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# KARGO MASTER®

**WE PUT EVERYTHING WITHIN REACH.**

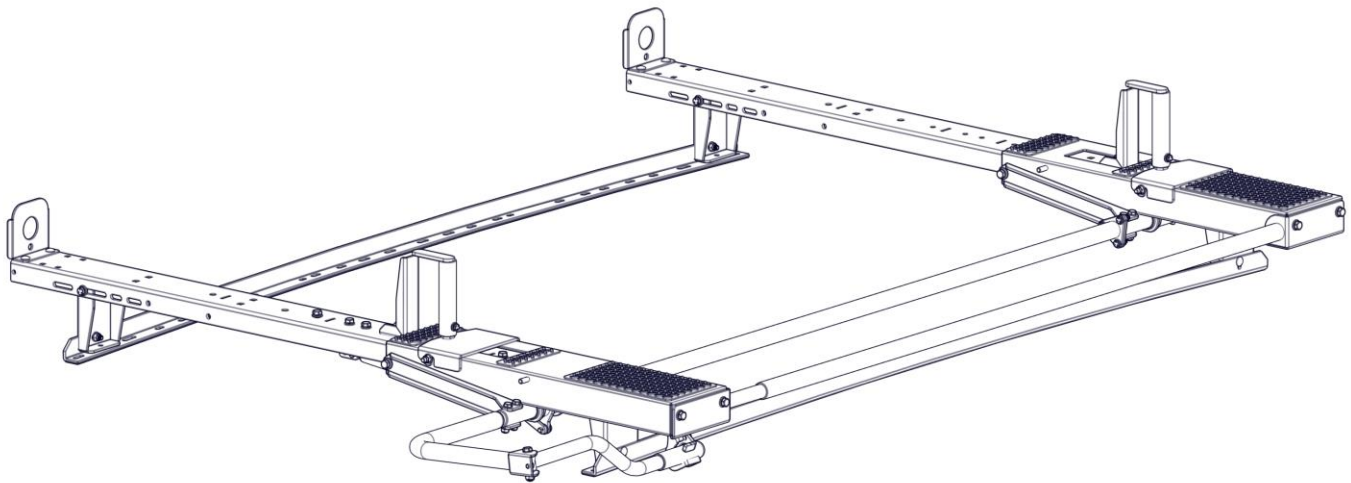
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## Assembly Guide

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4A97L

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\*PLEASE READ ALL INSTRUCTIONS AND WARNINGS PRIOR TO ASSEMBLING,  
INSTALLING, AND USING THIS PRODUCT\*

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## Warning



Always check for wires, fuel tanks and lines, brake lines and other important vehicle functionality items prior to drilling and installing all products.

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## Tools Needed

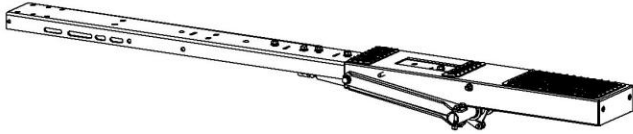
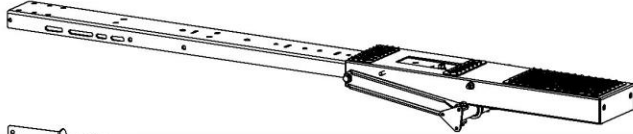
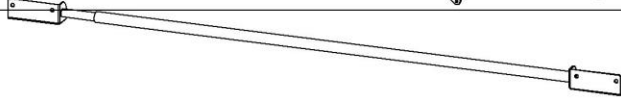
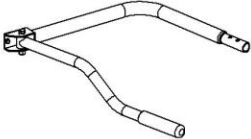

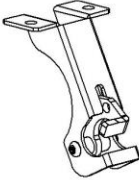

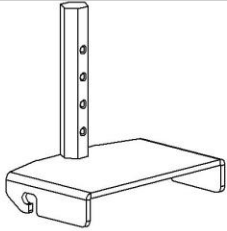

5/16" Wrench and Socket	3/8" Wrench and Socket
1/2" Wrench and Socket	9/16" Wrench and Socket
Tape Measure	

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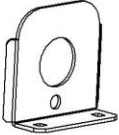
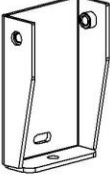

## Before You Begin

- Read all instructions.
- **NEVER EXCEED MANUFACTURERS ROOF WEIGHT RATING.**
- Place sealant around all swage joints to avoid water from leaking inside of ladder rack.
- Place sealant in between roof and mounting rails around the holes in the roof. Place sealant around the hardware to prevent water from leaking inside of van.



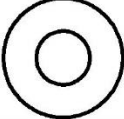

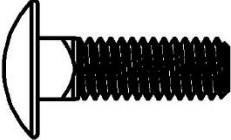
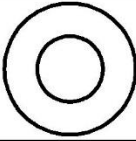


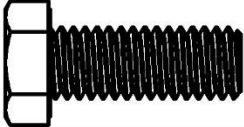
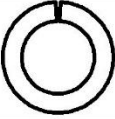
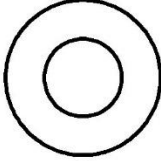

Parts

ITEM NO.		PART NO.	DESCRIPTION	QTY.
A		4A97L-1	Front Bow	1
B		4A93L-2	Rear Bow	1
C		4A93L-7	End Tube	1
D		4A97L-40	Handle	1
E		4A93L-50	Torque Tube	1
F		40900-44-R1	Latch	1
G		4A900-35	Ladder Hook	2
H		4A900-36	Ladder Hook Base	2
J		4A900-30-004-R3	Ladder Stop	2




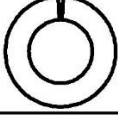
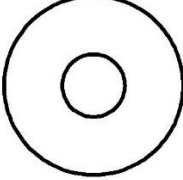

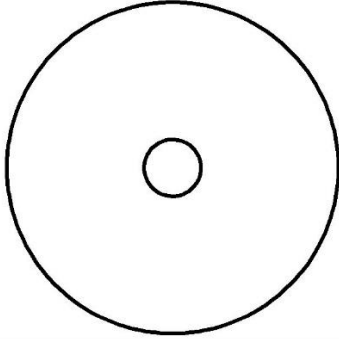
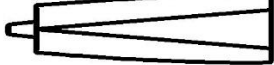
Parts Continued

ITEM NO.		PART NO.	DESCRIPTION	QTY.
K		4A900-10-008-R2	Load Plate	2
L		4A933-10	Foot	4
M		4A800-00-002-R1	Mount Rail	2
		18-4A97L	Hardware Kit	1

Hardware

ITEM NO.	TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		92865A542	BOLT, HEX, 1/4-20 x 1"	8
2		92148A180	WASHER, LOCK, 1/4	8
3		90126A029	WASHER, FLAT, 1/4"	20
4		95615A120	NUT, NYLOK, 1/4-20	6
5		90185A583	BOLT, CARRIAGE, 5/16-18 X 1	10
6		90126A030	WASHER, FLAT, 5/16, SAE	14
7		95615A160	NUT, NYLOC, 5/16-18	10
8		92865A622	BOLT, HEX, 3/8-16 X .75"	4
9		92865A624	BOLT, HEX, 3/8-16 X 1"	9
10		91102A760	WASHER, LOCK, 3/8	12
11		90126A031	WASHER, FLAT, 3/8, SAE	14
12		97135A230	NUT, HEX, NYLOK, 3/8- 16	1

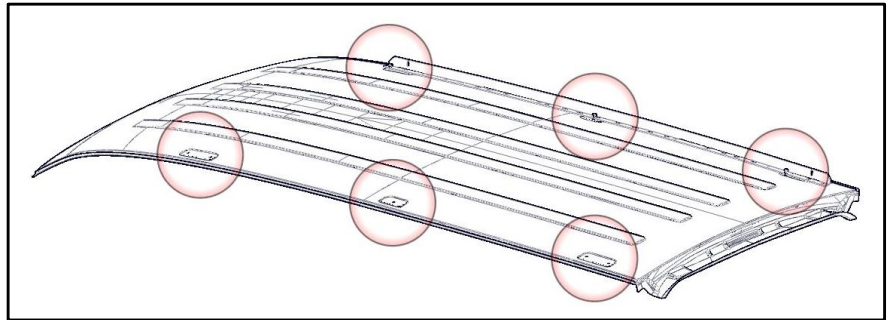
Hardware (2 of 2)

ITEM NO.		PART NUMBER	DESCRIPTION	QTY.
13		91287A137	BOLT, HEX, M6 X 1 X 20MM	6
14		91287A154	BOLT, HEX, M8 X 1.25 X 30MM	4
15		93625A300	NUT, NYLOK, M8 X 1.25	4
16		92148A200	WASHER, LOCK, M8	4
17		91100A160	WASHER, FENDER, M8, 24 MM OD	4
18		91263A839	M6x1 x 20mm Flat Head	4
19			WASHER, 5/16 x 1.75" OD X .125" THK, RUBBER	6
		BH-821	ADHESIVE/SEALANT, SELF-LEVELING	1

**DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF**

Promaster City Installation

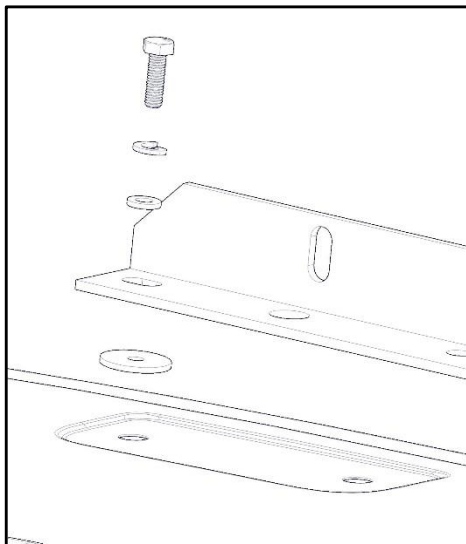
- Locate the six mounting locations on the roof of the van. Remove plugs.
- Place the front most slot on top of the front most mount location in the roof of the van.



