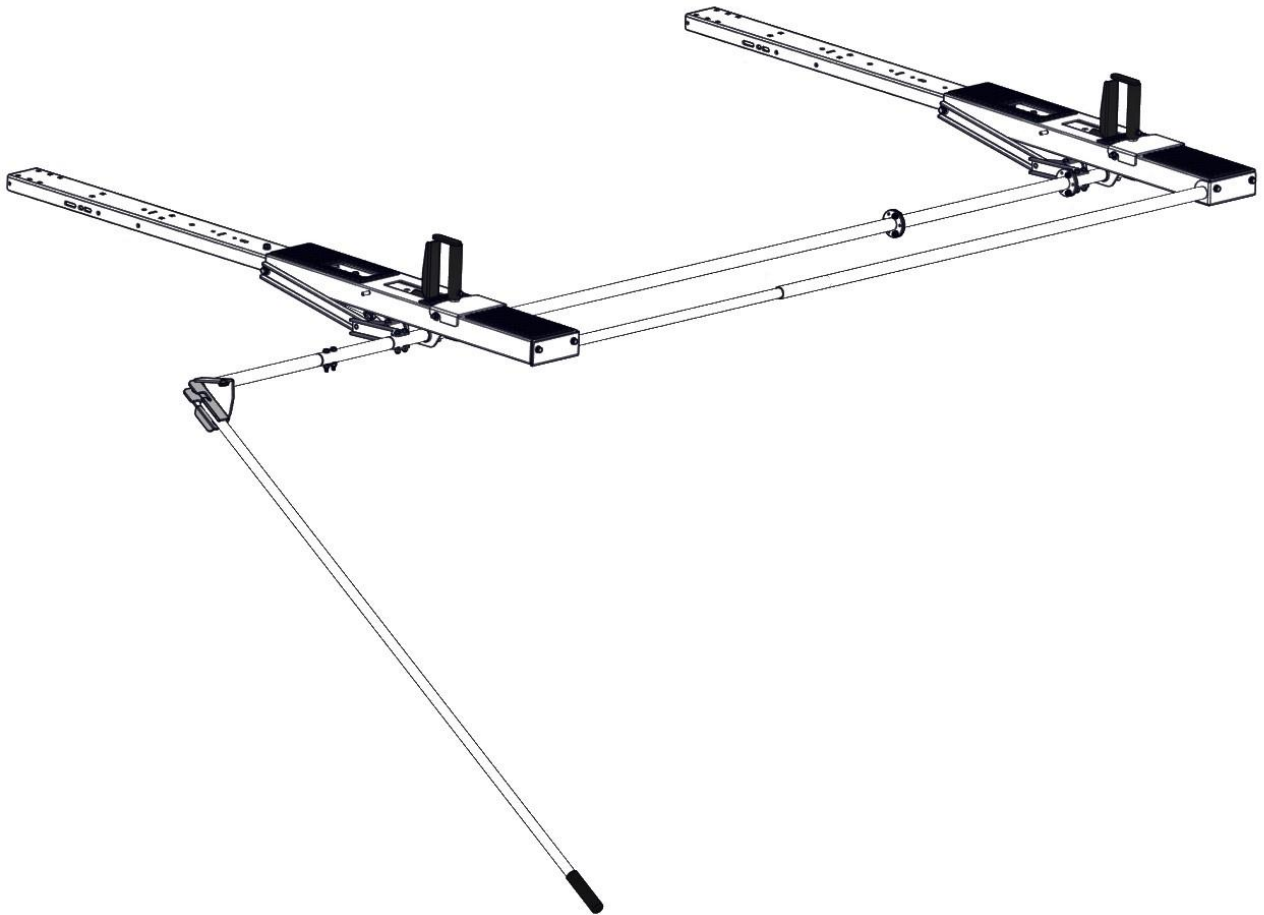


Holman

Instruction Guide 4A99H



Holman
Rancho Cordova, CA 95742
800-343-7486

InstallationSupport@Holman.com

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.



DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF.

Tools Needed

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

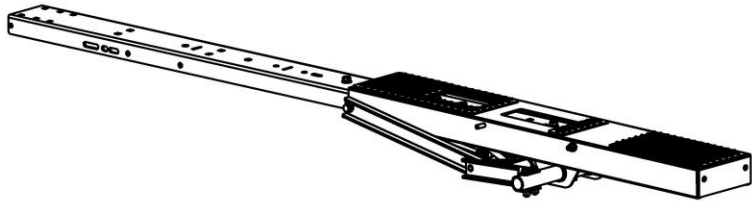
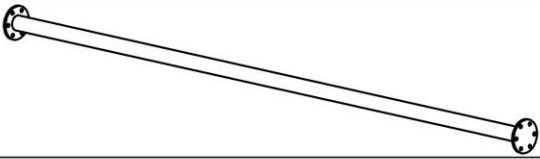
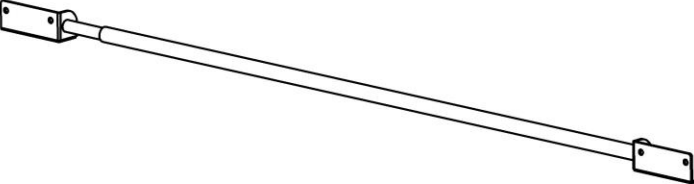
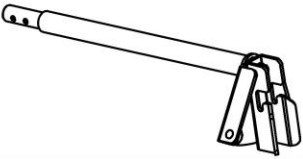
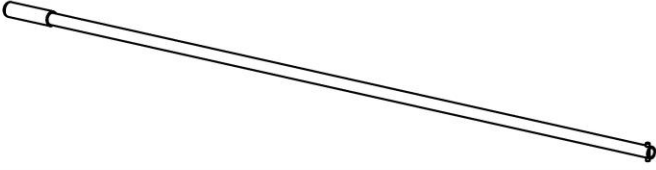
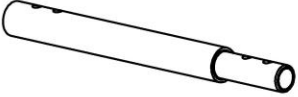
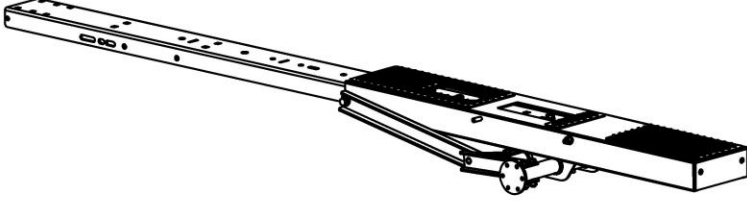
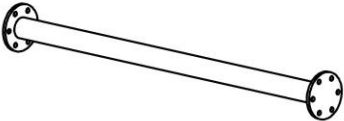
Table of Contents

Tools Needed	2
Before You Begin.....	2
Step 1 – Place Front Bow	6
Step 2 – Place Rear Bow.....	7
Step 3 – Install Torque Tube.....	8
Step 4 – Install End Tube.....	9
Step 5 – Install Actuator.....	9
Step 6 – Determine Ladder Stop Locations	10
Step 7 – Assemble Ladder Hooks	13
Step 8 – Install Ladder Hooks.....	14
Step 9 – Install Clips for Handle.....	14
Step 10 – Test Ladder Rack	15

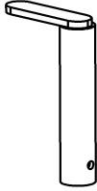
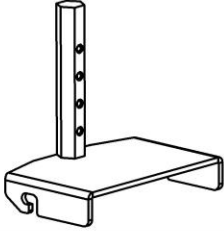

Before You Begin

- Read all instructions before assembling or installing any Holman product.
- Place sealant around all swage connections.
- Keep the adjustment guide in vehicle at all times.
- **DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF.**
- **BE SURE TO ADJUST LADDER CLAMPS ACCORDINGLY TO FIRMLY SECURE LADDER TO RACK.**
- **The mounting kit is NOT included and must be purchased separately.**

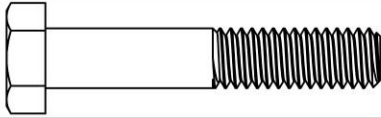
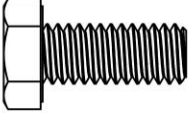
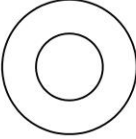
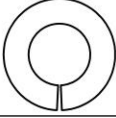
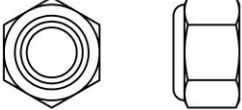
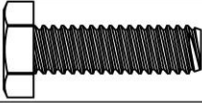
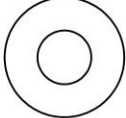




