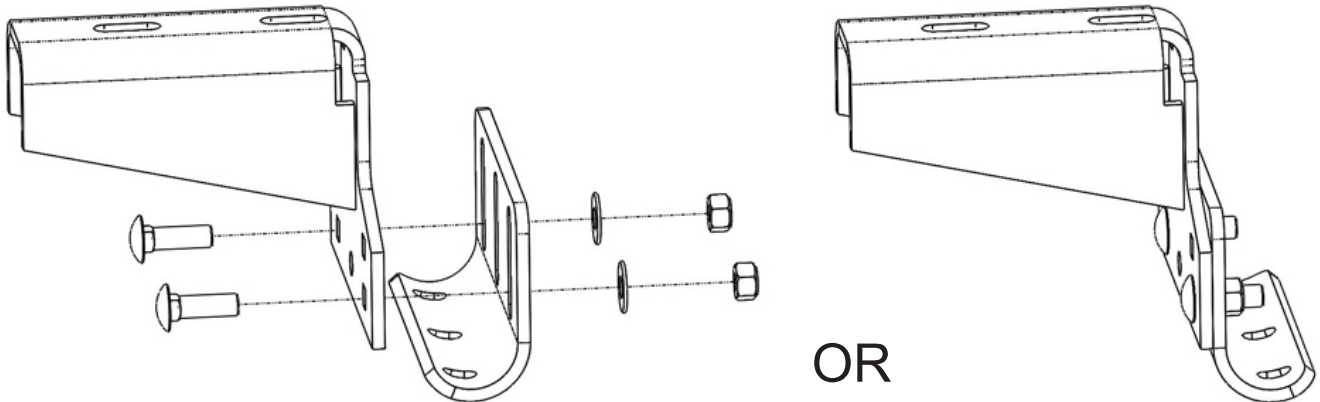
DESCRIPTION	QTY.
Front Rails	DS/PS
Rear Rails	DS/PS
Quick Clamp Handle	DS/PS
QC Handle Pivot Plate	2
QC Nylon Bearing	4
Vertical Ladder Stop	0
Gas Spring	2
Gas Spring Guard	2

# INSTALLATION INSTRUCTIONS

## STEP 1. LOOSELY INSTALL J-BRACKET TO UNIVERSAL MOUNTING BASE

Using (2) 7/8" tall carriage bolts, (2) washers, and (2) nylon lock nuts. Torque to 17 ft-lb.

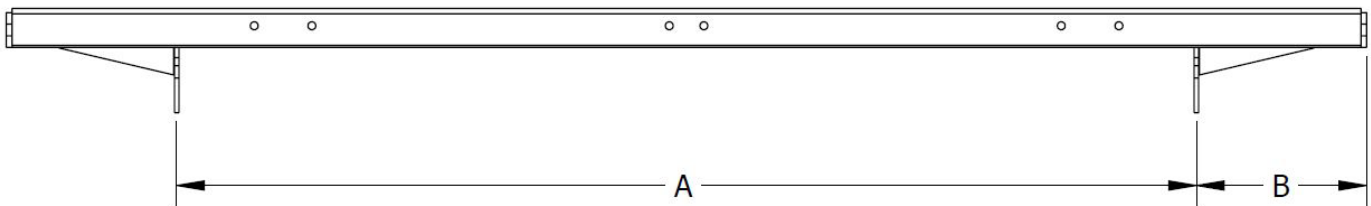
**NOTE:** J-bracket can be installed in multiple configurations to result in the best fitment to your vehicle. Bolts can be installed from both direction. Most vehicle installations will benefit from having the lowest installed height with the mounting bracket lining up with the start of the curve on the J-bracket. Due to vehicle roof curvatures, some adjustment for final assembly height may be required after the cross members are installed on the roof.



## STEP 2. MOUNT MOUNTING FEET TO CROSS MEMBERS

Use one 7/8" carriage bolt, washer and nylon lock nut per mounting foot. Install feet to cross member. Refer to table and diagram below for mounting foot location and orientation.