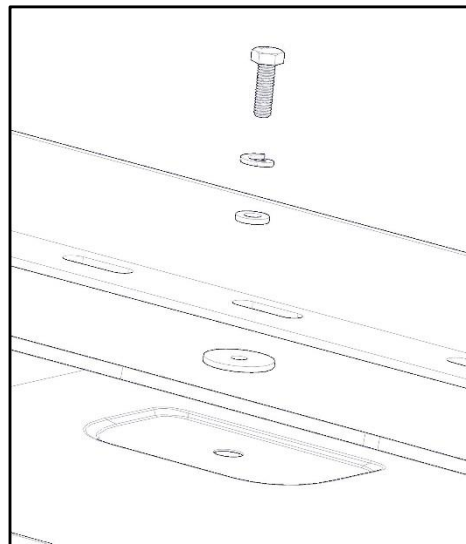
Be sure the other mounting locations can be accessed through the holes in the rail.

- Place sealant on and around holes in the roof to seal the roof. Install mount rail as shown with the flange to the outside of the van using M6x20mm bolts, M6 lock washers and M6 flat washers.
- Be sure to put rubber washer between the mount rail and the roof to ensure sealing.

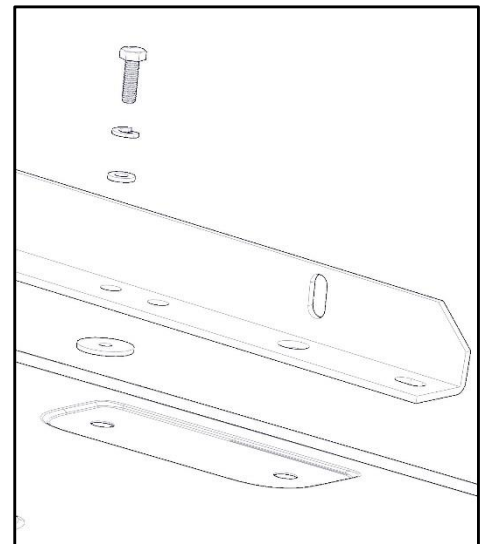
(Passenger side shown)



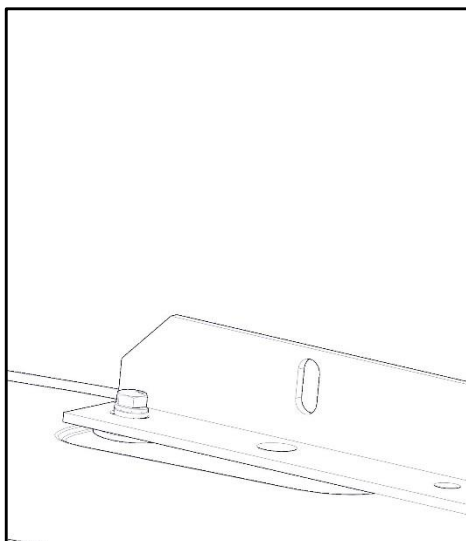
Front EXP



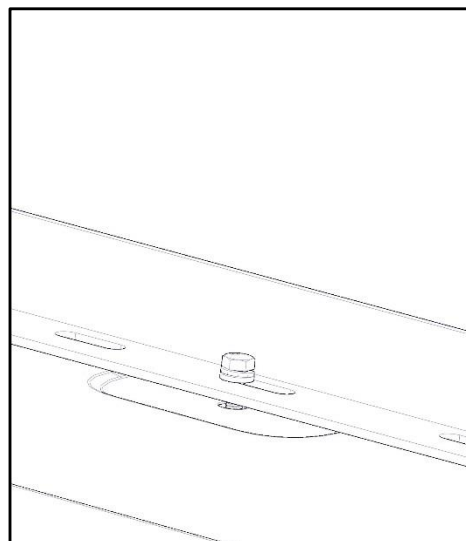
Mid EXP



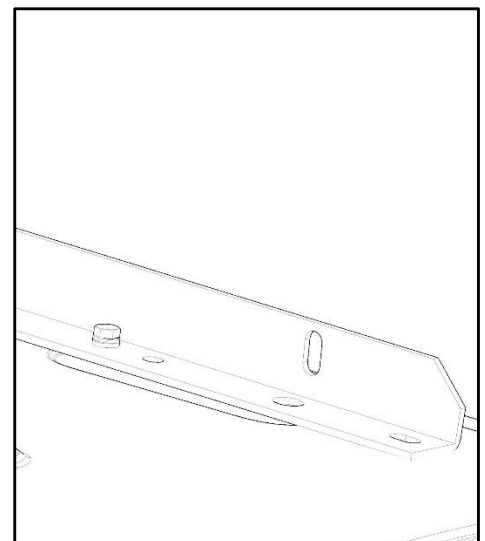
Rear EXP



Front Tighten



Mid Tighten



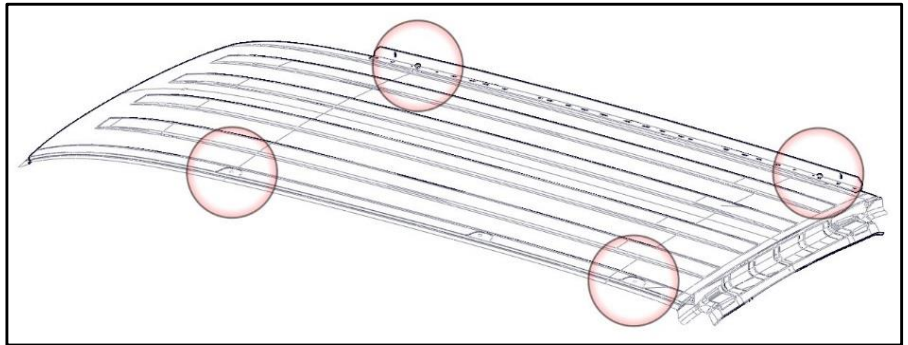
Rear Tighten



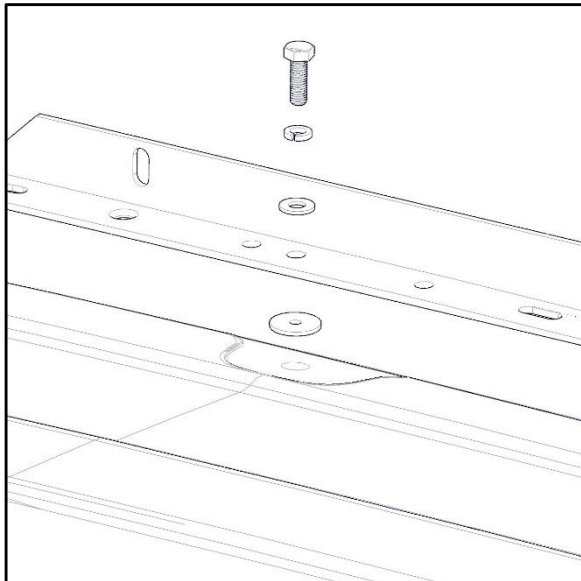
## DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF

### NV200/City Express Installation

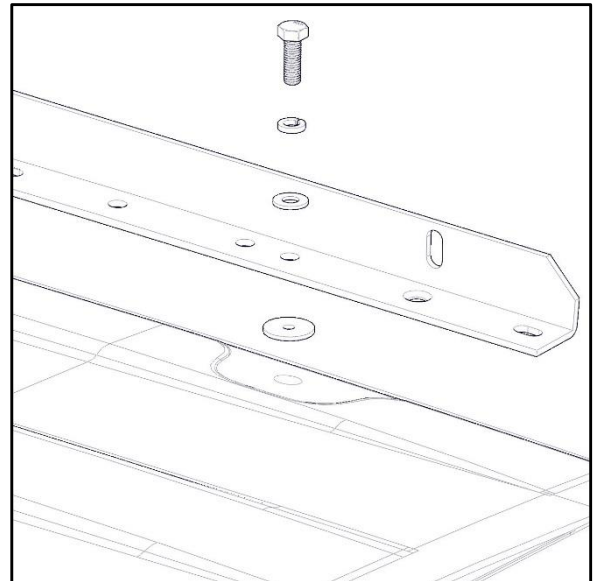
- Locate the four mounting locations on the roof of the van. Remove plugs.
- Place the mount rail on top of the mount locations with the flange to the outside. Place the rail so there is about 1" from the rear door opening.
- Apply sealant around the holes in the roof to prevent water from entering cargo area.
- Place the large rubber washer between the mount rail and the roof to ensure sealing.
- Bolt into place using M8x30mm bolts, M8 lock washers and M8 flat washers.