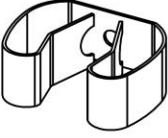

Parts

ITEM NO.		PART NUMBER	DESCRIPTION	QTY.
A		4A99H-Rear-1	Rear Pan Assembly	1
B		40993-24	Torque Tube	1
C		4A93L-7	End Tube Assembly	1
D		40993-43	Actuator	1
E		40993-44	Handle Assembly	1
F		40993-40-002	Acuator Extension	1
G		4A99H-Front-1	Front Pan Assembly	1
H		40993-25	Torque Tube Extension	1

Parts (Continued)

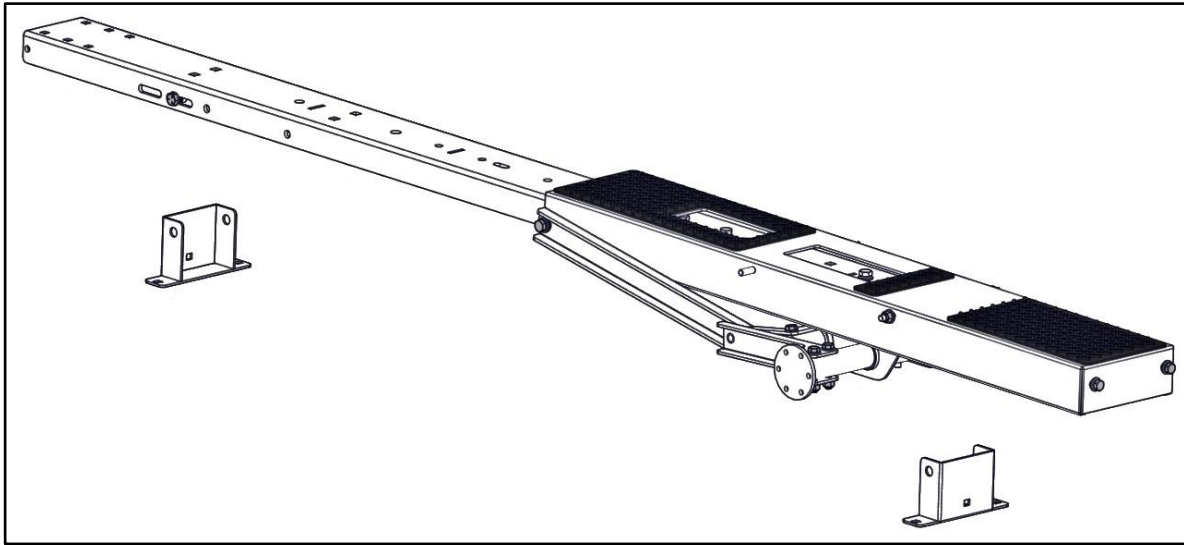
ITEM NO.		PART NUMBER	DESCRIPTION	QTY.
J		4A900-35	Ladder Hook-Top	2
K		4A900-36	Ladder Hook-Base	2
L		4A900-30-004-R3	Ladder Stop	2
		18-4A99H	HARDWARE	1

Hardware

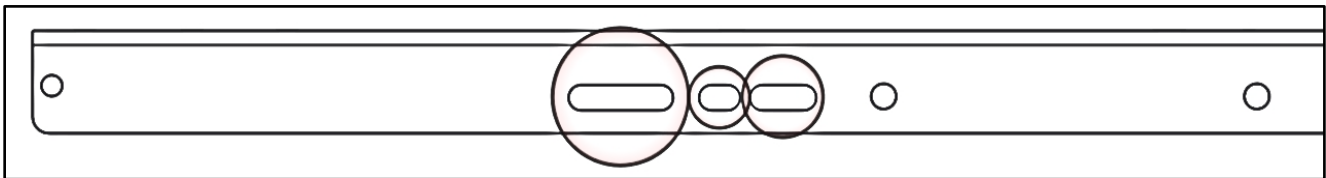
ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		13010	5/16"-18 X 1-3/4" HEX HEAD BOLT	2
2			5/16"-18 X 3/4" HEX HEAD BOLT	4
3		90126A030	5/16" Flat Washer	8
4		1133620	5/16" LOCKING WASHER	4
5		0169777	5/16"-18 NYLOC	2
6		13004	1/4"-20 X 7/8" HEX HEAD BOLT	11
7		33078	1/4" FLAT WASHER	20
8		33618	1/4" LOCK WASHER	2
9		37018	1/4"-20 NYLON INSERT LOCK NUT	9
10		74803	10-24 X 5/8" PHILLIPS HEAD SCREW	2
11		37014	10-24 NYLON INSERT LOCK NUT	2
12		1723A64	Vinyl-Coated Holder, 3/4" -1-1/8" Tool Diameter	2
13		-	Self Leveling Adhesive Sealant	1

Step 1 – Place Front Bow

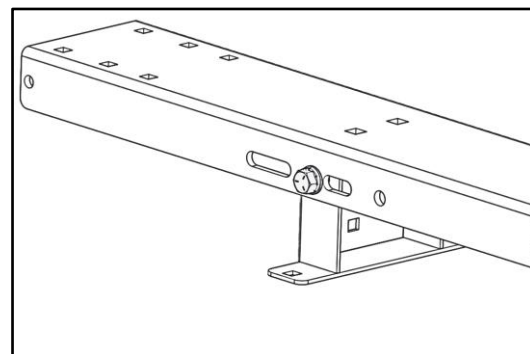
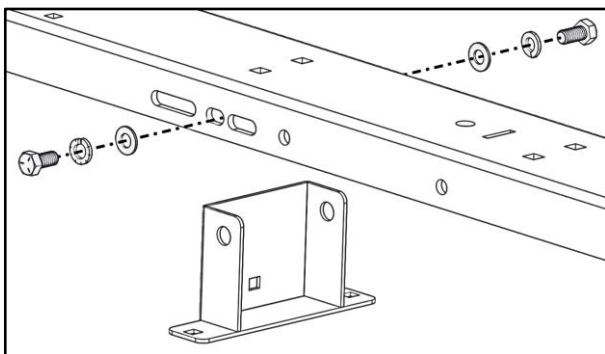
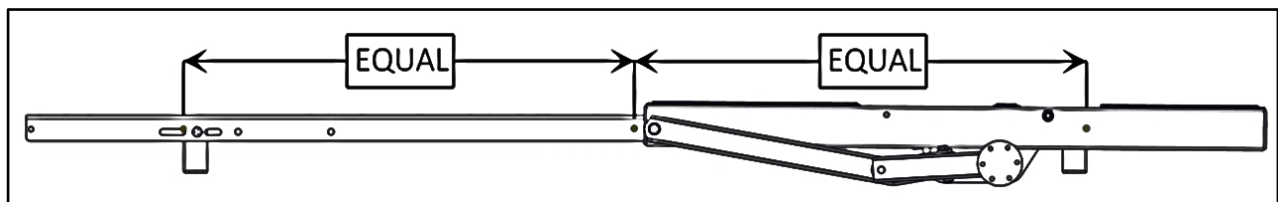
- Place the front bow on top of the installed feet. **Be sure bow is centered on the vehicle.**



- The same slot, but on opposite sides of the bow will be used to attach the bow to the feet. These slots will vary based on which vehicle the ladder rack is being installed on

