

## **VAN SOLUTIONS**

FOR THE WAY YOU WORK™



# **INSTALLATION MANUAL**



## Model 2271-3-01

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

Weather Guard / Knaack 9133 Leslie St. Unit 105 Richmond Hills, ON L4BN1 800-456-7865 Toll Free 800-334-2981 Fax Knaack.OrderEntry@wernerco.com

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



ATTENTION:PLEASEREADANDUNDERSTANDALLINSTRUCTIONSANDWARNINGS BEFORE ASSEMBLING, INSTALLING OR USING THIS PRODUCT.

## **CAUTION**

Be safe - always wear protective eye wear to keep debris out of your eyes when installing WEATHER GUARD® Van Products

## **WARNING**

Prior to drilling, check under vehicle for fuel, tanks, fuel lines, brake lines, electric wires, etc. To avoid cutting or puncturing them. Do not use Blind Fasteners in these areas.

### **Tools Needed**

- THREADLOCKER COMPOUND
- 1/2" SOCKET AND/OR WRENCH
- 3/16" HEX KEY/DRIVER
- 1/4" HEX KEY/DRIVER
- (2) 9/16 SOCKET AND/OR WRENCH
- TORQUE SETTABLE DRIVER OR TORQUE WRENCH.
- NEEDLE NOSE PLIERS
- LADDER OR WORK PLATFORM

### **BEFORE YOU BEGIN**

The EZGLIDE2™ drop-down ladder rack is 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.

If you are installing this product on a van with OEM side gutters, you do not need to use a mounting channel kit.



### **CONTENTS**

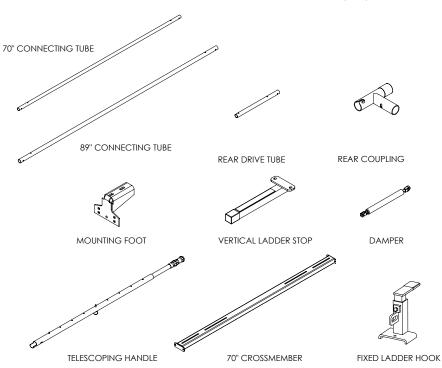
| EZGLIDE2™  | PARTS LIST  | 4 |
|------------|---|---|
| STEP 1     | INSTALL VERTICAL TUBE AND DAMPER                        | 6 |
| STEP 2     | INSTALL LADDER HOOKS                                    | 7 |
| STEP 3     | MOUNT MOUNTING FEET TO CROSS MEMBERS                    | В |
| STEP 4     | INSTALL CURVED MOUNTING BRACKETS                        | 9 |
| STEP 5     | INSTALL DROP DOWN MECHANISMS TO CROSS MEMBERS10         | D |
| STEP 6     | MOUNT CROSS MEMBERS TO VEHICLE1                         | 1 |
| STEP 7     | INSTALL CENTER CONNECTING TUBE AND FRONT CROSS MEMBER12 | 2 |
| STEP 8     | INSTALL REAR DRIVE TUBE1                                | 3 |
| STEP 9     | INSTALL REAR COUPLING1                                  | 3 |
| STEP 10    | POSITION AND SECURE LADDER RACK ASSEMBLY 14             | 4 |
| STEP 11    | INSTALL ACCESSORY VERTICAL TUBES AND FRONT RED CAP14    | 4 |
| STEP 12    | ADJUST LADDER HOOKS1                                    | 5 |
| F7GI IDF2™ | SPARE PARTS LIST  | A |



## EZ GLIDE2™ PARTS LIST

| DESCRIPTION          | QTY |
|----------------------|-----|
| FIXED DROP DOWN      | 2   |
| 70" CONNECTING TUBE  | 1   |
| 89" CONNECTING TUBE  | 1   |
| REAR DRIVE TUBE      | 1   |
| REAR COUPLING        | 1   |
| MOUNTING FOOT        | 4   |
| VERTICAL LADDER STOP | 4   |
| DAMPER               | 2   |
| TELESCOPIC HANDLE    | 1   |
| 70" CROSS-MEMBER     | 2   |
| FIXED LADDER HOOK    | 2   |



