



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

**EZGlide2™**

# **INSTALLATION MANUAL**



**Model 2291-3-01**



ATTENTION: PLEASE READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS 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
- 2X 9/16 SOCKET AND/OR WRENCH
- TORQUE SETTABLE DRIVER OR TORQUE WRENCH
- NEEDLE NOSE PLIERS
- LADDER OR WORK PLATFORM

**BEFORE YOU BEGIN**

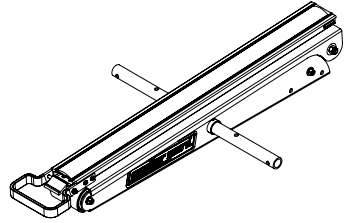
The EZGLIDE2™ drop-down ladder rack is designed to use Weather Guard Mounting Channel kits to provide the best support for your ladders and to take advantage of OEM provided roof mounting points. If you have not already installed the mounting channel kit to the van roof, install it now before proceeding.

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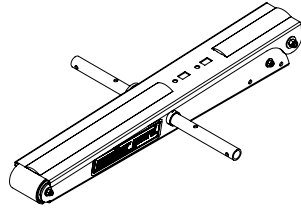
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## EZ GLIDE2 PARTS LIST

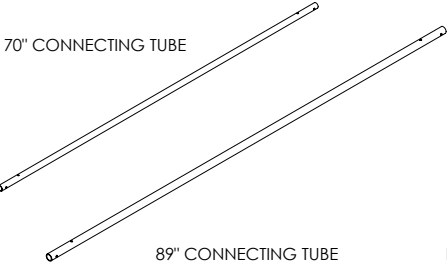
DESCRIPTION	QTY
DROP DOWN W/SLIDE	1
FIXED DROP DOWN	1
70" CONNECTING TUBE	1
89" CONNECTING TUBE	1
REAR DRIVE TUBE	1
REAR COUPLING	1
MOUNTING FOOT	4
VERTICAL LADDER STOP	4
DAMPER	2
TELESCOPIC HANDLE	1
70" CROSS-MEMBER	2
SLIDE LADDER HOOK	1
FIXED LADDER HOOK	1



DROP DOWN W/ SLIDE



FIXED DROP DOWN



70" CONNECTING TUBE



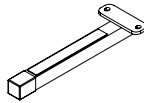
89" CONNECTING TUBE

REAR DRIVE TUBE

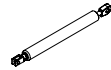
REAR COUPLING



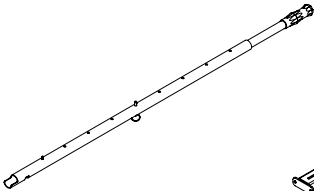
MOUNTING FOOT



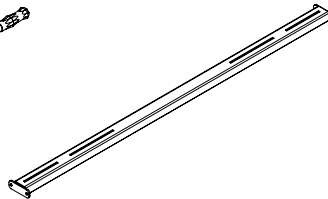
VERTICAL LADDER STOP



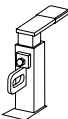
DAMPER



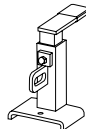
TELESCOPING HANDLE



70" CROSSMEMBER

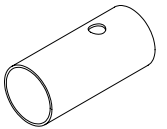
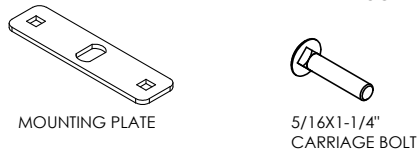
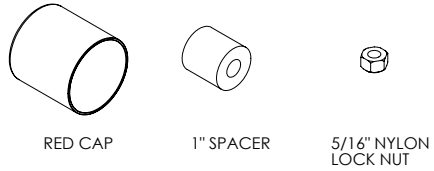
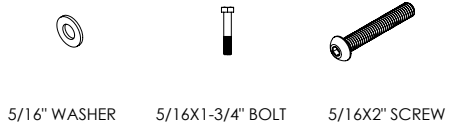