**NOTE:** Mounting feet can be installed in the other direction if need be (Toes in vs. Toes out).

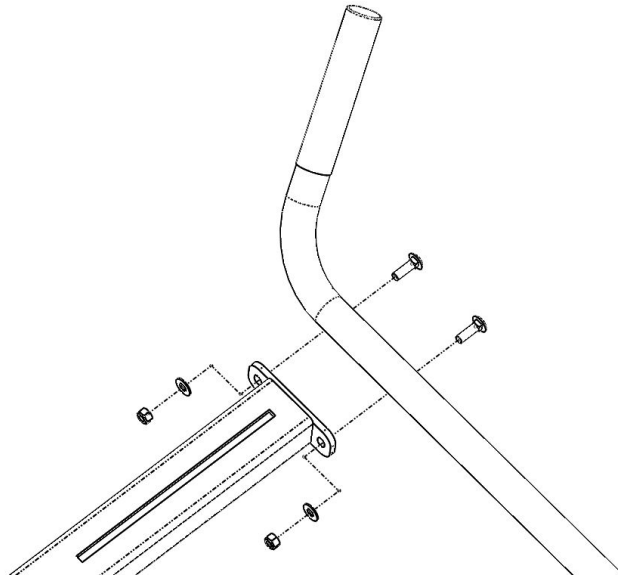


MOUNTING FOOT DISTANCE		
VEHICLE	A	B
Ford Transit Connect (Front)	46-1/4"	6-3/8"
Ford Transit Connect (Rear)	47-1/4"	5-7/8"
RAM Promaster City (Front)	42"	8-1/2"
RAM Promaster City (Rear)	41-3/8"	8-13/16"
Chevy City Express	45-3/8"	6-13/16"
Nissan NV200	45-3/8"	6-13/16"

# INSTALLATION INSTRUCTIONS

## STEP 3. INSTALL FRONT RAIL ASSEMBLY

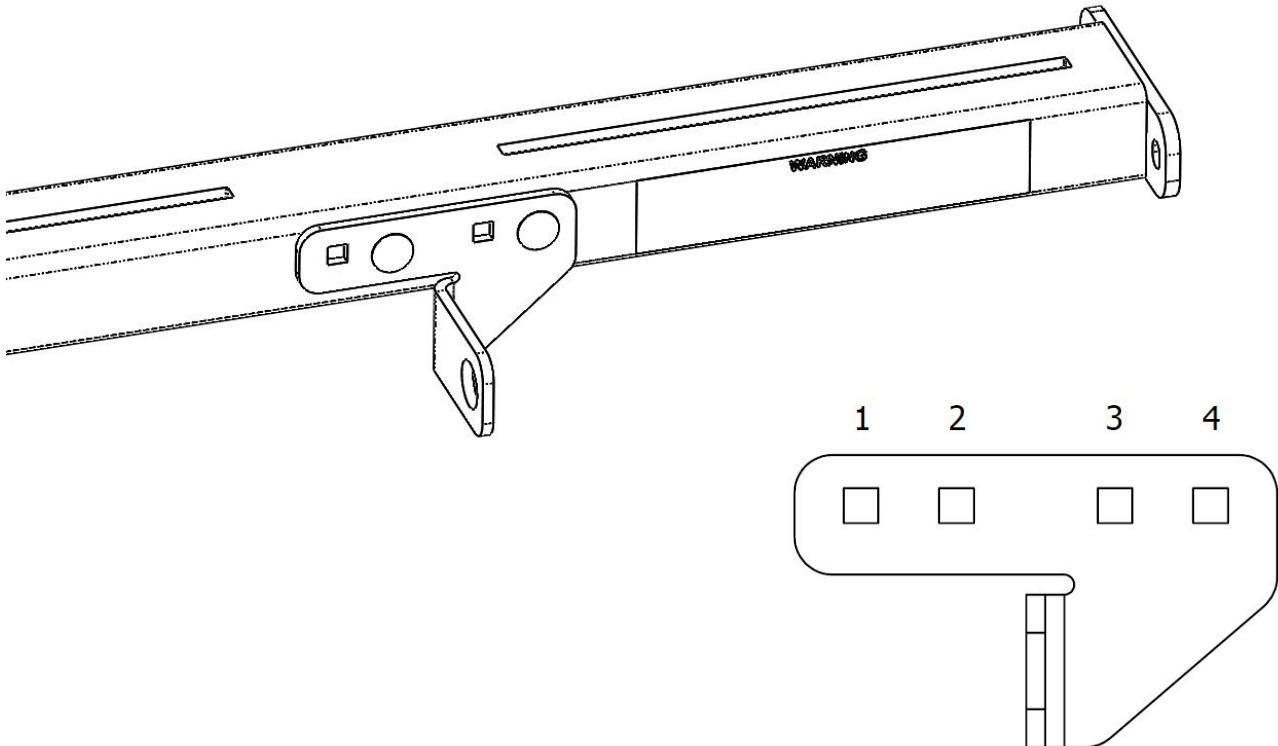
Using (2) 1-1/4" tall carriage bolts, (2) washers, and (2) nylon lock nuts.



