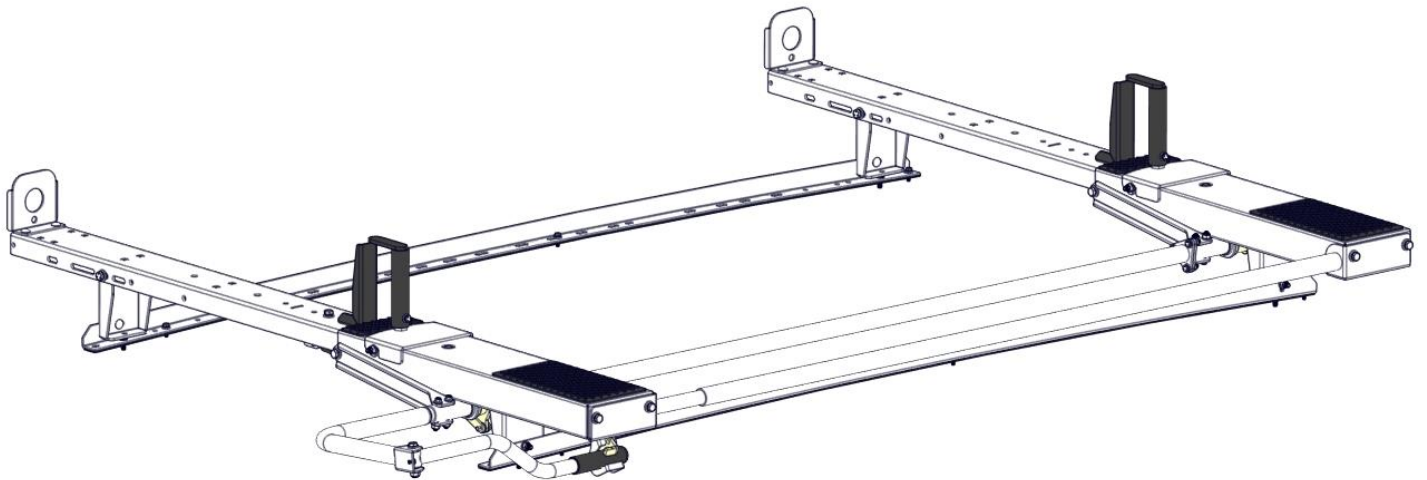

KARGO MASTER[®]

WE PUT EVERYTHING WITHIN REACH.

Instruction Guide

4A97L-Rev 1



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

Warning



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

Tools Needed

13mm Socket and Wrench	10mm Socket and Wrench
4mm Allen Hex	9/16" Socket and Wrench
1/2" Socket and Wrench	7/16" Socket and Wrench

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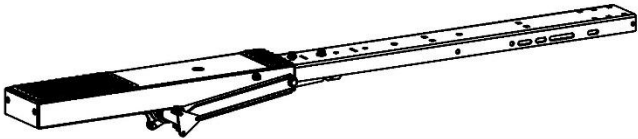
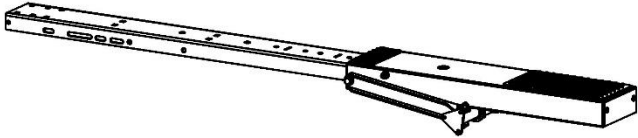

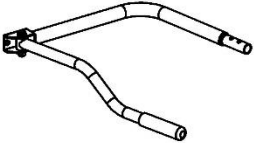



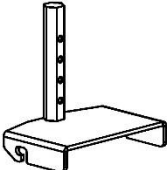

 Step 10 – Install Ladder Hook 17

Before You Begin

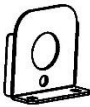
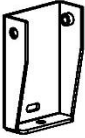
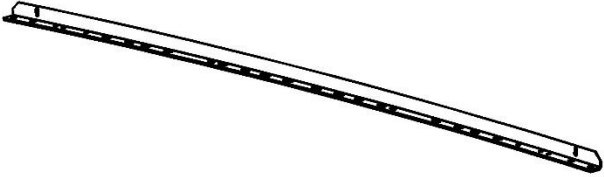
- Read all instructions. Find your vehicle roof rail mounting prior to rack assembly.
- Be sure to put sealant around all threads entering cargo area and between the rubber spacer and roof of vehicle to prevent water from leaking into cargo area.

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



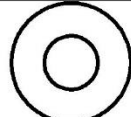

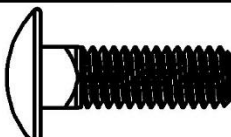
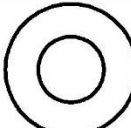

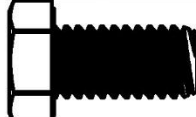
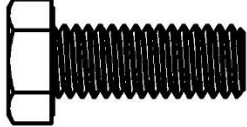
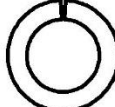
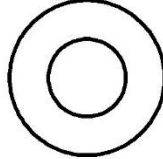

Parts

ITEM NO.		PART NUMBER	DESCRIPTION	QTY.
1		4A97L-1	ASSEMBLY, BOW, FRONT, LADDER RACK, ALUMINUM, MINI	1
2		4A93L-2	ASSEMBLY, BOW, FRONT, LADDER RACK, ALUMINUM, MINI	1
3		4A93L-7	ASSEMBLY, CROSTUBE, LOW ROOF DROP DOWN, ALUMINUM	1
4		4A97L-40	ASSEMBLY, HANDLE, DROP DOWN, MINI	1
5		4A93L-50	WELDMENT, TORQUE TUBE, STEEL, 71.5" SPACING, LOW ROOF DROP DOWN	1
6		4A92L-44-R1	ASSEMBLY, LATCH, HANDLE, DROP DOWN, MINI	1
7		4A900-35	WELDMENT, HOOK, LADDER, LOW ROOF DROP DOWN	2
8		4A900-36	WELDMENT, HOOK, LADDER, BASE, LOW ROOF DROP DOWN	2
9		4A900-30-004-R3	BRACKET, LADDER STOP, LADDER RACK, ALUMINUM	2




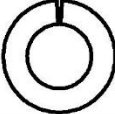
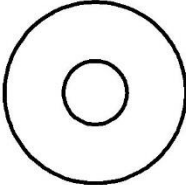

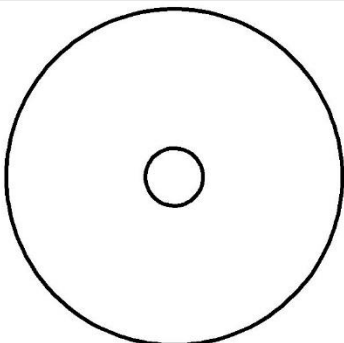

Parts Con't

ITEM NO.		PART NUMBER	DESCRIPTION	QTY.
10		4A900-10-008-R2	PAN STOP, CARGO, LADDER RACK, ALUMINUM	2
11		4A933-10	FOOT	4
12		4A800-00-002-R1	MOUNT RAIL	2
		18-4A97L	HARDWARE, DROP DOWN, MINI	1

Hardware (1 of 2)

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

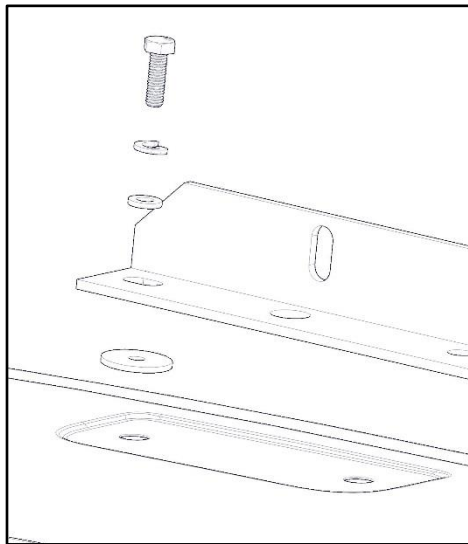
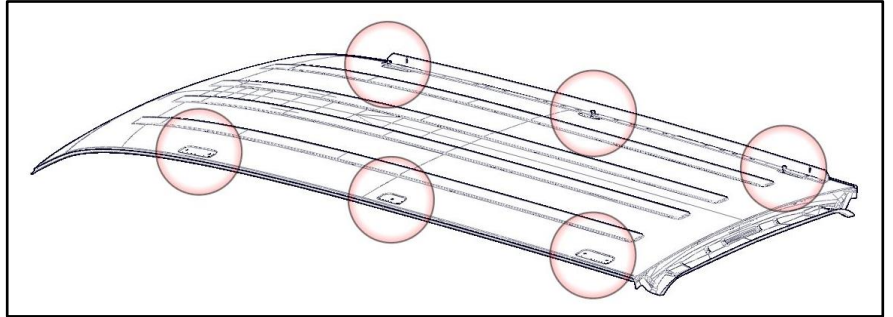
Hardware (2 of 2)

