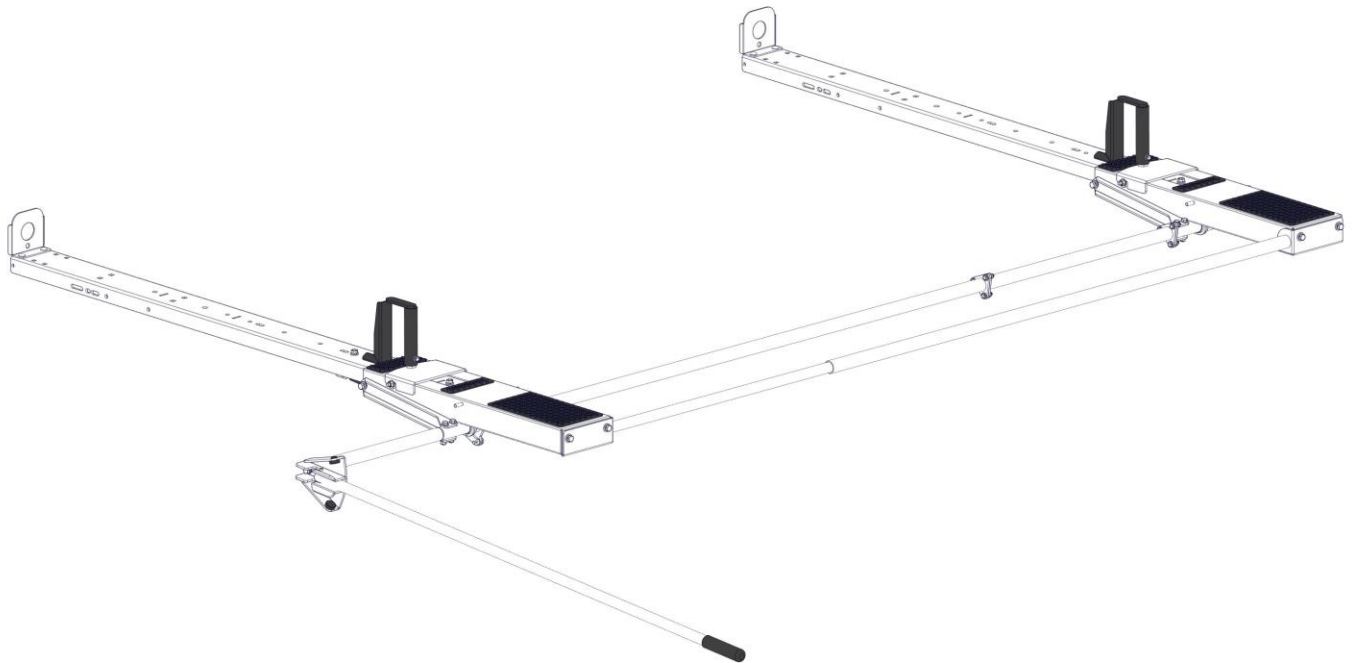


KARGO MASTER®

WE PUT EVERYTHING WITHIN REACH.

Installation Instructions 4A93M



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

9/16" Wrench and Socket	7/16" Wrench and Socket
1/2" Wrench and Socket	3/8" Wrench and Socket
1/4" Drill	Phillips Driver

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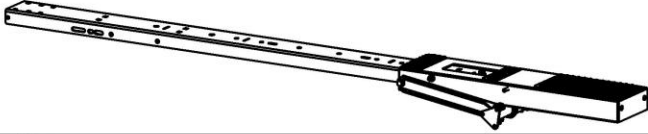
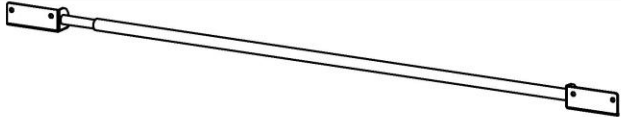
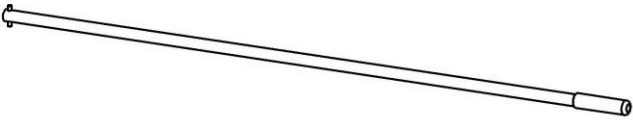
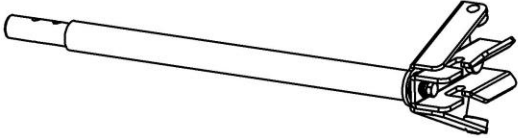

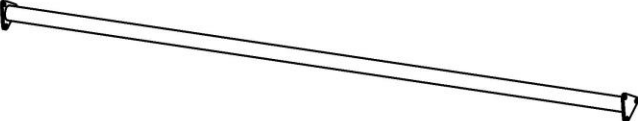

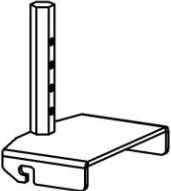


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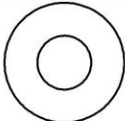

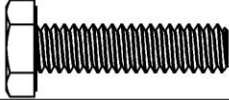

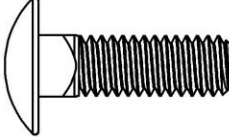

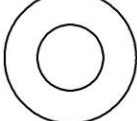
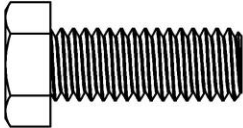
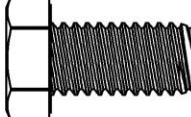
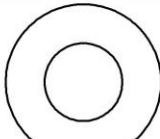
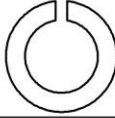
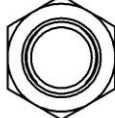
Before You Begin



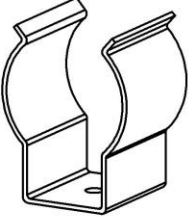

- Read all instructions.
- Have vehicle specific mount kit installed on vehicle.
- Place sealant around all swage connections.
- **DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF.**
- **BE SURE TO ADJUST LADDER CLAMPS ACCORDINGLY TO FIRMLY SECURE LADDER TO RACK.**

Parts List

ITEM		PART NO.	DESCRIPTION	QTY.
A		4A93L-1	REAR BOW	1
B		4A93L-2	FRONT BOW	1
C		4A93L-7	END TUBE ASSEMBLY	1
D		40800-13	HANDLE	1
E		4A93M-10	HANDLE MOUNT	1
F		4A93L-51	TORQUE TUBE EXTENSION	1
G		4A93L-50	TORQUE TUBE	1
H		4A900-35	LADDER HOOK	2
J		4A900-36	LADDER HOOK BASE	2
K		4A900-30-004-R3	LADDER STOP	2
L		4A900-10-008-R2	LOAD PLATE	2
		18-4A93M	HARDWARE KIT	1