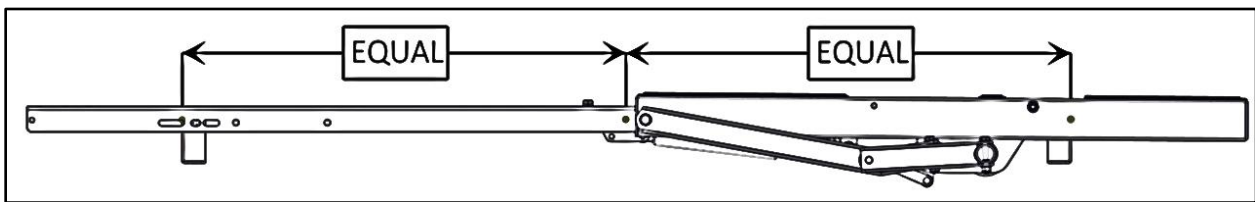
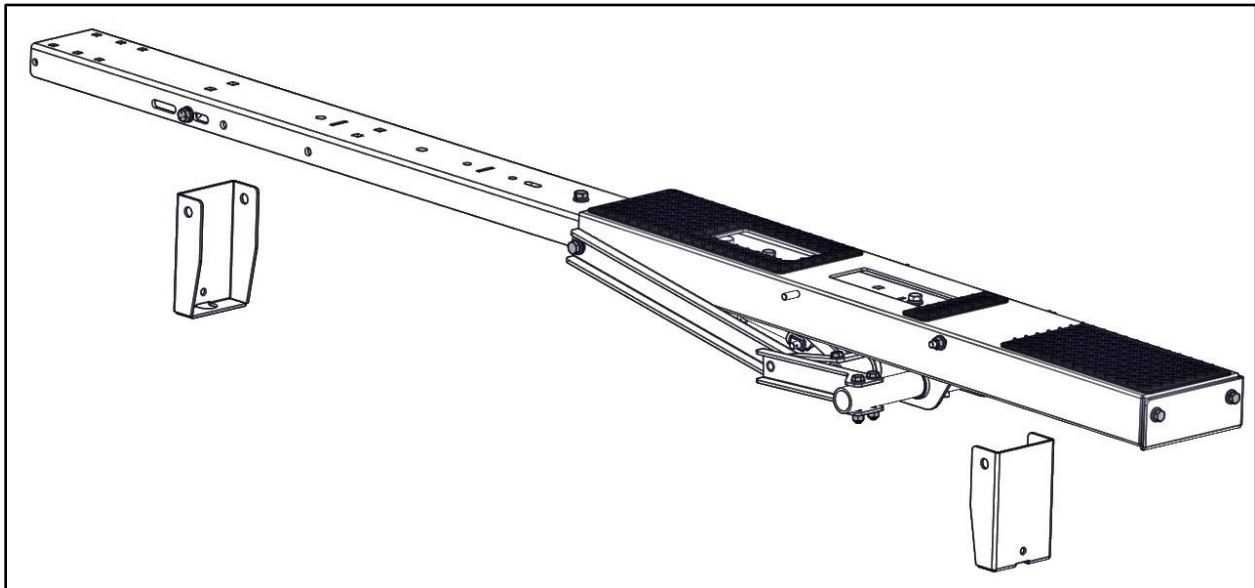


- Bolt the front bow to the feet using 3/8" x 3/4" hex head bolts, 3/8" lock washers and 3/8" flat washers that are included in the vehicle mounting kit. Pivot the ladder pan out of the way to access the mount locations on the passenger side.
- Snug tighten, but allow movement.

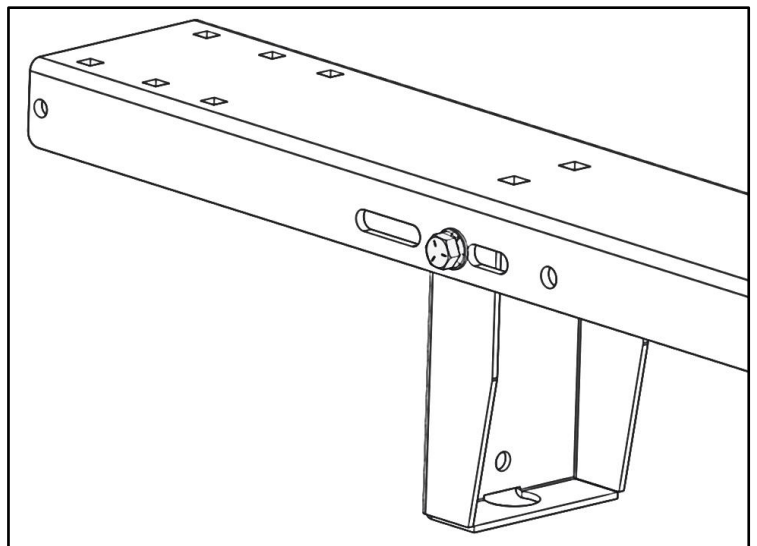
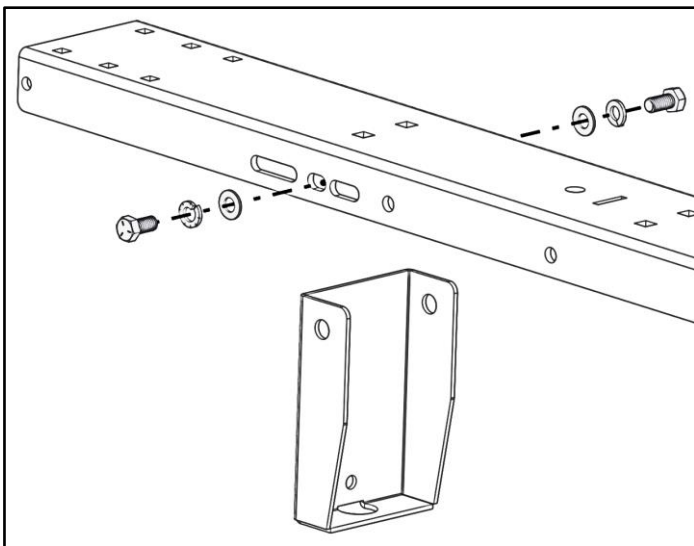


Step 2 – Place Rear Bow

- Place the rear bow on top of the installed feet. **Be sure bow is centered on the vehicle.**

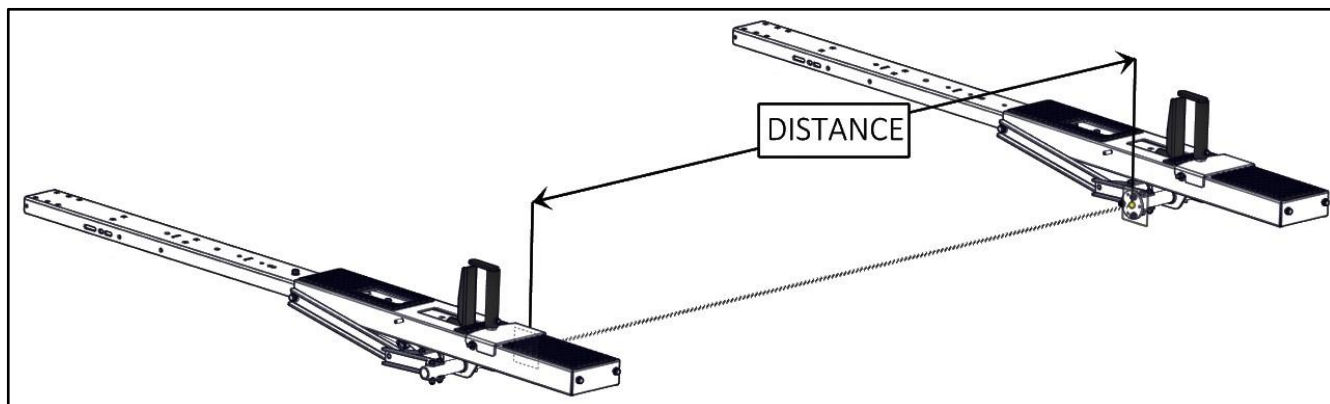


- The same slot, but on opposite sides of the bow, will be used to attach bow to the feet. These slots will vary based on which vehicle the ladder rack is being installed on.
- Bolt the rear bow to the feet using 3/8" x 3/4" hex head bolts, 3/8" lock washers and 3/8" flat washers that are included in the vehicle mounting kit. Pivot the ladder pan out of the way to access the mount locations on the passenger side.
- Snug tighten, but allow movement.