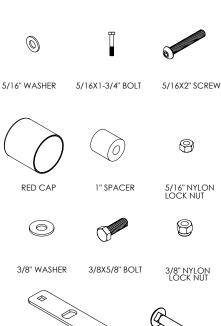




### **USER INSTRUCTIONS**

| DESCRIPTION                | QTY |
|----------------------------|-----|
| 5/16" WASHER               | 62  |
| 5/16 x 1-3/4" BOLT         | 6   |
| 5/16 x 2" SCREW            | 4   |
| RED CAP                    | 1   |
| 1" SPACER                  | 4   |
| 5/16 NYLON LOCK NUT        | 52  |
| 3/8 WASHER                 | 4   |
| 3/8 x 7/8" BOLT            | 2   |
| 3/8 NYLON LOCK NUT         | 2   |
| MOUNTING PLATE             | 4   |
| 5/16X1-1/4" CARRIAGE BOLT  | 8   |
| COUPLING BUSHING           | 1   |
| CLEVIS PIN                 | 1   |
| 5/16 x 7/8" CARRIAGE BOLT  | 24  |
| E-CLIP                     | 2   |
| DAMPER ROD                 | 2   |
| LOOP CLAMP                 | 1   |
| SPRING CLIP                | 2   |
| 5/16 x 1-1/4" BOLT         | 4   |
| CURVED MOUNTING BRACKET    | 4   |
| MOUNTING FOOT BOLT PLATE   | 4   |
| UNIVERSAL CLAMP            | 4   |
| 5/16-18 x 1-3/4" CARR BOLT | 4   |

NOTE: SOME ADDITIONAL PARTS MAY BE INCLUDED FOR USE WITH OTHER LADDER RACKS.









CLEVIS PIN



5/16X7/8" CARRIAGE BOLT



5/16X1-1/4" CARRIAGE BOLT

E-CLIP



5/16-18 X 1-3/4" CARRIAGE BOLT



UNIVERSAL CLAMP



DAMPER ROD



5/16X1-1/4" BOLT



MOUNTING PLATE

LOOP CLAMP



CURVED MOUNTING BRACKET



SPRING CLIP



MOUNTING FOOT BOLT PLATE

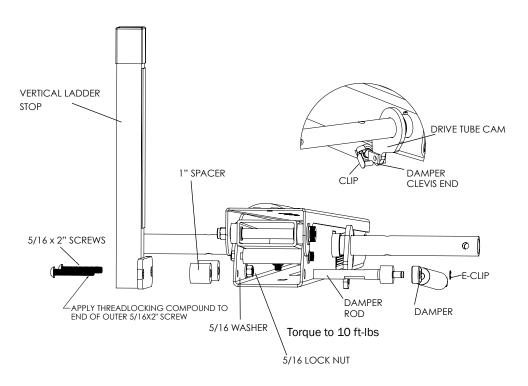
## (<u>weather g</u>uard)

### STEP 1 - INSTALL VERTICAL TUBE AND DAMPER

Using the damper, damper rod and (1) e-clip, install the eyelet end of the damper to the damper rod using (1) e-clip. The damper comes with a preinstalled clip on the clevis end side. Remove clip, slide clevis end over the drive tube cam, and reinstall clip.

Using (2) 5/16x2" screws, (2) 1" spacers, (1) 5/16" nylon lock nut, (1) 5/16" washer, and (1) damper rod, install the vertical ladder stop to each drop down unit. The inner mounting point will use the 5/16" washer and nut, While the outer mounting point will use the damper rod for the 5/16x2" screw. It is recommended to use thread locking compound on the 5/16x2" screw that threads into the damper rod. Torque both the 5/16" nut and damper rod to 10 ft-lbs.

Repeat with the other drop down unit.

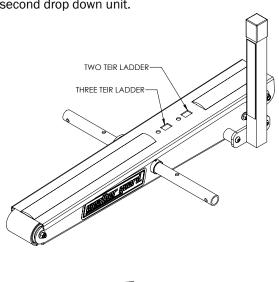


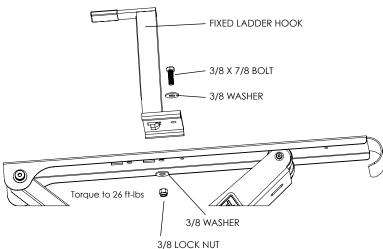


### **STEP 2 - INSTALL LADDER HOOKS**

Using (1) 3/8x7/8" bolt, (1) 3/8" nylon lock nut, and (2) 3/8" washers install the fixed ladder hook to the drop down unit. The hook should be located according to the diagram in the upper set of holes, but may be adjusted depending on ladder dimensions and user preference. Torque nut to 26 ft-lbs.

Repeat for second drop down unit.