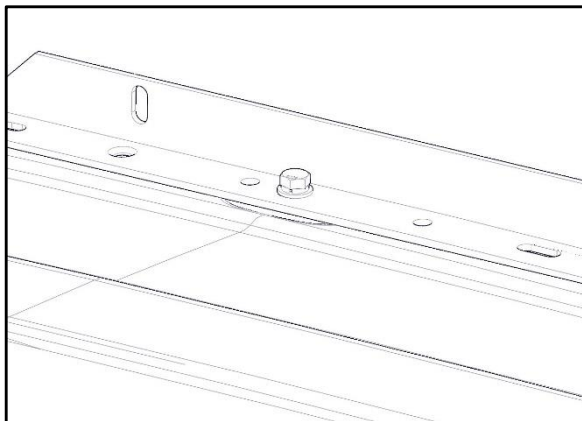
(Passenger side shown)



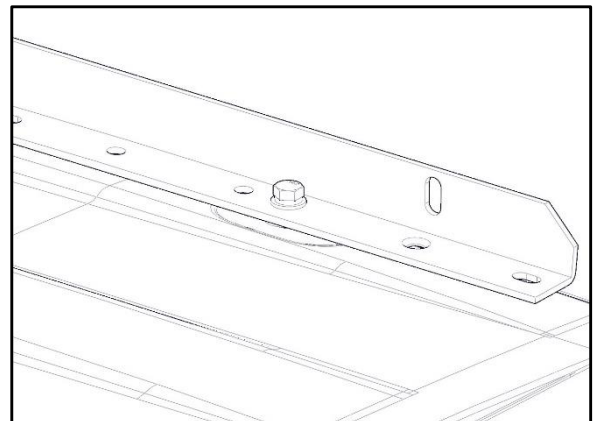
Front EXP



Rear EXP



Front Tighten



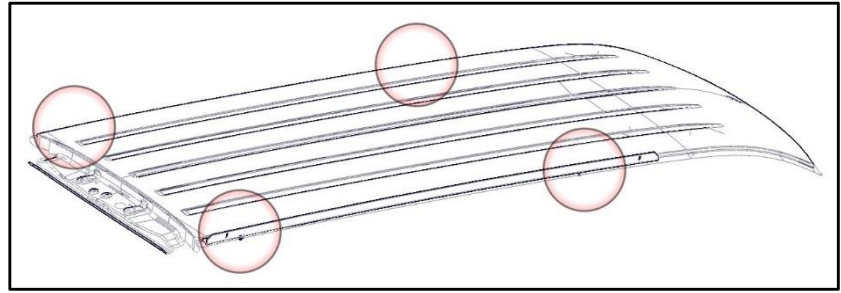
Rear Tighten



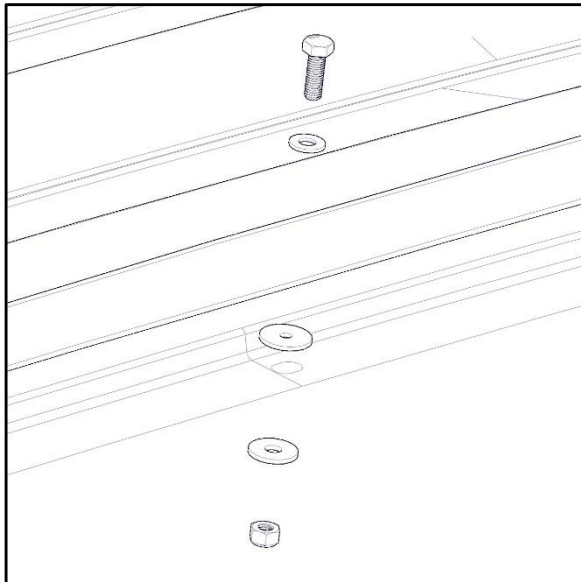
## DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF

### Transit Connect Installation

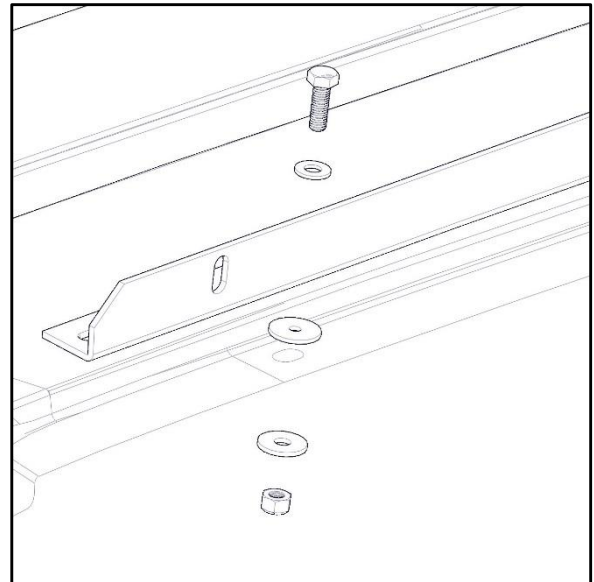
- Locate the four mounting locations on the roof of van. Remove plugs.
- Place the mount rail on top of the mount locations with the flange to the outside. Place the rail so there is about 1" from the rear door opening.
- Apply sealant around the holes in the roof to prevent water from entering cargo area.
- Place the large rubber washer between the mount rail and the roof to ensure sealing.
- Attach using M8x25mm bolts, M8 flat washers on the outside. Use the fender washer and M8 nyloc nut on the inside of the van.



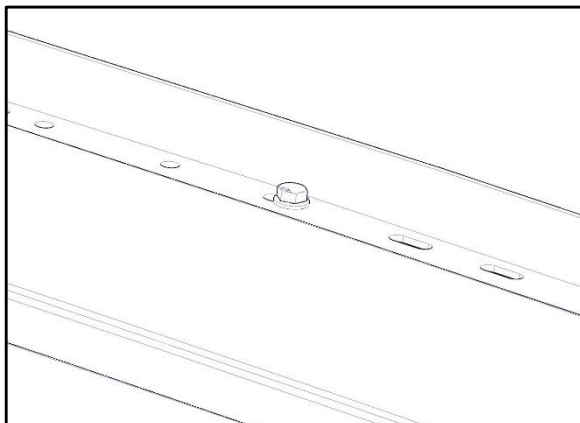
(Passenger side shown)



