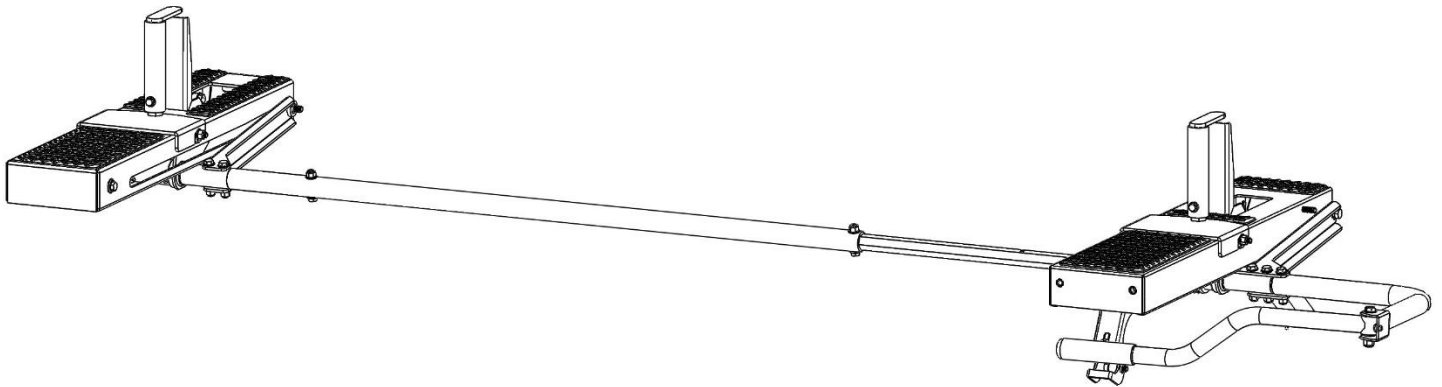


Holman

Instruction Guide 4A943



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

1/2" Socket and Wrench	3/8" Socket and Wrench
7/16" Socket and Wrench	Tape Measure

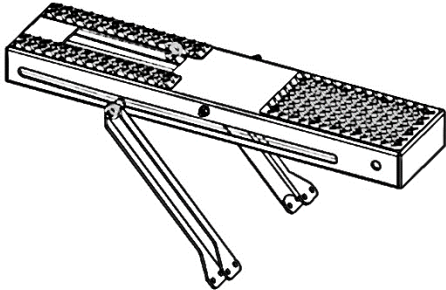
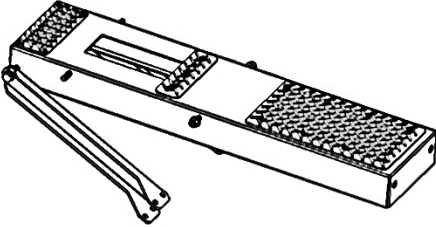
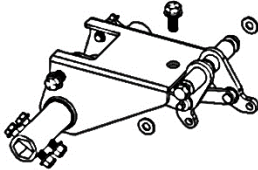
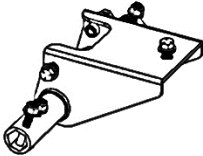
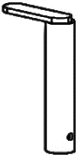
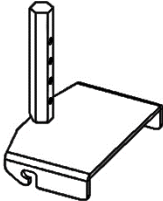
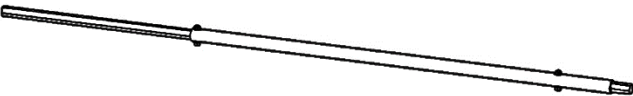


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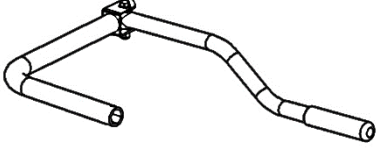
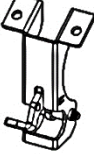

Before You Begin

- Read all instructions prior to assembling or installing any Holman product.
- **Always locate your installation locations prior to performing any work.**
- **Have rack with bows installed on vehicle prior to installing this rack add-on.**