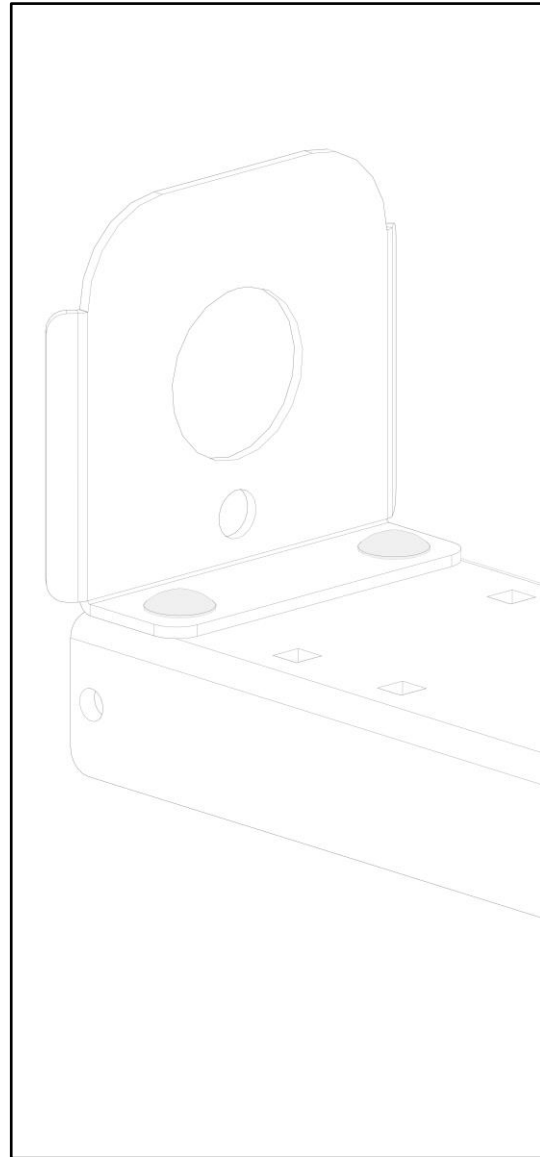
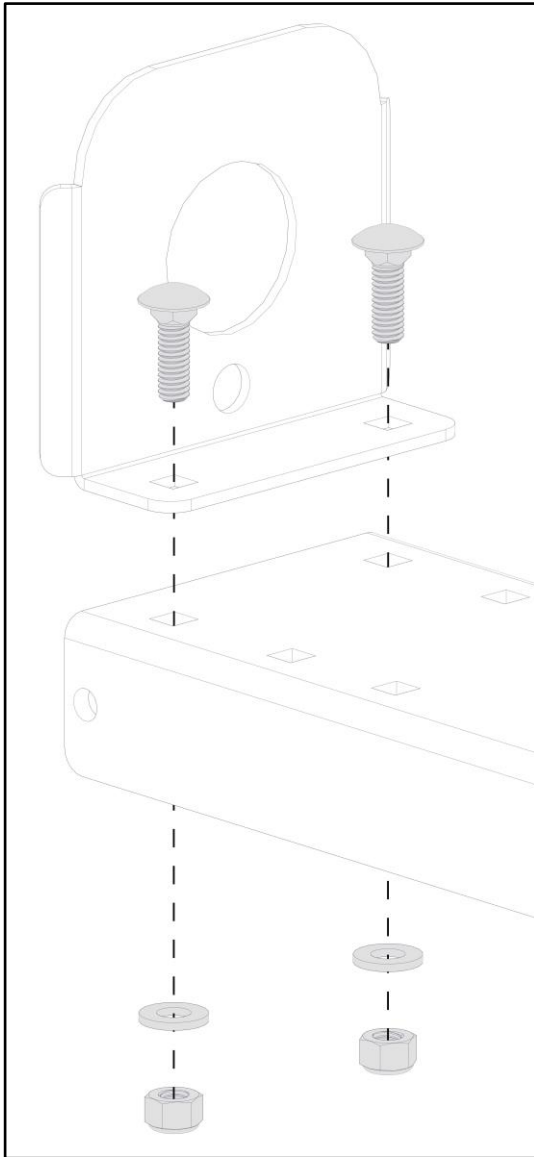
Hardware

ITEM	HARDWARE TO SCALE	PART NO.	DESCRIPTION	QTY.
1		11541082	1/4" FLAT WASHER	20
2		0123494	1/4" LOCK WASHER	2
3		110120304	1/4"-20 X 1" HEX BOLT	11
4		0169789	1/4"-20 NYLOC NUT	9
5		21811	5/16"-18 X 1" CARRIAGE BOLT	4
6		0169777	5/16"-18 NYLOC NUT	4
7		11541083	5/16" FLAT WASHER	4
8		11241197	3/8"-16 X 1" HEX BOLT	1
9		11241196	3/8"-16 X 3/4" HEX BOLT	4
10		11541089	3/8" FLAT WASHER	6
11		0123496	3/8" LOCK WASHER	4
12		0169791	3/8"-16 NYLOC NUT	1

ITEM	HARDWARE TO SCALE	PART NO.	DESCRIPTION	QTY.
13		90272A244	10-24 x 5/8" PAN HEAD SCREW	2
14		37515	10-24 NYLOC NUT	2
15		17185A510	HANDLE HOLDER	2
16		BH-821	SEALANT	1

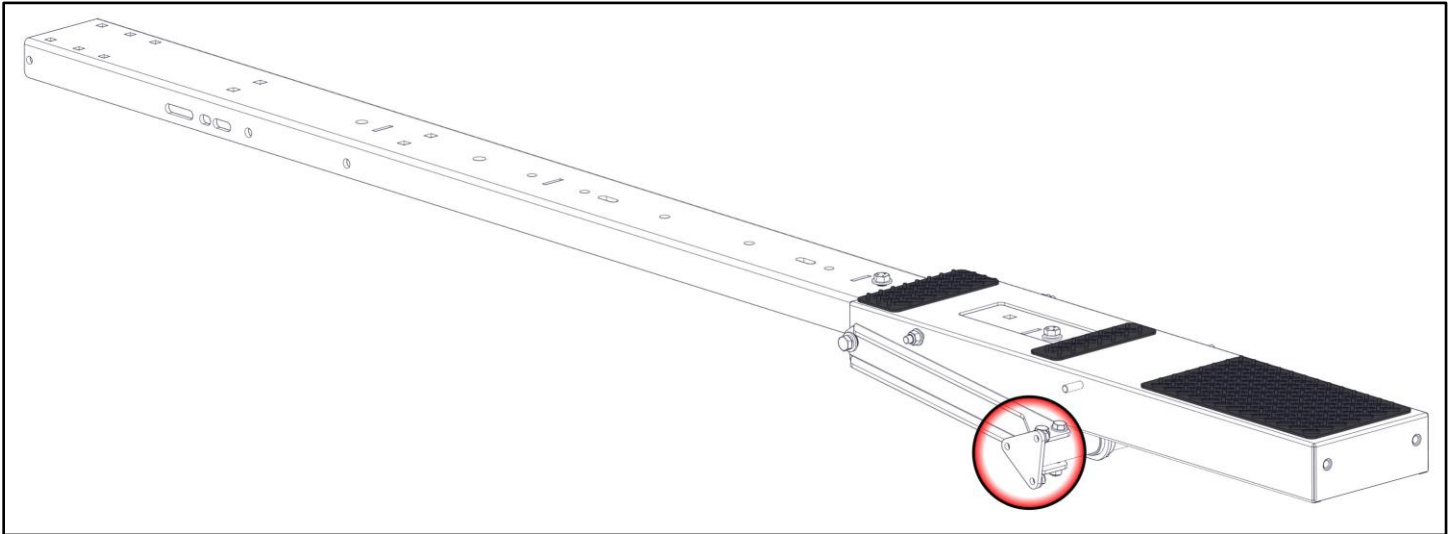
Step 1 – Install Load Plates

- At the end of each bow, opposite from the pan mechanism, attach the load plates using two 5/16" x 1" carriage bolts, two 5/16" flat washers and two 5/16" nyloc nuts as shown.
- If installing a driver side ladder rack, skip this step.
- Repeat on both bows.
- TIGHTEN.