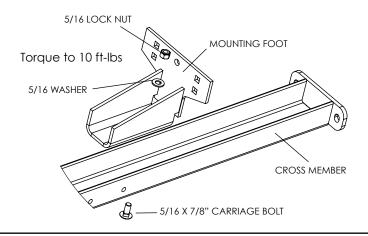




### **STEP 3 - MOUNT MOUNTING FEET TO CROSS MEMBERS**

Only use one carriage bolt, washer, and nut per mounting foot.

Using (1) 5/16x7/8" carriage bolt, (1) 5/16" washer, and (1) 5/16" nylon lock nut per mounting foot, install two mounting feet per cross member. Please refer to the table and diagram for mounting foot location and orientation.



### INSTALL MOUNTING FEET ACCORDING TO TABLE



| MOUNTING FOOT DISTANCE |            |            |           |           |  |  |  |
|------------------------|------------|------------|-----------|-----------|--|--|--|
| VEHICLE                | DIM "A"    |            | DIM "B"   |           |  |  |  |
| FORD TRANSIT 55-1/2"   |            | 6-3        | /4"       |           |  |  |  |
| ram promaster          | 59-3/8"    |            | 4-5       | /8"       |  |  |  |
| NISSAN NV              | 59-5/8"    |            | 4-5       | /8"       |  |  |  |
| MB SPRINTER            | 59-3/8"    |            | 4-5       | /8"       |  |  |  |
| FORD GUTTER*           | F: 62-7/8" | R: 60-3/4" | F: 3"     | R: 4-1/4" |  |  |  |
| DODGE GUTTER*          | F: 63-7/8" | R: 62-1/2" | F: 2-1/2" | R: 3-1/4" |  |  |  |
| GM GUTTER*             | F: 58-1/2" | R: 57-1/2" | F: 5-1/4" | R: 5-3/4" |  |  |  |

<sup>\*</sup> Due to manufacturing differences the listed distances for gutter mount applications is a reference only. Please ensure the curved mounting bracket contacts the gutter before final torquing of the nuts.



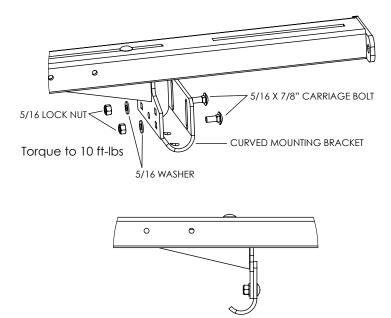
### STEP 4 - INSTALL MOUNTING BRACKETS

Most vans will use a mounting channel kit for installing the EZGLIDE2™ van rack. Follow STEP 4A for these applications. For gutter mounting, follow STEP 4B.

### STEP 4A - FOR CHANNEL MOUNTING APPLICATIONS

Using (2) 5/16X7/8" carriage bolt, (2) 5/16" washers, and (2) 5/16" nylon lock nuts per mounting foot install a curved mounting bracket to each mounting foot. Torque nuts to 10 ft-lbs.

If using an impact driver to torque nuts, it is recommended that the carriage bolt orientation be reversed to engage the square cut outs in the mounting foot.



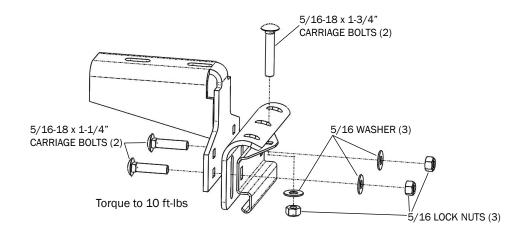
Most vehicle installations will benefit from having the lowest installed height with the mounting bracket lining up with the start of the curve on the curved mounting bracket. Due to vehicle roof curvatures some adjustment for final assembly height may be required after the crossmembers are installed on the roof.

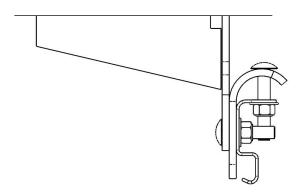


### **STEP 4B - GUTTER MOUNT APPLICATIONS**

### FOR GMC SAVANA AND CHEVROLET EXPRESS VANS

Assemble the curved mounting bracket and the universal mounting clamp to the mounting base with (2) 5/16-18x1-1/4" carriage bolts, (2) 5/16 washers and (2) 5/16 lock nuts. Do not tighten. Insert (1) 5/16-18x1-3/4" carriage bolt into the curved section of the mounting bracket and through the square hole in the universal mounting clamp. Hold it in place with (1) 5/16 washer and (1) 5/16 lock nut. Do not tighten.





