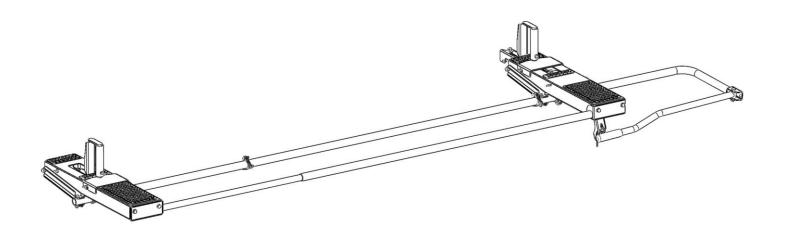
# Holman

## Instruction Guide 4A96L



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InstallationSupport@Holman.com

20241023R3 DATE: \_\_\_\_\_



#### 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**

1/2" Wrench and Socket	3/8" Wrench and Socket
9/16" Wrench and Socket	7/16" Wrench and Socket

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#### **Before You Begin**

- Read all instructions prior to assembling or installing any Holman product.
- Always locate your installation locations prior to performing any work.
- Have rack already installed on vehicle. This product is a driver side drop down addition.



#### **Parts**

ITEM	PART NUMBER	DESCRIPTION	QTY.
	4A93L-10	Ladder Pan and Arms Assembly	2
	4A93L-11	Cam/Damper/Bra cket Assembly	1
	4A93L-12	Front Short Torsion Tube Bracket Assembly	1
	4A93L-50	WELDMENT, TORQUE TUBE, STEEL, 71.5" SPACING, LOW ROOF DROP DOWN	1
	4A93L-7	Support Tube Assy	1
	4A93L-71	ASSEMBLY, HANDLE, LOW ROOF DROP DOWN	Ī
	4A900-50	Damper Bracket Assembly	1
	4A93L-51	WELDMENT, TORQUE TUBE, STEEL, EXTENSION, LOW ROOF DROP DOWN	1
	4A93L-45	ASSEMBLY, LATCH, HANDLE, LOW ROOF DROP DOWN	1
	4A900-35	Ladder Hook	2
	4A900-36	Base Ladder Hook Weldment	2
	4A900-30-004	Ladder Stop	2
	18-4A96L	Assembly Bolt Kit	1



#### **Hardware**

NO.	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1			1"X5/16" RUBBER BUMPER	2
2			WHEEL, POLYURETHANE, 2 1/4" X 9/16"	4
3			AXLE	2
4		92418A225	BOW TIE COTTER PIN	1
5	2.00	0156744	PIN, CLEVIS, 5/16 X 2"	1
6			SPACER, PLASTIC, 5/16" ID, .72 L	1



#### **Hardware (Continued)**

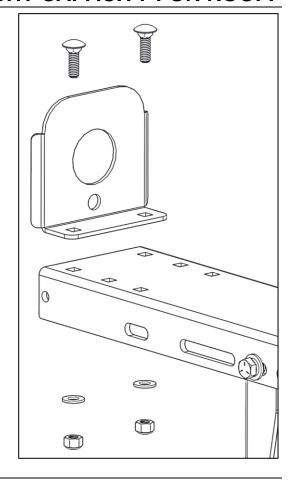
NO.	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
7			.05X.34X.75 NYLON WASHER	6
8			BOLT, HEX, 1/4-20 X	11
9			.25 FLAT WASHER	20
10			NUT, NYLOC, 1/4-20	9
11			1/4 LOCK WASHER	2
12			3/8" FLAT WASHER	8
13			WASHER, LOCK, 3/8	6
14			BOLT, HEX, 3/8-16 X .75"	4
15			.375-16 X 1 HH	3
16			3/8-16 NYLOC NUT	1
17		21811	5/16"-18 X 1" CARRIAGE BOLT	2
18		0169777	5/16"-18 LOCK NUT	2
19		11545144	5/16" FLAT WASHER	2
20		60ML	SEALANT	1



#### DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF.

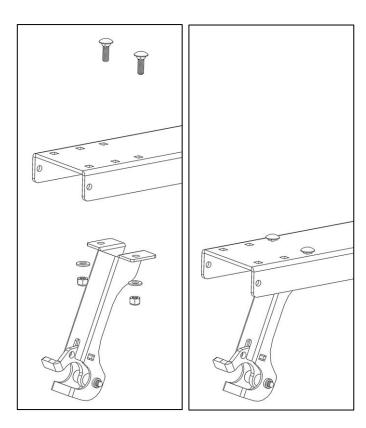
#### Step 1 - Remove End Stops

- If installed, remove end stops at the end of each bow, opposite from the passenger side pan mechanism.
- · Repeat for both bows.



#### Step 2 - Install Latch Assembly

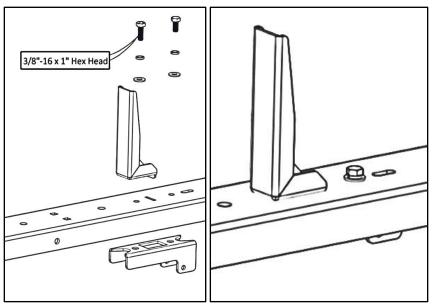
- At the end of the rear bow, mount latch assembly in the squares shown.
- Use the 3rd set of square holes from the end of the bow.
- Mount using two 5/16" x 1" carriage bolts, two 5/16" flat washers and two 5/16" lock nuts.





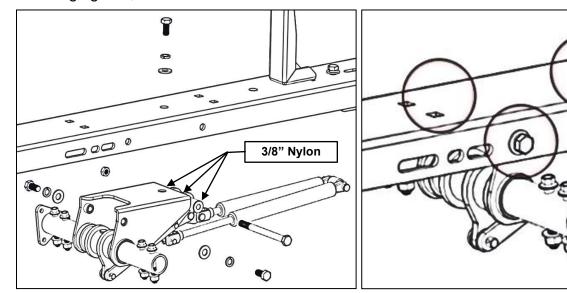
#### Step 3 - Install Rear Bow Damper Mount

- Mount damper mount to the underside of the rear bow in the location shown.
- Mount the ladder stop on the top side of bow.
- When installing the ladder stop, be sure to use the longer, 3/8" x 1" hex head bolt, a 3/8" lock washer and 3/8" flat washer.
- At the other location, fasten using 3/8" x 3/4" hex head bolt, 3/8" lock washer and 3/8" flat washer.
- Snug tighten, but allow movement.



#### Step 4 – Install Rear Bow Damper Mechanism

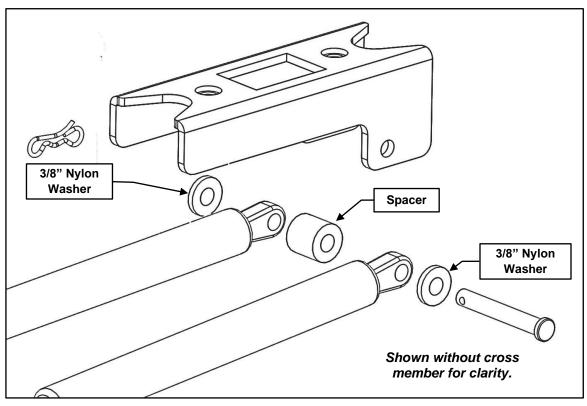
- Mount damper mechanism to the underside of the rear bow in the location shown.
- Use the existing hardware found in the damper mechanism to mount.
- While using the 3/8" x 4-1/2" hex head bolt. Be sure not to lose the nylon washers.
- Snug tighten, but allow movement.