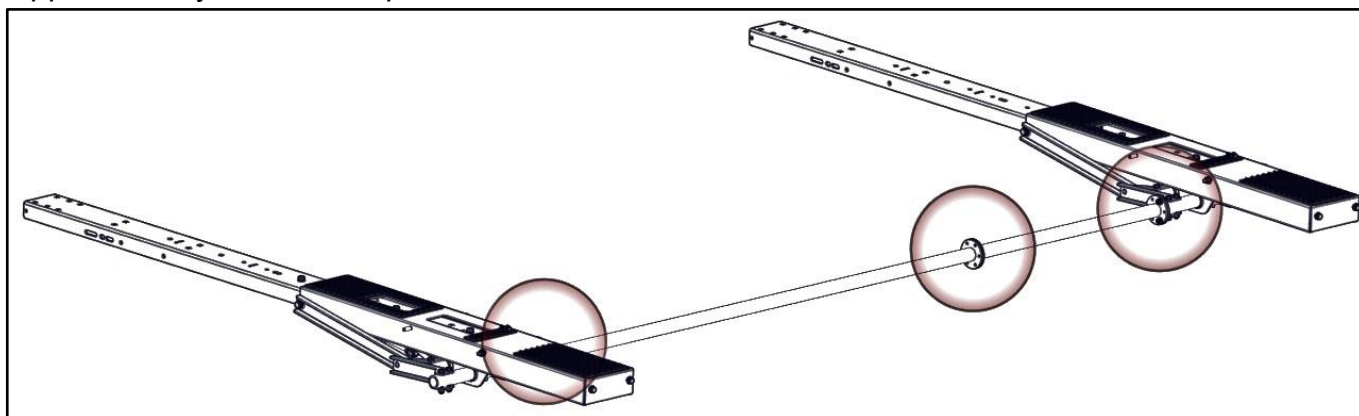


Step 3 – Install Torque Tube

- Measure the minimum distance between the front and rear bow as shown below.

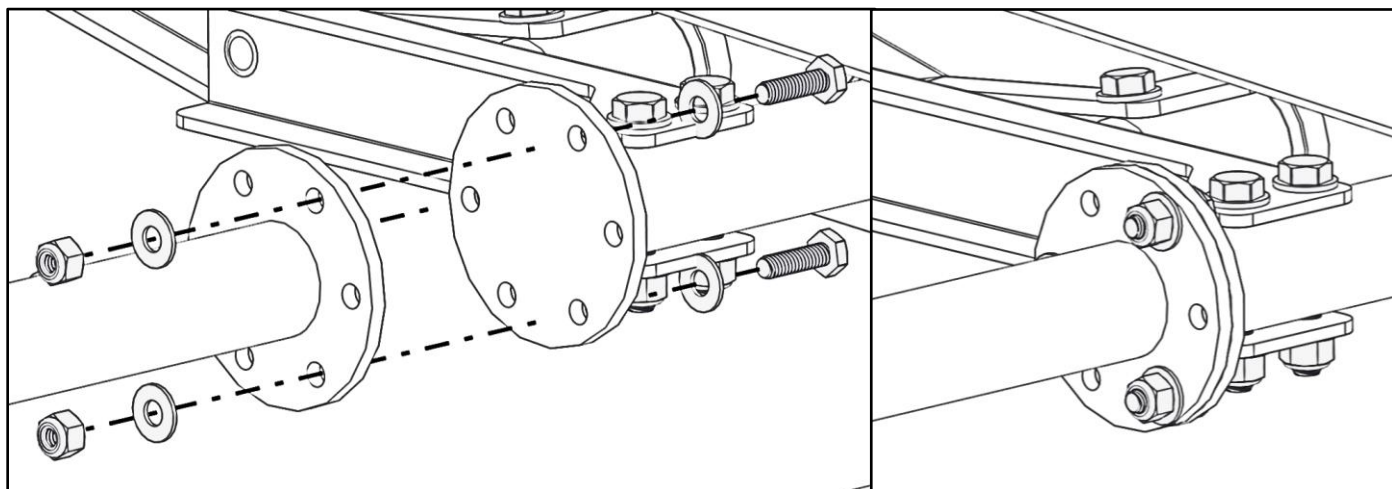


- If the distance is approximately 57", only the long torque tube will be needed. If the distance is approximately 82", the torque tube and the extension will be needed.



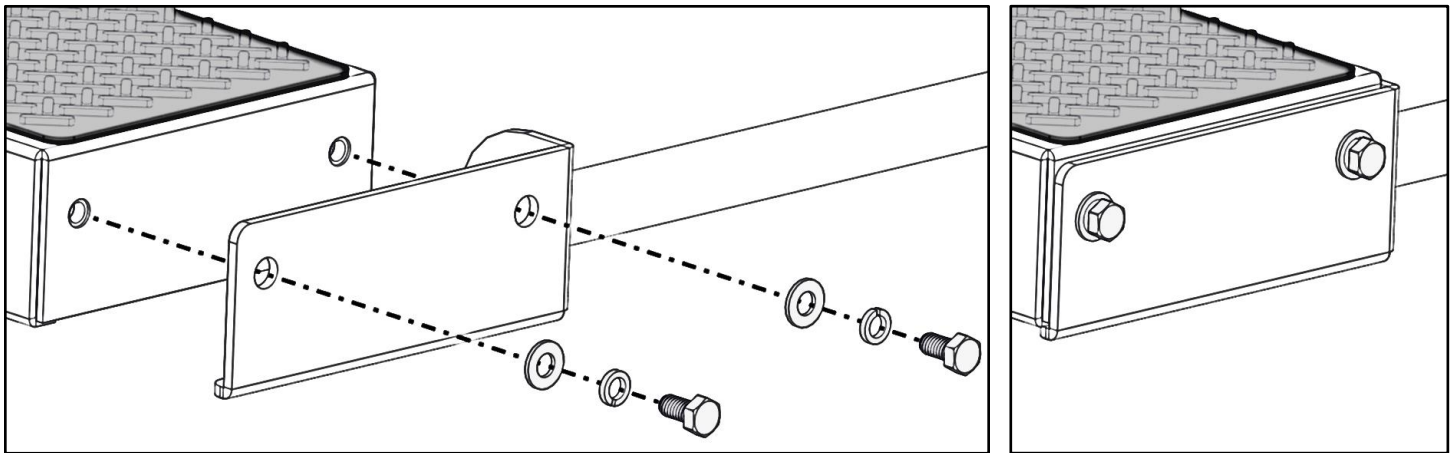
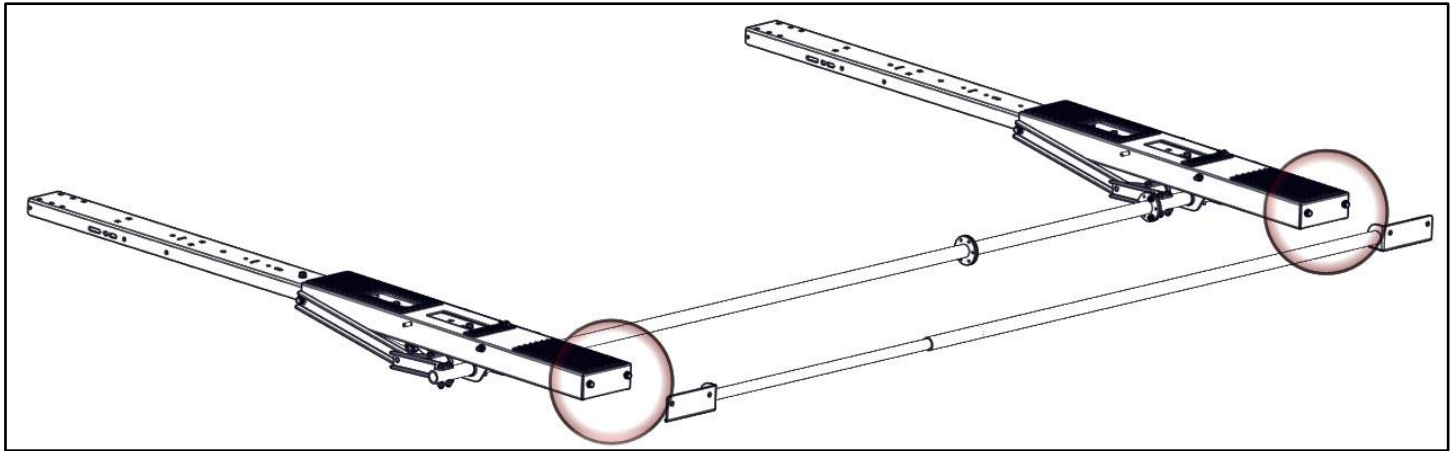
Note: The extension is being used in the picture below.