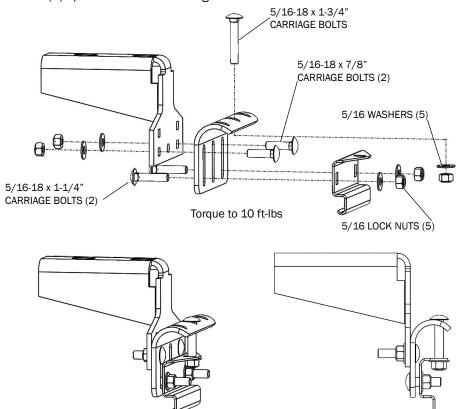


### STEP 4B - GUTTER MOUNT APPLICATIONS (cont.)

### FOR FORD ECONOLINE VANS

Assemble the curved mounting bracket to the cross member mounting base with (2) 5/16-18x7/8" carriage bolts, (2) 5/16 washers and (2) 5/16 lock nuts as shown in the figure below. Loosly tighten to allow some adjustment at this time.

Assemble the universal mounting clamp to the curved mounting bracket with (2) 5/16-18x1-1/4" carriage bolts, (2) 5/16 washers and (2) 5/16 lock nuts. Do not tighten. Next, insert (1) 5/16-18x1-3/4" carriage bolt into the top of the curved mounting bracket and through the square hole in the universal mounting clamp. Hold it in place with (1) 5/16 washer and (1) 5/16 lock nut. Do not tighten.

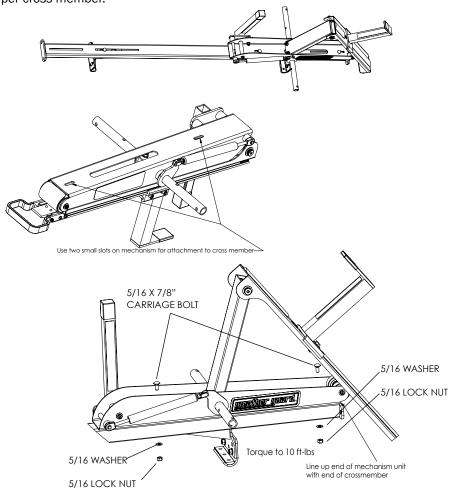




# STEP 5 - INSTALL DROP DOWN MECHANISMS TO CROSS MEMBERS

Using (2) 5/16x7/8" carriage bolt, (2) 5/16" washer, and (2) 5/16" nylon lock nut per drop down mechanism, install each drop down mechanism to the cross members. The end of the bottom bracket on the drop down mechanism should line up with the end of the cross member. Torque nuts to 10 ft-lbs.

On single side installations, there will be one drop down mechanism per cross member. On dual drop down setups, you may install two mechanisms per cross member.







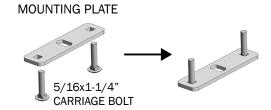
### STEP 6 - MOUNT REAR CROSS MEMBERS TO VEHICLE

Insert (2) 5/16-18x1-1/4" carriage bolts into each mounting plate. Position mounting plate assemblies into channel in the approximate location of the cross member before inserting the roof mouting bolts and attaching the mounting channels to the van roof.

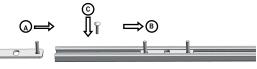
Using (2) 5/16" washers, (2) 5/16" nylon lock nuts, and (1) mounting foot bolt plate per mountir foot, install the rear cross member on the mounting channel. The cross member that has the slide down mechanism should be installed in the rear position.

The EZ GLIDE2 can be installed on either the street side or curb side of the van. Decide which side to install the drop-down before mounting it to the vehicle

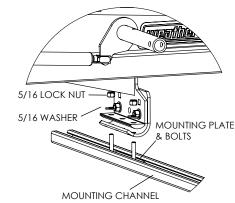
Locate the cross member approximately 1-3" from the end of the mounting channel and hand tighten each 5/16" nut. The nuts will need to be kept loose until step 7 is complete.