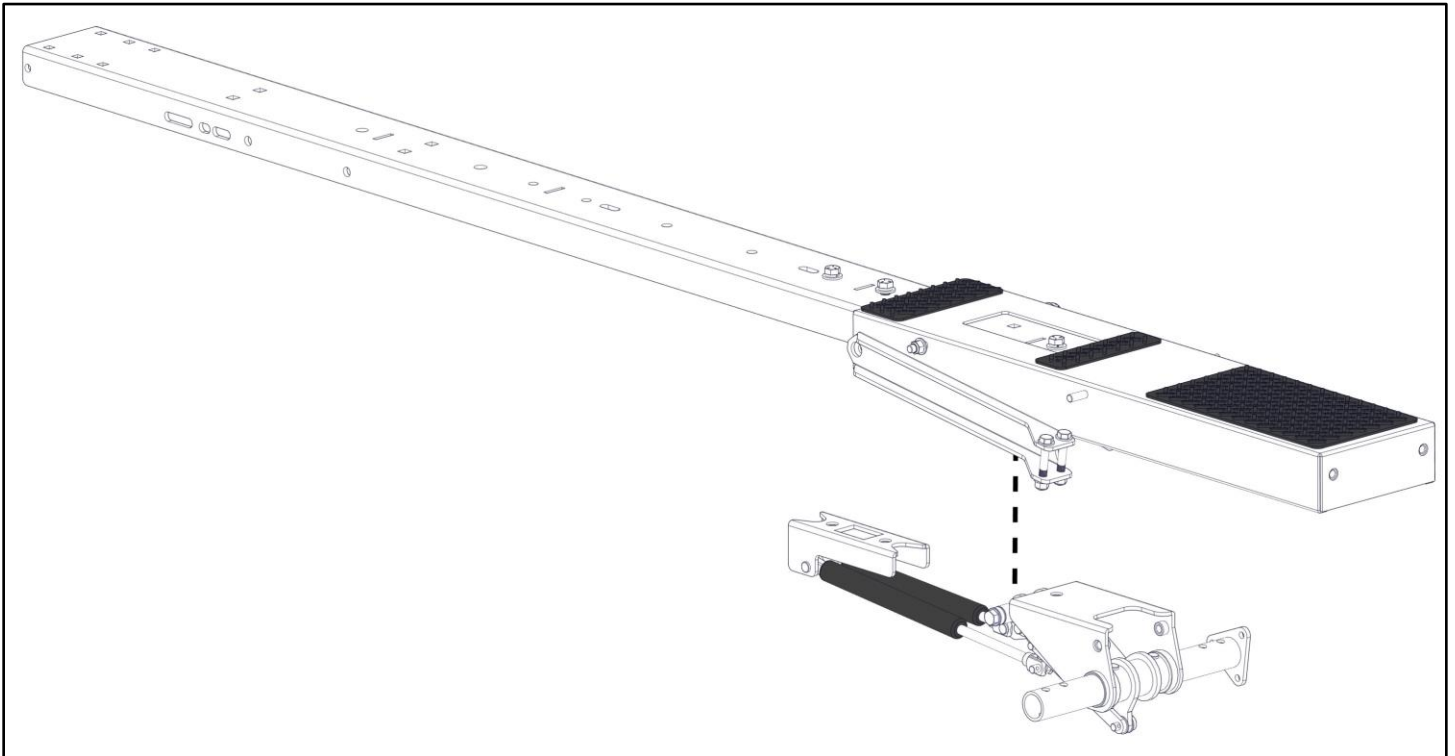


Step 2 – Determine Front and Rear Bow

- The front bow is shown below. This bow does **NOT** have a dampening mechanism on the underside.

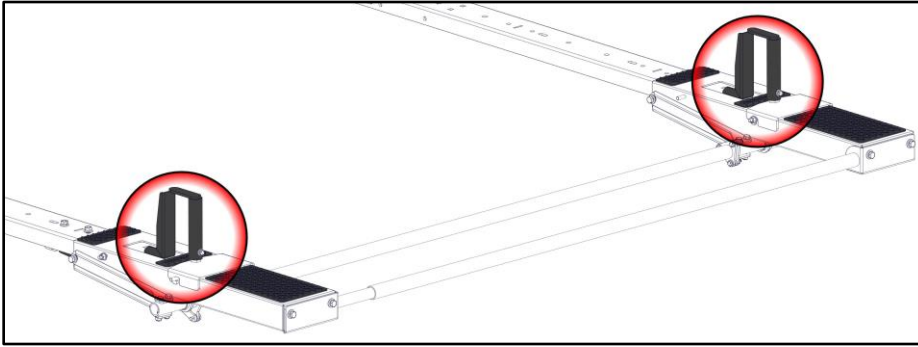


- The rear bow is shown below. This bow has the dampening mechanism assembled on the underside.

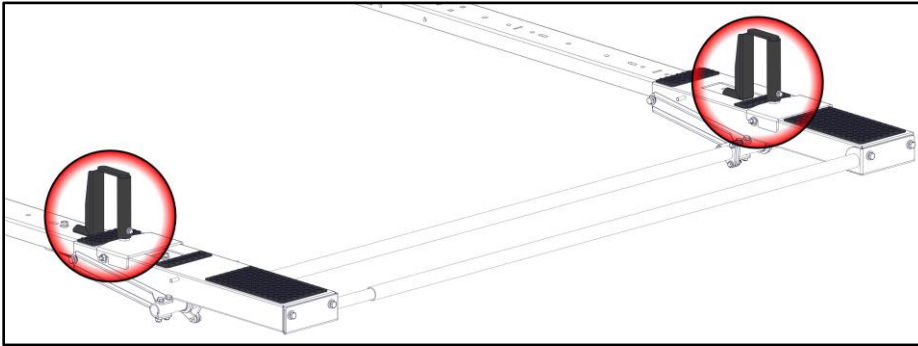


- Also, notice the triangular mount attached to the tube. This helps distinguish the front from the rear bows.

Step 3 – Install Ladder Clamps and Stops

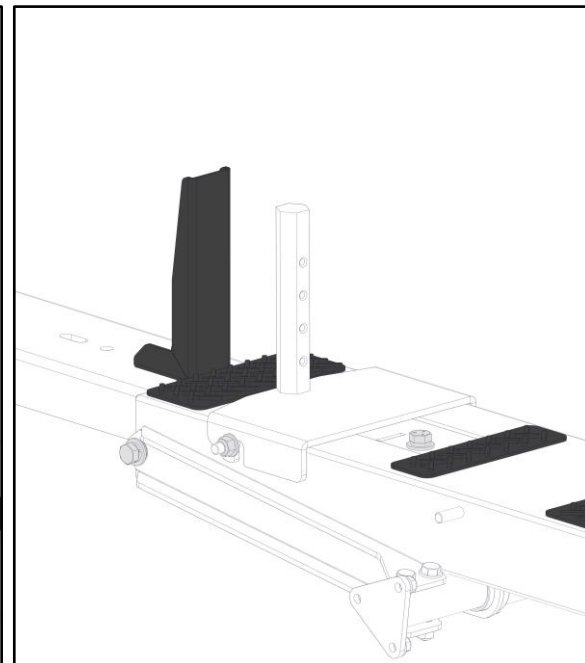
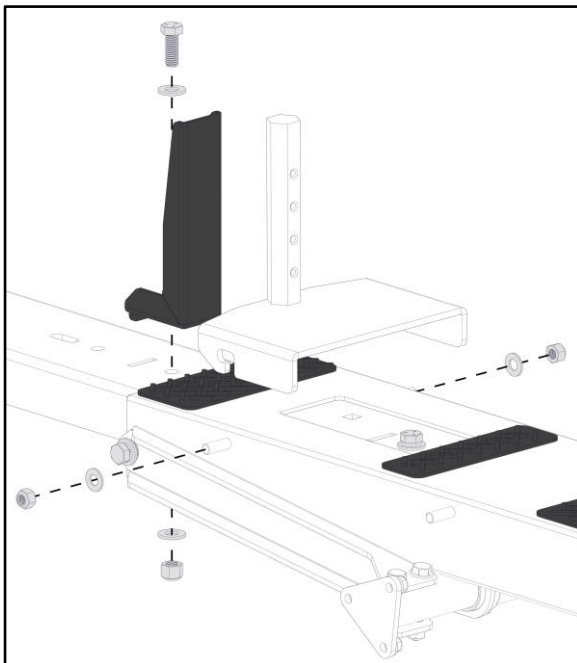


Location of ladder clamps and stops for standard extension ladders.