SLIDE LADDER HOOK

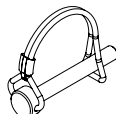


FIXED LADDER HOOK

DESCRIPTION	QTY
5/16" WASHER	46
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	38
3/8 WASHER	
3/8 x 7/8" BOLT	1
3/8 NYLON LOCK NUT	1
MOUNTING PLATE	4
5/16X1-1/4" CARRIAGE BOLT	8
COUPLING BUSHING	1
CLEVIS PIN	1
5/16 x 7/8" CARRIAGE BOLT	16
E-CLIP	2
DAMPER ROD	2
LADDER HOOK SUPPORT	2
5/16 x 3" SCREW	2
SPRING CLIP	2
5/16 x 1-1/4" BOLT	4
CURVED MOUNTING BRACKET	4
MOUNTING FOOT BOLT PLATE	4



COUPLING BUSHING



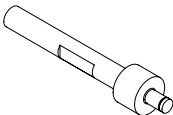
CLEVIS PIN



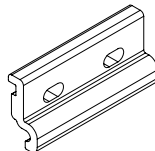
5/16X7/8" CARRIAGE BOLT



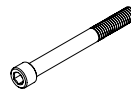
E-CLIP



DAMPER ROD



LADDER HOOK SUPPORT



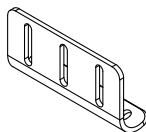
5/16X3" SCREW



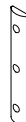
SPRING CLIP



5/16X1-1/4" BOLT



CURVED MOUNTING BRACKET



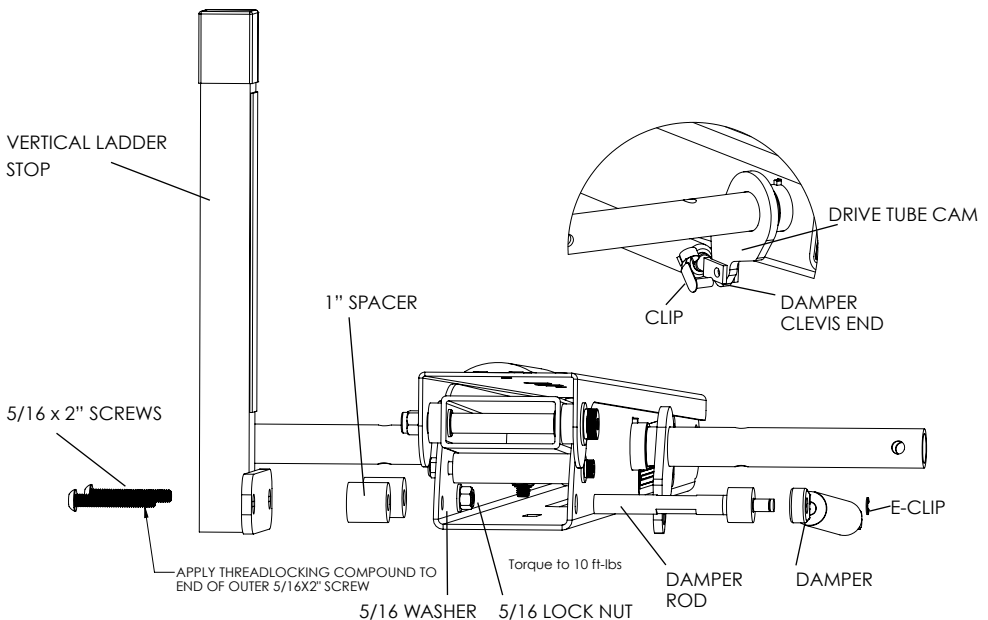
MOUNTING FOOT BOLT PLATE

## 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. The needle nose pliers will help with this operation.

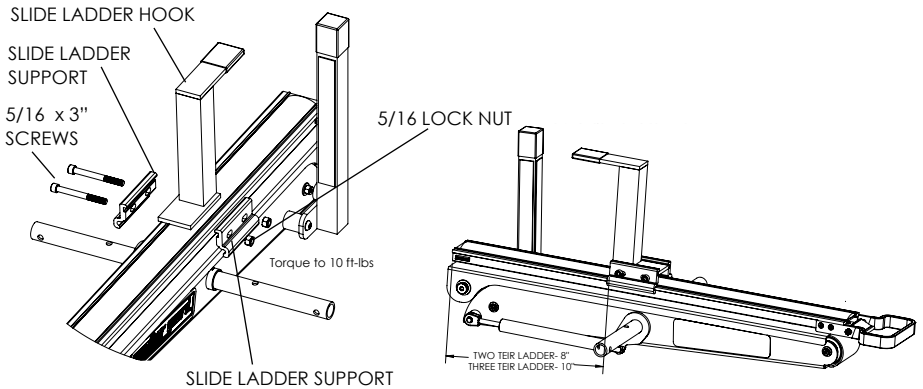
Using (2) 5/16x2" screws, (2) 1" spacers, (1) 5/16" nylon lock nut, (1) 5/16" washer, and (1) damper rod, install the vertical ladder stop to each drop down unit. The inner mounting point will use the 5/16" washer and nut, While the outer mounting point will use the damper rod for the 5/16x2" screw. 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.