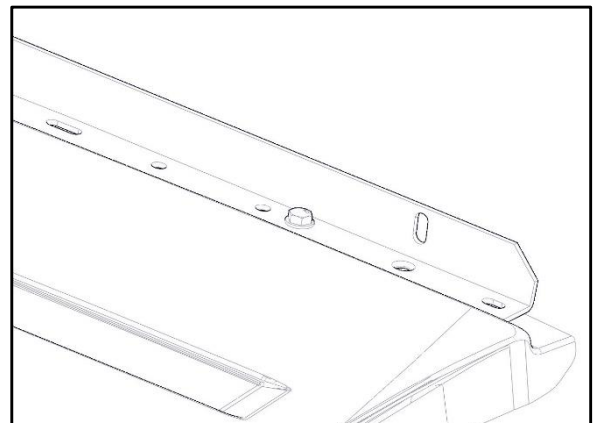
Front EXP



Rear EXP



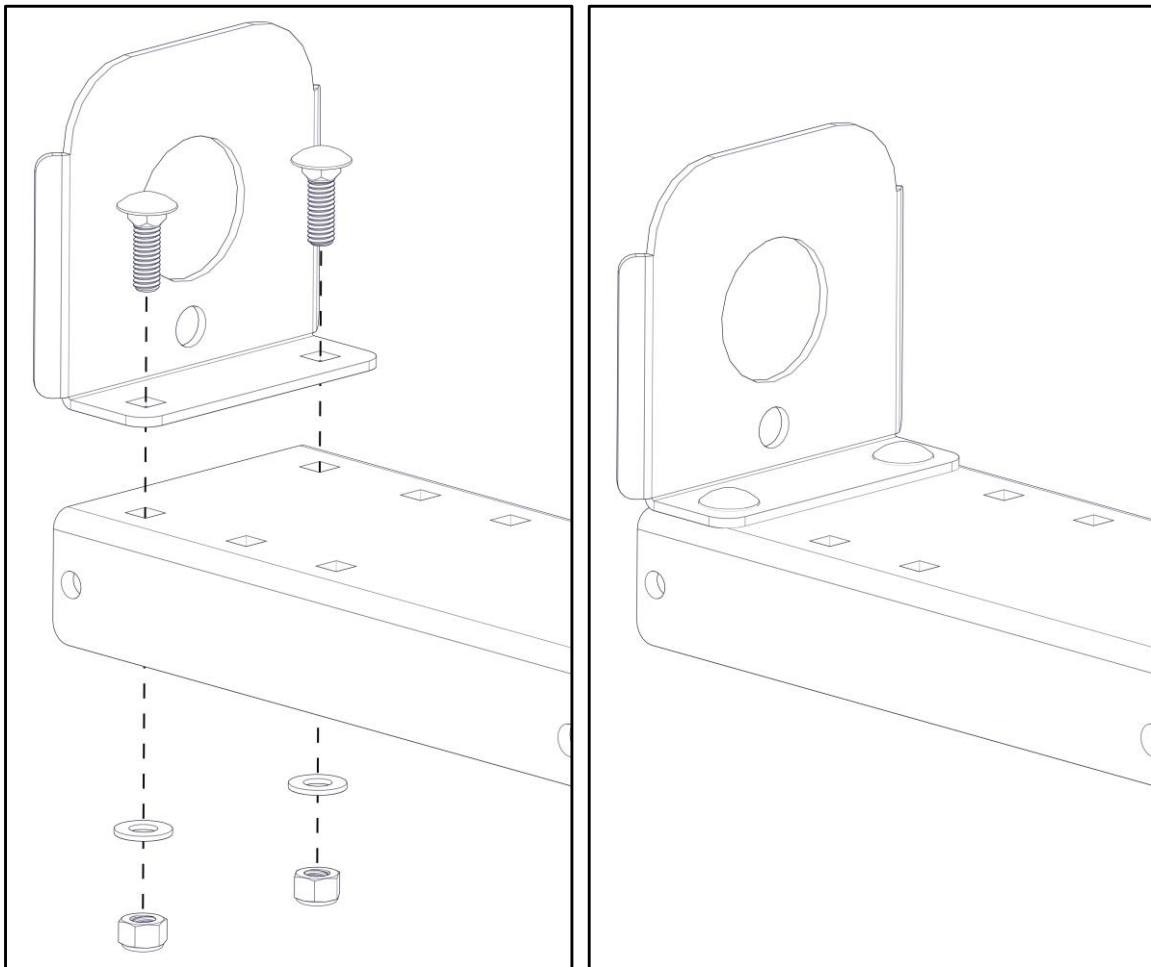
Front Tighten



Rear Tighten

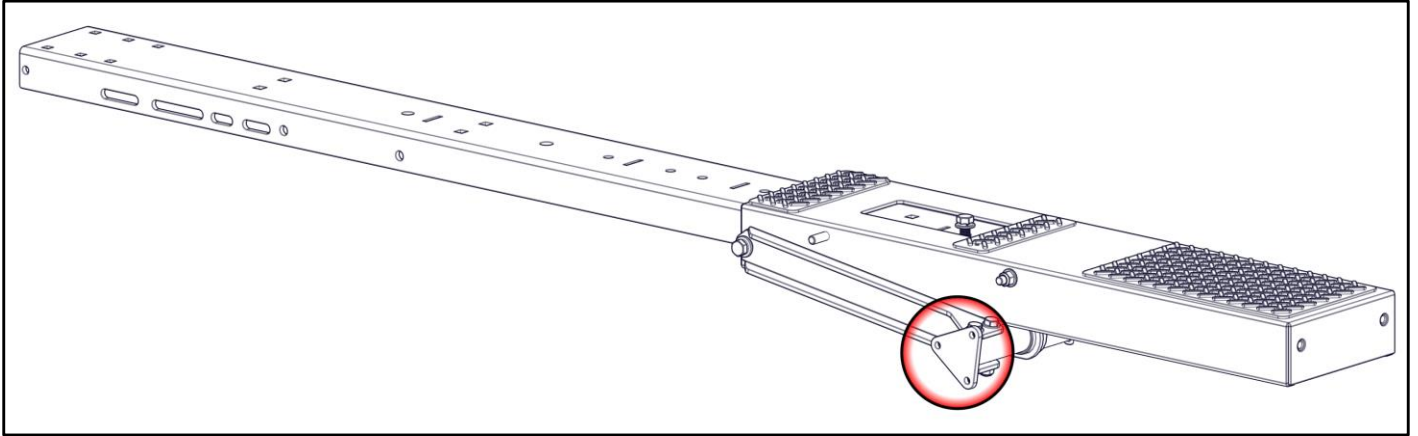
## Step 1 – Load Plates

- At the end of each bow, opposite from the pan mechanism, bolt the load plate using two 5/16" x 1" carriage bolts, two 5/16" flat washers and two 5/16" nyloc nuts in the orientation shown.
- If installing a driverside ladder rack, skip installing the load plates.
- Repeat on both bows.
- Tighten.

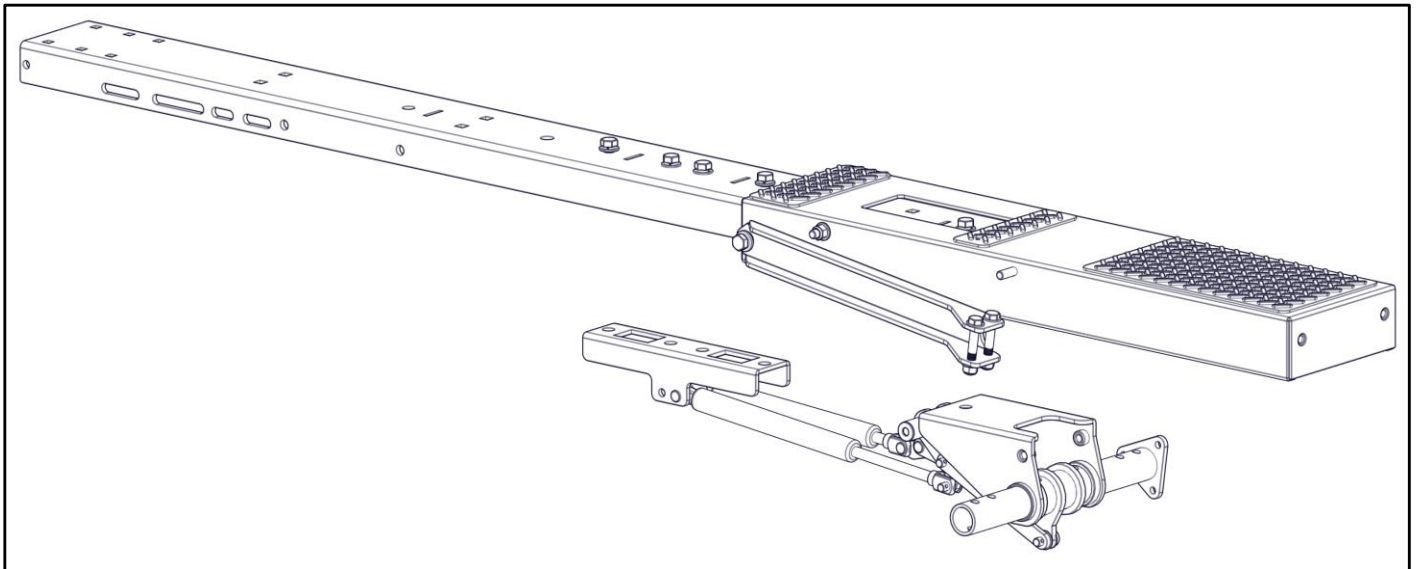


## Step 2 – Determine Front and Rear Bow

- The front bow is shown below. This bow does **NOT** have a dampening mechanism on the underside. Notice the location of the triangular piece.

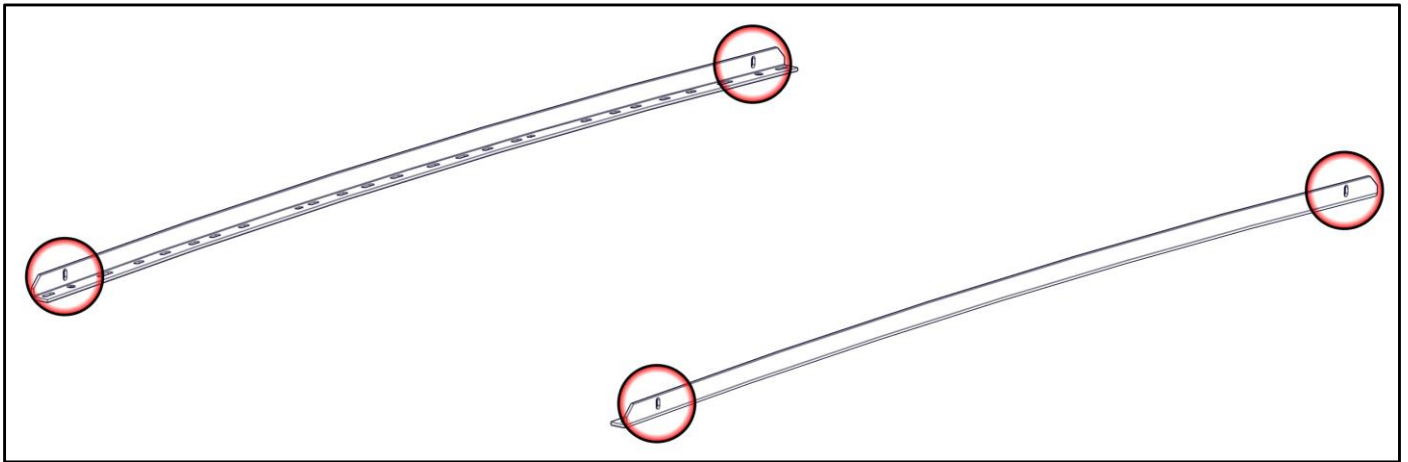


- The rear bow is shown below. This bow has the dampening mechanism pre-assembled on the underside.

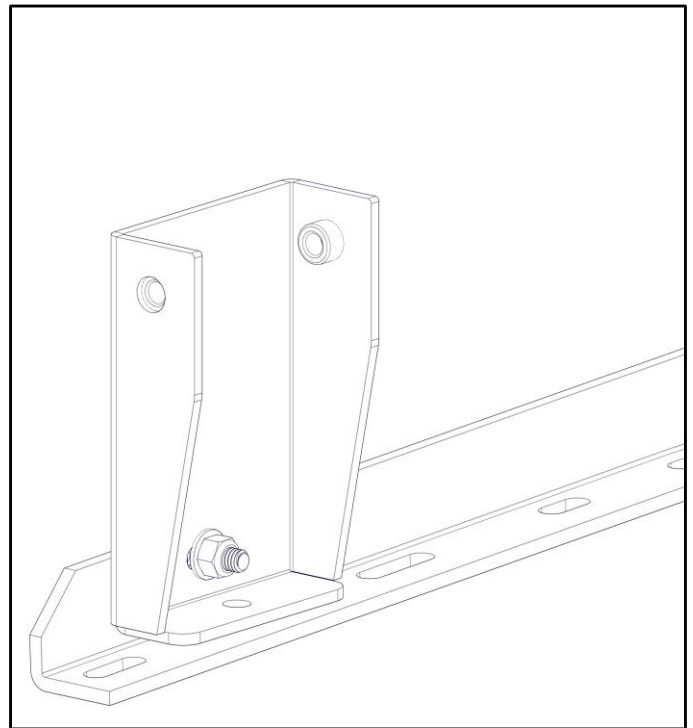
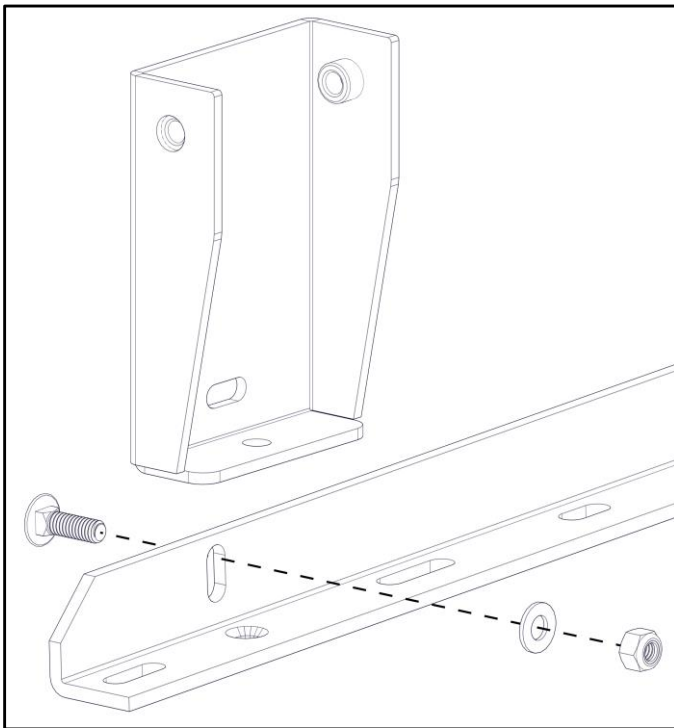


### Step 3 – Mount Feet to Rails

- Locate the four mounting locations on the mount rails as shown below.