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

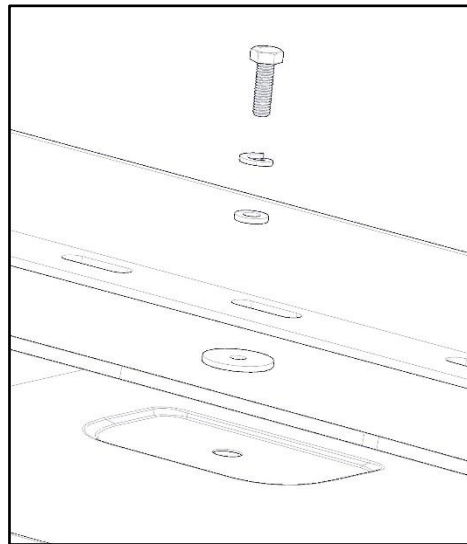
DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF

Promaster City Installation

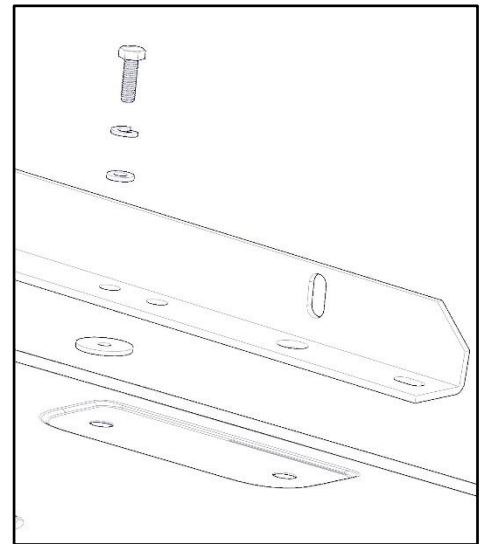
- Locate 6 mounting locations shown on roof of van.
- Install “Top Rail” as shown using M6x20mm bolts with lock washers and flat washers.
- In most installs, the rail upright is to the outside of the van.
- Be sure to put rubber washer between the “Top Rail” and the roof to ensure sealing.
- Place sealant on and around threads to seal roof. (Passenger side shown)



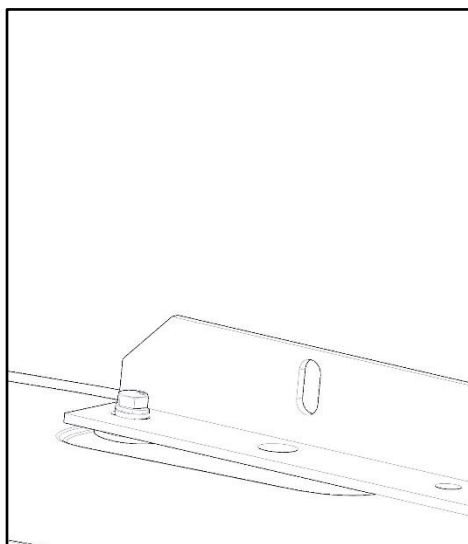
Front EXP



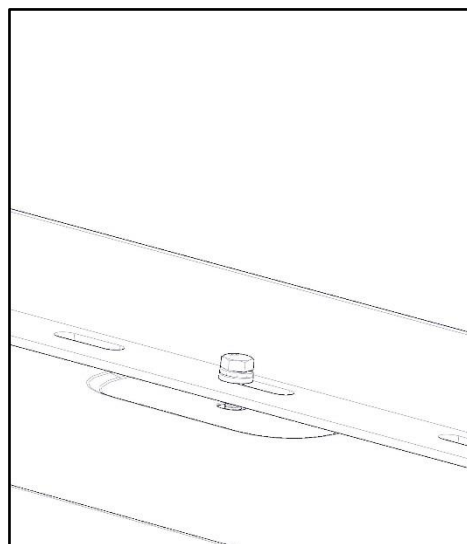
Mid EXP



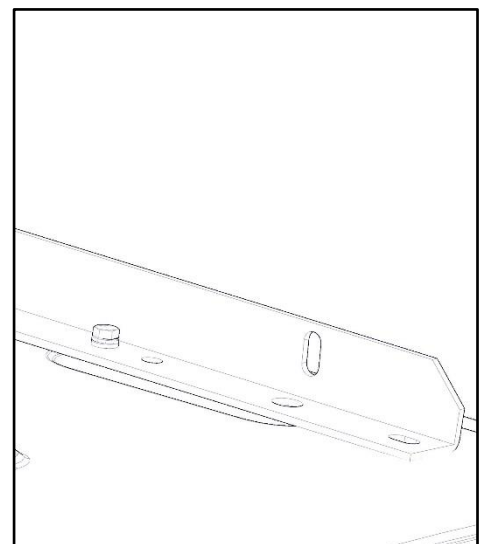
Rear EXP



Front Tighten



Mid Tighten

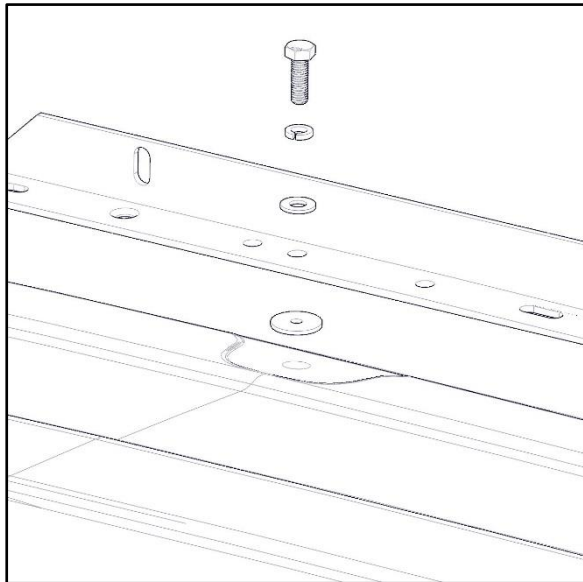
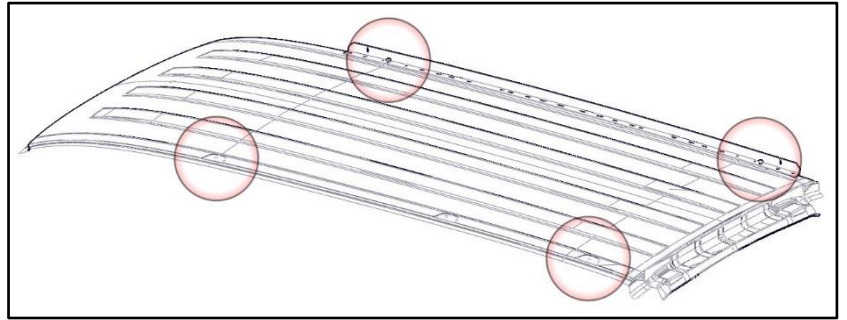


Rear Tighten

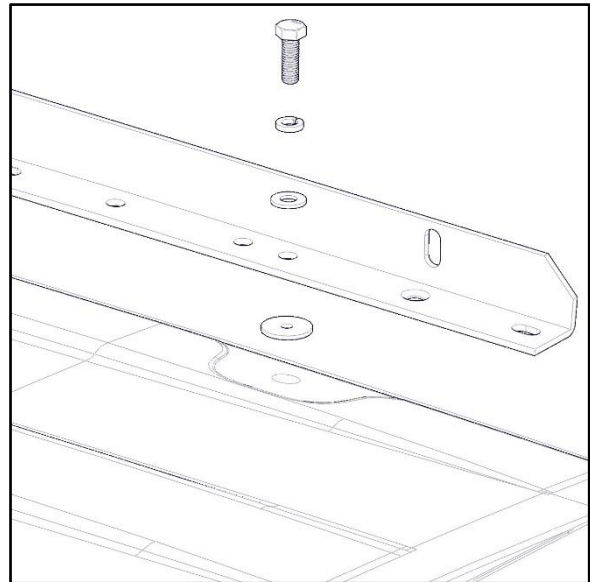
DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF

NV200/City Express Installation

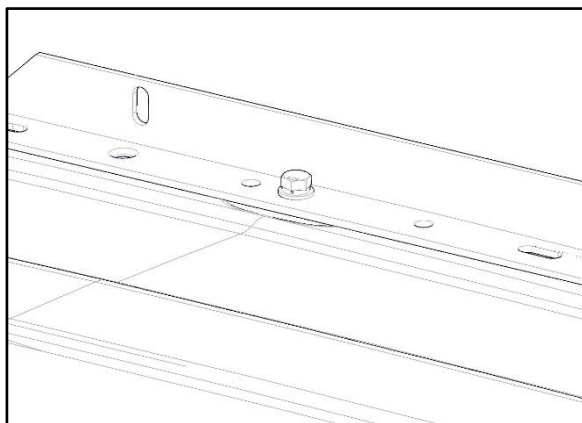
- Locate 4 mounting locations shown on roof of van.
- Install “Top Rail” as shown using M8x30mm bolts with lock washers and flat washers.
- In most installs, the rail upright is to the outside of the van.
- Mount rail so there is about 1” from the rear door opening.
- Be sure to put rubber washer between the “Top Rail” and the roof to ensure sealing.
- Place sealant on and around threads to seal roof. (Passenger side shown)