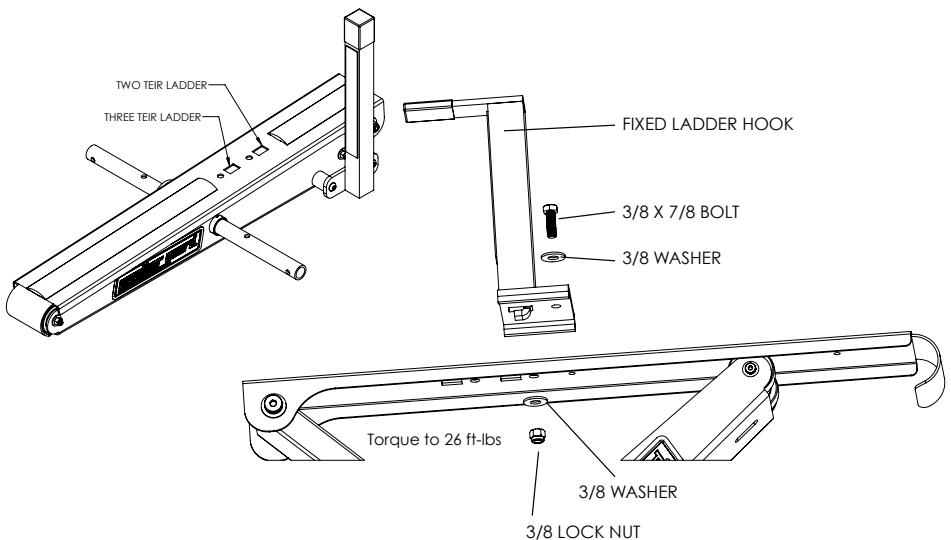


### STEP 2 - INSTALL LADDER HOOKS

Using (2) 5/16x3" screws, (2) 5/16" nuts, and (2) ladder hook supports, install the slide ladder hook on the slide down unit. The hook should be located according to the diagram but may be adjusted depending on ladder dimensions and user preference. Torque nuts to 10 ft-lbs.



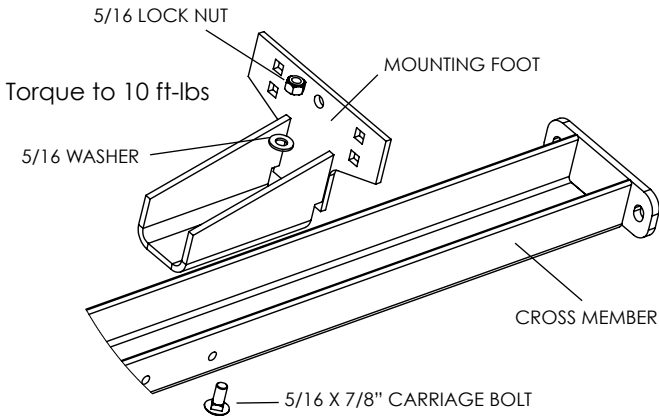
Using (1) 3/8x7/8" bolt, (1) 3/8" nylon lock nut, and (2) 3/8" washers install the fixed ladder hook to the drop down unit. The hook should be located according to the diagram, but may be adjusted depending on ladder dimensions and user preference. Torque nut to 26 ft-lbs.