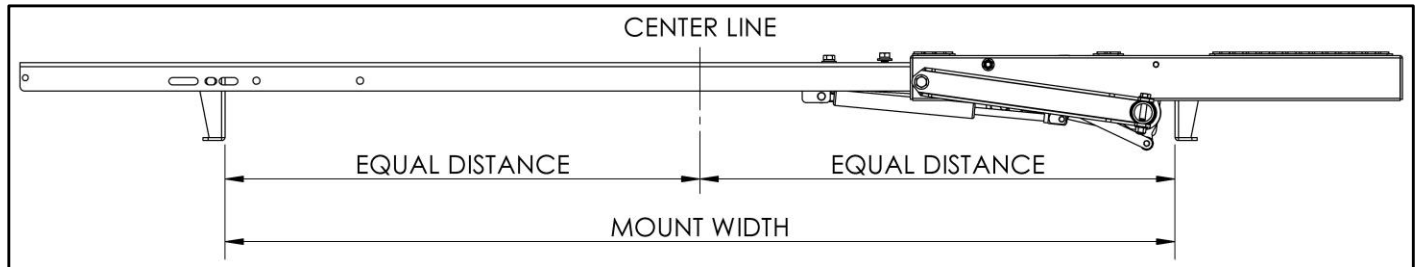


- Bolt the foot to the mount rail in the orientation shown using 5/16" x 1" carriage bolts, 5/16" flat washers and 5/16" nyloc nuts.

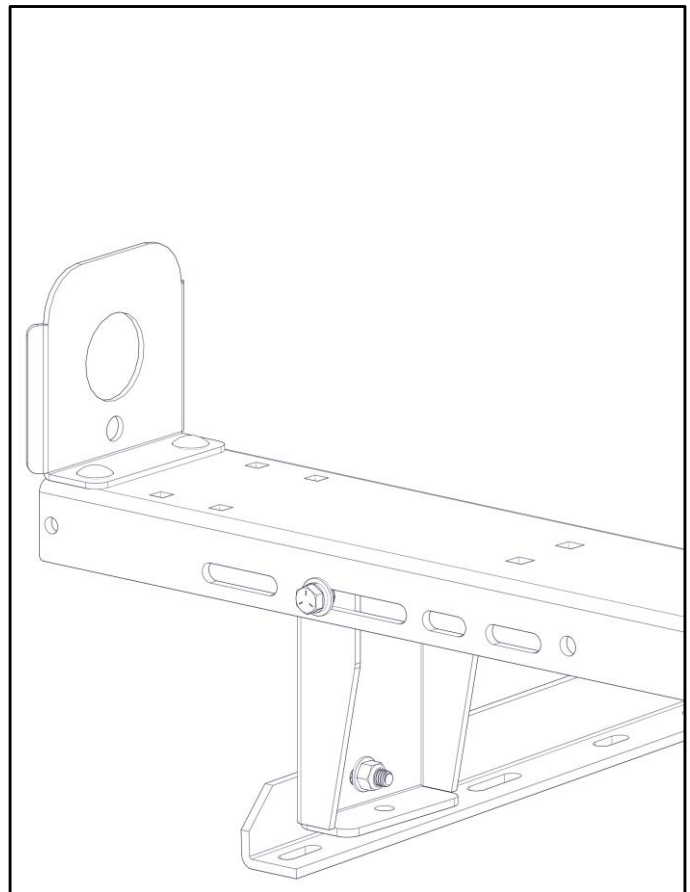
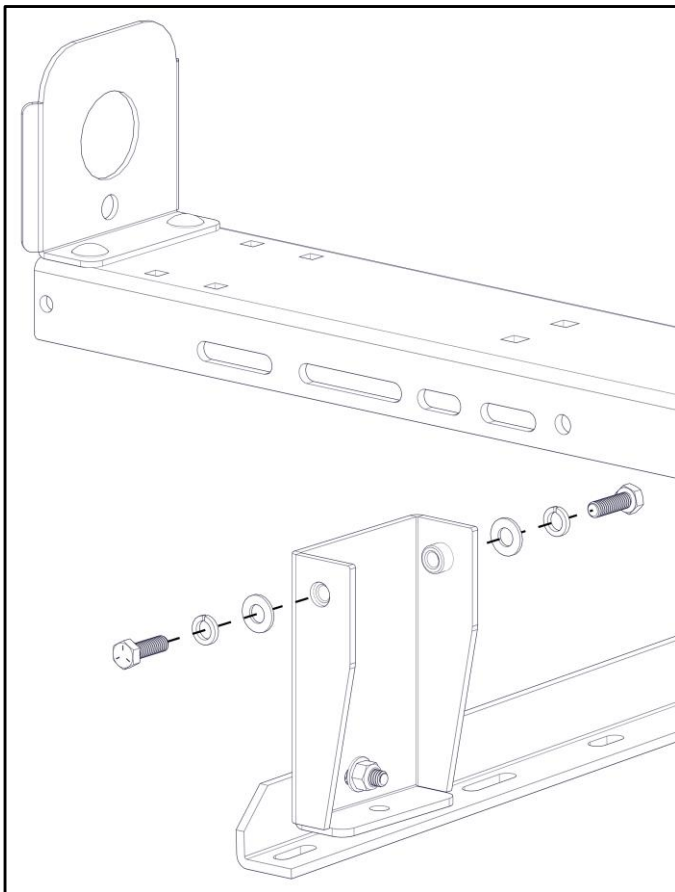


## Step 4 – Place Bows on Feet

- Place the front bow on top of the front most mounts on the vehicle and the rear bow on the rear most mounts.
- Be sure there is an equal distance from the center of the cross bow to each foot as shown below. The same slot, but on opposite ends of the bow should be used.

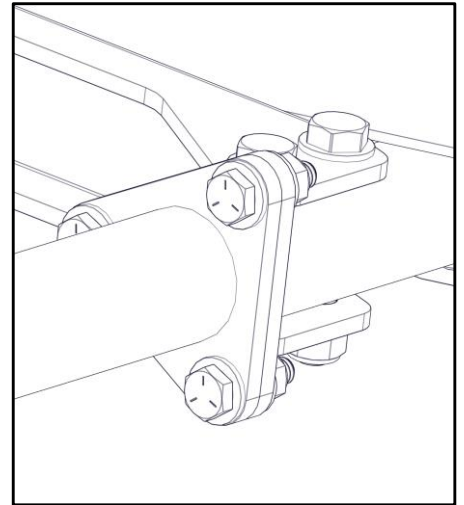
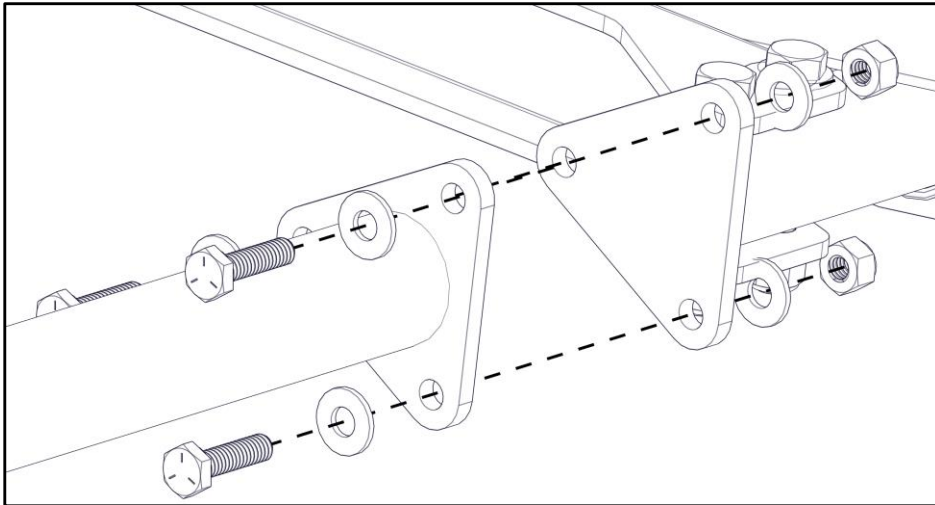
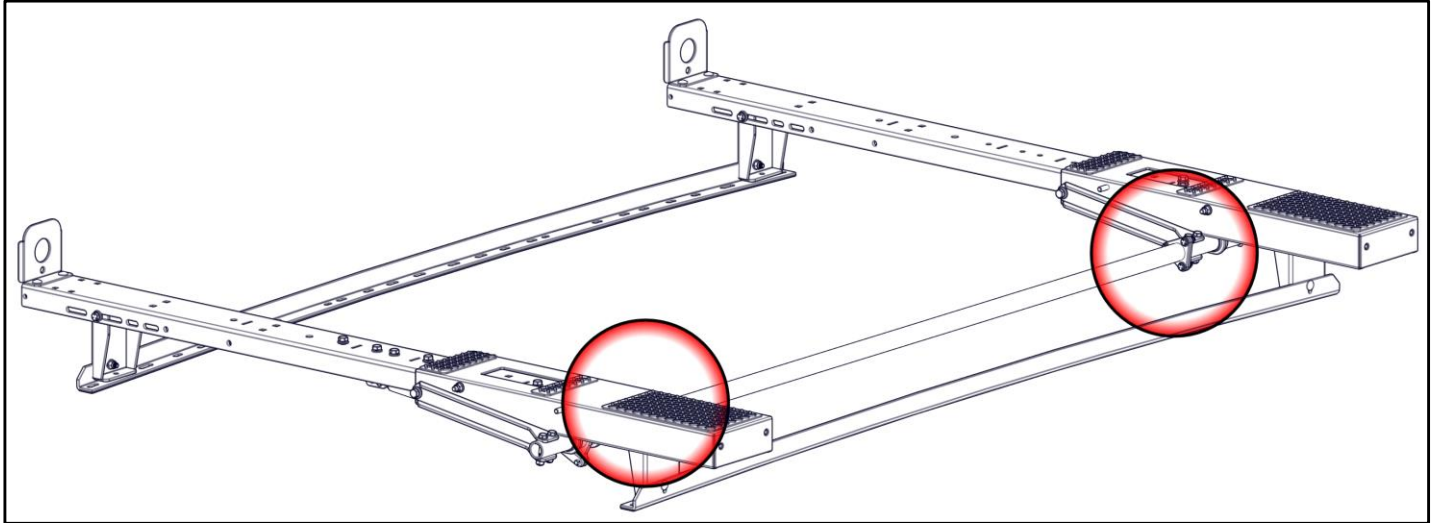