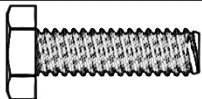

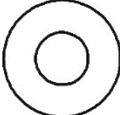

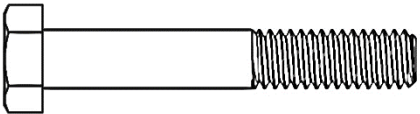
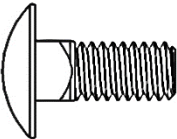

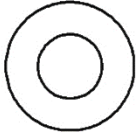
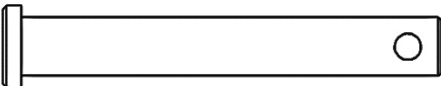
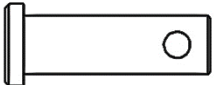

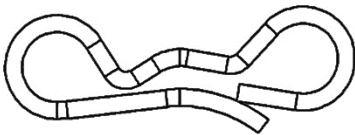

Parts List

NO.	ITEM	PART NUMBER	DESCRIPTION	QTY.
1		4A900-30-2	FRONT PAN ASM	1
2		4A900-30-4	REAR PAN ASM	1
3		4A900-11-1	DAMPER BRACKET ASM	1
4		4A900-11-2	BRACKET ASM	1
5		4A900-35	LADDER HOOK	2
6		4A900-36	BASE LADDER HOOK WELDMENT	2
7		4A900-20	HEX TUBE ASM	1
8		4A900-20-001	HEX BAR, TORQUE, COUPLER	1
9		AVM SD500ALUM	DAMPER - VEJPS190 "J" ORFICE	2


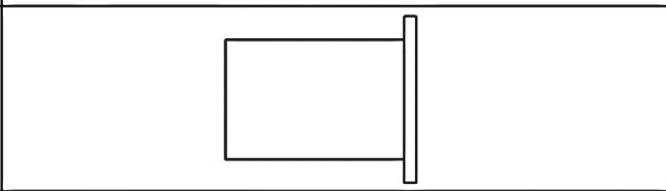
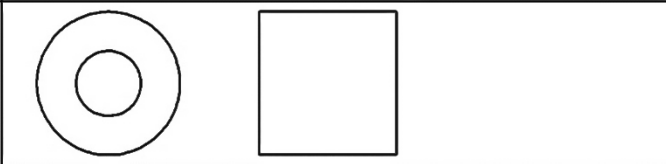
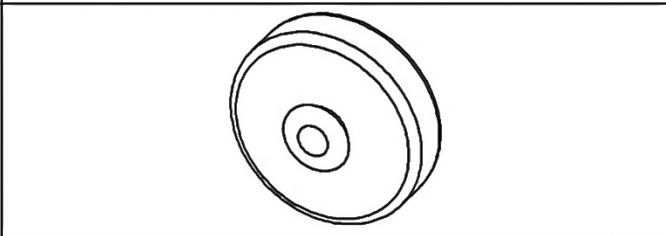
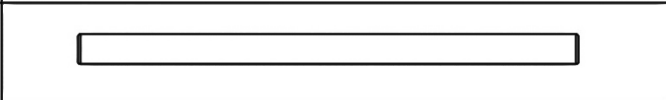
Parts (Continued)

NO.	ITEM	PART NUMBER	DESCRIPTION	QTY.
10		4A943-46	HANDLE ASM	1
11		4A92L-44	LATCH ASSY.	1
12		4A900-30-004	LADDER STOP	2
13		18-4A943	ASSEMBLY BOLT KIT	1

Hardware

ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		13004	1/4"-20 X 7/8" HEX HEAD BOLT	2
2		33618	1/4" LOCK WASHER	2
3		33078	1/4" WASHER	2
4			5/16-18 X 7" PTHH	1
5		11241182	5/16"-18 X 2" HEX HEAD BOLT	1
6		21810	5/16"-18 X 3/4" CARRIAGE BOLT	2
7		0169777	5/16"-18 LOCK NUT	4
8		33080	5/16" WASHER	6
9		0156744	5/16" X 2" CLEVIS PIN	1
10		0156919	5/16" X 3/4" CLEVIS PIN	2
11			.06X.34X.75 NYLON WASHER	2
12			5/16-3/8 BOW TIE COTTER PIN	3
13			1" OD RUBBER BUMPER, 1/2" HOLE, 5/16" THK	2