## STEP 4. INSTALL PIVOT PLATE BRACKET ON REAR CROSS MEMBER

Using (2) 7/8" tall carriage bolts, (2) washers, and (2) nylon lock nuts.

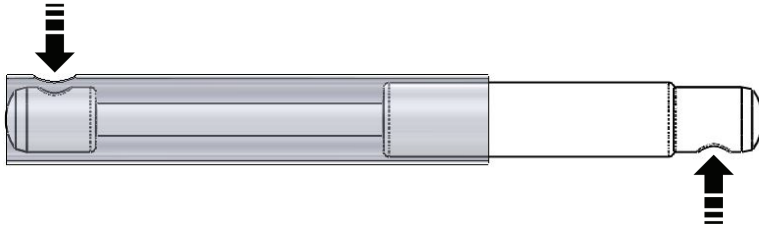
**NOTE:** Mount using 2 and 4 on the passenger side. Use 1 and 3 when mounting to driver side (224-3-03).



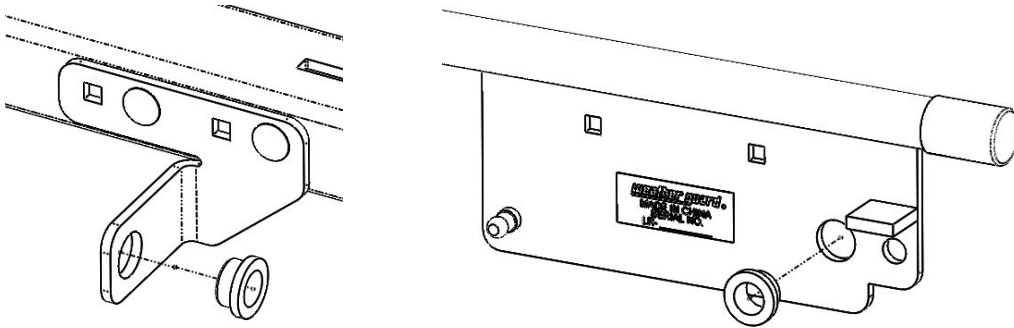
## INSTALLATION INSTRUCTIONS

### STEP 5. INSTALL REAR RAIL ASSEMBLY

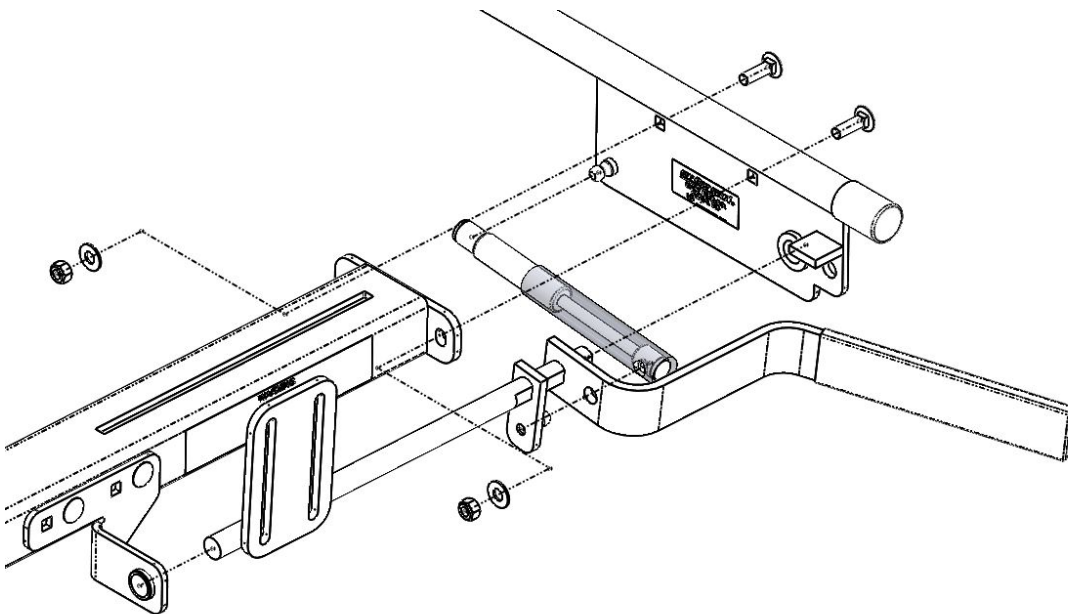
- A. Loosen the adjustable end fitting of the gas spring such that the mounting socket on either end are facing opposite directions. Slide the gas spring guard over the gas spring as shown below.



- B. Insert nylon bearings into pivot plate bracket as well as on the rear rail assembly.