- Rotate the pan to expose the slots in the bow. Place a foam block from the packaging to hold the pan in an up position in order to access the mounting slots.
- Attach the bow to each foot using 3/8" x 1" hex head bolts, 3/8" split lock washers and 3/8" flat washers in the order shown.
- Leave loose until the rack is assembled.
- Repeat at all four feet.



## Step 5 – Install Torque Tube

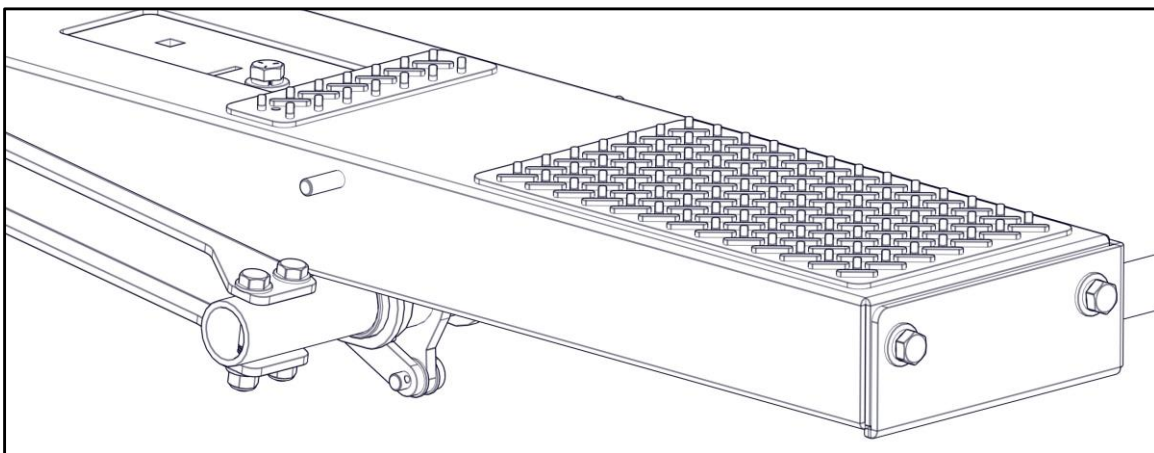
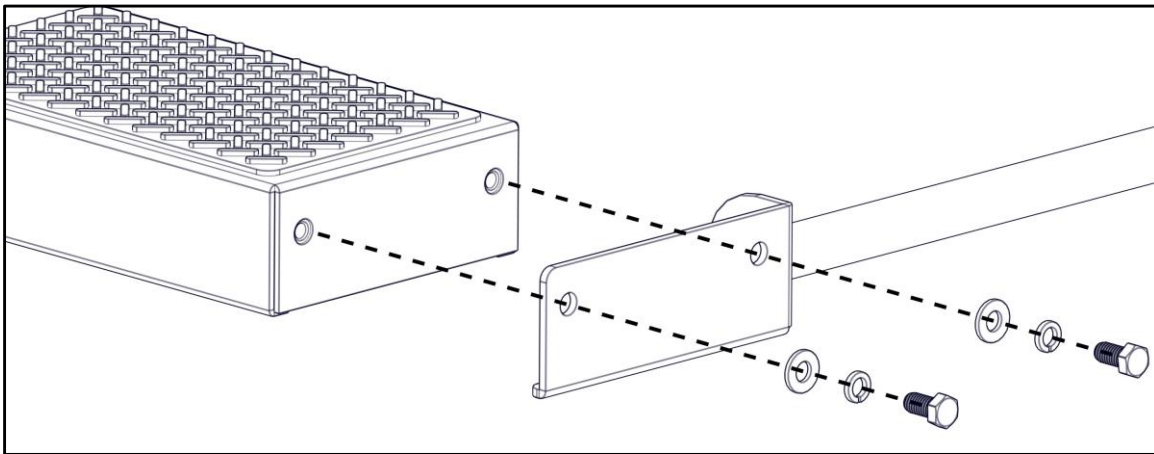
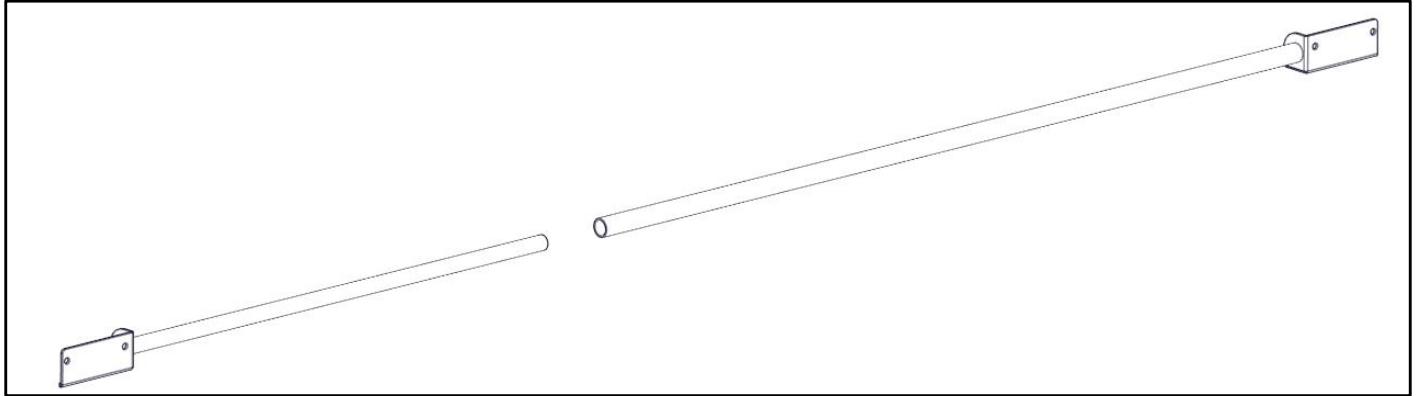
- Bolt the torque tube to the front and the rear bow using a 1/4" x 1" hex head bolt, two 1/4" flat washers and a 1/4" nyloc nut at each location.
- Repeat near each bow.





## Step 6 – Install End Tube

- Assemble end tubes as shown. Bolt to the end of both pans using 3/8" x 3/4" hex head bolts, 3/8" split lock washers and 3/8" flat washers.
- Repeat at the end both bows.
- Tighten.