- Bolt the torque tube to the front and rear bow using 1/4" x 7/8" hex head bolts, 1/4" flat washers and 1/4" lock nuts.
- Repeat this process if the extension is being used.
- Snug tighten, but allow movement.



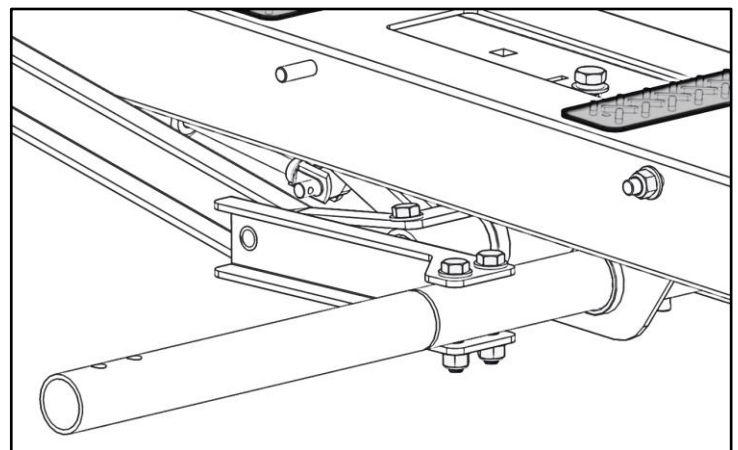
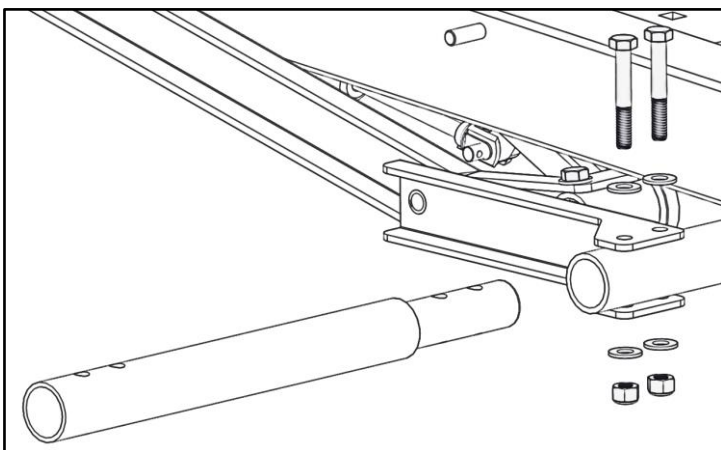
Step 4 – Install End Tube

- Bolt the end tube to the end of the pan on the front and rear bow using 5/16" x 3/4" hex head bolts, 5/16" lock washers and 5/16" flat washers.
- Snug tighten, but allow movement.

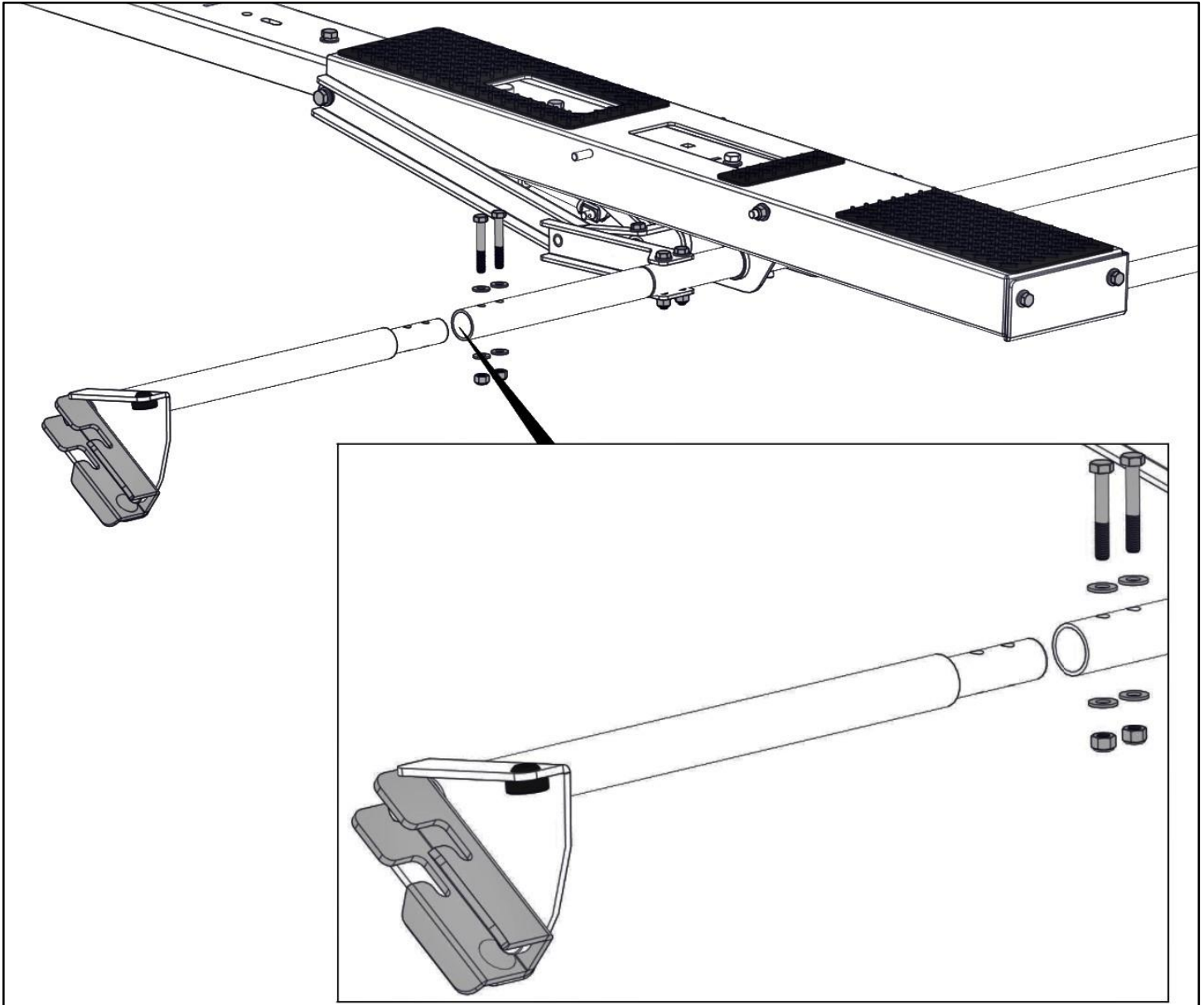


Step 5 – Install Actuator

- Remove the hardware, as shown, from the tube on the rear bow.
- Insert actuator extension into the tube and attach using the previously removed hardware.