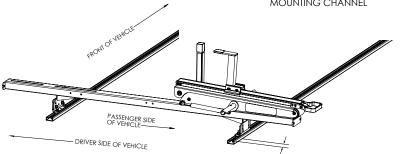


ATTACH MOUNTING CHANNEL TO VAN AFTER POSITIONING MOUNTING PLATES



MOUNTING CHANNEL



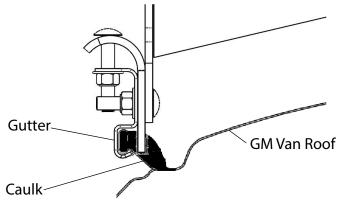


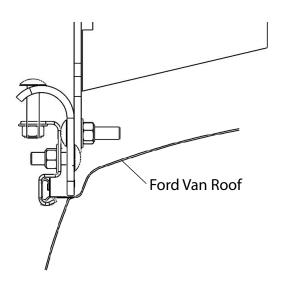
IT IS RECOMMENDED THAT THE REAR CROSSMEMBER BE LOCATED APPROXIMATELY 1-3" FROM THE REAR OF THE MOUNTING CHANNEL



### **STEP 6B - GUTTER MOUNTING APPLICATIONS**

Place rear crossmember on vehicle near the rear of the van into the mounting gutter and position the universal mounting clamp around the outer edge of the gutter. Do not tighten at this time to allow flexibility while installing the connecting tubes.



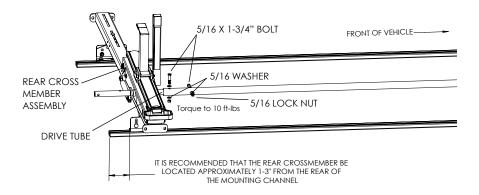




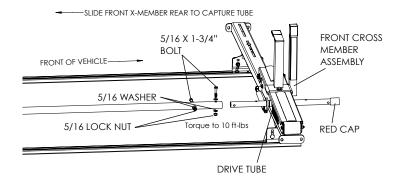
# STEP 7 - INSTALL CENTER CONNECTING TUBE AND FRONT CROSS MEMBER

Select the connecting tube, 89" or 70" long that best fits your van and the load you are carrying. 130" WB Transit vans should use a 70" tube.

Rotate and position the connecting tube on the drive tube until all 4 mounting holes line up. Using (2) 5/16x1-3/4" bolts, (4) 5/16" washers, and (2) 5/16" nuts, install the connecting tube. Torque 5/16 nuts to 10 ft-lbs.

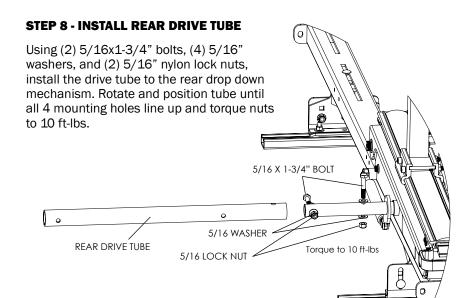


Using (2) 5/16x1-3/4" bolts, (4) 5/16" washers, and (2) 5/16" nuts, install the connecting tube on the front drive tube. Rotate and position the center connecting tube until all 4 mounting holes line up and then drop cross member onto stud plates. Torque 5/16 nuts to 10 ft-lbs.

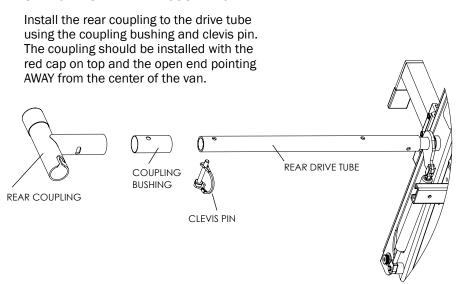


On Ford Transit installations it is ok to place the curved mounting bracket on top of the mounting channel end caps and pinch them between the mounting channels.

## <u>weather guard</u>



### **STEP 9 - INSTALL REAR COUPLING**

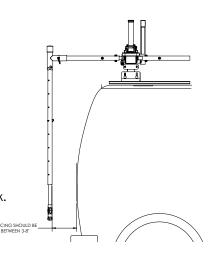




# STEP 10 - POSITION AND SECURE LADDER RACK ASSEMBLY

Insert the handle into the rear

clearance between the back of the vehicle and the handle for full rotation. If more or less clearance is desired slide the rack forward or backwards in the mounting channels. Once the desired position is found, torque all 5/16" nuts on the mounting plates to 10 ft-lbs to lock the position of the rack.