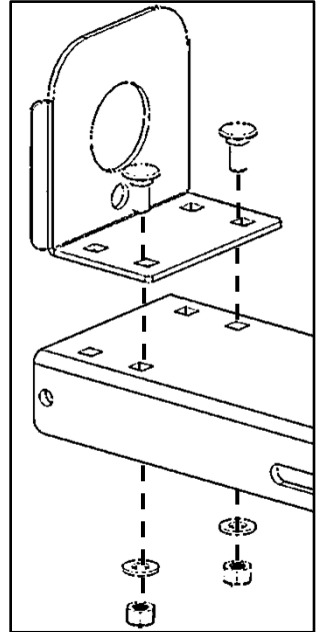
Hardware (Continued)

ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
14			5/16" X 3/8" X 1" SLEEVE	2
15		2938T39	1" FLANGED BEARING FOR 3/8" SHAFT	2
16			.340" ID X 3/4" OD X .72" L PLASTIC SPACER	1
17		9960T26 (1:2 SCALE)	RUBBER WHEEL, 2-1/4" OD X 9/16" W	2
18		(1:2 SCALE)	AXLE	1
19		SEALANT - 60ml	SEALANT	1

DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF!

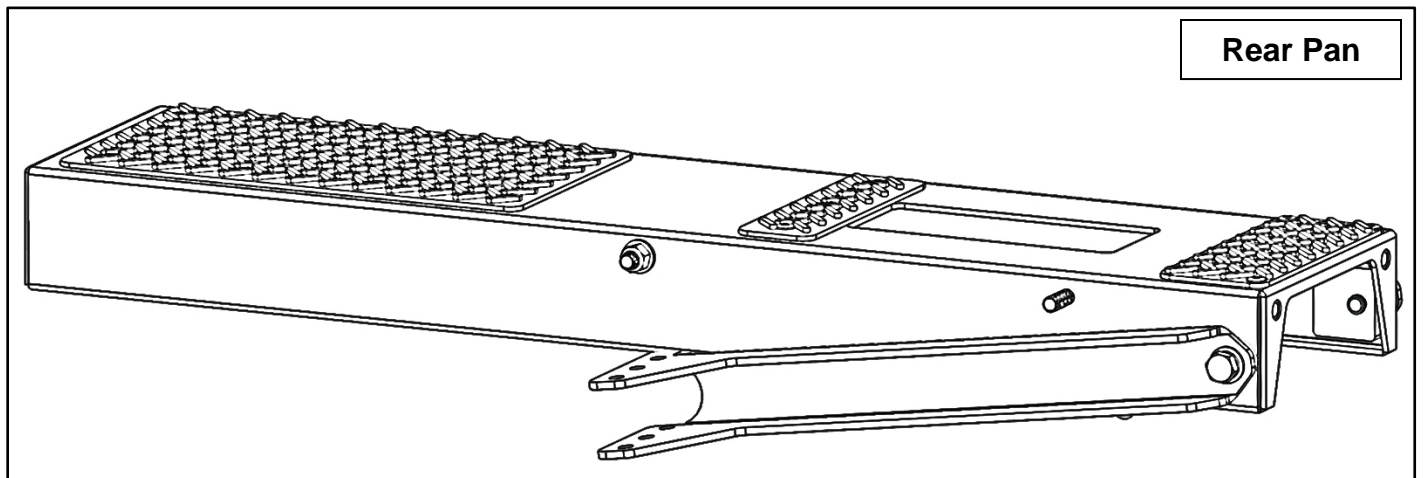
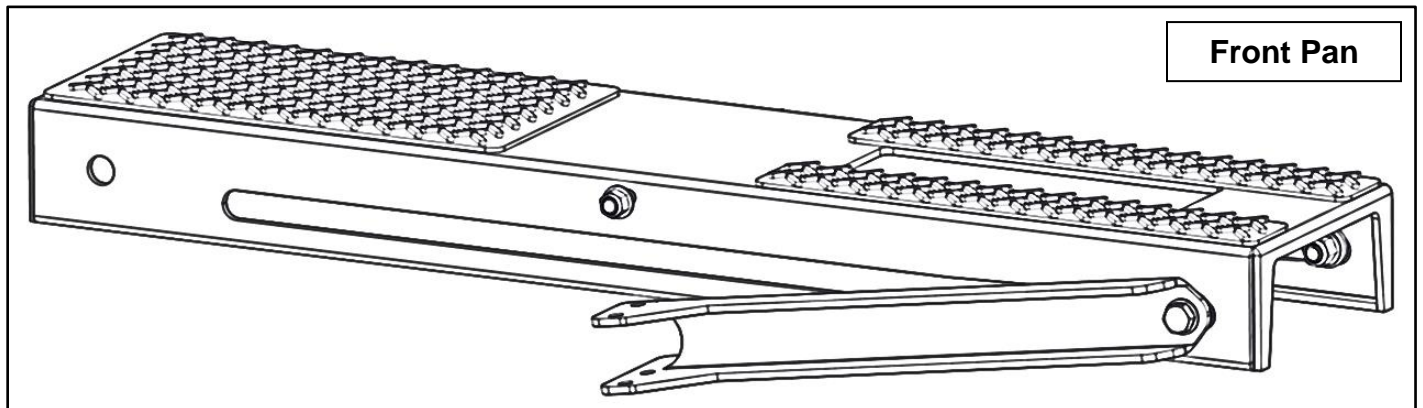
Step 1 – Remove End Stops