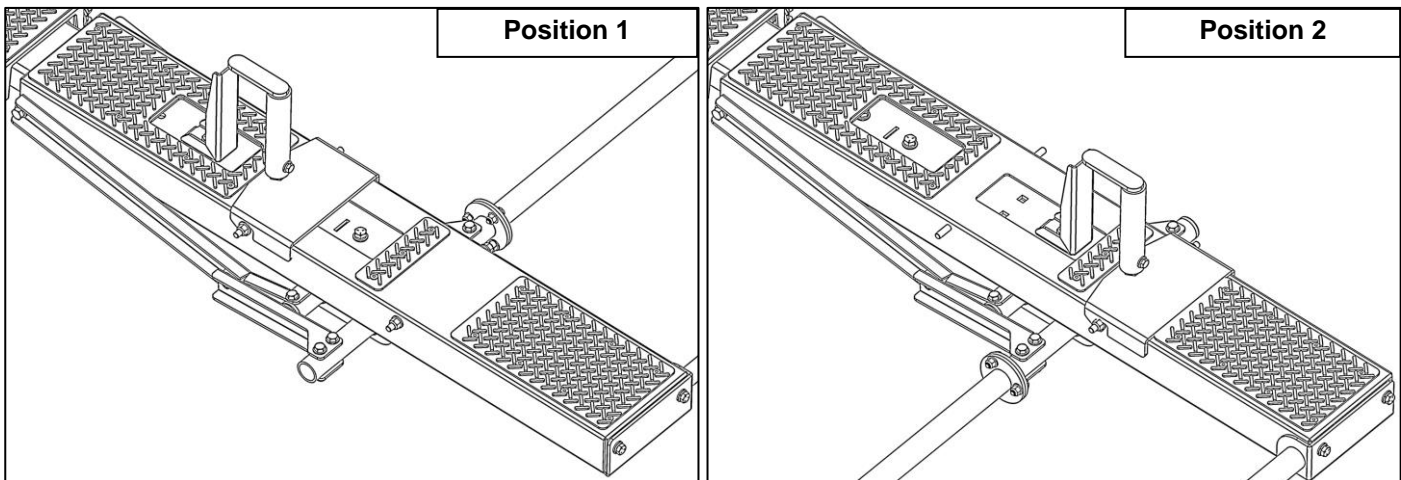
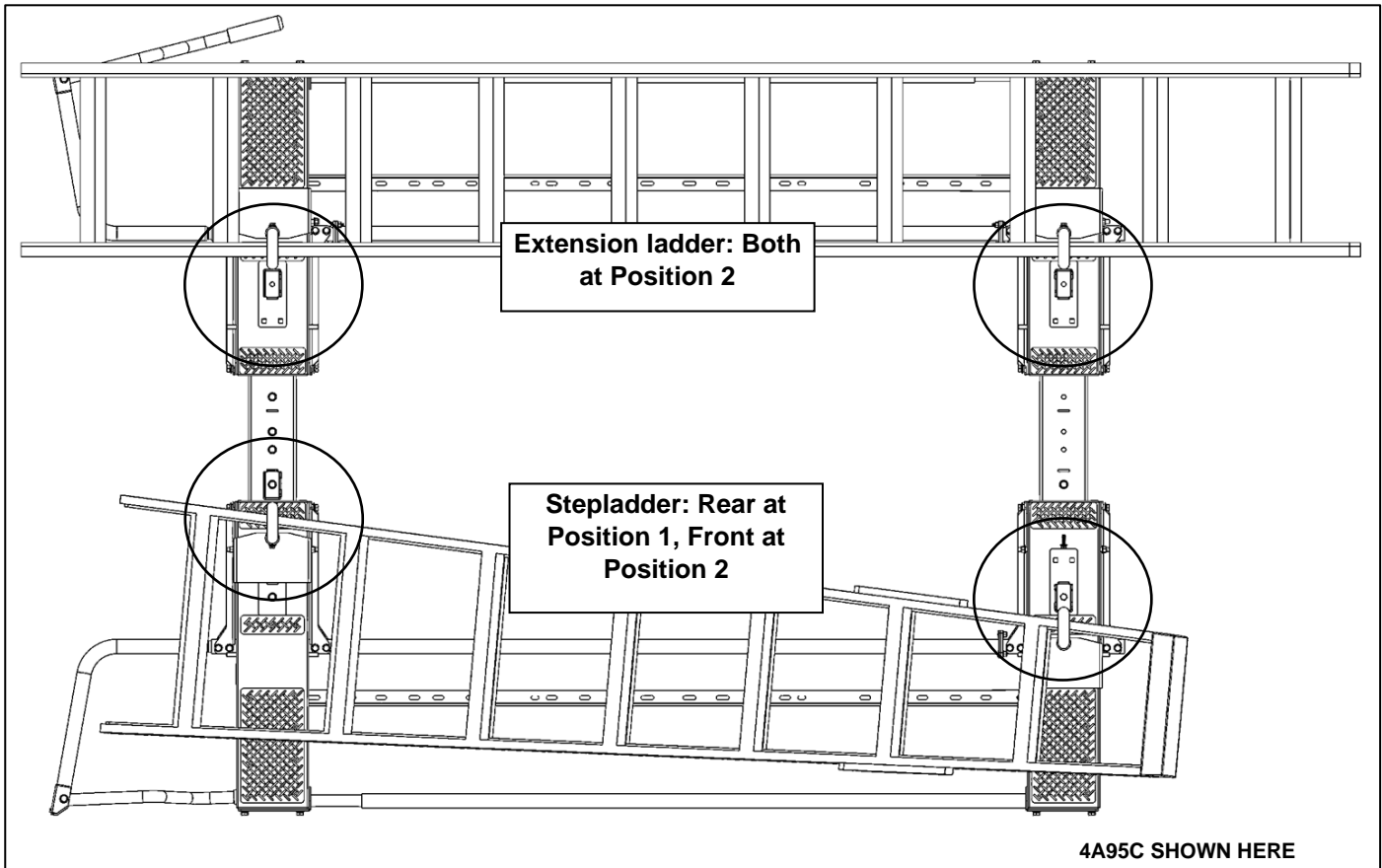
- Insert actuator assembly into the end of the actuator extension as shown below.
- Bolt into place using two 5/16" x 1-3/4" hex head bolts, four 5/16" flat washers and two 5/16" lock nuts.
- Tighten.



Step 6 – Determine Ladder Stop Locations

NOTE: On side of each bow, there are two positions available for mounting the ladder stops and ladder hooks based on the size and type of ladder. Ladder stops may be installed either further inboard or further outboard, depending on the ladder to be used. It is best to determine the size and type of ladder prior to installing the ladder stops and ladder hooks. The following are examples of a typical 8 foot stepladder and 10 foot extension ladder mounted on the drop down ladder rack.

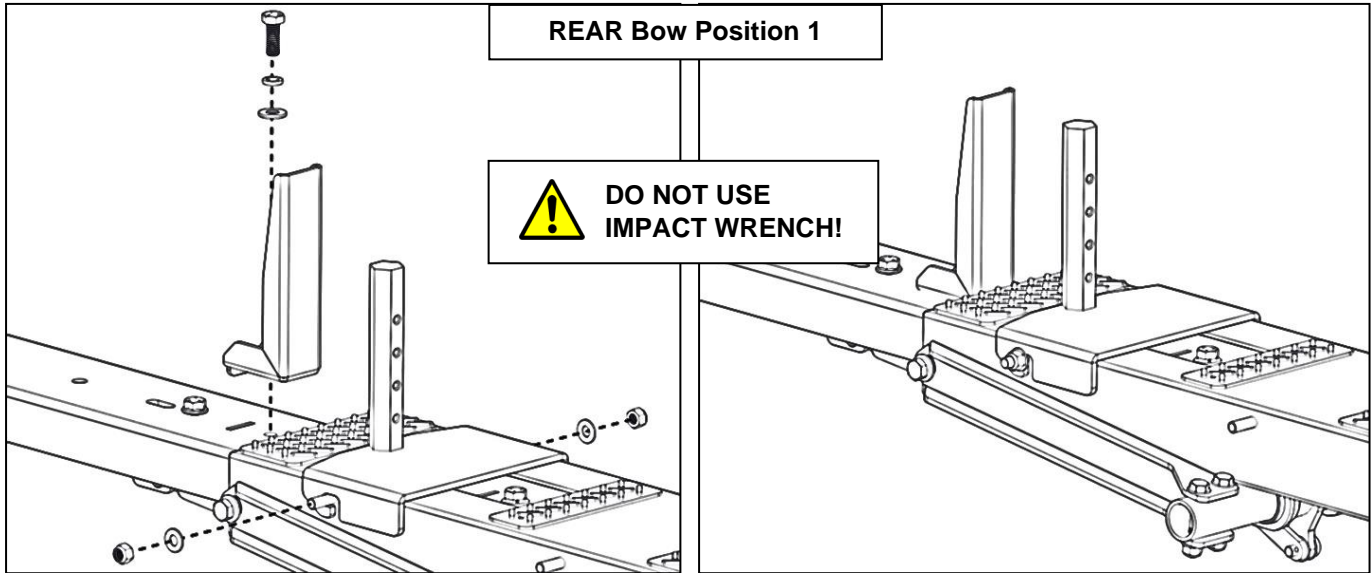
The following are the two positions available on each bow.