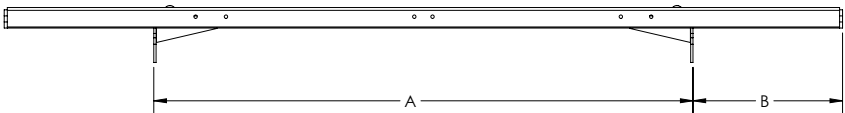
### STEP 3 - MOUNT MOUNTING FEET TO CROSS MEMBERS

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

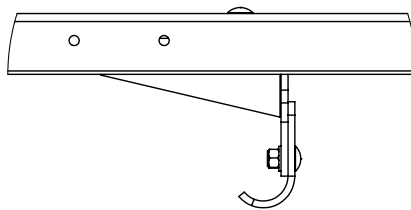
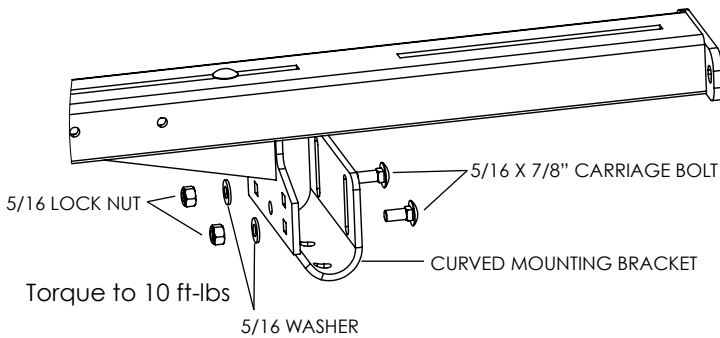


MOUNTING FOOT DISTANCE		
VEHICLE	DIM "A"	DIM "B"
FORD TRANSIT	55-1/2"	6-3/4"
RAM PROMASTER	59-5/8"	4-5/8"
NISSAN NV200	59-3/8"	4-13/16"
MERCEDES-BENZ SPRINTER	53-1/4"	7-7/8"

### STEP 4 - INSTALL CURVED MOUNTING BRACKETS

Using (2) 5/16X7/8" carriage bolt, (2) 5/16" washer, and (2) 5/16" nylon lock nut 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.

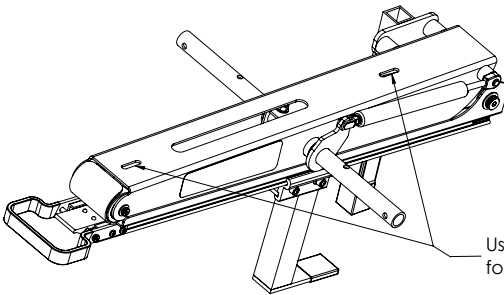
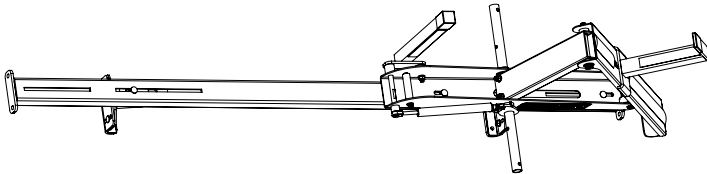


Most vehicle installations will benefit from having the lowest installed height with the mounting bracket lining up with the start of the curve on the curved mounting bracket. Due to vehicle roof curvatures some adjustment for final assembly height may be required after the crossmembers are installed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

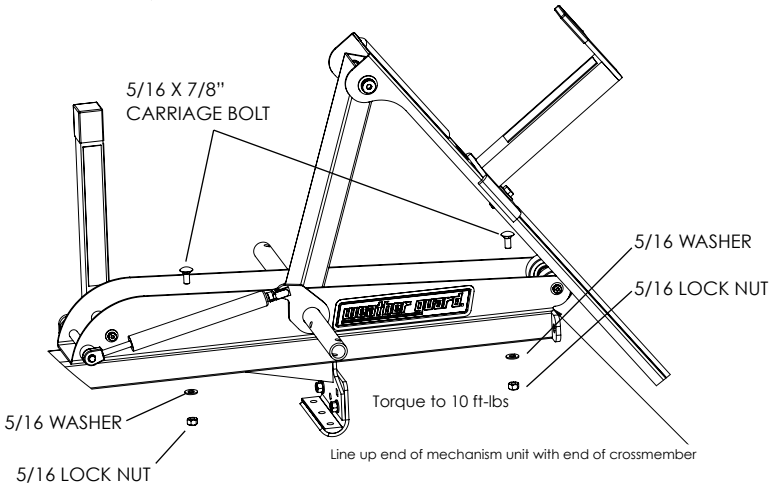
**STEP 5 - INSTALL DROP DOWN MECHANISMS TO CROSS MEMBERS**

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.