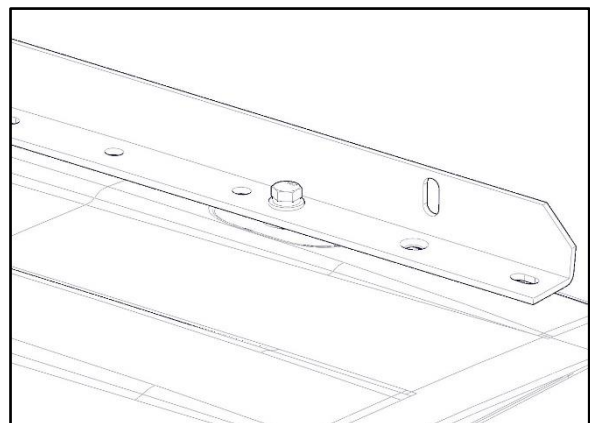
Front EXP



Rear EXP



Front Tighten

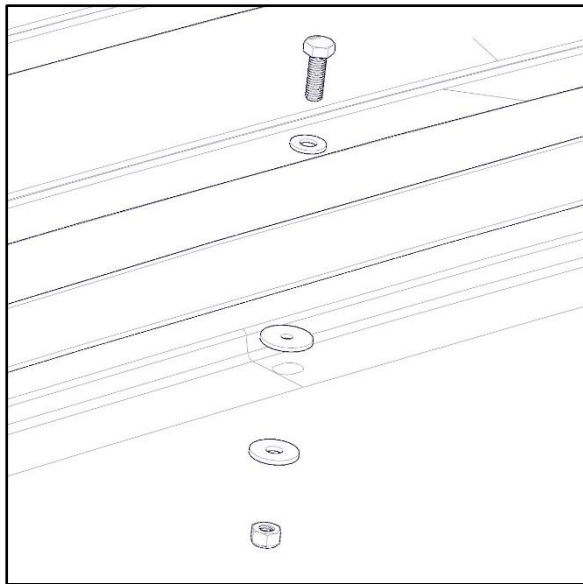
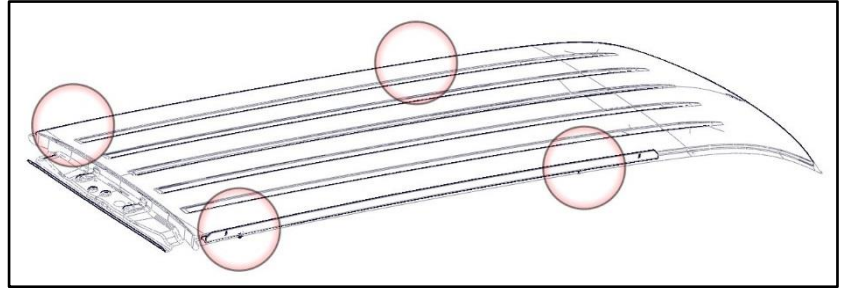


Rear Tighten

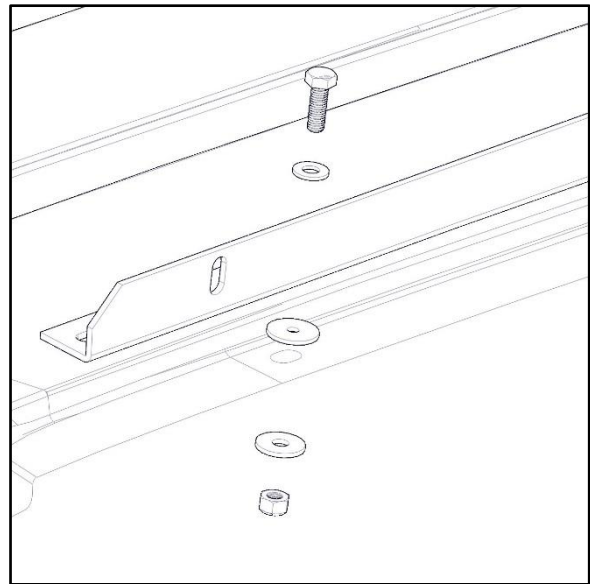
DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF

Transit Connect Installation

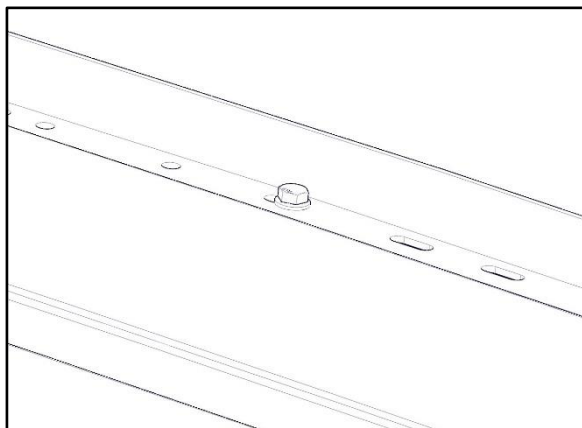
- Locate 4 mounting locations shown on roof of van.
- Be sure to put rubber washer between the “Top Rail” and the roof to ensure sealing.
- In most installs, the rail upright is to the outside of the van.
- Mount rail so there is about 1” from the rear door opening.
- Install “Top Rail” as shown using M8x25mm bolts and flat washers on the outside. Use the fender washer and nyloc nut on the inside of the van.
- Place sealant on and around threads to seal roof. (Passenger side shown)