- C. Install handle by sliding it into the nylon bearing on the pivot plate bracket. Install gas spring onto ball stud on the handle.
- D. Slide the nylon bearing installed on the rear rail assembly onto the handle. Install gas spring onto ball stud on the rear rail assembly.
- E. Tighten rear rail assembly to rear cross member by using (2) 1-1/4" tall carriage bolts, (2) washers, and (2) nylon lock nuts.

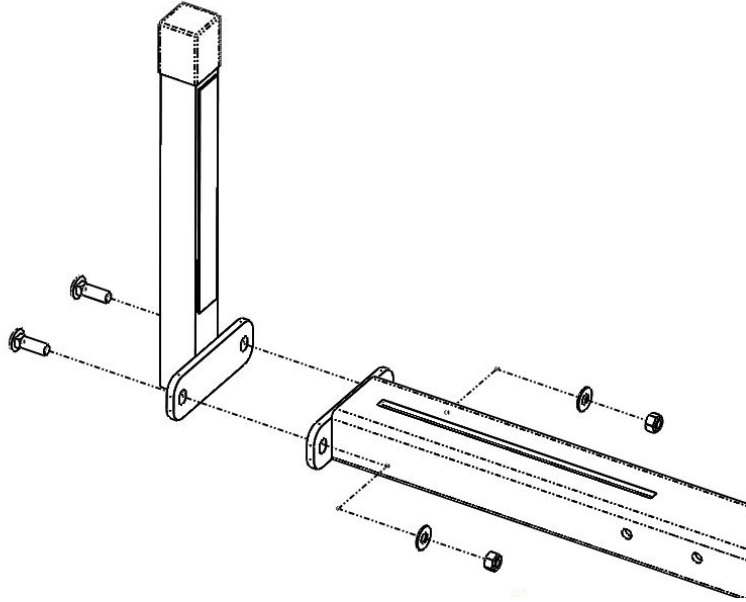


**NOTE:** For 224-3-03, install driver side front and rear assembly by following the same sequence above.

## INSTALLATION INSTRUCTIONS

### STEP 6. INSTALL DRIVER SIDE VERTICAL LADDER STOP (223-3-03 ONLY)

Using (2) 1-1/4" tall carriage bolts, (2) washers, and (2) nylon lock nuts, fasten the vertical ladder stop.