Use two small slots on mechanism for attachment to cross member



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

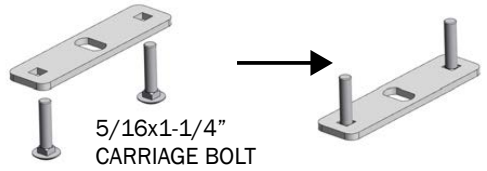
Insert (2) 5/16-18x1-1/4" carriage bolts into each mounting plate. Position mounting plate assemblies into channel in the approximate location of the cross member before inserting the roof mounting bolts and attaching the mounting channels to the van roof.

Using (2) 5/16" washers, (2) 5/16" nylon lock nuts, and (1) mounting plate w/ bolts per mounting foot, install the rear cross member on the mounting channel. The cross member that has the slide down rear position.

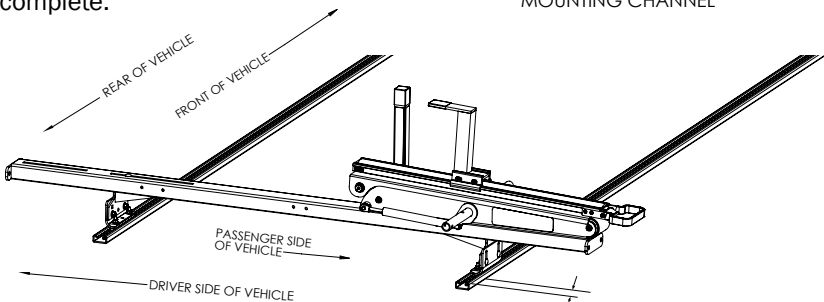
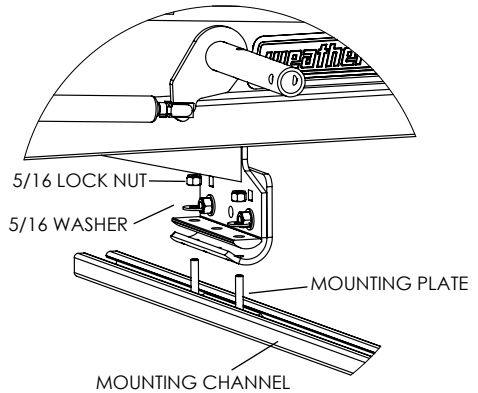
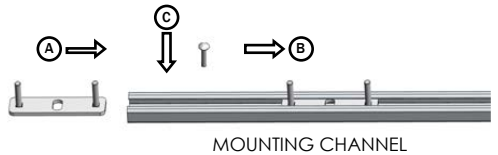
The EZ GLIDE2 can be installed on either the street side or curb side of the van. Decide which side to install the drop-down before mounting it to the vehicle.

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.