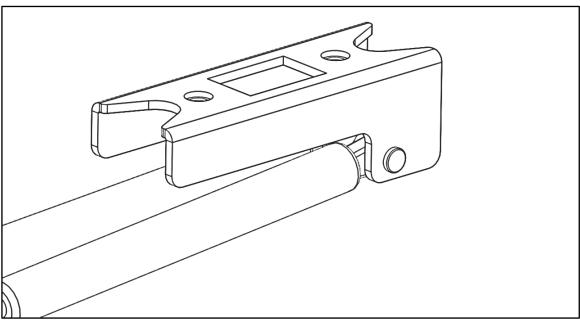




#### Step 5 - Install Dampers

- Install the end of damper to the damper mount using clevis pin, two nylon washers, a plastic spacer and a cotter pin in the orientation shown. The plastic spacer goes in between two dampers. The nylon washers go between the dampers and the inside of the damper mount block.
  Be sure cotter pin is correctly fastened.
- In some situations, one may need to wait until handle assembly is installed to attach both ends of the dampers. This is so you can use the handle to help adjust the damper.

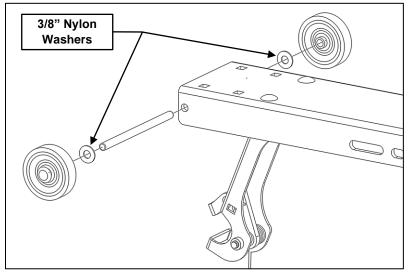


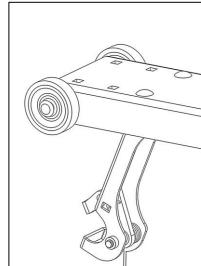




#### Step 6 - Install Rear Wheels

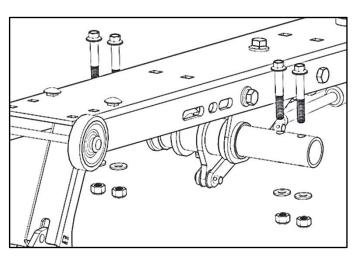
- Slide wheel axle in the end of the rear bow.
- Place a wheel on each end of the axle.
- While placing the pan on the next step, be sure the wheel caps DO NOT come off.

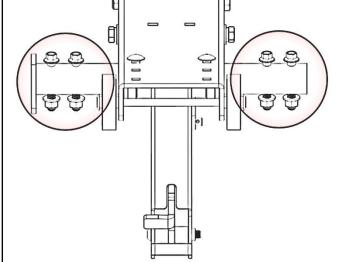


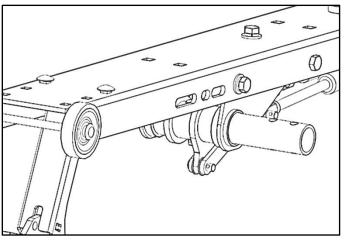


#### Step 7 - Install Rear Pan

• Remove hardware from the installed damper mechanism from step 4.