Position 1

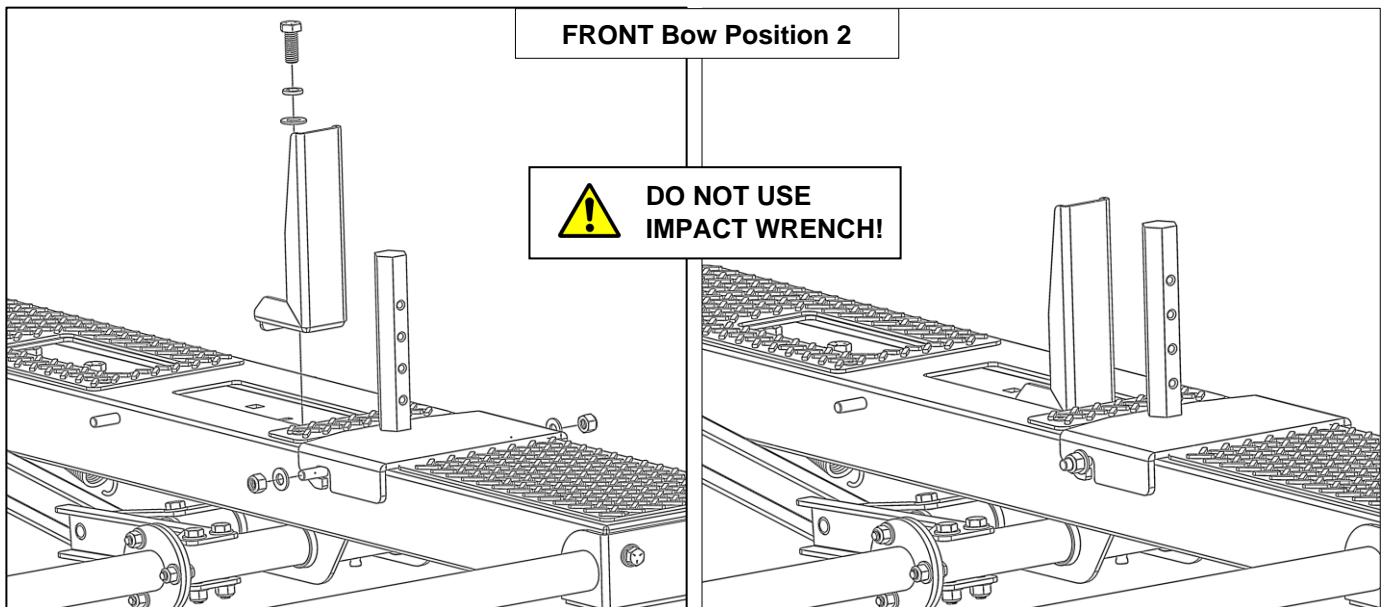
- For each ladder hook in this position, place the ladder hook base around the threaded studs in the desired location and tighten.
- For both the front and rear bow, remove the existing 3/8" x 1" hex head bolt, a 3/8" lock washer and a 3/8" flat washer.
- Position the ladder stop near the ladder hook base, as shown, with the flange on ladder stop aligned with the slot in the bow.

- Install ladder stop and tighten.



Position 2

- For each ladder hook in this position, place the ladder hook base around the threaded studs in the desired location and tighten.
- Position the ladder stop near the ladder hook base, as shown, with the flange on ladder stop aligned with the slot in the bow.
- Remove the existing 3/8" x 1" hex head bolt, a 3/8" lock washer and a 3/8" flat washer.
- Bolt the ladder stop in place using the removed hardware in the orientation shown.



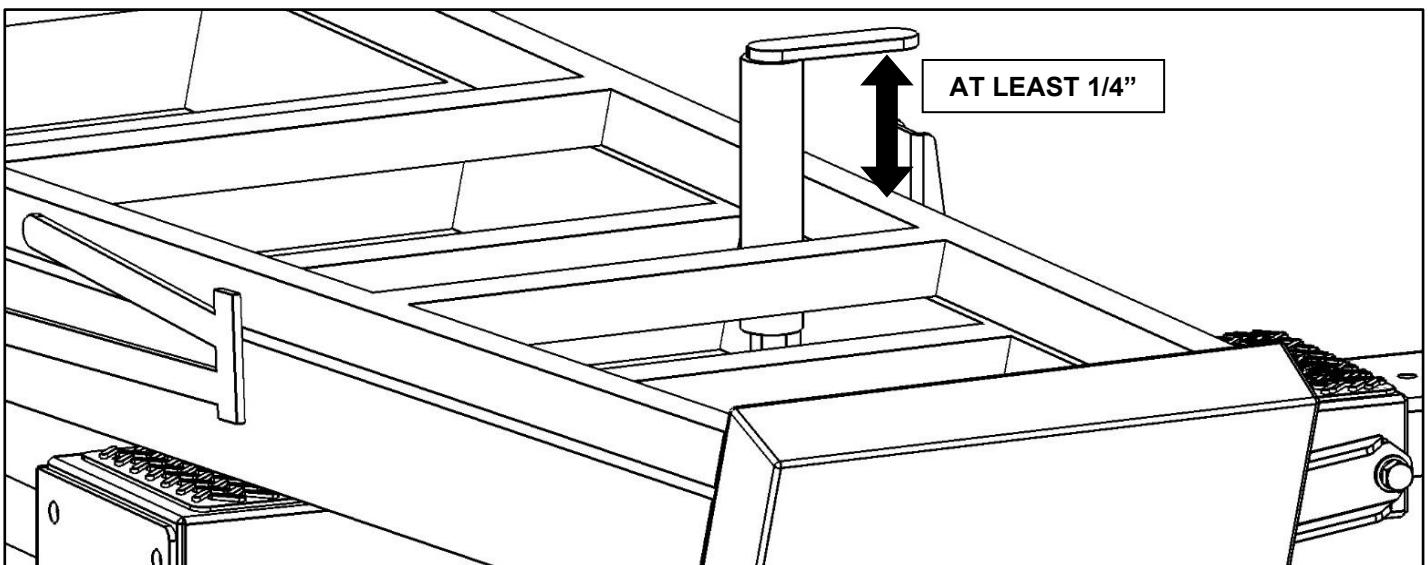
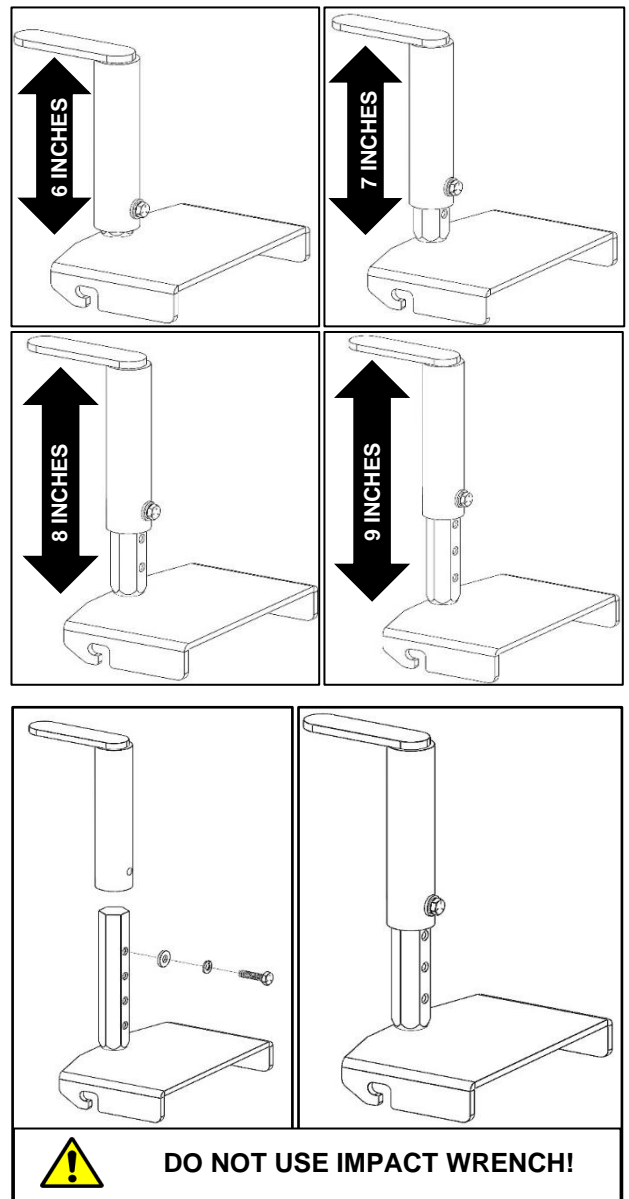
Step 7 – Assemble Ladder Hooks

Note: Before use the ladder hook must be adjusted to an appropriate height for the ladder that will be used. The height of the hook needs to be at least 1/4" greater than the ladder. The ladder should fit loosely on the hook, not snug.