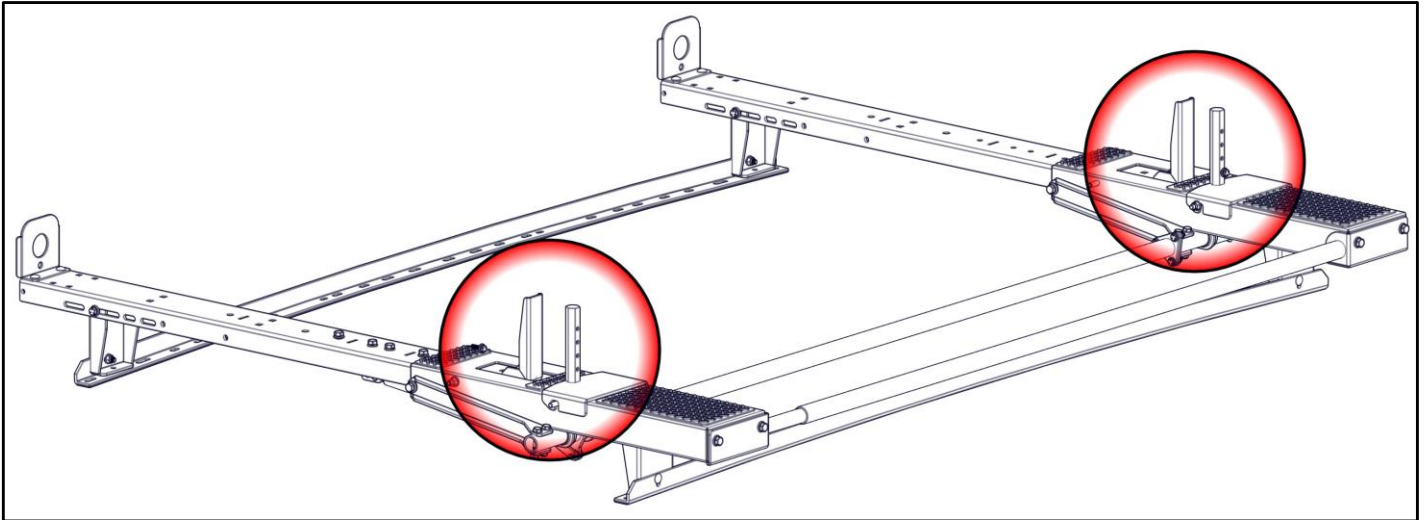
## Step 7 – Install Ladder Hooks and Stops

- Determine which location the ladder hook and ladder stop need to be installed.
- Notice there are two studs protruding from each ladder pan.

Example 1:

Both bows, lower positions are best for extension ladders.

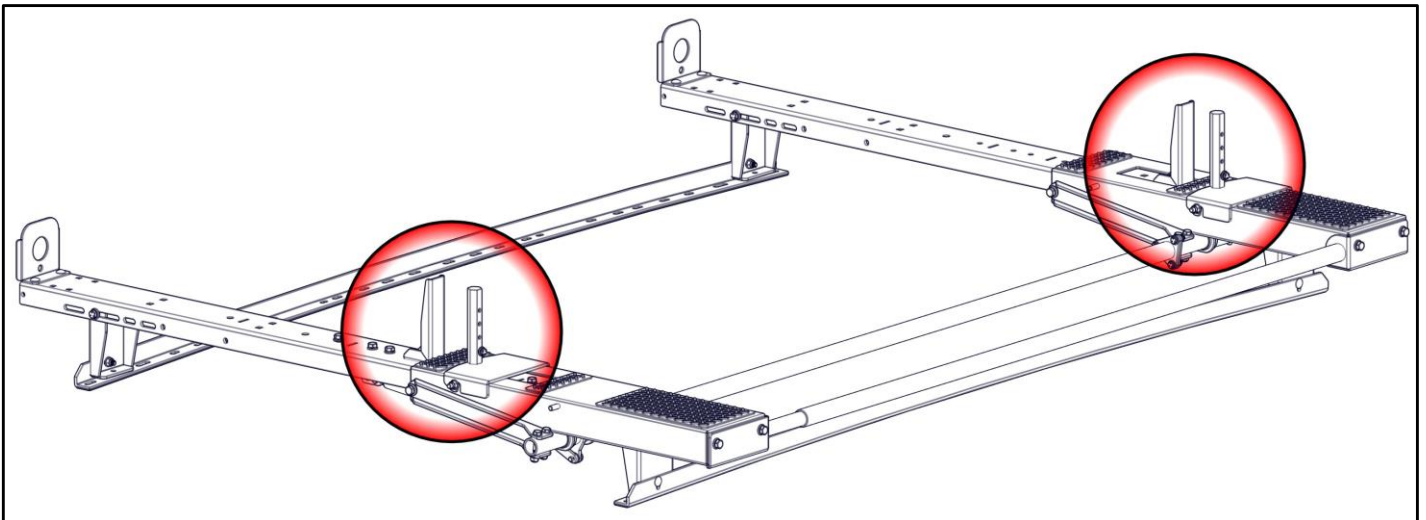
Location of ladder clamps and stops for standard extension ladders.



Example 2:

Front bow, low position, Rear bow, upper position is best for common stepladders.

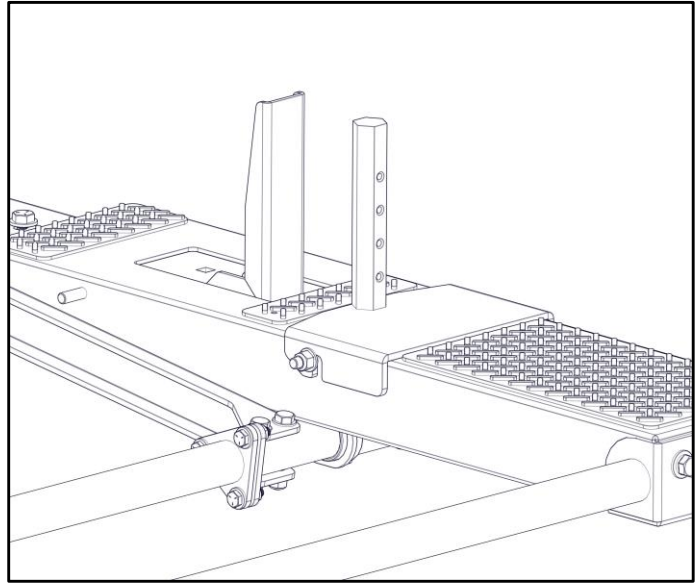
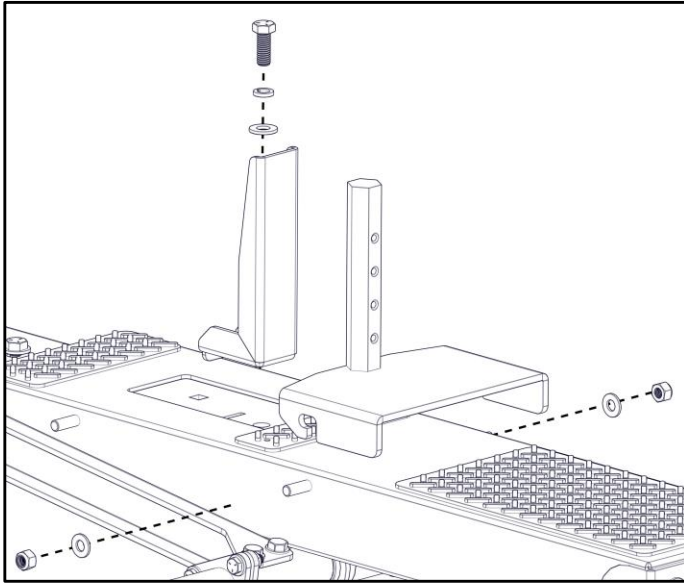
Location of ladder clamps and stops for standard stepladders.



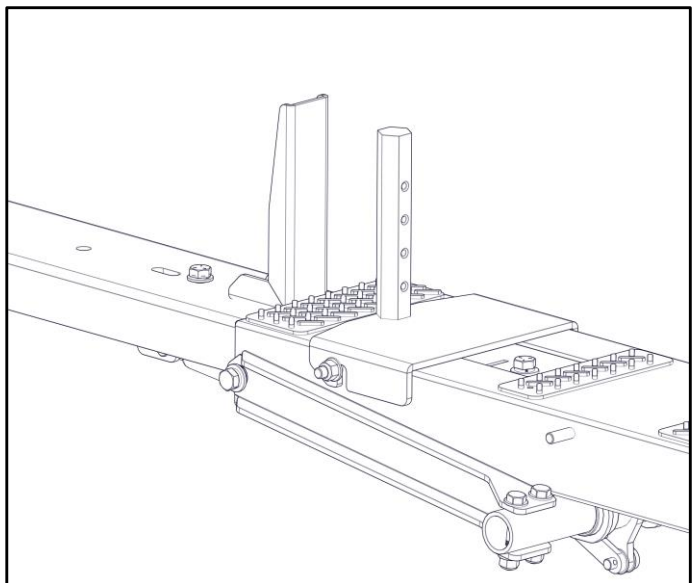
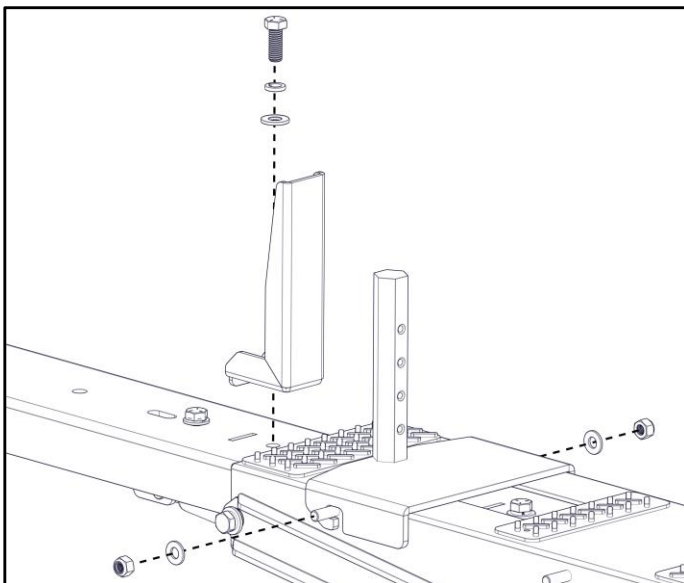
\*\*In the rare instance that the upper location is used on the front bow, A 3/8" nyloc nut and bolt will need to be used to install the ladder stop.\*\*

- On the front bow, place the ladder hook base around the threaded studs in the desired location and attach using the pre-installed hardware.
- Position the ladder stop near the ladder hook base as shown. Be sure the slot of the ladder stop aligns with the slot in the bow.
- Bolt the ladder stop in place using a 3/8" x 1" hex head bolt, a 3/8" split lock washer and a 3/8" flat washer in the orientation shown.