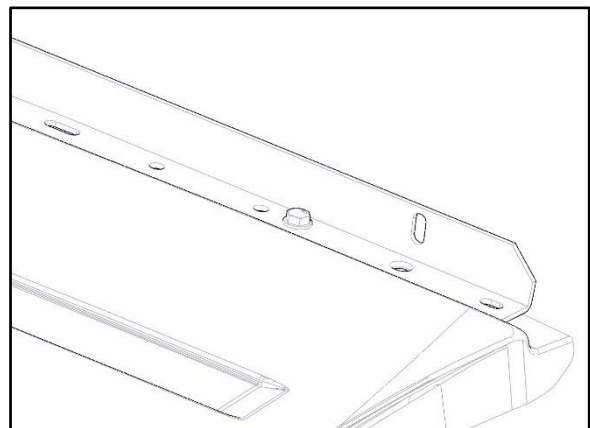
Front EXP



Rear EXP



Front Tighten

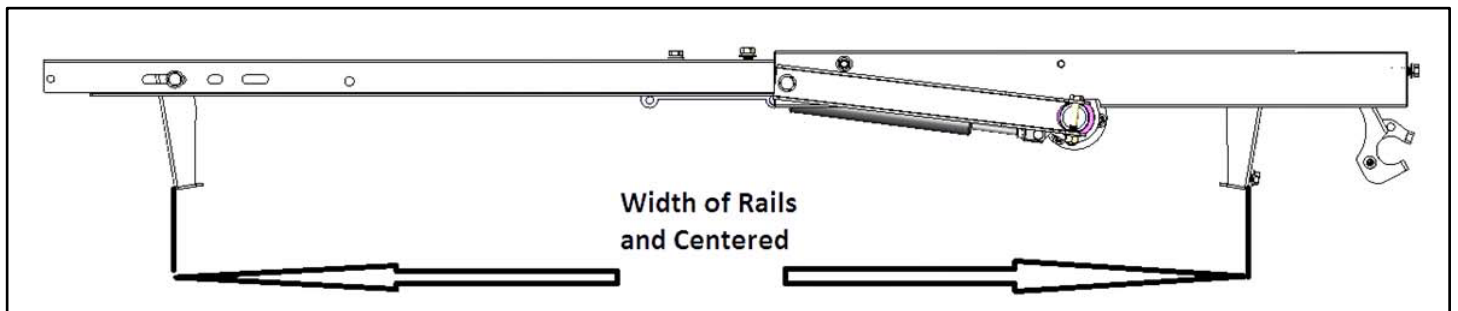


Rear Tighten

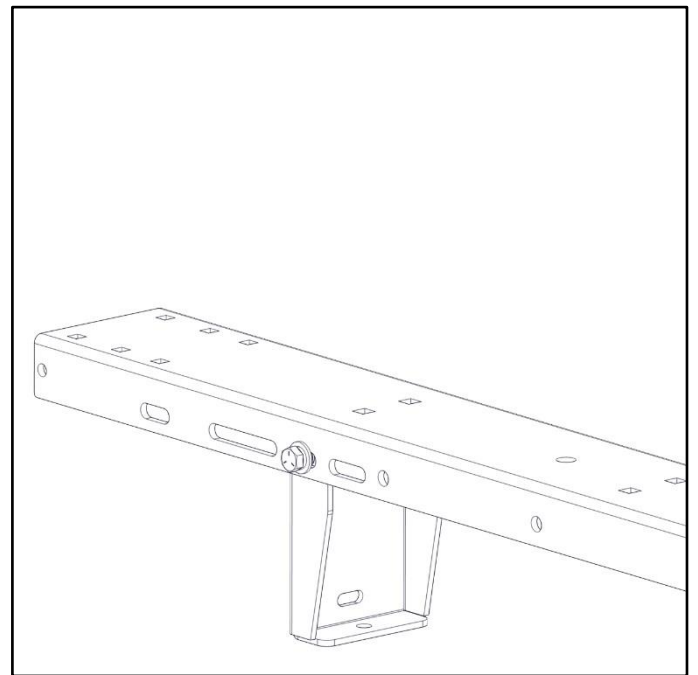
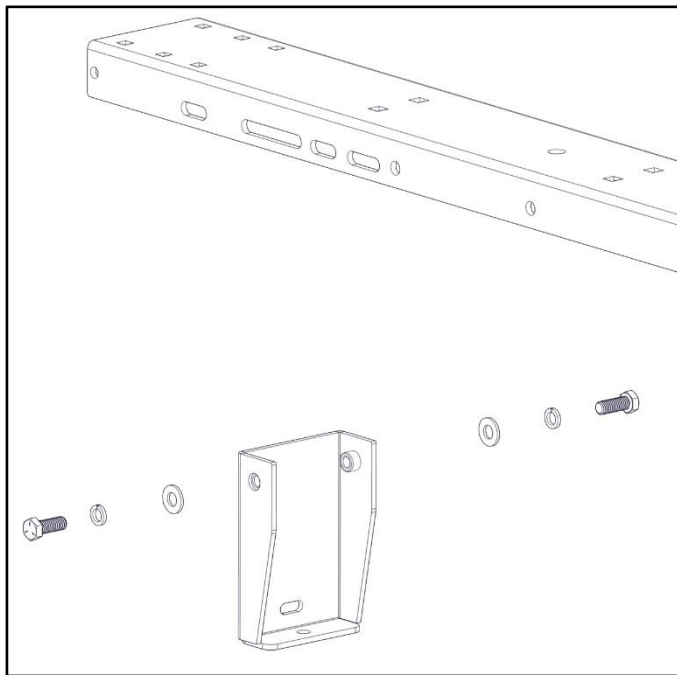
Assembly Instructions

Step 1 – Assembly of Foot

- Measure width between previously installed rails.
- On the cross bows, use the slots that correspond to the measured distance between rails.
- Bolt feet to bows as shown, **DO NOT TIGHTEN** at this point.
- Feet can be installed as shown or reverse depending on how you mounted the rail.
- Most common orientation is with the opening in the foot toward the center of the van.
- Use a 3/8" x 1" hex head bolt, 3/8" lock washers and a 3/8" flat washer to bolt foot to crossmember. Snug Tighten, but allow movement.



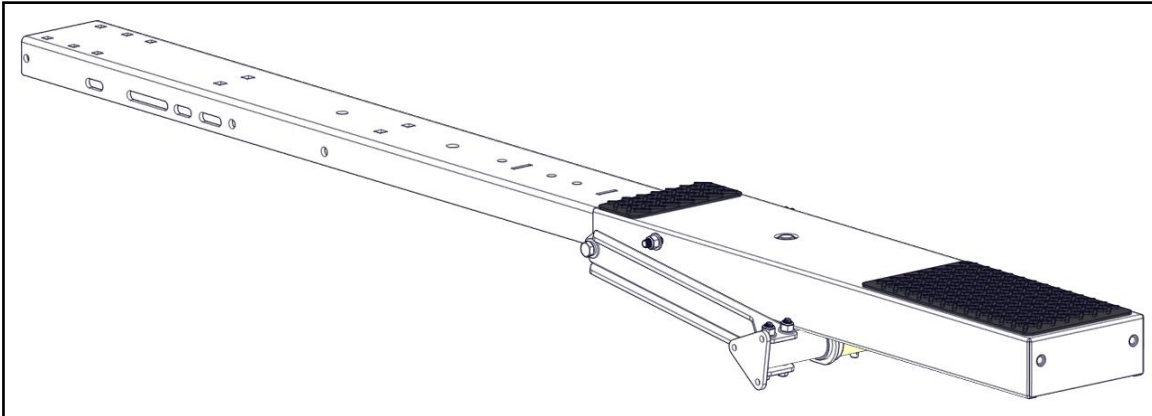
Driver Side Shown Below.



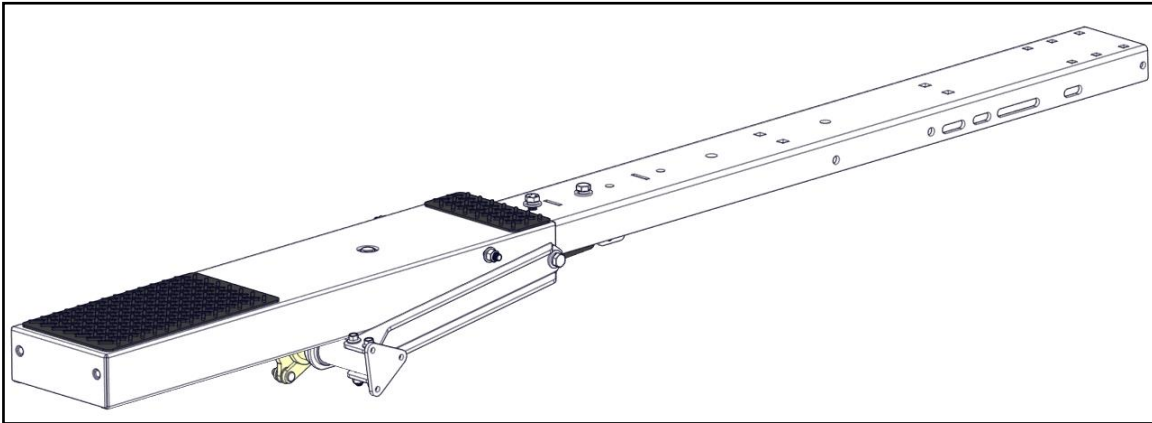
On Passenger Side, Rotate pan out of the way to access mounting slots.

Step 2 – Determine Bows and Mount Pan Hooks

Determine front and rear bow. The rear bow will have a dampening mechanism attached.

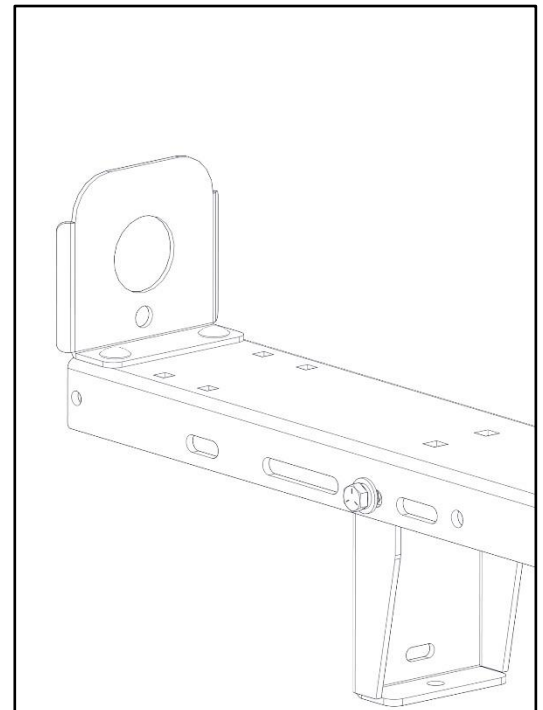
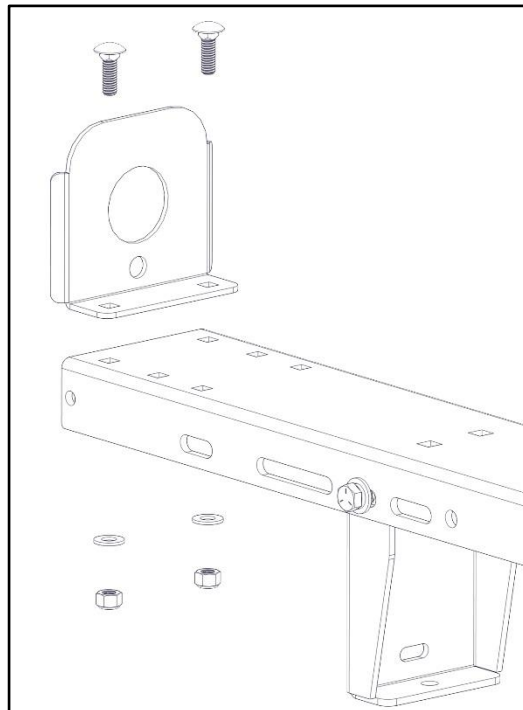


Front Bow



Rear Bow

- Bolt pan hooks to the exposed end of each bow.
- Use a 5/16" carriage bolts, 5/16" washers and a 5/16" nyloc nuts.
- TIGHTEN. Skip if adding a rack onto the driverside.