- Measure the thickness of the ladder that will be used and determine the appropriate mounting hole on the ladder hook weldment that will allow for a loose fit.
- **Be sure the height of the hook is AT LEAST 1/4" GREATER THAN the thickness of your ladder.**
- If you are unsure of the thickness of the ladder that will be used, set the height of the hook to the highest setting (9 inches) and adjust it later.

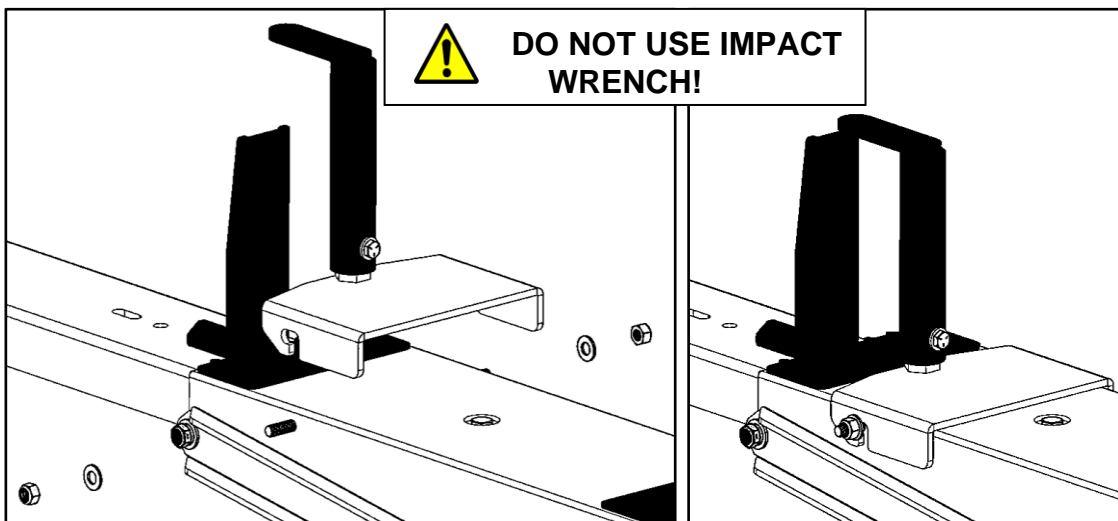
NOTE: Roof height clearance is affected by the hook mounting location used. Please verify and be aware of the total height of the vehicle with rack installed.

- Using a 1/4" x 1" hex head, a 1/4" lock washer and a 1/4" flat washer, bolt ladder hook assembly to ladder hook weldment using the previously determined mounting location.
- Tighten.



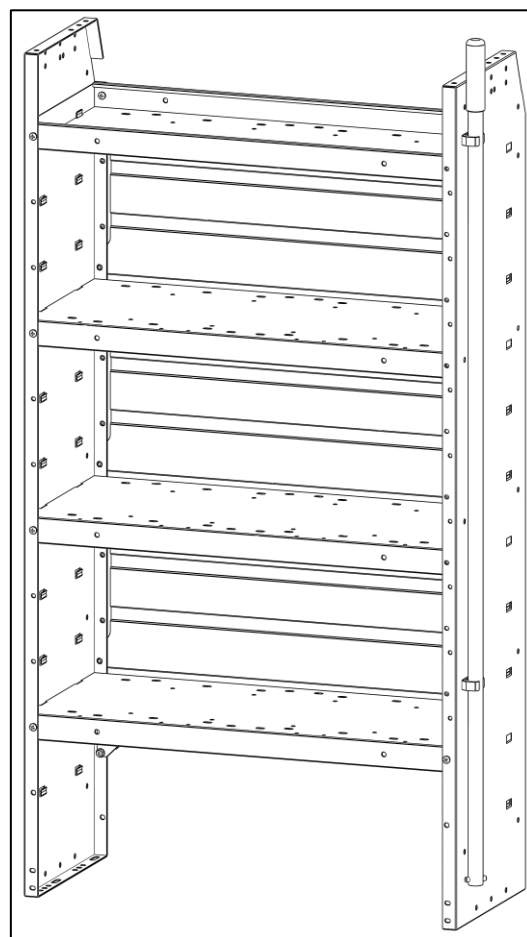
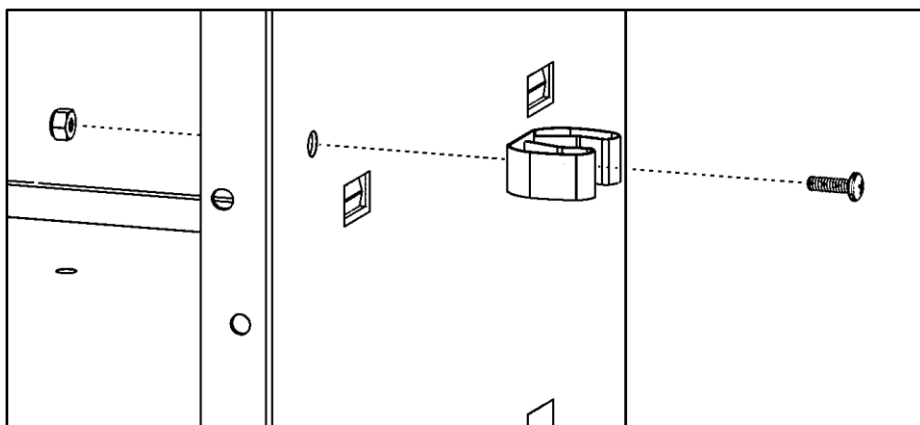
Step 8 – Install Ladder Hooks

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



Step 9 – Install Clips for Handle

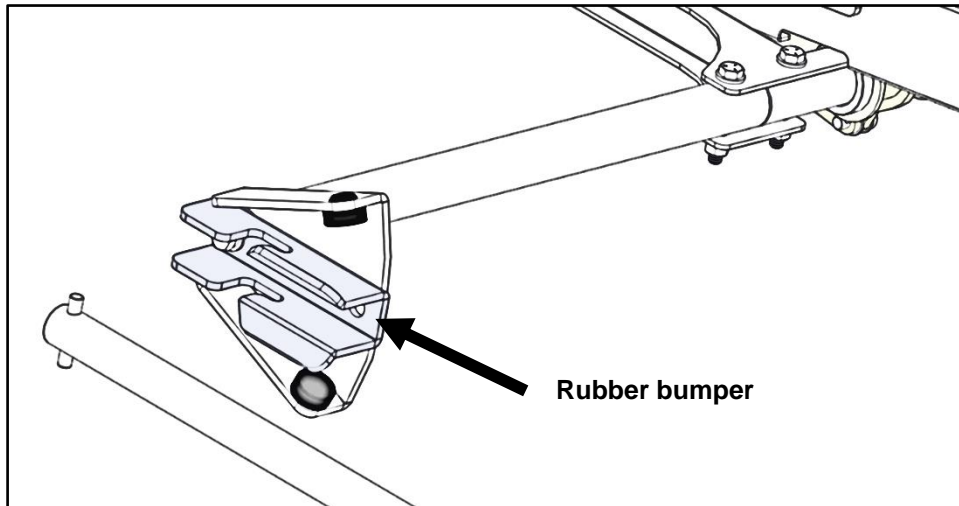
- Locate a good mounting place to install the upper clip for the handle. We recommend placing towards the rear of the van on the rear panel of a shelf.
- Place the upper clip on the handle.
- Place the handle against the shelf in the desired location.
- Mark the holes onto the shelf.
- Drill the locations using a 7/32" drill.
- Attach clip using #10 x 5/8" pan head screws and #10 nut.
- Repeat for second clip.
- TIGHTEN.



GO BACK AND ENSURE ALL HARDWARE IS TIGHT.

Step 10 – Test Ladder Rack

- Prior to installing a ladder, place the long handle into the handlebar assembly and test that the ladder rack mechanism works correctly.
- Actuating handle requires pushing handle against rubber bumper built into operator arm.
- If necessary, re-align and re-square rack.



ASSEMBLY AND INSTALLATION IS NOW COMPLETE