- If installed, remove end stops at the end of each bow, opposite from the pan mechanism.
- Repeat for second bow.



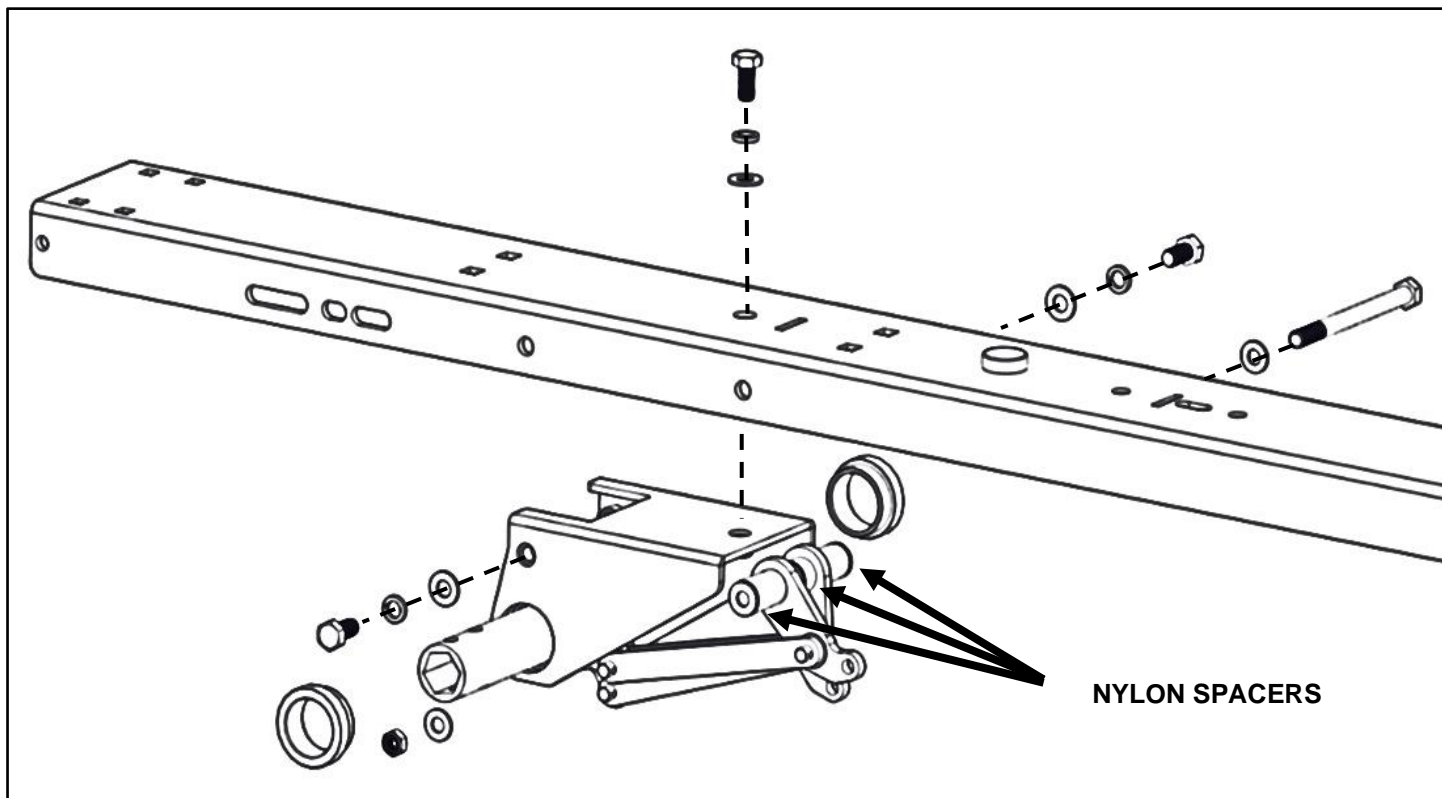
Step 2 – Determine Front and Rear Pan

The front pan will have a slot in the pan.

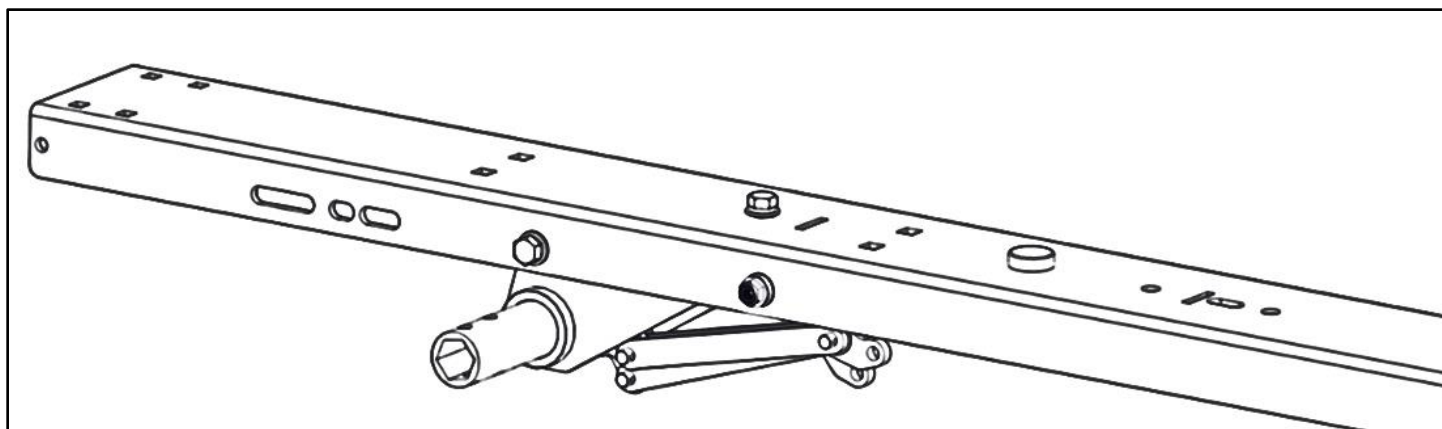


Step 3 – Mount Cantilever Mechanism

- Using existing hardware attached to damper bracket assembly, mount cantilever mechanism to the under side of the rear bow in the location shown. **Be sure the two bushings are in place. The 4-3/4" bolt will get nylon spacers near the moving parts.**
- Snug tighten, but allow movement.