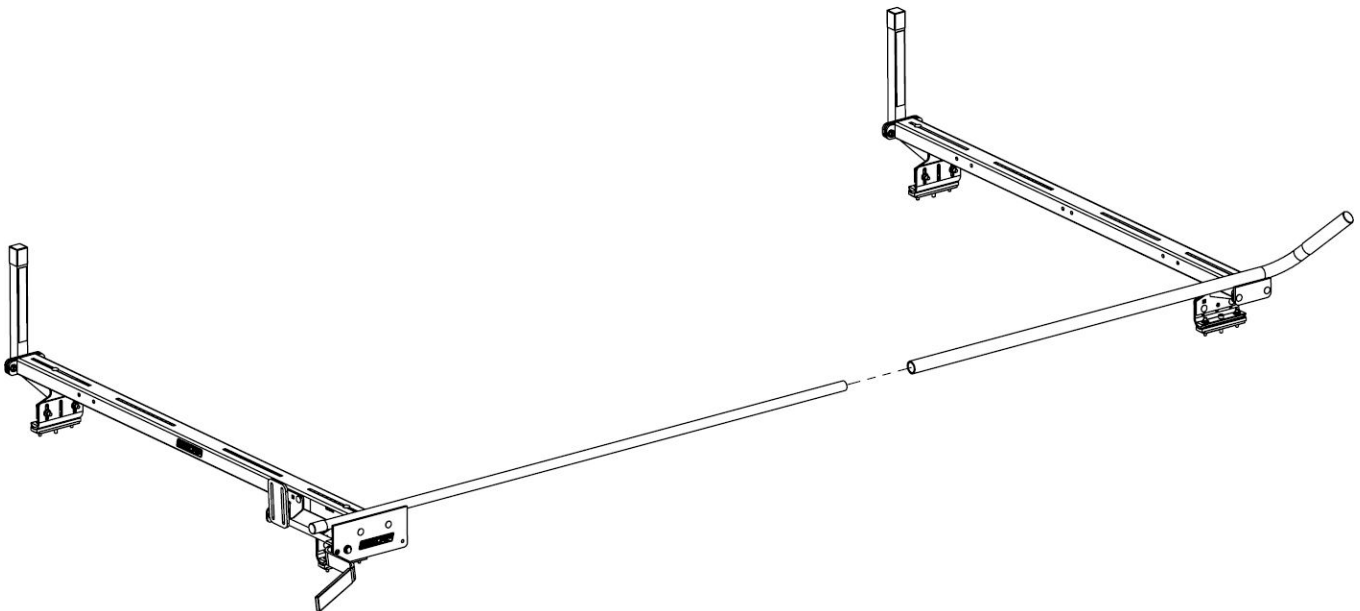


### STEP 7. RACK ASSEMBLY

With the front and the rear cross member assembly on the roof, insert the rear rail into the front rail.

Use the 1/4-20 x 1/2" tapite screws through the obround hole near the tip of the front rail to fasten the rails together. Use a drop of thread locking adhesive.

**NOTE:** If installing a 225-3-03, Accessory Quick Clamp cross member, do not use the thread locking adhesive yet. Refer to the 225-3-03 instruction manual.