\*\*In the rare instance that the upper location is used on the front bow, A 3/8" nyloc nut and washer will need to be used from the underside to install the ladder stop.\*\*

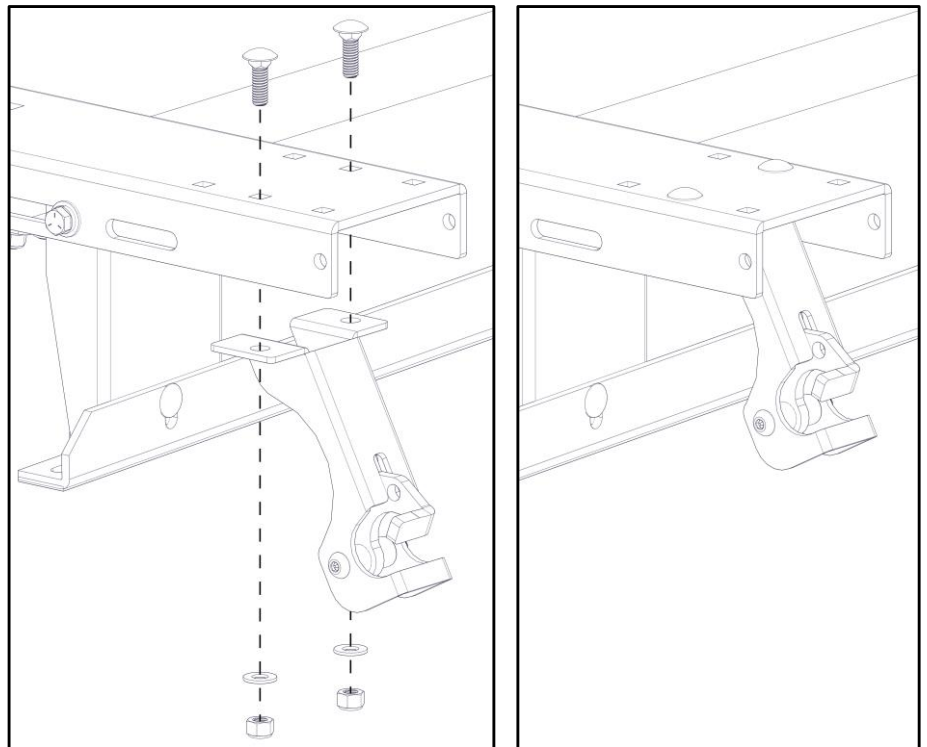


- On the rear bow, place the ladder hook base around the threaded studs in the desired location and attach using the pre-installed hardware as shown.
- Position the ladder stop near the ladder hook base as shown. Be sure the slot of the ladder stop aligns with the slot in the bow.
- Bolt the ladder stop in place using a 3/8" x 1" hex head bolt, a 3/8" split lock washer and a 3/8" flat washer in the orientation shown.



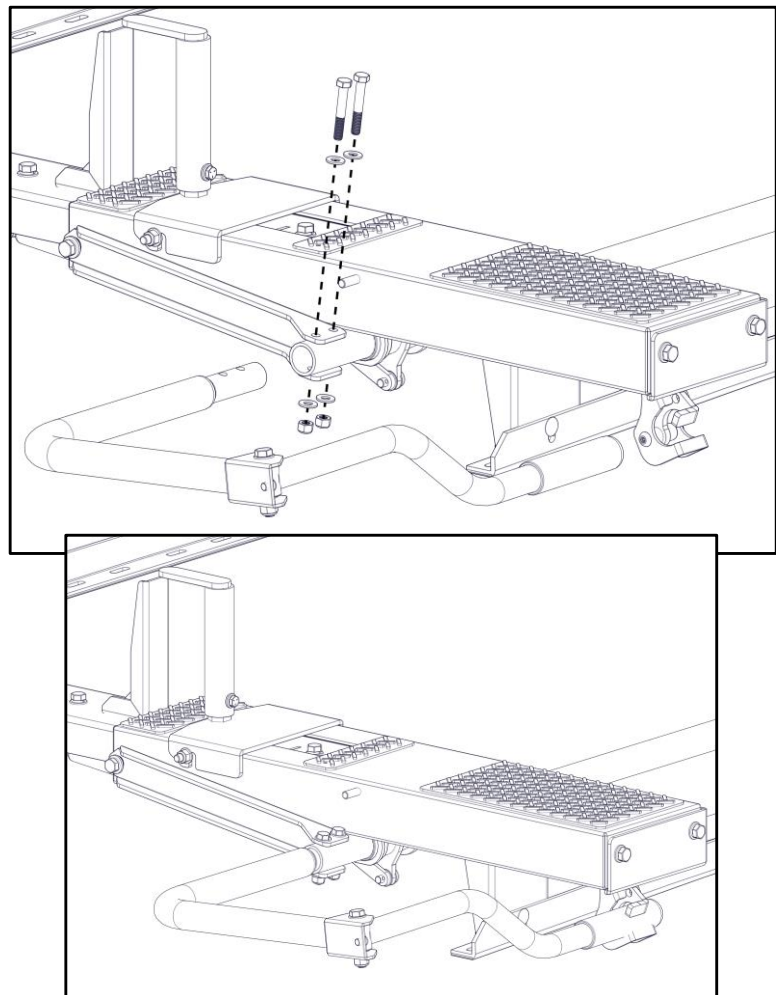
## Step 8 – Install Latch

- Rotate the rear pan out of the way to expose the end of the crossmember as in Step 4.
- Bolt the latch to the end of the crossmember using two 5/16" x 1" carriage bolts, two 5/16" flat washers and two 5/16" nyloc nuts.
- Shown without pan for clarity.
- Tighten.



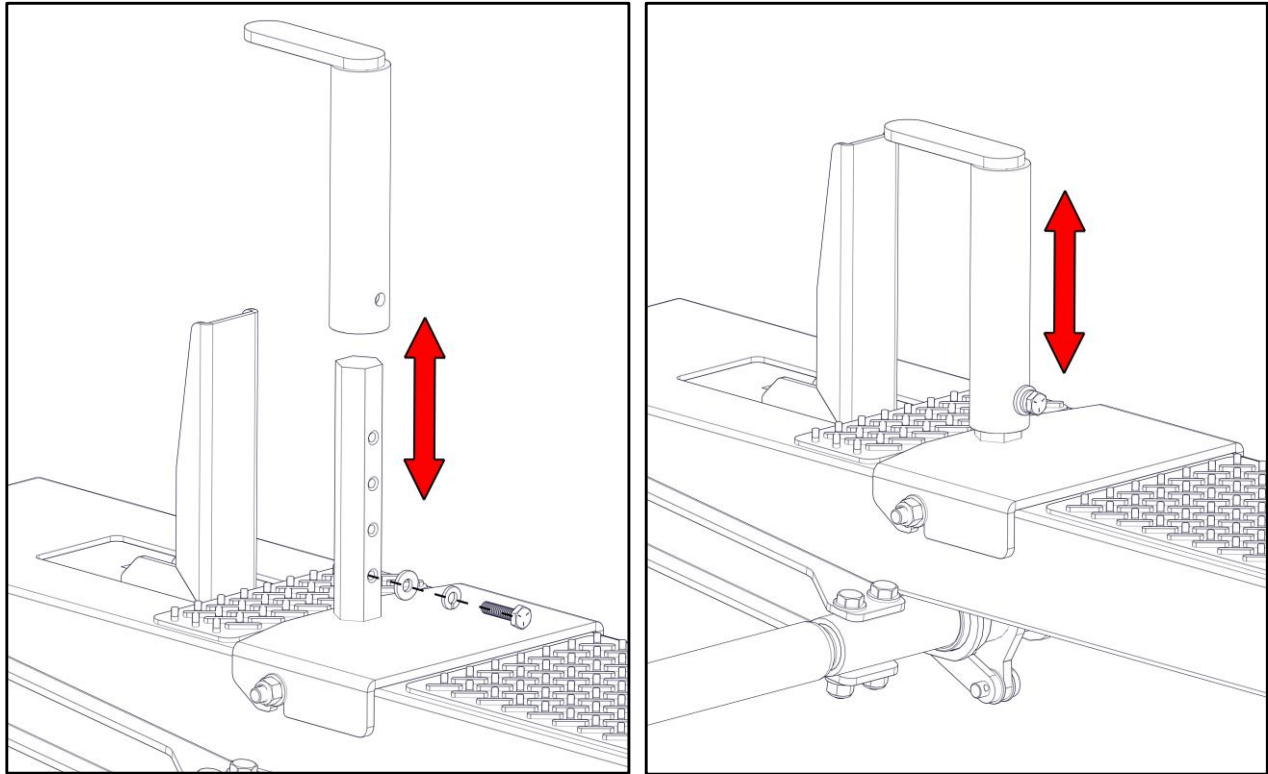
## Step 9 – Install Handle

- Place sealant round swage joint to ensure no water leaks into tubes.
- Place handle in orientation shown.
- Attach handle to the rear pan using existing 5/16" hardware.
- Tighten.



## Step 10 – Assemble Ladder Hooks

- Install the ladder hooks on the previously installed ladder hook base using 1/4" x 1" hex head bolts, 1/4" split lock washers and 1/4" flat washers in the desired location. This location is dependent on the size of the ladder being used. Adjust so the ladder hook fits the ladder as tight as possible.
- Tighten.



GO BACK AND TIGHTEN ALL BOLTS FROM PREVIOUS STEPS, BE SURE  
HARDWARE IN MOUNTING IS TIGHT.

YOUR INSTALLATION IS NOW COMPLETE