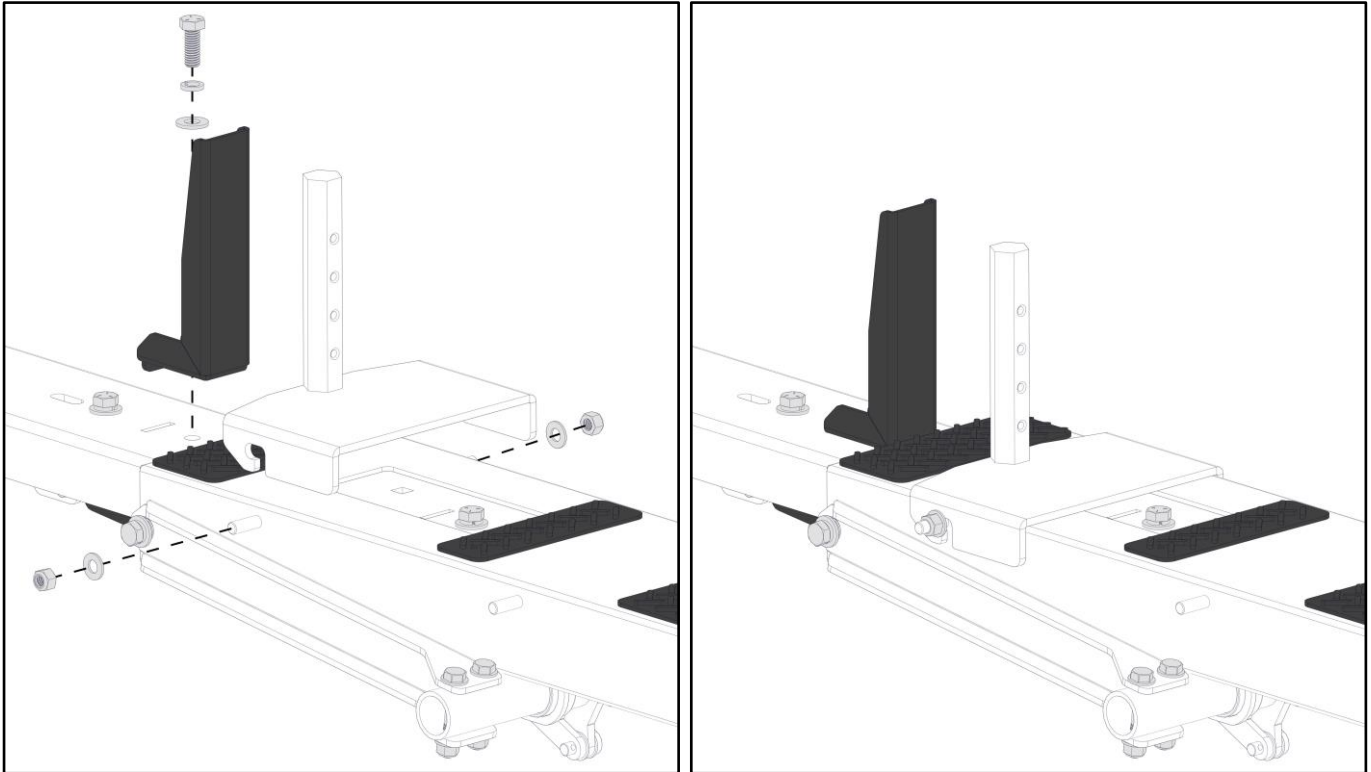


Location of ladder clamps and stops for standard step ladders.

- Determine which location the ladder bow and ladder stop need to be installed.
- On the front bow, position the ladder stop in the desired location. 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, two 3/8" flat washer and a 3/8" nyloc nut in the orientation shown.
- Place the ladder hook base around the threaded studs near the ladder stop and attach using 5/16" flat washers and 5/16" nyloc nuts. This can be adjusted.

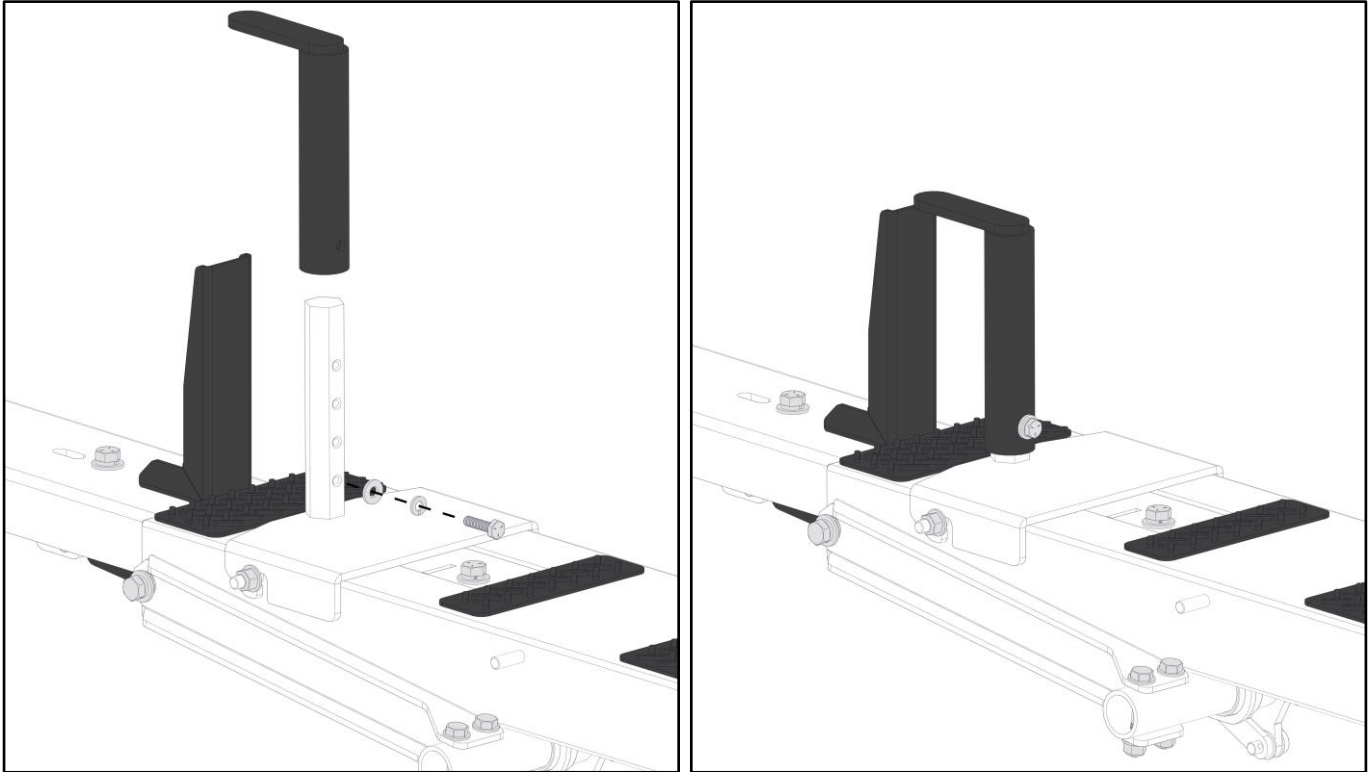


- On the rear bow, position the ladder stop in the desired location. Be sure the slot of the ladder stop aligns with the slot in the bow.
- Bolt the ladder stop in place using 3/8" x 1" hex head bolt, 3/8" split lock washer and a 3/8" flat washer in the orientation shown.
- Place the ladder hook base around the threaded studs near the ladder stop and attach using 5/16" flat washers and 5/16" nyloc nuts. This can be adjusted.