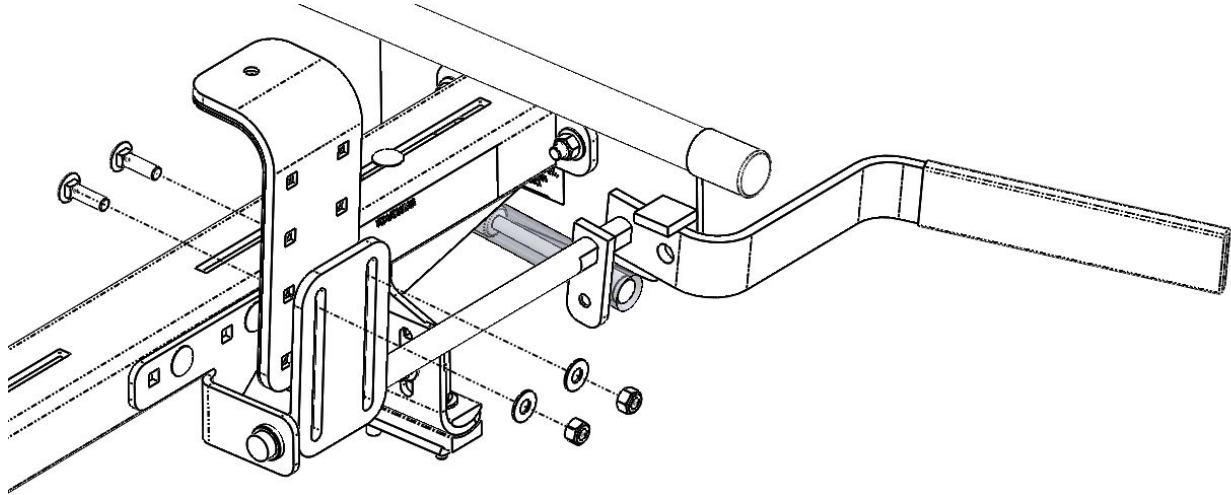
# INSTALLATION INSTRUCTIONS

## STEP 8. INSTALL LADDER CLAMPS

### Rear Assembly

Place the ladder on the rack to adjust the clamp position to fit your ladder.

Using (2) 7/8" tall carriage bolts, (2) washers, and (2) nylon lock nuts, fasten the rear clamp as shown.

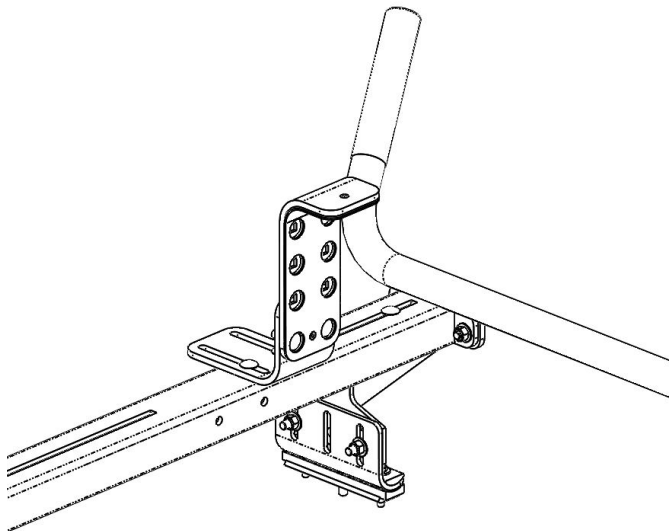


### Front Assembly

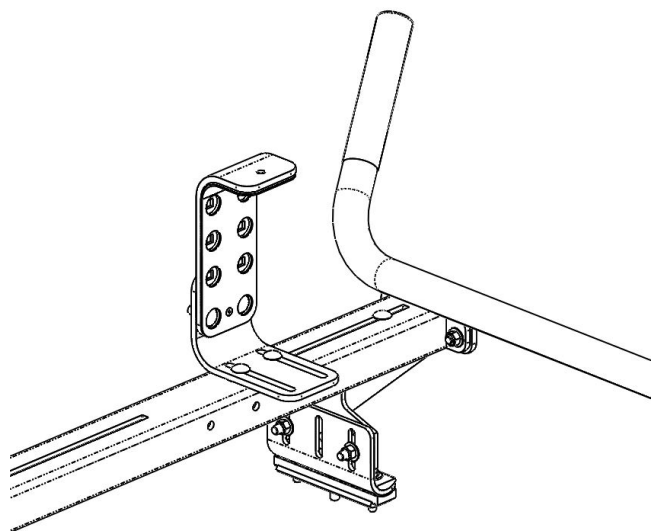
Place the ladder on the rack to adjust the clamp position to fit your ladder.

Using (2) 7/8" tall carriage bolts, (2) washers, and (2) nylon lock nuts, fasten the rear clamp as shown.