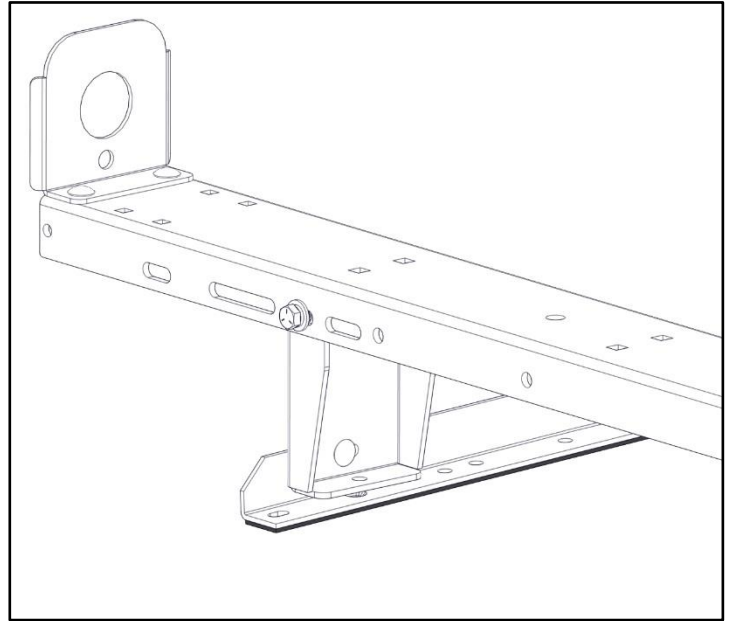
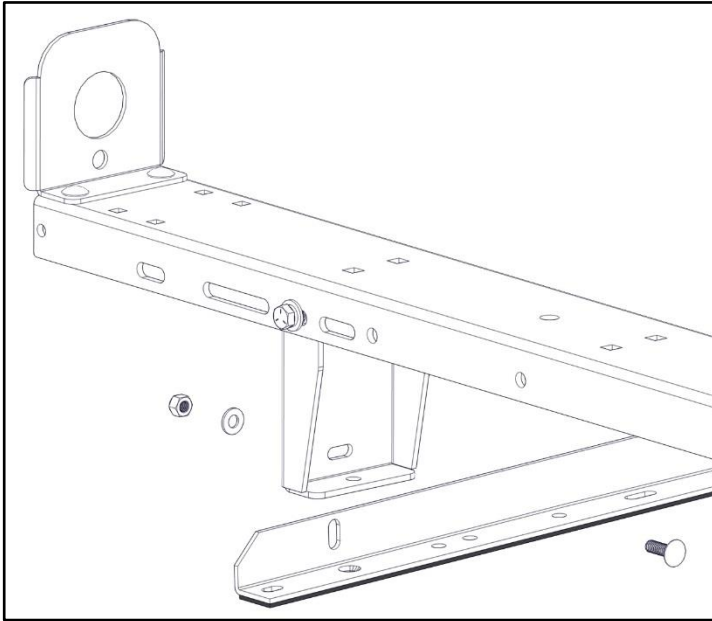


Step 3 – Mount to Rails

- Place both bows on top of installed rails.
- Be sure to place the front bow at the front of the vehicle.
- Bolt feet to rails using 5/16" x 1" carriage bolts, 5/16" flat washers and 5/16" nyloc nuts.
- Put the ladder hooks on the driver side of vehicle.

Snug Tighten, but allow movement.

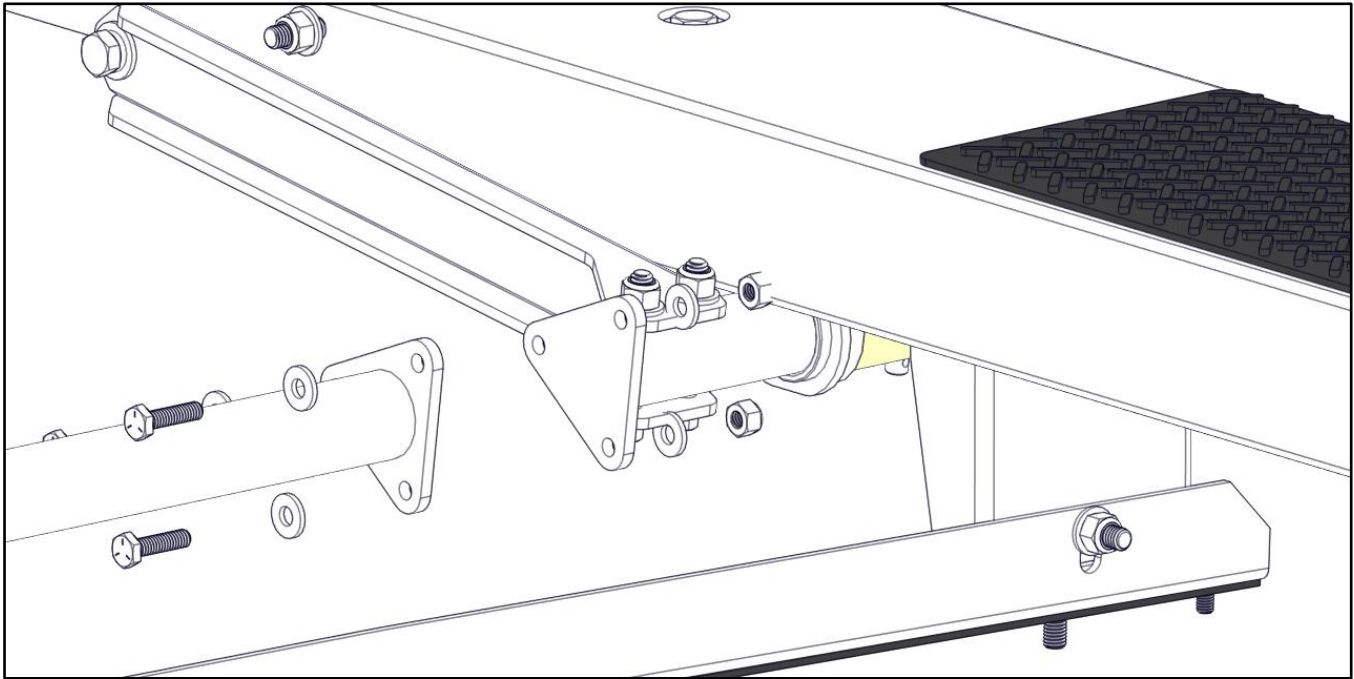
Driver Side Shown



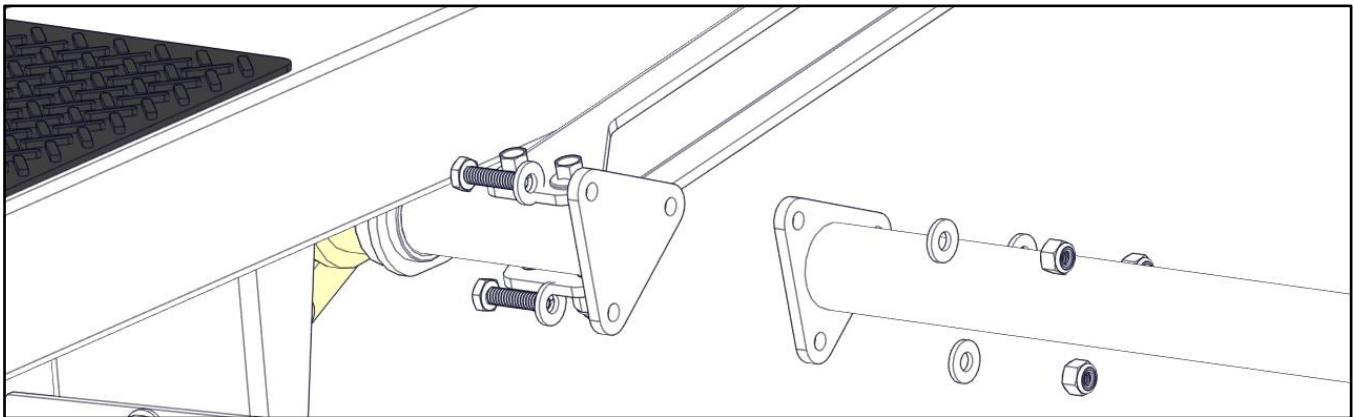
Step 4 – Install Torque Tube

- Install torque tube to front pan assembly using 1/4" x 1" hex heads, 1/4" flat washers and 1/4" nyloc nuts.