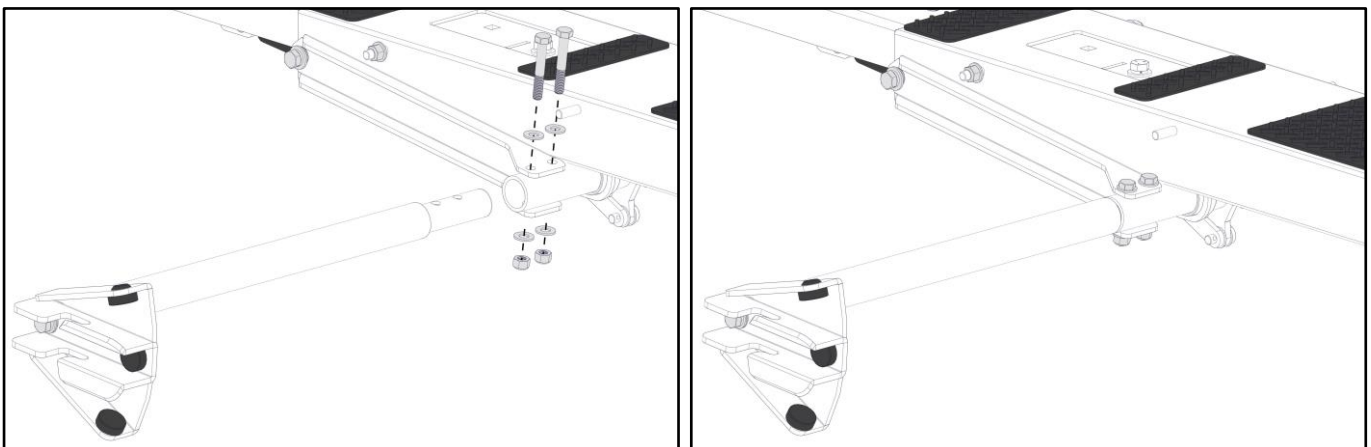
Step 4 – Install Ladder Hooks

- Install the ladder hooks on the front and rear bows. Place the ladder hook over the previously installed ladder hook base and attach 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.



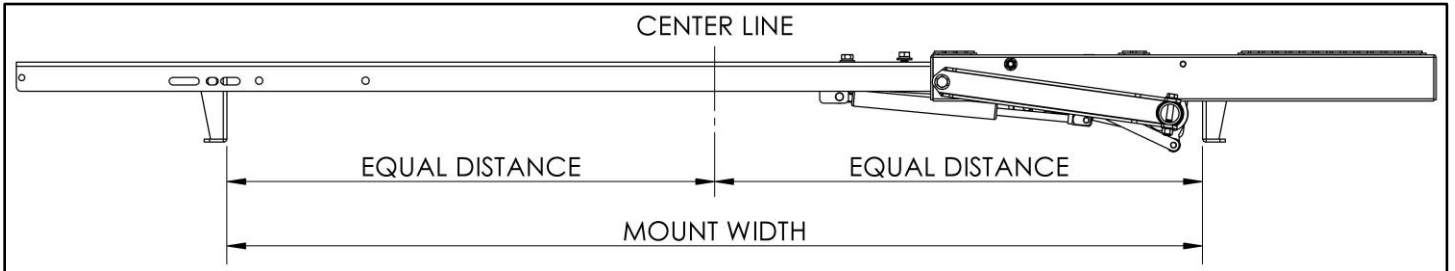
Step 5 – Install Handle Mount

- On the rear bow, remove the hardware from the tube as shown. Apply sealant around the swage connection to prevent rust.
- Insert handle mount into the tube in the orientation shown. Bolt the handle into place using the previously removed hardware.



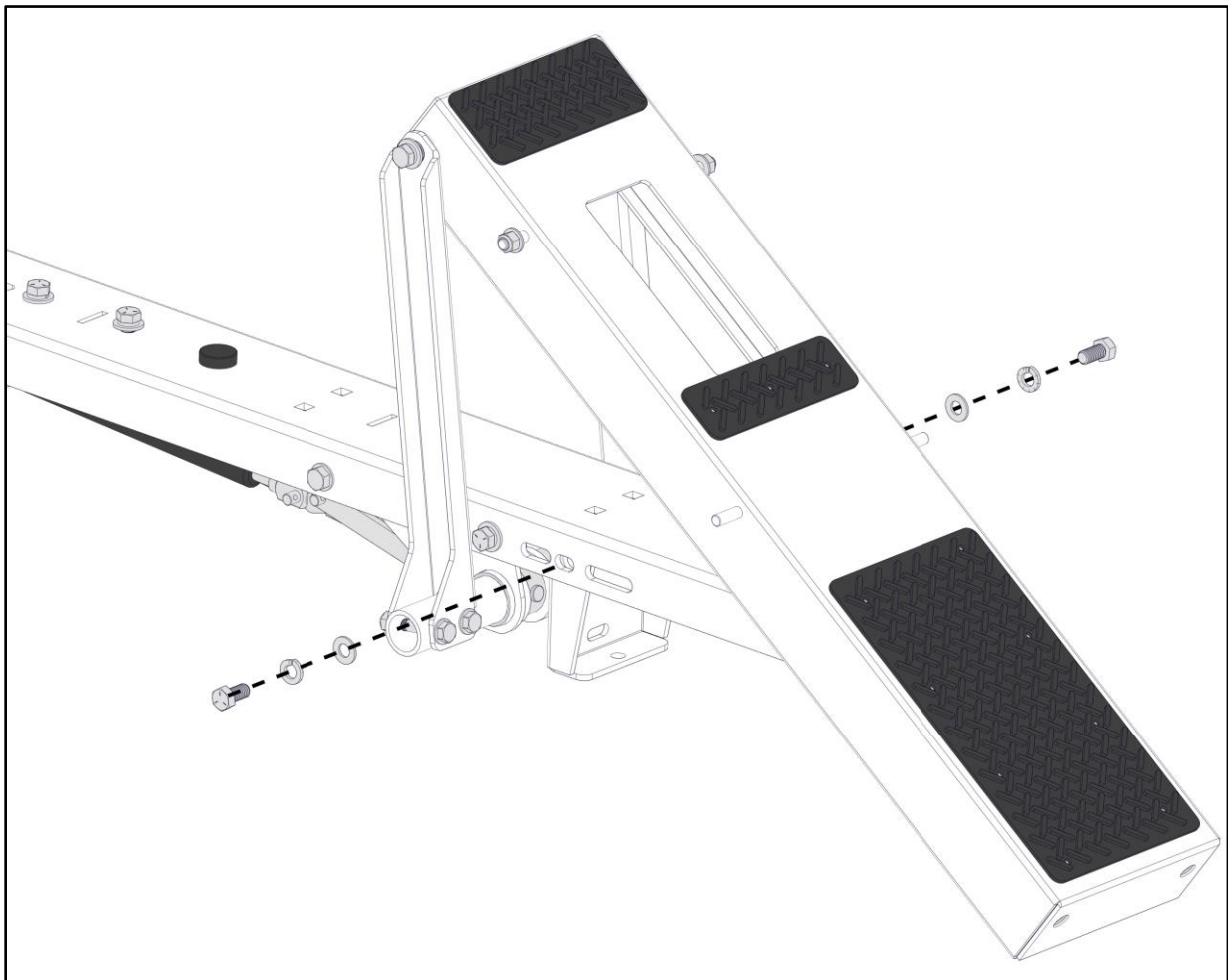
Step 6 – Place Bows on Vehicle

- Be sure to have the vehicle specific mounting installed on vehicle.
- Place the front bow on top of the front most mounts and the rear bow on the rear most mounts. The rear bow is the bow assemble with the handle mount installed.
- Be sure there is an equal distance from the center of the cross bow to each foot.