### Front Assembly Option 1



### Front Assembly Option 2

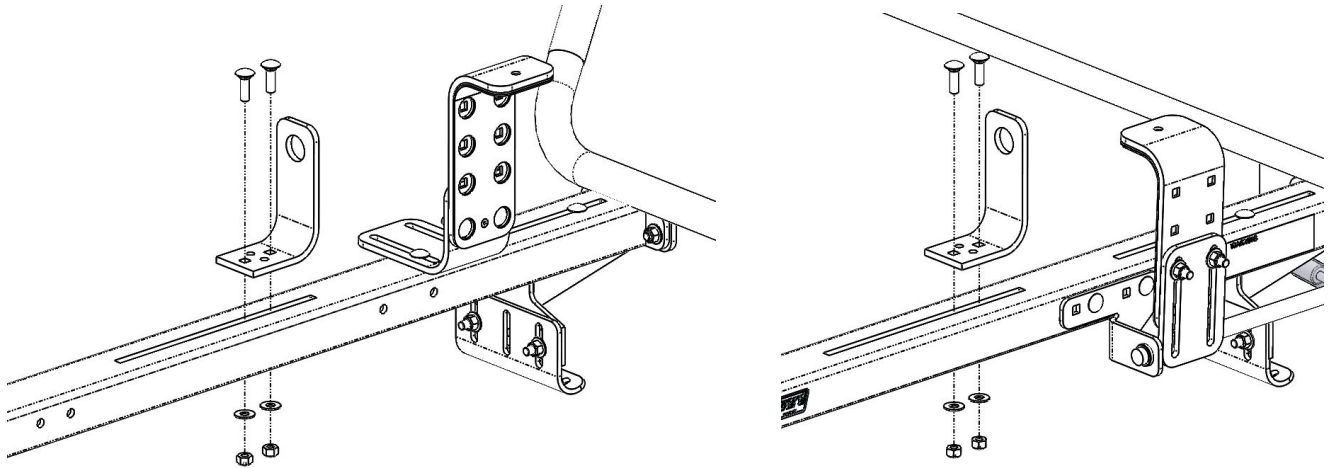


**NOTE:** Use option 1 for most standard extension ladder applications and option 2 for some step ladder applications.

## INSTALLATION INSTRUCTIONS

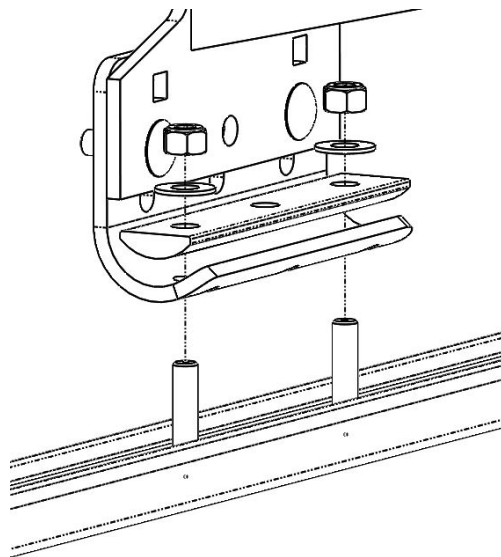
### STEP 9. INSTALL LADDER GUIDES

Place the ladder on the rack to adjust the ladder guide position to fit your ladder.  
Using (2) 1-1/4" tall carriage bolts, (2) washers, and (2) nylon lock nuts, fasten the ladder guide.



### STEP 10. MOUNT CROSS MEMBERS TO VEHICLE - MOUNTING CHANNEL

Slide two stud plates per mounting channel if not already done. Lift the assembled ladder rack and place it on the stud plates on all four corners. Use (2) washers, (2) nylon lock nuts, and a bolt plate to fasten each mounting foot.



### STEP 11. TIGHTEN DOWN ALL HARDWARE

Make sure everything is aligned and installed properly and torqued to 17 ft-lb.

## SERVICE PARTS

<b>PART NO.</b>	<b>DESCRIPTION</b>
7870	Ladder Guide
7707	Ladder Stop Clamp
2060-3-01	60" Cross Member & Mounting Feet
7830-3-01	Passenger Side Front & Rear Rail
7577-3-01	Passenger Side Handle
7831-3-01	Driver Side Front & Rear Rail
7578-3-01	Driver Side Handle
70514	Vertical Post
72213	Rear Handle Pivot Plate Bracket
72214	Bolt Kit AP
72215	Bolt Kit QC
72216	Bolt Kit 125

## WARNING

This product can reduce the driver's ability to clearly see roadways, vehicular or pedestrian traffic and other objects through the rear and side windows of the vehicle, which can cause an accident. Extra precautions should be taken when driving a vehicle with this product. Make all adjustments necessary to ensure maximum visibility, including but not limited to, changing mirror and seating positions. State and local laws may prohibit obstruction of windows in a moving vehicle.