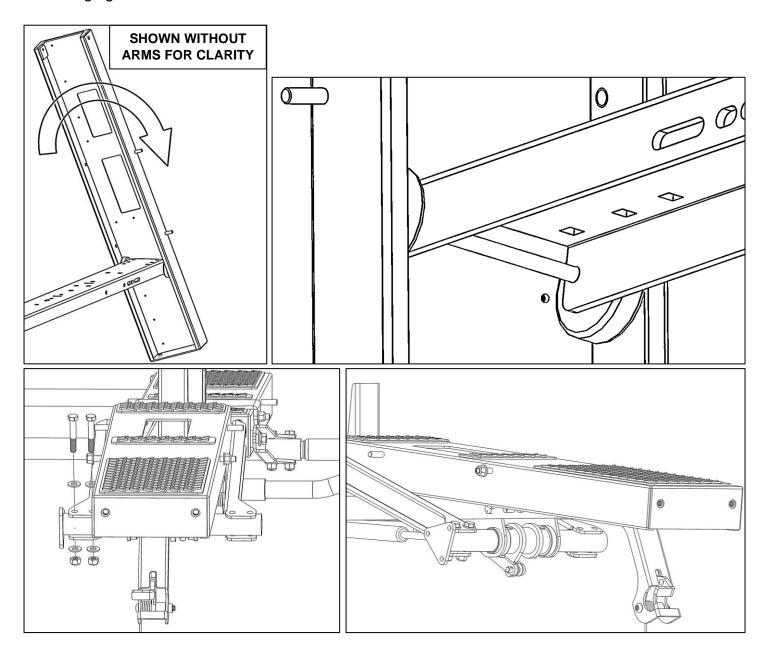








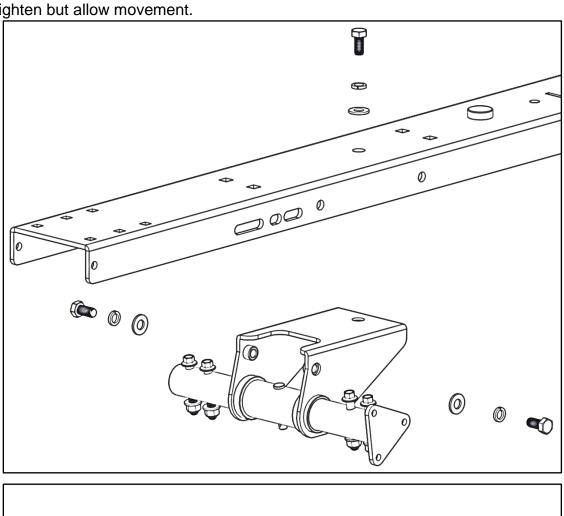
- Rotate the pan perpendicular to the top bow and at a slight angle as shown.
- Manuever the pan around the wheels. Be sure the wheel caps DID NOT come off.
- Align the arms from the pan with the holes in the damper mechanism where the bolts were previously removed.
- Bolt together using previously removed hardware. Only mount the front two bolts, leaving the holes to the rear as shown empty. The empty holes are for the handle installation.
- Snug tighten but allow movement.

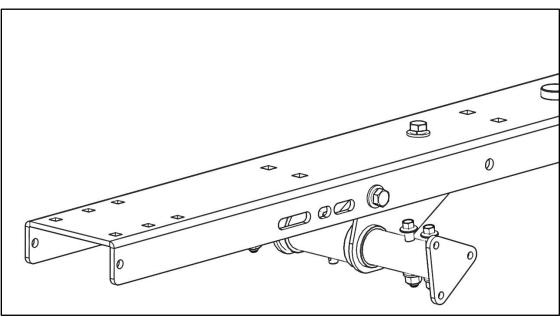




#### <u>Step 8 – Install Front Pan Mechanism</u>

- Mount mechanism to the underside of the front bow in the location shown. This is the mechanism that **DOES NOT** have the dampers.
- Use the existing hardware found in the mechanism to mount.
- Snug tighten but allow movement.



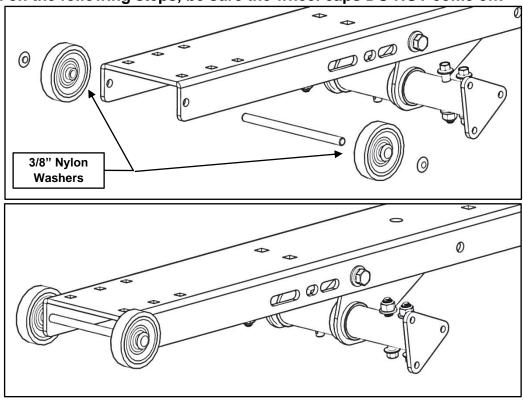




#### **Step 9 – Assemble Front Wheels**

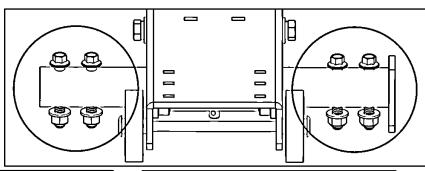
• To install wheel assembly, slide wheel axle in the end of the front bow, then place a wheel on the end of each axle.

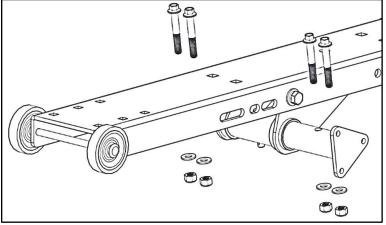
While placing the pan on the following steps, be sure the wheel caps DO NOT come off.