MOUNTING PLATE



ATTACH MOUNTING CHANNEL TO VAN AFTER POSITIONING MOUNTING PLATES

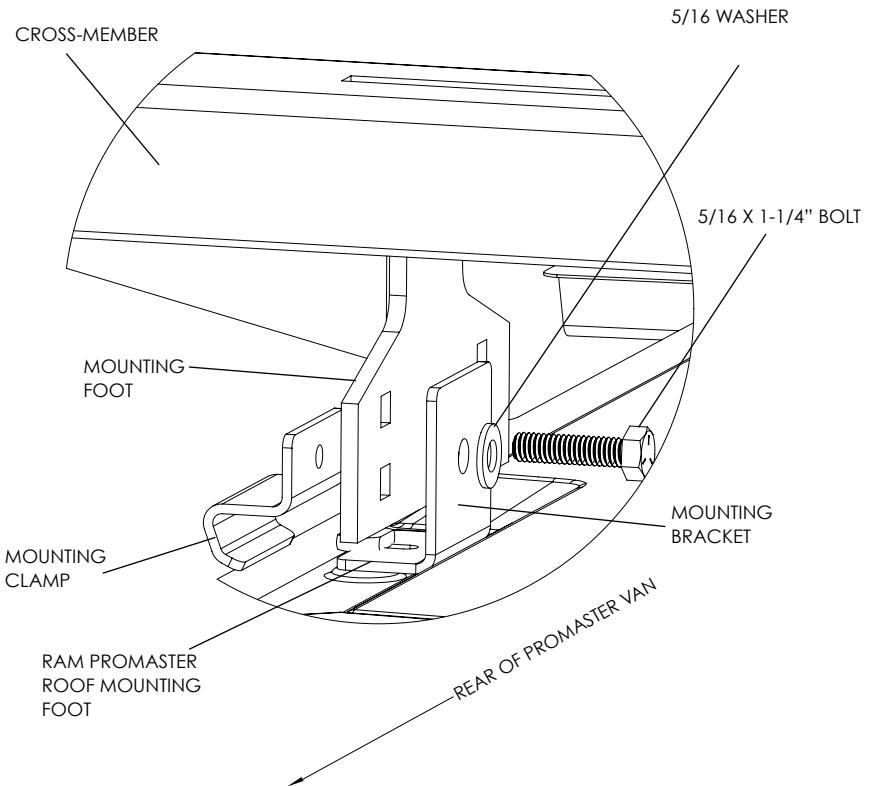


IT IS RECOMMENDED THAT THE REAR CROSSMEMBER BE LOCATED APPROXIMATELY 1-3" FROM THE REAR OF THE MOUNTING CHANNEL

**STEP 6B – 159” WHEELBASE RAM PROMASTER  
MOUNT REAR CROSS MEMBERS TO VEHICLE**

The 2115-0-01 mounting channel kit is used on RAM Promaster vans. For 159” wheel-base and the 159” wheel-base extended versions, the rear cross-member is mounted directly to the mounting point closest to the rear of the van. The front cross-member and center cross-members, if used, mount to the channels as shown in Step 6.

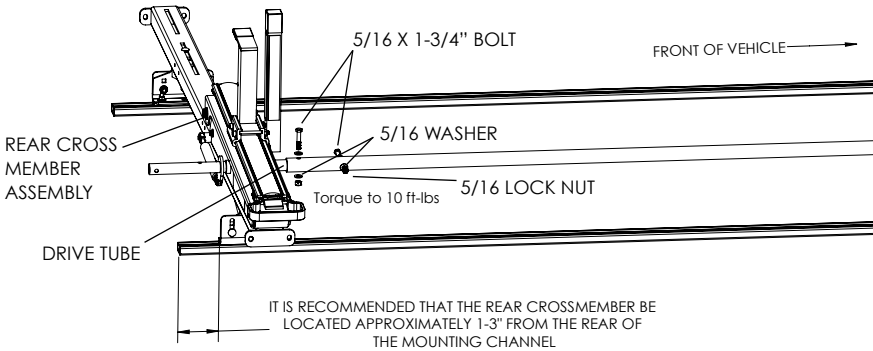
If not already installed, fit the mounting bracket around the rear mounting post on the Promaster roof. Place the mounting foot against the bracket and clamp in place using 5/16 bolt and mounting clamp as shown.



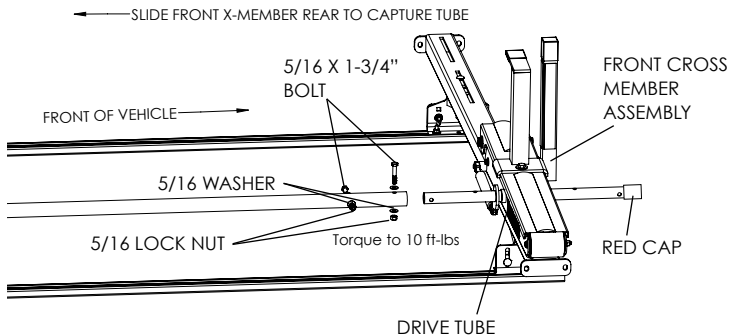
### STEP 7 - INSTALL CENTER CONNECTING TUBE AND FRONT CROSS MEMBER

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.