Front bow shown



Rear bow shown below

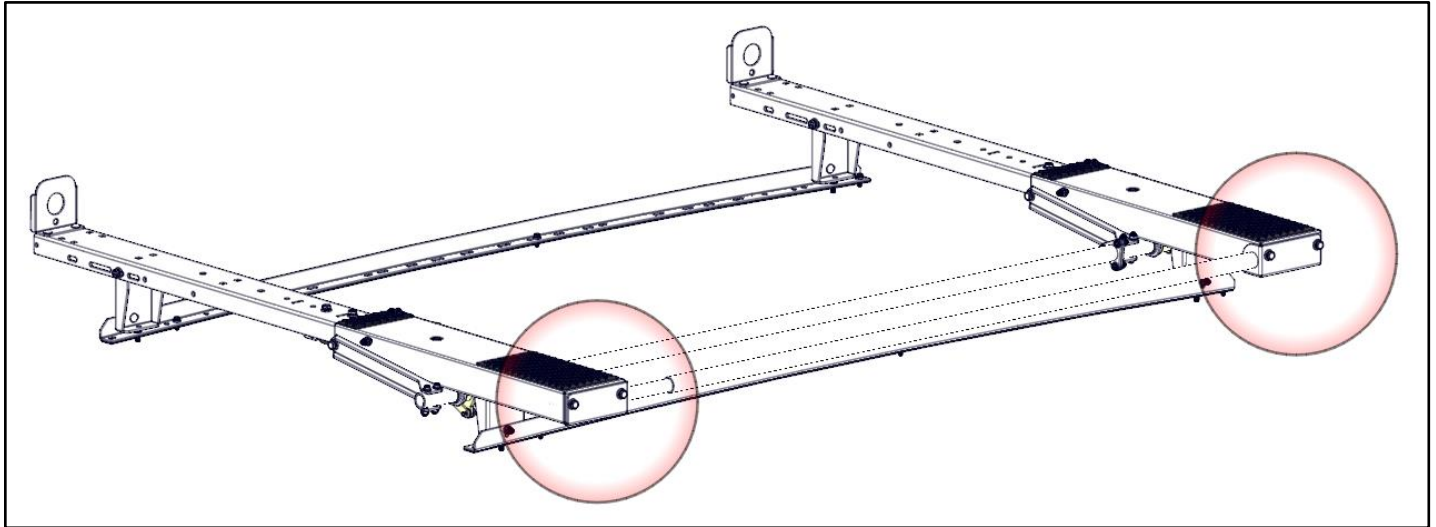


TIGHTEN all 6 bolts.

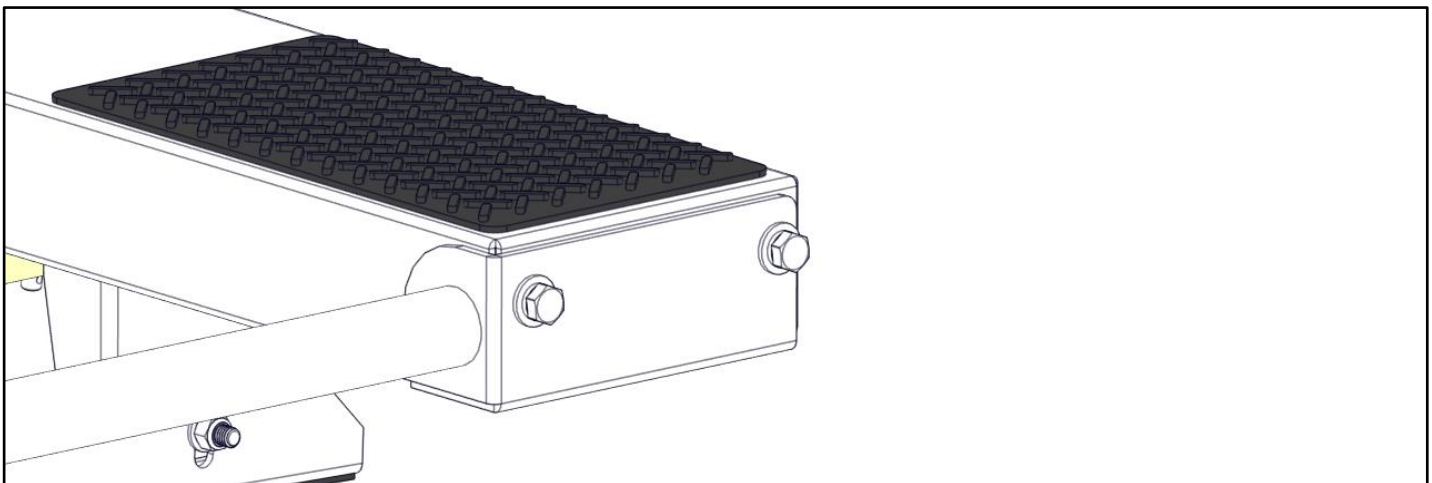
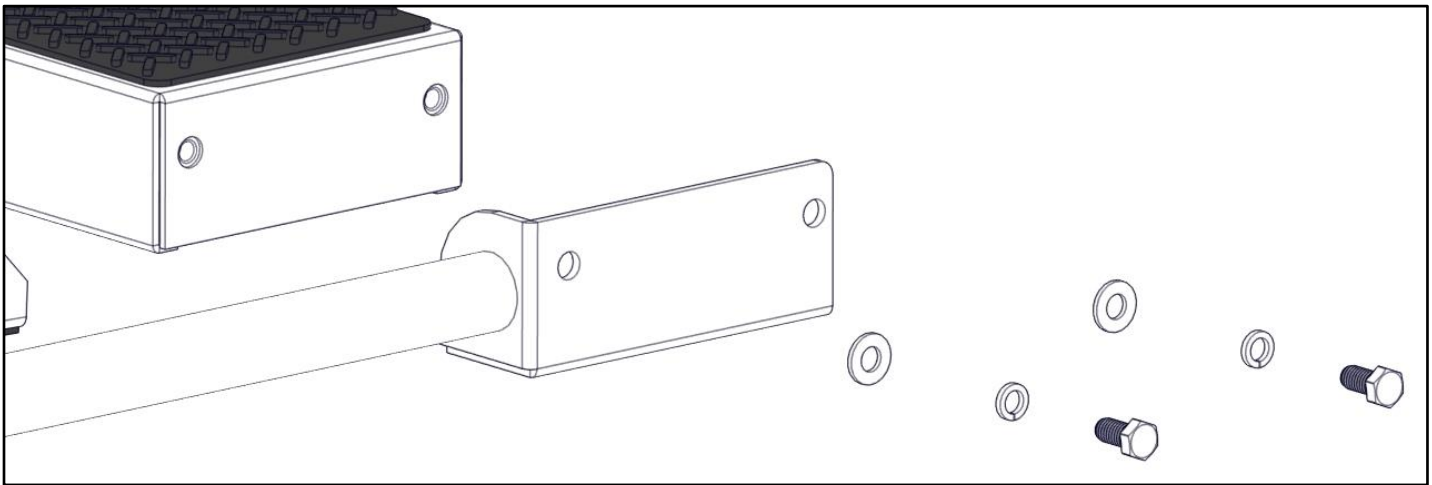
Step 5 – Install End Tube

- Install end tube to the end of each bows pan assembly using 3/8" x 3/4" hex heads, 3/8" lock washers and 3/8" flat washers.

TIGHTEN



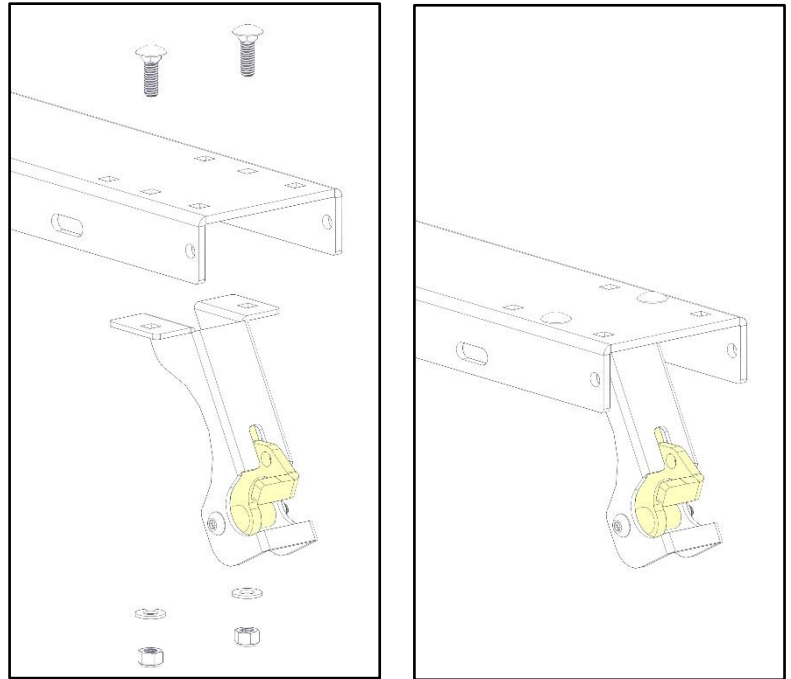
Front bow shown below



Step 6 – Install Latch

- Move rear pan assembly out of the way to expose the end of the crossmember.
- Bolt through the middle set of square holes as shown.
- Bolt latch assembly to end of crossmember using 5/16" x 1" carriage bolts, 5/16" flat washers and 5/16" nyloc nuts.
- Shown without pan for clarity.