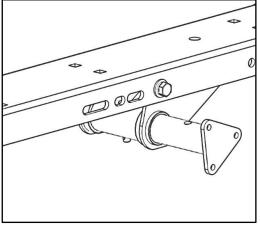


#### Step 10 - Remove Bolts

 Remove 5/16" x 2" hex head bolts, 5/16" flat washers, and 5/16" lock nuts from the previously installed mechanism from Step 8.



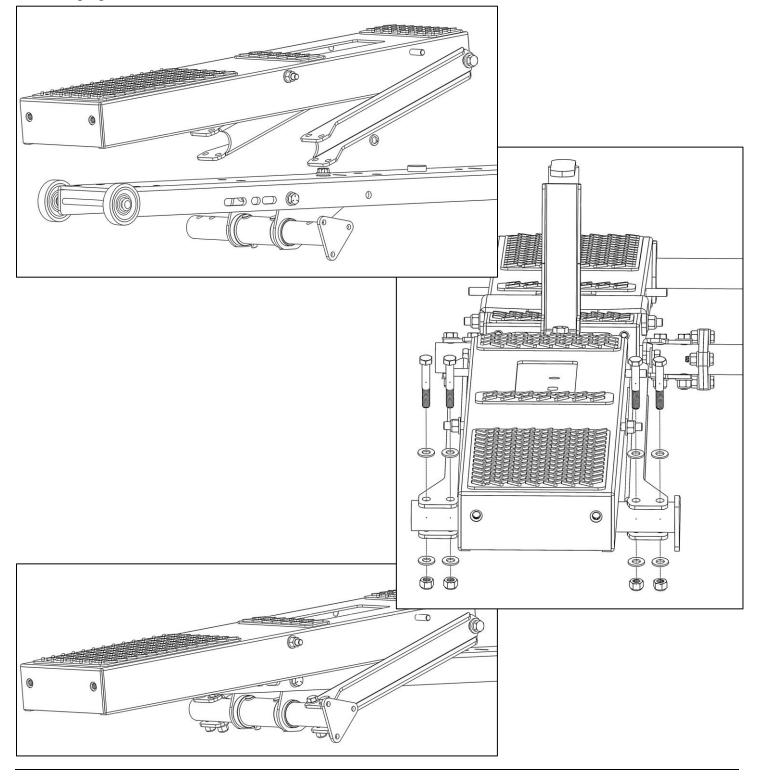






#### **Step 11 – Install Front Pan**

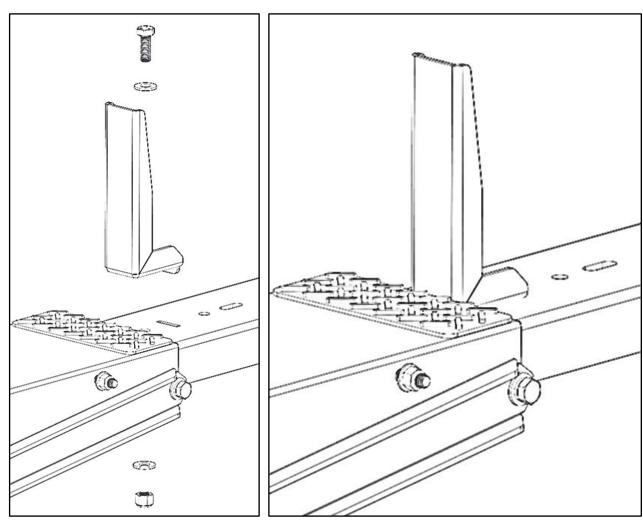
- Place front pan on top of wheels and bow in the same way as the rear pan. Be sure the wheel caps DID NOT come off.
- Align the arms from the pan with the holes from the mechanism where the bolts were previously removed.
- Bolt together using previously removed hardware.
- Snug tighten, but allow movement.