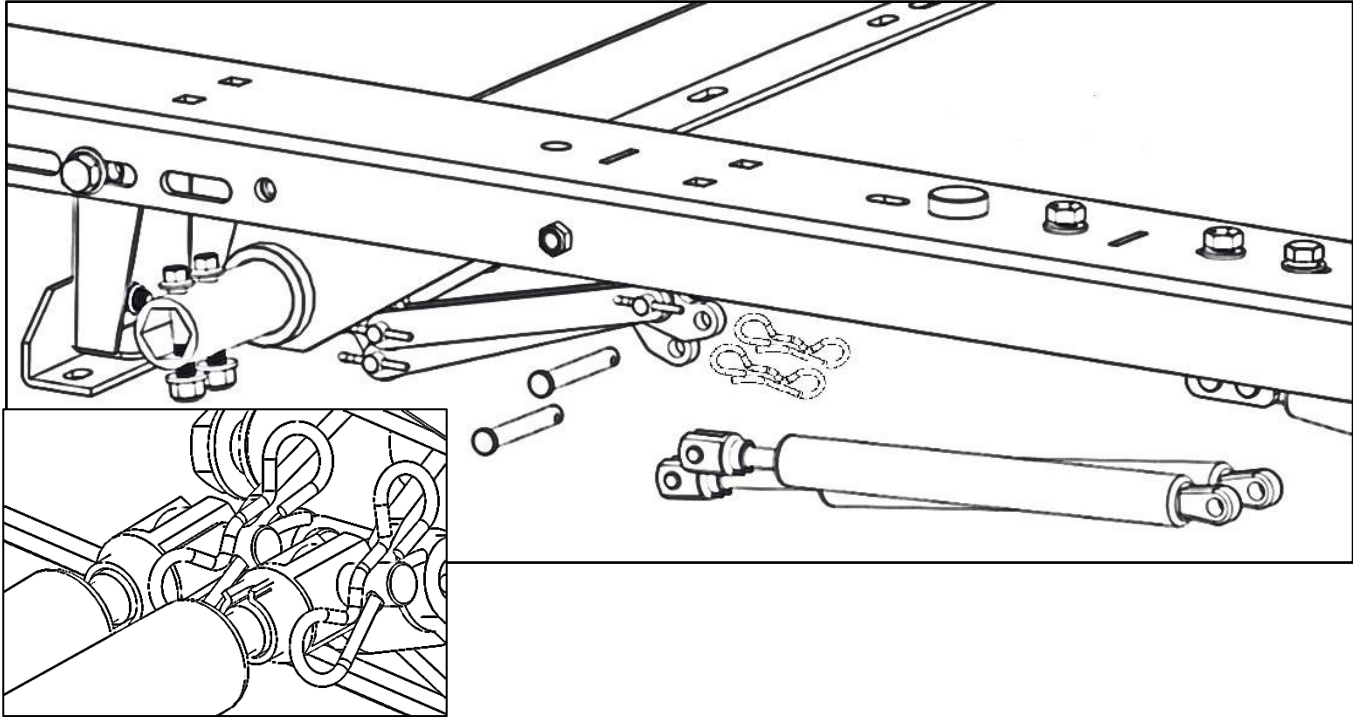


NOTE: Removing foot may make installation easier.