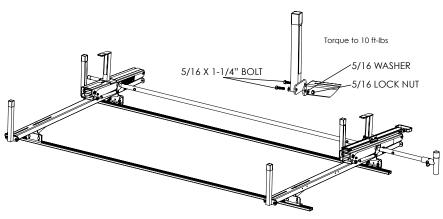


### **STEP 11 - INSTALL ACCESSORY VERTICAL LADDER STOPS**

Using (2) 5/16x1-1/4" bolts, (4) 5/16" washers, and (2) 5/16" nylon lock nuts per vertical ladder stop, install 1 vertical ladder stop at the end of each cross member. Torque nuts to 10 ft-lbs.

If a dual side setup was installed do not install the ladder stops.

Your drop down ladder rack also includes two spring clips that may be installed to the inside of the van, that allow the handle to be safely stored when the handle is not in use.

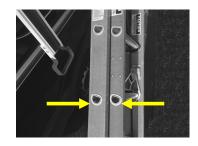




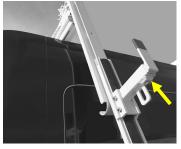
### STEP 12 - ADJUSTING THE LADDER HOOKS

The adjustable ladder hook can be set from 5" to 9-1/4" widths. The welded loop on the fixed portion of the hook provides a fastening point for cables to secure ladders to the rack.

Measure width of ladder in the area where it will rest on the hook.



Loosen the 5/16-18 set bolt with 1/2" wrench and move the sliding portion of the ladder hook in or out to best fit the ladder.



Test fit the ladder on the hook. Make any final adjustments and tighten the 5/16 bolt to 10 ft-lbs.



Do not exceed the van manufacturer's maximum roof load rating. This information is available on the OEM's body builder website.

Like any roof load, ladders should be evenly distributed between the cross-members.



### 2261-3-01 EZGLIDE2™ SERVICE PARTS

| PART NO | DESCRIPTION   | FITS MODEL NUMBER                  |
|---------|---|------------------------------------|
| 70512   | REPLACEMENT 70" CONNECTING TUBE FOR EZGLIDE2™<br>DROP-DOWN VAN RACK                         | 2261-3-01, 2265-3-01               |
| 70513   | REPLACEMENT 36" CONNECTING TUBE FOR EZGLIDE2™<br>DROP-DOWN VAN RACK                         | 2267-3-01, 2265-3-01,<br>2267-3-01 |
| 70514   | REPLACEMENT LADDER STOP KIT FOR EZGLIDE2™ DROP-<br>DOWN VAN RACK                            | ALL MODELS                         |
| 70546   | REPLACEMENT ADJUSTABLE LADDER HOOK KIT FOR EZGLIDE2 <sup>TM</sup> FIXED DROP-DOWN MECHANISM | ALL MODELS                         |
| 70517   | REPLACEMENT BOLT KIT FOR MOUNTING CHANNEL KIT,<br>85 IN                                     | 2085-0-01                          |
| 70520   | REPLACEMENT RED PLASTIC CAP KIT FOR EZGLIDE2 <sup>TM</sup><br>DROP-DOWN VAN RACK            | ALL MODELS                         |
| 70521   | REPLACEMENT REAR HANDLE KIT FOR EZGLIDE2™ DROP-<br>DOWN VAN RACK                            | ALL MODELS                         |
| 70522   | REPLACEMENT RUB STRIP KIT FOR EZGLIDE2 <sup>TM</sup> FIXED DROP-<br>DOWN MECHANISM          | ALL MODELS                         |
| 70524   | REPLACEMENT DAMPER FOR EZGLIDE2™ DROP-DOWN<br>VAN RACK                                      | ALL MODELS                         |
| 70528   | REPLACEMENT BOLT KIT FOR MODEL 2271-3-01<br>EZGLIDE2™ DROP-DOWN VAN RACK                    | 2271-3-01, 2261-3-01               |
| 70529   | REPLACEMENT BOLT KIT FOR MODEL 2275-3-01<br>EZGLIDE2™ DROP-DOWN VAN RACK                    | 2275-3-01, 2265-3-01               |
| 70530   | REPLACEMENT BOLT KIT FOR MODEL 2277-3-01<br>EZGLIDE2™ DROP-DOWN VAN RACK                    | 2277-3-01, 2267-3-01               |
| 70532   | REPLACEMENT EZGLIDE2™ FIXED DROP-DOWN<br>MECHANISM  | ALL MODELS                         |
| 70533   | REPLACEMENT BUSHING KIT FOR EZGLIDE2™ DROP-<br>DOWN VAN RACK                                | ALL MODELS                         |



### 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.

©2017 Knaack LLC