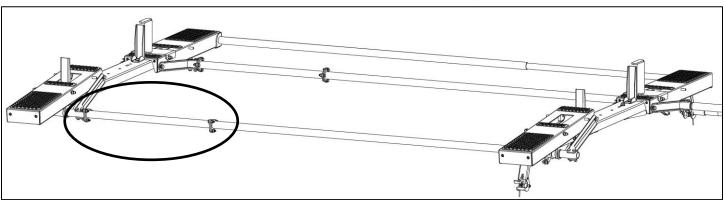
#### **Step 12 – Install Front Bow Ladder Stop**

- Bolt ladder hook to the front bow in the orientation shown.
- Be sure to have the flange of the hook line up with the slot on the bow.
- TIGHTEN.



#### **Step 13 – Determine if Extension is Required**

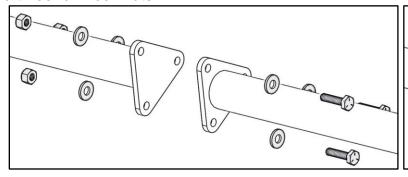
• Determine if the extension will be needed. Look at the passenger side of rack.



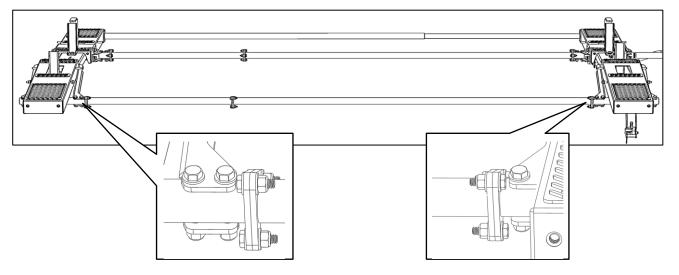


#### **Step 14 – Attach Torque Tube**

- Bolt one end of torque tube to front or rear bow using three 1/4" x 1" hex head bolts, six 1/4" flat washers and three 1/4" lock nuts.
- Repeat on opposite end.
- If the extension is needed, follow these same instructions to attach torque tube to extension.

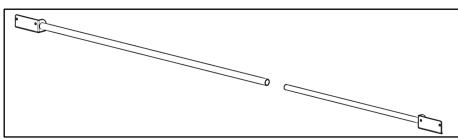


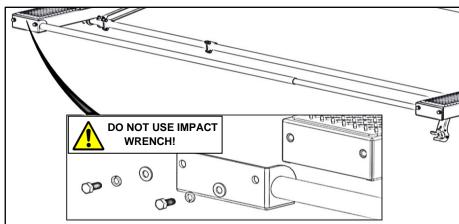
TIGHTEN



#### Step 15 - Install End Tube

- Assemble end tube and place at the end of each bow.
- Bolt into place using 3/8" x 3/4" hex head, 3/8" lock washer and 3/8" flat washer.
- Repeat at front and rear bow.
- TIGHTEN.







#### **Step 16 – Assemble Ladder Hooks**

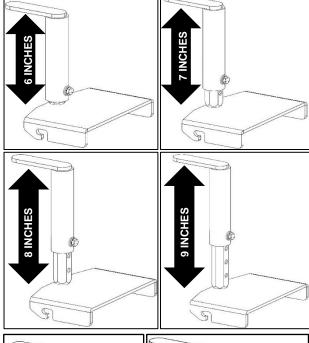
Note: Before use the ladder hook must be adjusted to an appropriate height for the ladder that will be used. The height of the hook needs to be at least 1/4" greater than the ladder. The

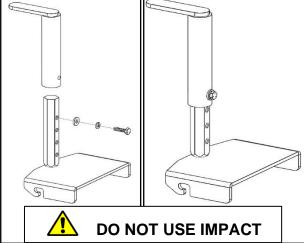
ladder should fit loosely on the hook, not snug.

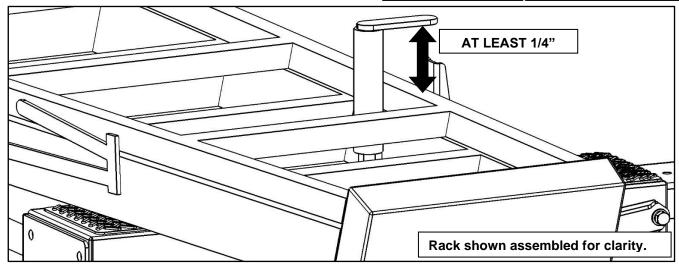
- Measure the thickness of the ladder that will be used and determine the appropriate mounting hole on the ladder hook weldment that will allow for a loose fit.
- Be sure the height of the hook is AT LEAST 1/4" GREATER THAN the thickness of your ladder.
- If you are unsure of the thickness of the ladder 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.