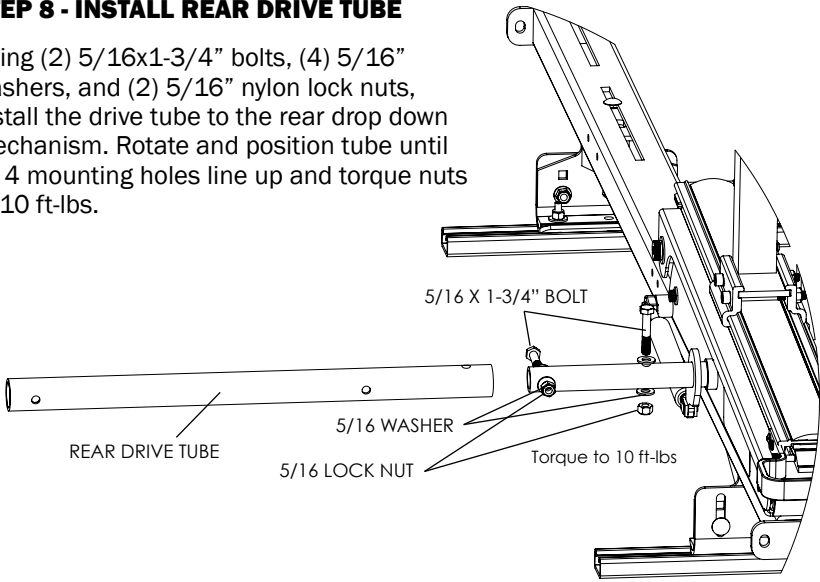
Using (2) 5/16x1-3/4" bolts, (4) 5/16" washers, and (2) 5/16" nuts, install the connecting tube on the front drive tube. Rotate and position the center connecting tube until all 4 mounting holes line up and then drop cross member onto stud plates. Torque 5/16 nuts to 10 ft-lbs.



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.

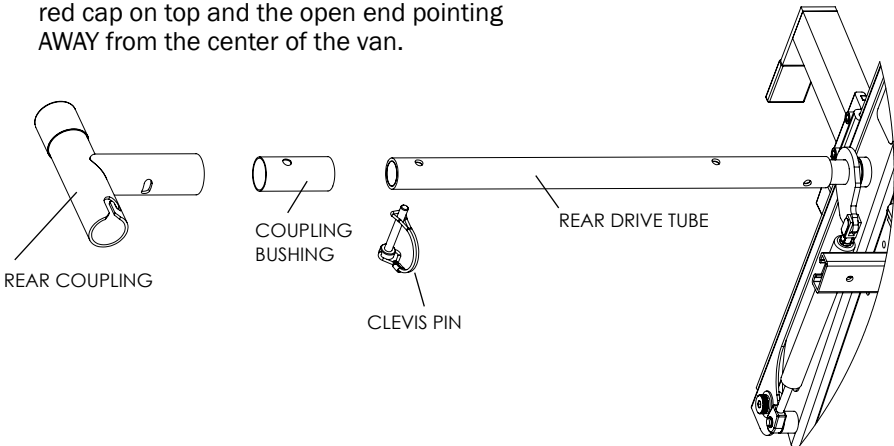
**STEP 8 - INSTALL REAR DRIVE TUBE**

Using (2) 5/16x1-3/4" bolts, (4) 5/16" washers, and (2) 5/16" nylon lock nuts, install the drive tube to the rear drop down mechanism. Rotate and position tube until all 4 mounting holes line up and torque nuts to 10 ft-lbs.



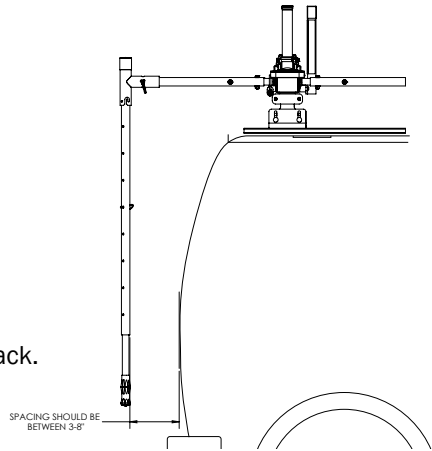
**STEP 9 - INSTALL REAR COUPLING**

Install the rear coupling to the drive tube using the coupling bushing and clevis pin. The coupling should be installed with the red cap on top and the open end pointing AWAY from the center of the van.



### STEP 10 - POSITION AND SECURE LADDER RACK ASSEMBLY

Insert the handle into the rear coupler and ensure there is sufficient 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.