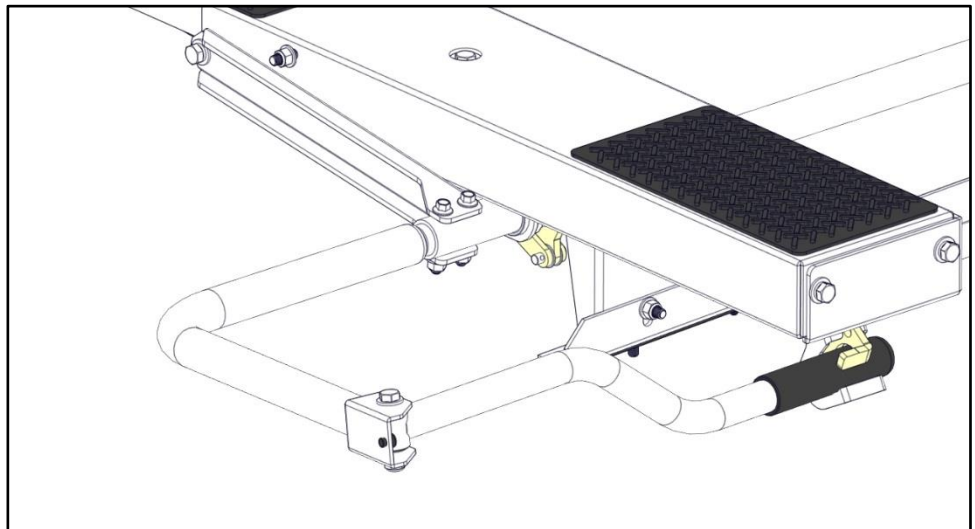
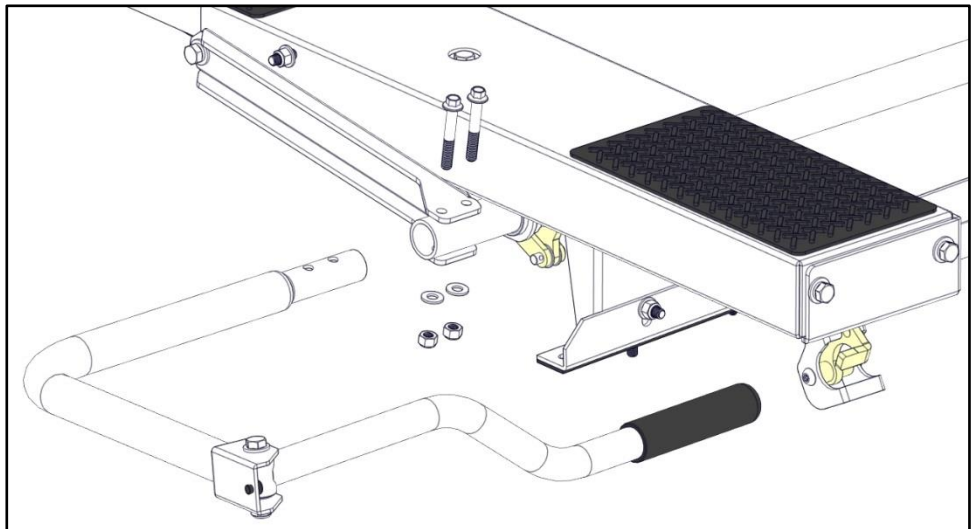
TIGHTEN



Step 7 – Install Handle

- Use the hardware in the rear bow to bolt handle into position as shown.

TIGHTEN

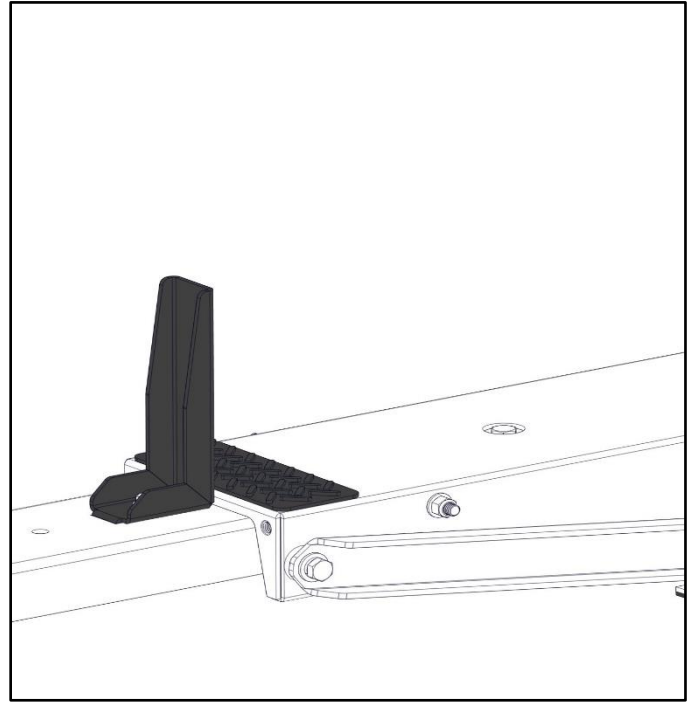
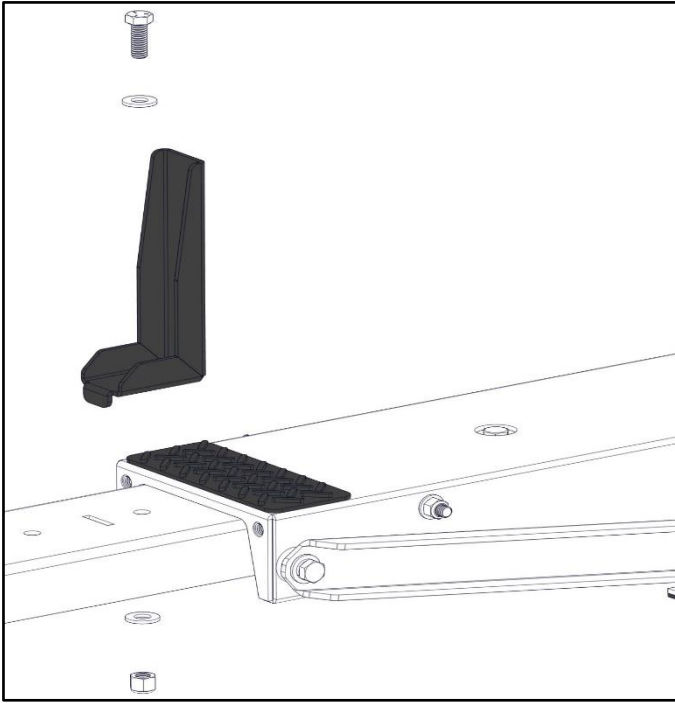


Step 8 – Install Ladder Stop

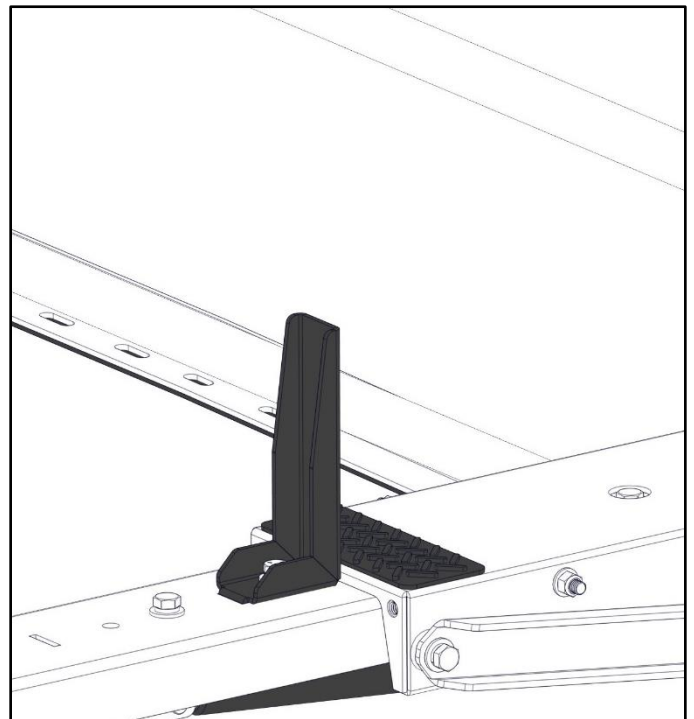
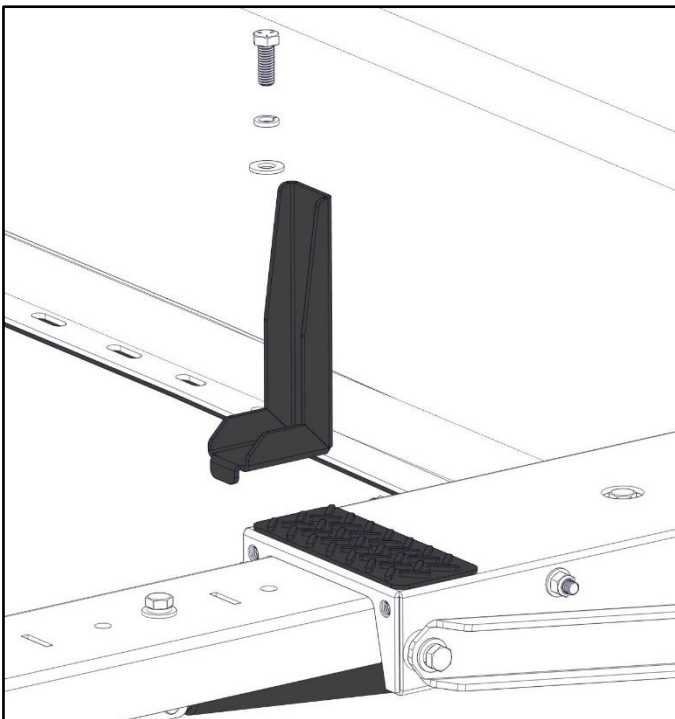
- Use a 3/8" x 1" hex head bolt, two 3/8" flat washers and a 3/8" nyloc nut to attach the ladder stop on the front bow. Be sure to place the tab on the ladder stop into the slot on the bow.
- Use the hardware in the rear bow to bolt ladder stop in orientation shown. Be sure to place the tab on the ladder stop into the slot on the bow.