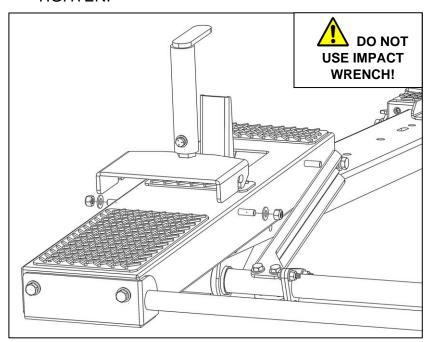


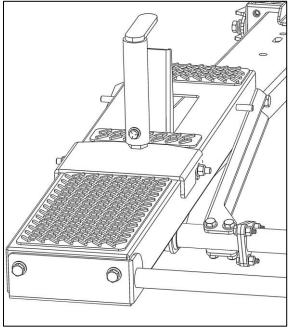


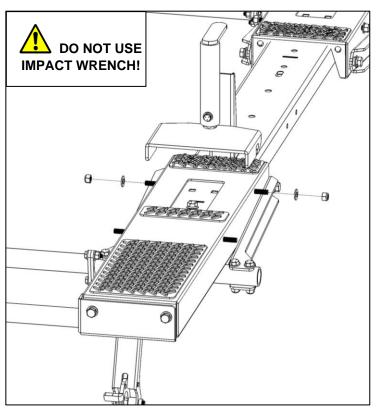


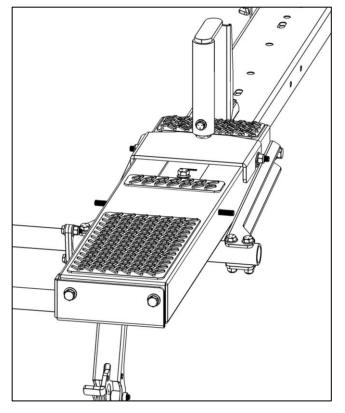
#### **Step 17 – Install Ladder Hooks**

- Using the hardware and installed studs on the bows, loosen the nuts and slide ladder hook into place. Be sure the washers are on the outside of the ladder hook.
- TIGHTEN.





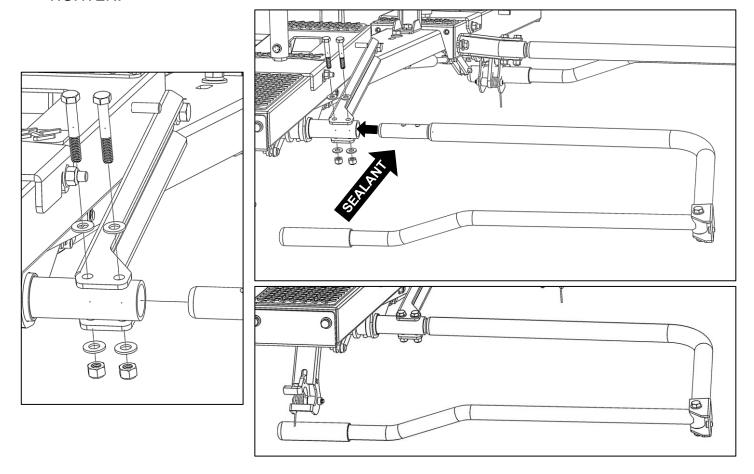






#### **Step 18 – Install Handle**

- Be sure to place sealant along swage joint.
- Using the hardware removed in Step 3, insert handle into swage on the rear bow.
- TIGHTEN.



### GO BACK AND TIGHTEN ALL BOLTS FROM PREVIOUS STEPS.

BE SURE HARDWARE IN MOUNTING IS TIGHT.

YOUR INSTALLATION IS NOW COMPLETE.