- Place a foam block from the packaging to hold the bow in the up position in order to access the mounting slots.
- Leave loose until the rack is assembled.
- Repeat on both ends of both bows.

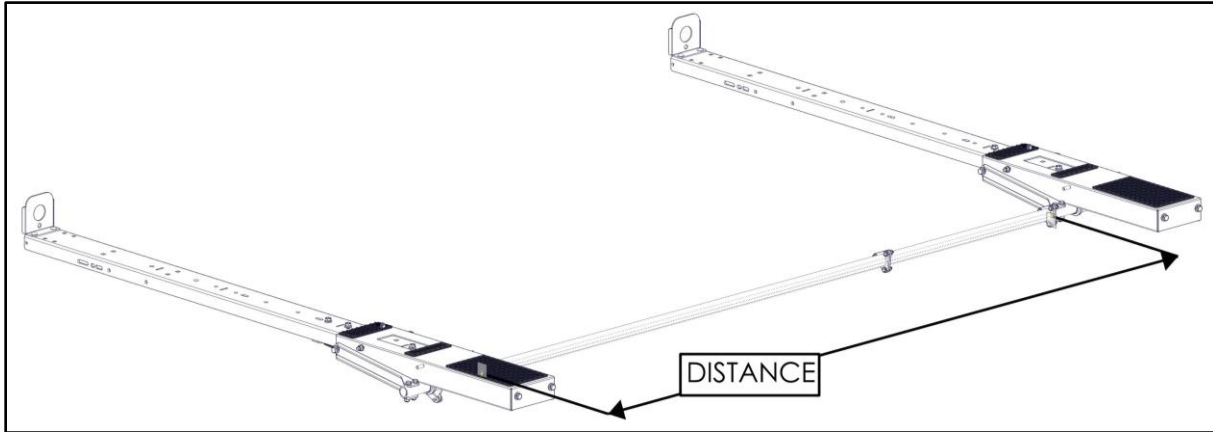
**Bow and feet may vary from installation to installation.
Mounting slots on bow and foot orientation will vary**



Step 7 – Determine if the Extension is Needed

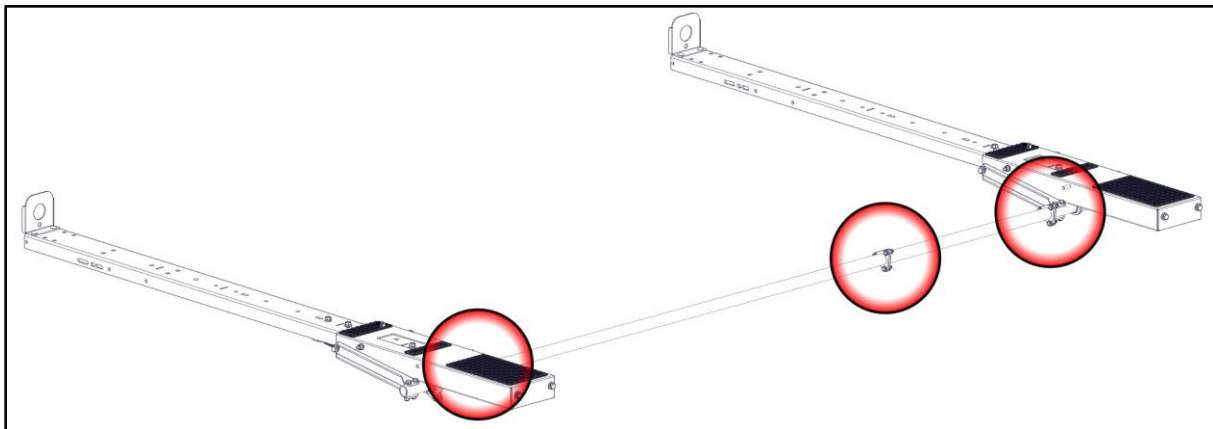
- Measure the distance between the two bows as shown. If the distance is approximately **84.5"**, the extension will be needed.
- If the distance between the two bows is approximately **60"**, the extension piece is **NOT** needed.