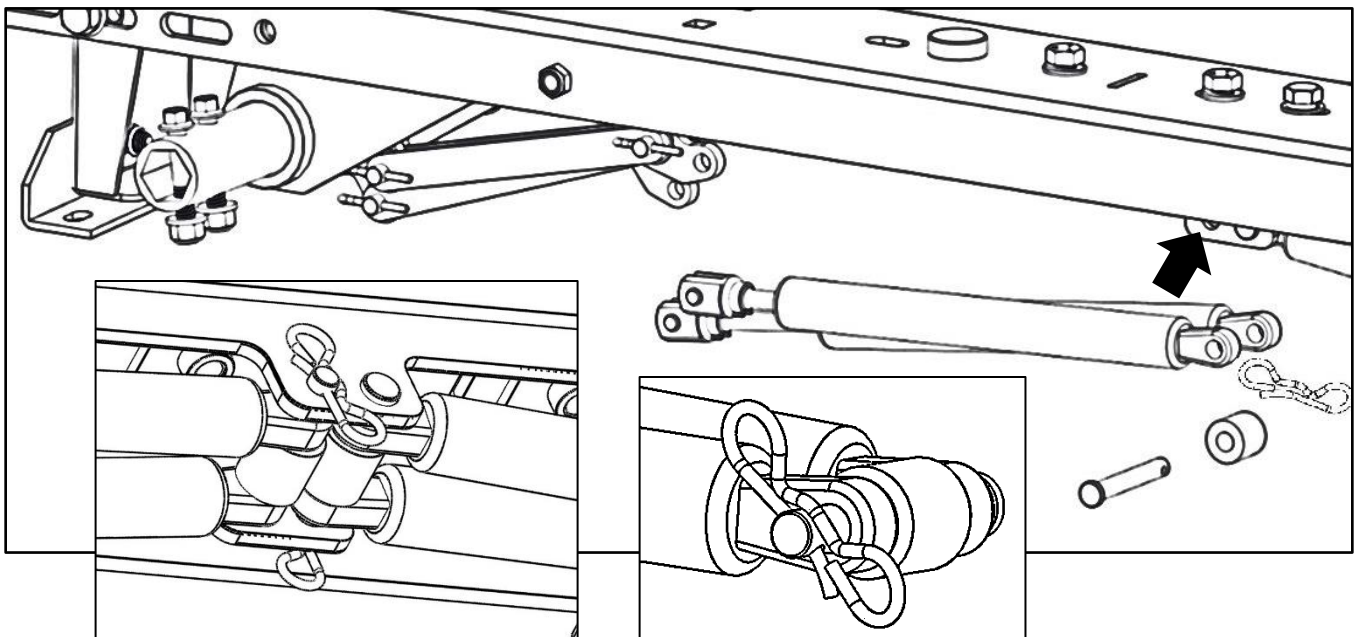


Step 4 – Install Dampers

- Install dampers in orientation shown.
- Install one end of each damper to damper bracket assembly using 3/4" clevis pin and cotter pin in orientation shown.

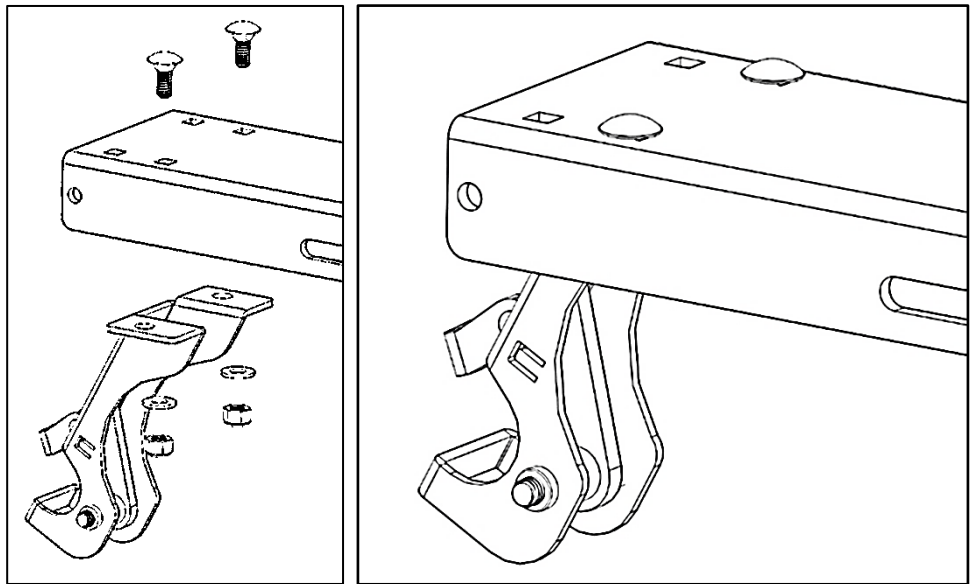


- Install a 2" clevis pin, plastic spacer, and cotter pin through the mount on underside of bow. The plastic spacer goes in between two dampers.
- In some situations, one may need to wait until handle assembly is installed to attach both sides of the dampers. This is so you can use the handle to help adjust the damper.
- Securely install cotter pin through each clevis pin to ensure dampers stay in place.