TIGHTEN

Front Bow shown below



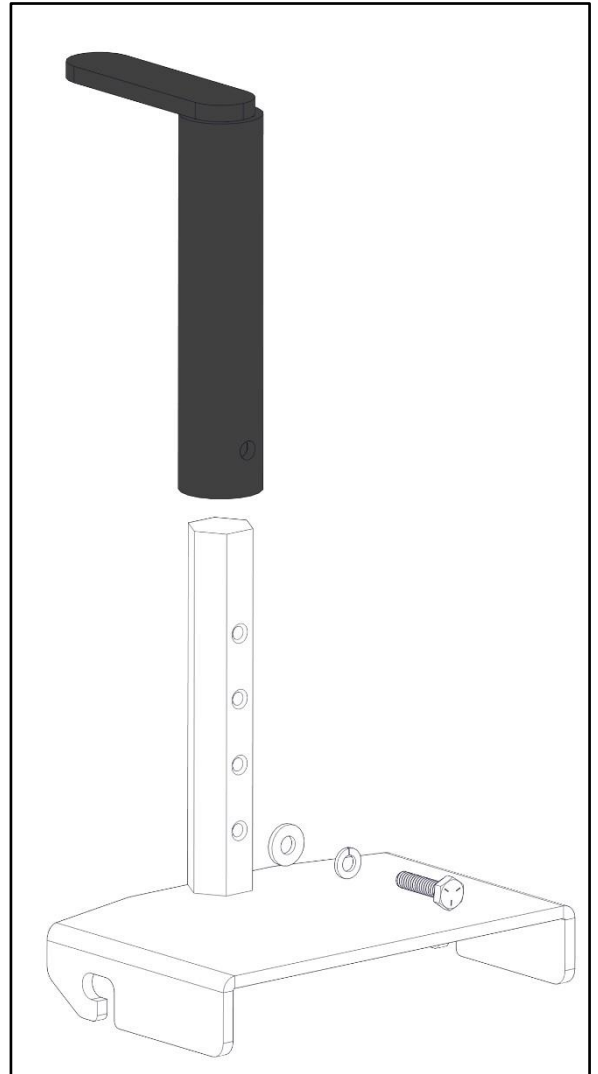
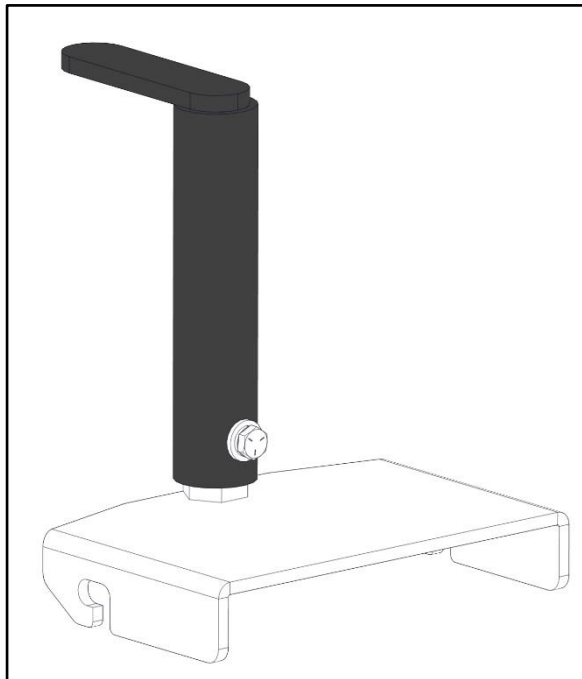
Rear Bow shown below



Step 9 – Assemble Ladder Hooks

- Bolt ladder hook assembly to ladder hook weldment as shown.
- Use a 1/4" x 1" hex head, a 1/4" split lock washer and a 1/4" flat washer. This can be adjusted later.

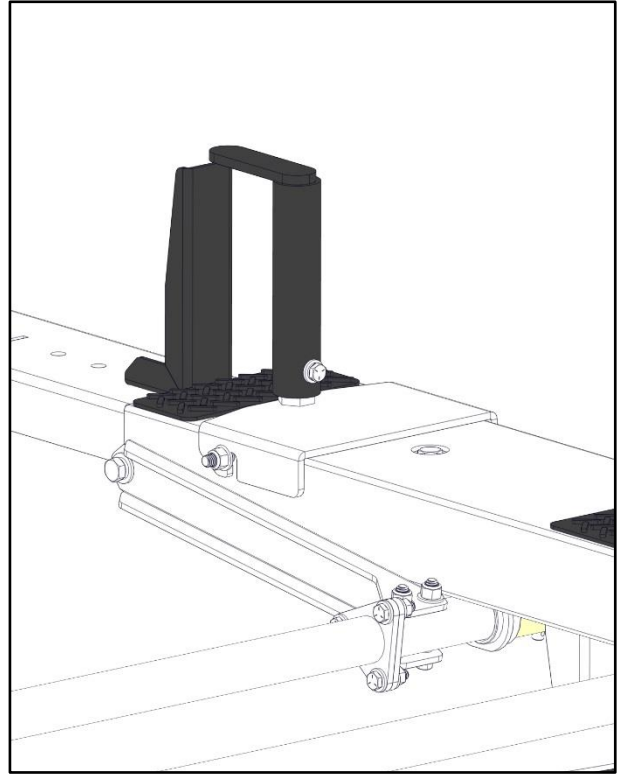
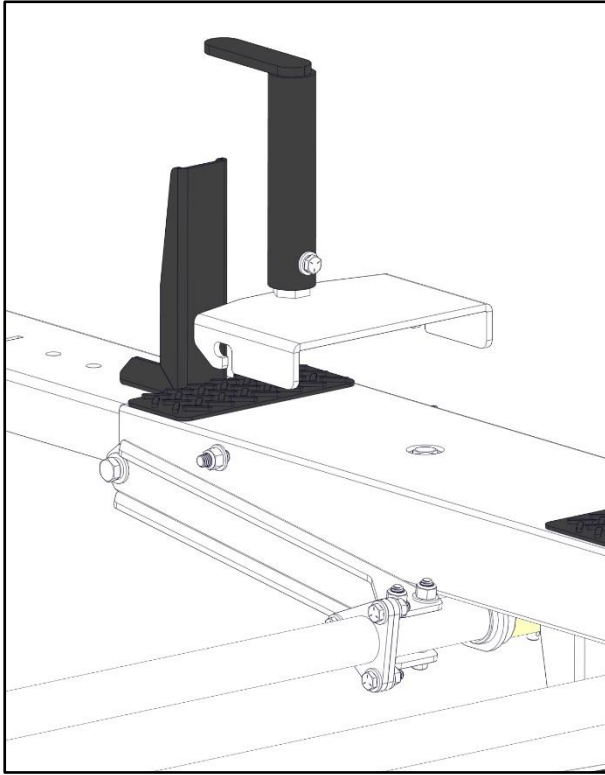
TIGHTEN



Step 10 – Install Ladder Hooks

- Using the hardware and installed pem studs on both bows, loosen nuts and slide ladder hook assembly into place.

TIGHTEN



GO BACK AND ENSURE ALL HARDWARE IS TIGHT
Your installation is now complete.