** Picture shown below has the extension installed**

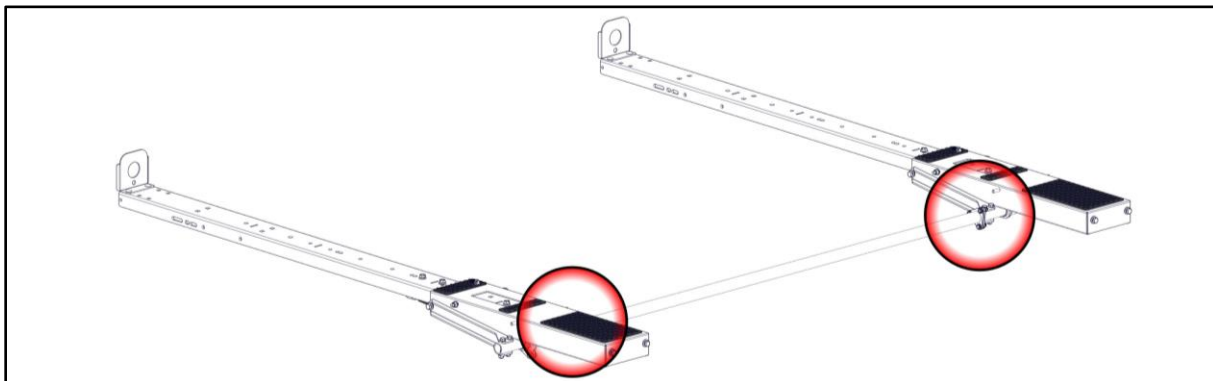


Step 8 – Install Torque Tube

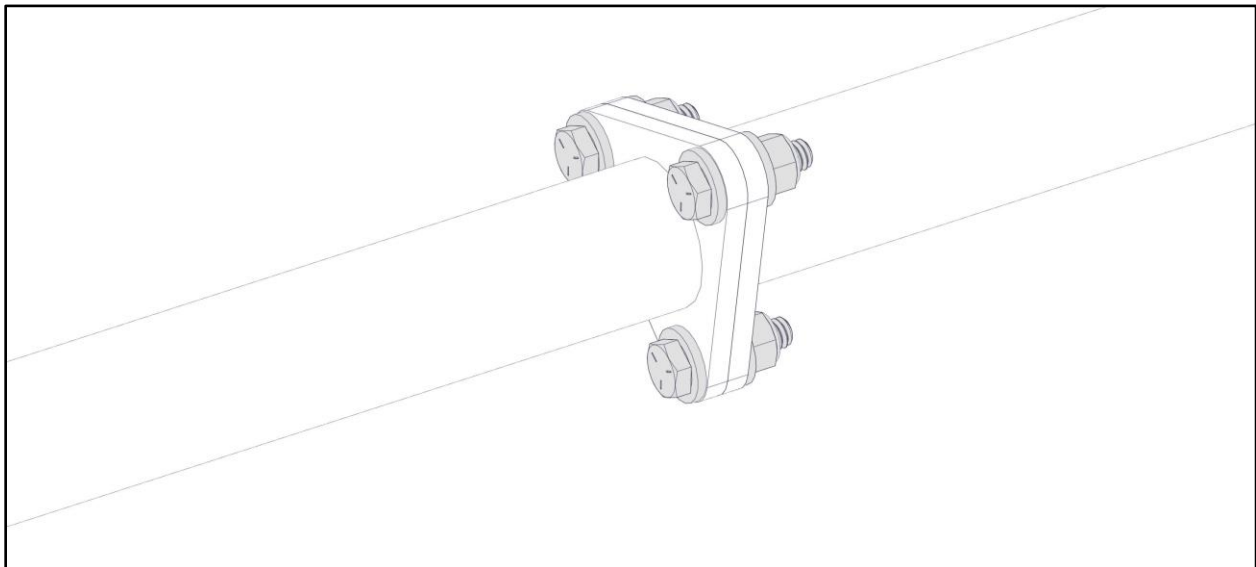
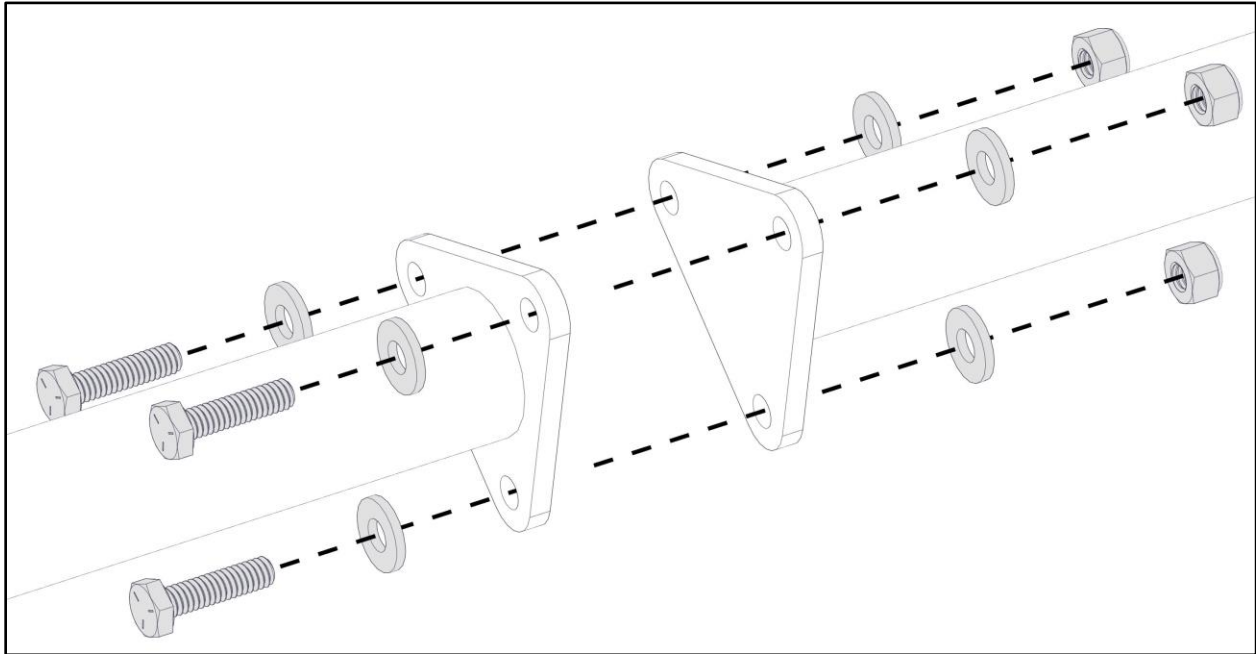
- If the extension is needed, assemble the extension to the torque tube the same way the torque tube attaches to the bows.



- If the extension is **NOT** needed, use only the torque tube as shown below.

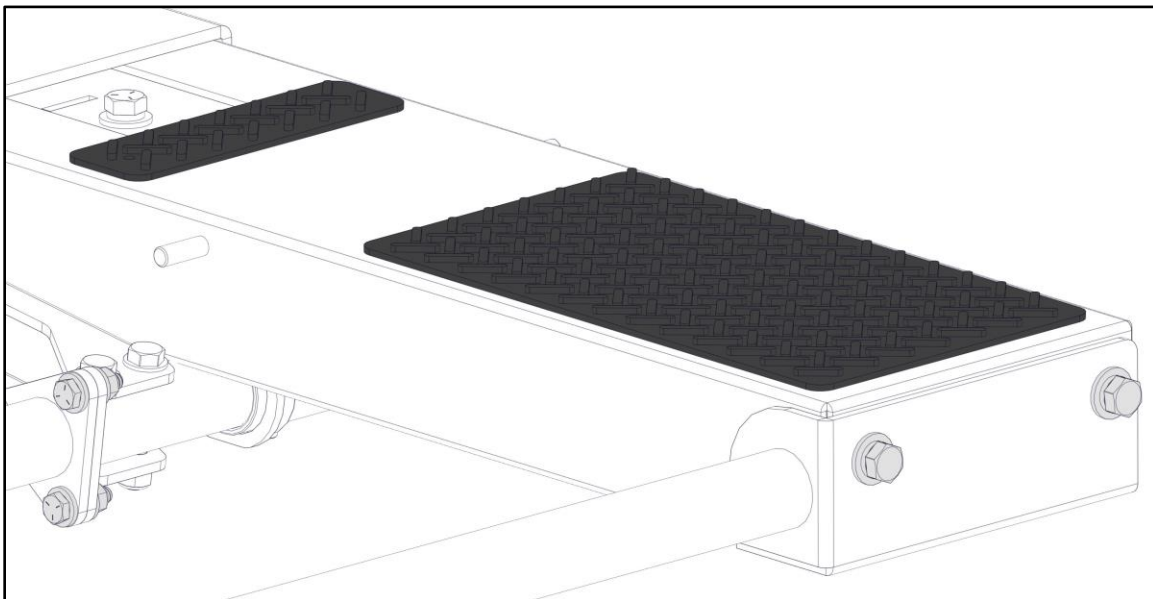
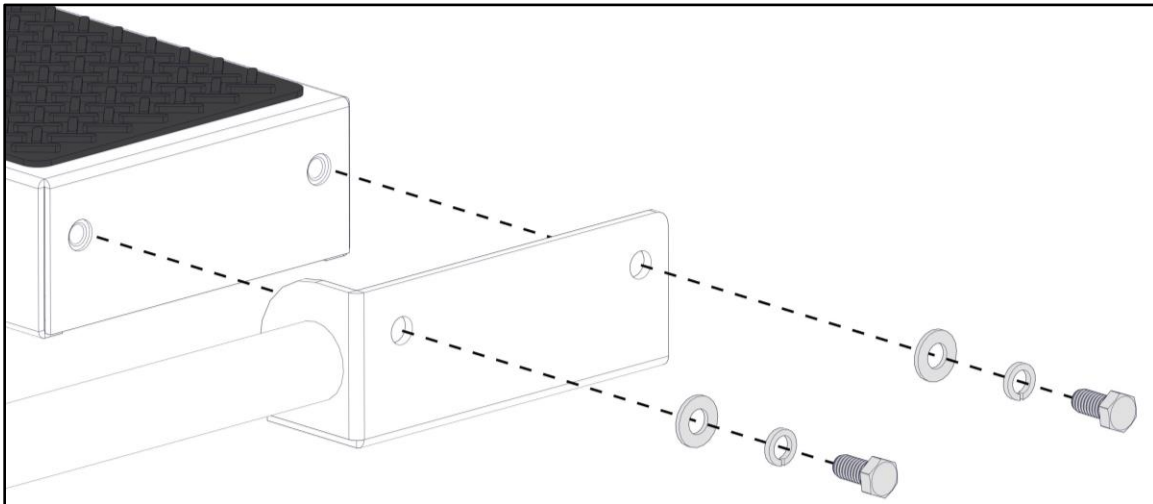


- Bolt the torque tube to the front and the rear bow using 1/4"-20 x 1" hex head bolt, two 1/4" flat washers and 1/4"-20 nyloc nut at each location. If the extension is used, bolt together using the same method.