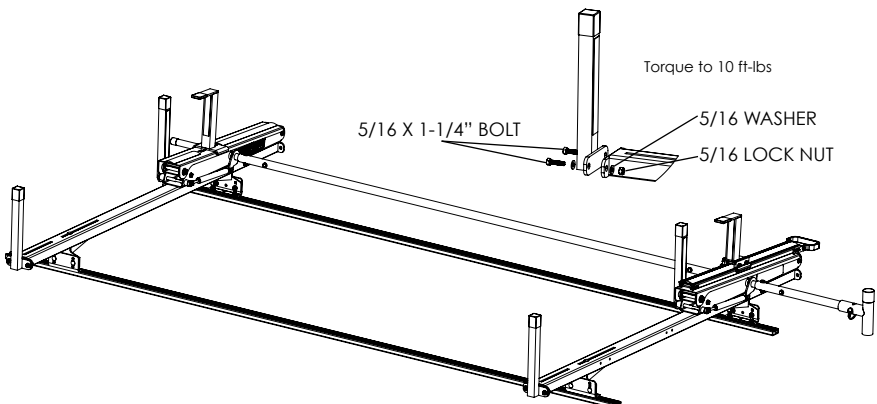


### STEP 11 - INSTALL ACCESSORY VERTICAL LADDER STOPS

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.

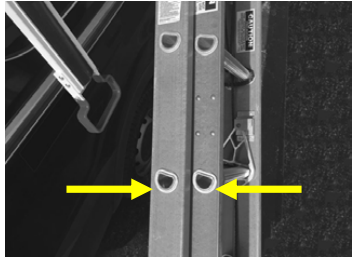
Your drop down ladder rack also includes two spring clips that may be installed to the inside of the van, that allow the handle to be safely stored when the handle is not in use.



**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.



## 2291-3-01 EZGLIDE2™ SERVICE PARTS

PART NO	DESCRIPTION	FITS MODEL NUMBER
70500	REPLACEMENT BOLT KIT FOR MODEL 2291-3-01 EZGLIDE2™ DROP-DOWN VAN RACK	2291-3-01
70509	REPLACEMENT BUSHING KIT FOR EZGLIDE2™ EXTENDABLE DROP-DOWN MECHANISM	2291-3-01, 2295-3-01, 2297-3-01
70510	REPLACEMENT HANDLE KIT FOR EZGLIDE2™ EXTENDABLE DROP-DOWN MECHANISM	2291-3-01, 2295-3-01, 2297-3-01
70511	REPLACEMENT 89" CONNECTING TUBE FOR EZGLIDE2™ DROP-DOWN VAN RACK	2291-3-01, 2295-3-01, 2271-3-01, 2275-3-01
70512	REPLACEMENT 70" CONNECTING TUBE FOR EZGLIDE2™ DROP-DOWN VAN RACK	
70513	REPLACEMENT 36" CONNECTING TUBE FOR EZGLIDE2™ DROP-DOWN VAN RACK	
70514	REPLACEMENT LADDER STOP KIT FOR EZGLIDE2™ DROP-DOWN VAN RACK	ALL MODELS
70546	REPLACEMENT ADJUSTABLE LADDER HOOK KIT FOR EZGLIDE2™ FIXED DROP-DOWN MECHANISM	ALL MODELS
70545	REPLACEMENT ADJUSTABLE LADDER HOOK KIT FOR EZGLIDE2™ EXTENDABLE DROP-DOWN MECHANISM	2291-3-01, 2295-3-01, 2297-3-01
70518	REPLACEMENT BOLT KIT FOR MOUNTING CHANNEL KIT, 102 IN	2102-0-01
70519	REPLACEMENT BOLT KIT FOR MOUNTING CHANNEL KIT, 113 IN	2113-0-01
70520	REPLACEMENT RED PLASTIC CAP KIT FOR EZGLIDE2™ DROP-DOWN VAN RACK	ALL MODELS
70521	REPLACEMENT REAR HANDLE KIT FOR EZGLIDE2™ DROP-DOWN VAN RACK	ALL MODELS
70522	REPLACEMENT RUB STRIP KIT FOR EZGLIDE2™ FIXED DROP-DOWN MECHANISM	ALL MODELS
70523	REPLACEMENT RUB STRIP KIT FOR EZGLIDE2™ EXTENDABLE DROP-DOWN MECHANISM	2291-3-01, 2295-3-01, 2297-3-01
70524	REPLACEMENT DAMPER FOR EZGLIDE2™ DROP-DOWN VAN RACK	ALL MODELS
70531	REPLACEMENT EZGLIDE2™ EXTENDABLE DROP-DOWN MECHANISM	2291-3-01, 2295-3-01, 2297-3-01
70532	REPLACEMENT EZGLIDE2™ FIXED DROP-DOWN MECHANISM	ALL MODELS
70533	REPLACEMENT BUSHING KIT FOR EZGLIDE2™ DROP-DOWN VAN RACK	ALL MODELS