These instructions are to be followed using the parts and fasteners supplied for proper installation. Any modifications or improper installation of this product will create a hazardous condition that could result in death, serious personal injury and/or property damage.

## CAUTION

Prior to drilling, so as not to cut electric wires, fuel lines, brake lines, etc., check behind and underneath drilling and mounting locations. To keep debris out of your eyes when checking the underside of the vehicle, or when drilling, always wear protective eye wear. Failure to heed this warning will result in death or serious injury.

## – NOTICE –

Any modification or unintended use of this product shall immediately void all manufacturers warranties. Manufacturer disclaims all liability for injuries to persons or property resulting from any modification to, or unintended use of this product.

## KNAACK LLC LIMITED LIFETIME WARRANTY FOR WEATHER GUARD® PRODUCTS

WEATHER GUARD® Products — Limited Lifetime Warranty  
(Purchased on or after 1/1/2009)

Knaack LLC (the "Manufacturer") warrants to the original purchaser only that WEATHER GUARD® Truck and Van Products (the "WEATHER GUARD® Product") will be free from defects in material and workmanship from the date of purchase and continuing for the expected lifetime of the WEATHER GUARD® Product. A copy of the original sales receipt must be supplied to the Manufacturer at the time a warranty claim is made. This warranty terminates if the original purchaser transfers the WEATHER GUARD® Product to any other person.

### What is Covered

All WEATHER GUARD® Products identified above that are purchased on or after January 1, 2009.

### What We Will Do to Correct Problems

Subject to the limitations and exclusions described in this limited warranty, the Manufacturer will remedy defects in materials or workmanship by providing one of the following remedies at its option and without charge to the original purchaser for parts or labor: (a) repairing the defective portion of the WEATHER GUARD® Product or (b) replacing the entire WEATHER GUARD® Product. In addition, the manufacturer may elect at its option, not to repair or replace the WEATHER GUARD® Product, but rather issue to the original purchaser a refund equal to the purchase price paid for the WEATHER GUARD® Product or a credit to be used toward the purchase of new WEATHER GUARD® Product.

### What is Not Covered

This limited warranty expressly excludes:

- Defects caused by normal wear and tear, cosmetic rust, scratches, accidents, unlawful vehicle operation, or modification to the product, or any types or repair of a WEATHER GUARD® Product other than those authorized or provided by the Manufacturer.
- Defects resulting from conditions beyond the Manufacturer's control including, but not limited to misuse, overloading, or failure to assemble, mount or use the WEATHER GUARD® Product in accordance with the Manufacturer's written instructions or guidelines included with the WEATHER GUARD® Product or made available to the original purchaser.
- Damage to the contents of the box or vehicle.
- TO THE EXTENT PERMITTED BY LAW, IN NO EVENT SHALL THE MANUFACTURER BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING ANY ECONOMIC LOSS, WHETHER RESULTING FROM NONPERFORMANCE, USE, MISUSE OR INABILITY TO USE THE WEATHER GUARD® PRODUCT OR THE MANUFACTURER'S NEGLIGENCE.

### No Other Express Warranty Applies

This Limited Lifetime Warranty is the sole and exclusive warranty for WEATHER GUARD® products. No employee, agent, dealer, or other person is authorized to alter this warranty or make any other warranty on behalf of Knaack LLC.

### Notification Procedures

If the WEATHER GUARD® Product does not conform with the terms of this limited warranty, the original owner must promptly notify the Manufacturer in writing upon discovery of the nonconformity. In order to receive the remedies under this limited warranty, the warranty claim must describe the nature of the nonconformity, and a copy of the original sales receipt, invoice, bill or other proof of purchase must accompany the claim. Repairs or modifications made to the WEATHER GUARD® Product by other than the Manufacturer or its authorized agent will nullify this limited warranty. Coverage under this limited warranty is conditioned at all times upon the owner's compliance with these required notification and repair procedures. Warranty claims must include reciprocal contact information and may be made via certified mail to:

Knaack LLC  
ATTN: Warranty Claims  
420 E. Terra Cotta Avenue Crystal Lake, IL 60014

If you have any questions, please call toll free at 1-800-456-7865  
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