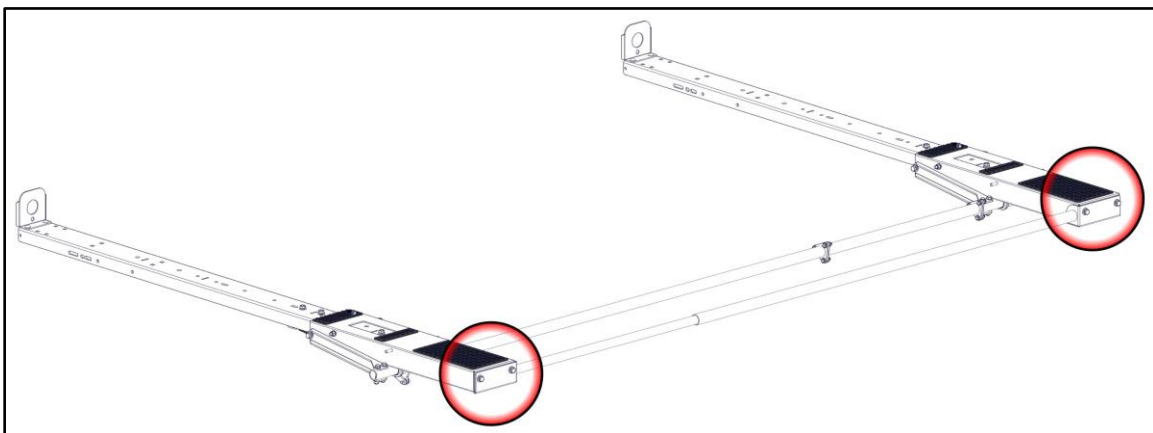


Step 9 – Install End Tube

- Attach the end tube to the end of both bows using 3/8" x 3/4" hex head bolts, 3/8" split lock washers and 3/8" flat washers in the orientation shown.

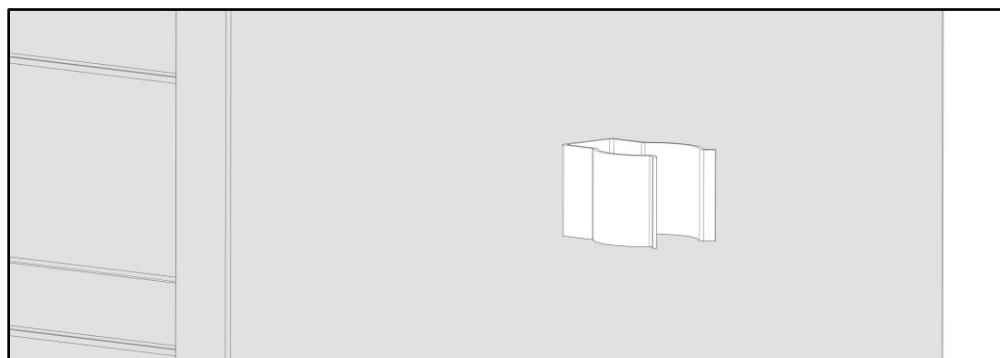
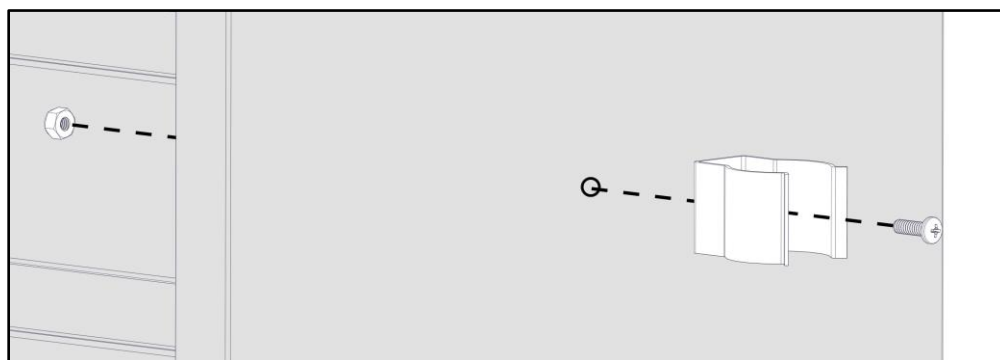
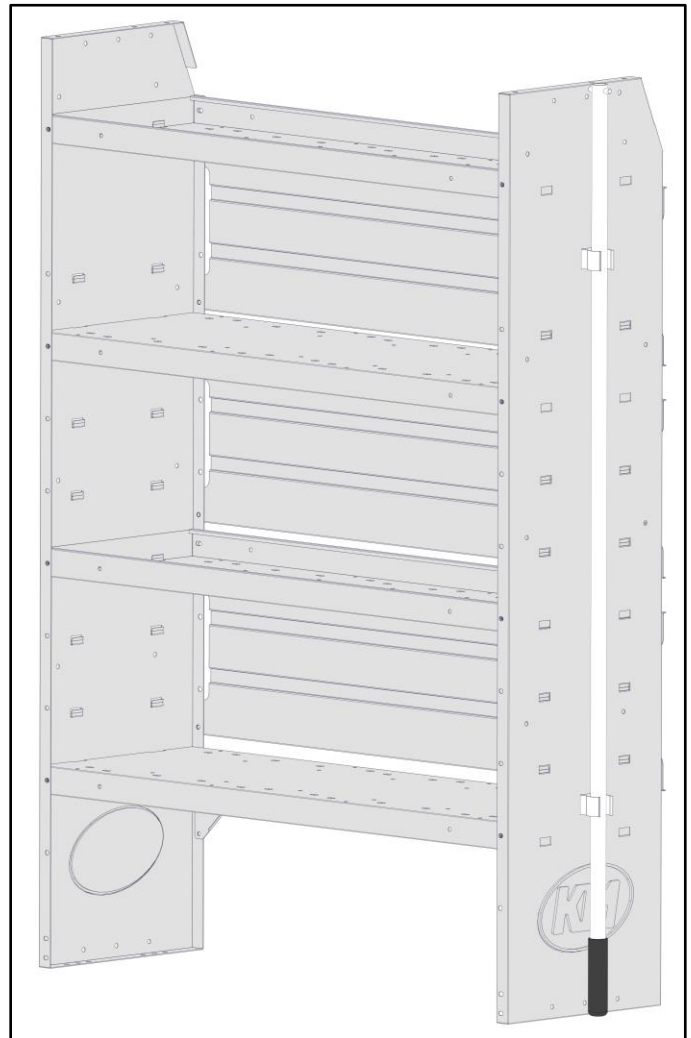


- Repeat at the end of both bows.



Step 10 – Install Clips for Handle

- Locate a good mounting place to install the clips for the handle. It is recommended to place at the rear of the van on the rear panel of a shelf.
- Place the clips on the handle. Place the handle against the shelf in the desired location.
- Mark the holes onto the shelf. Drill the locations using a 1/4" drill.
- Attach clip using a #10 x 5/8" pan head screw and #10 nyloc nut. Repeat on both clips.



SQUARE AND POSITION THE RACK

**START BY TIGHTENING THE FEET TO THE VEHICLE AND
MOVING UPWARD AND OUTWARD ON THE RACK**

INSTALLATION IS NOW COMPLETE