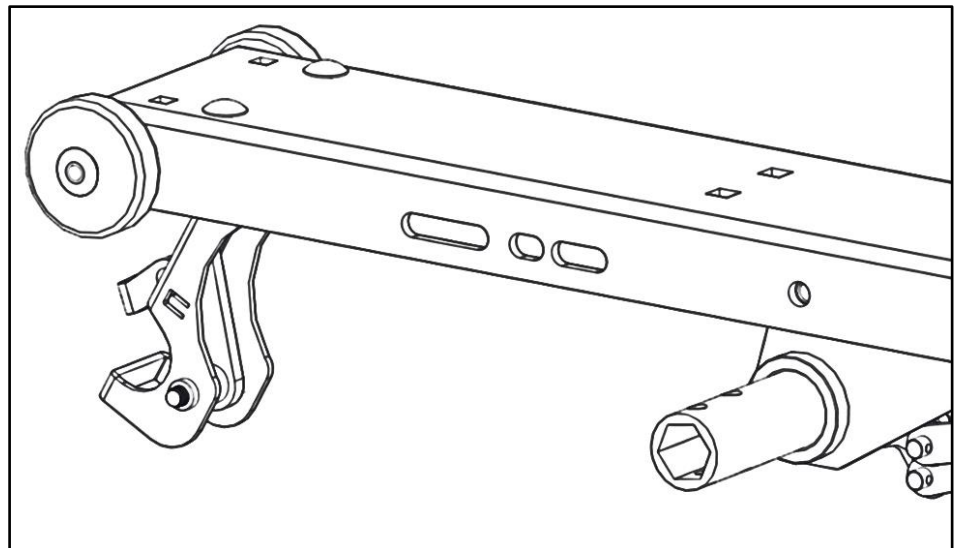
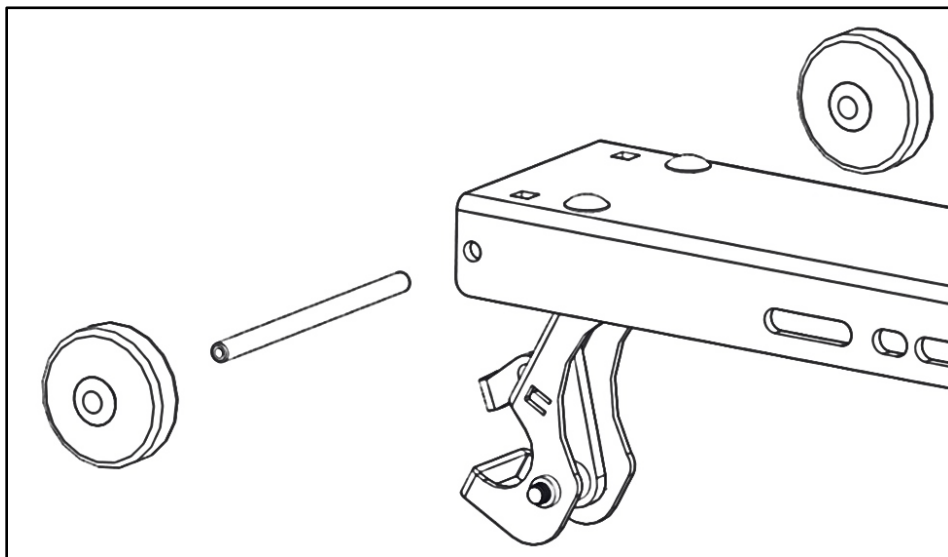


Step 5 – Install Latch

- Install latch assembly to the exposed end of the rear bow.
- Use 5/16" x 3/4" carriage bolts, 5/16" flat washers and 5/16" lock nuts in orientation shown.

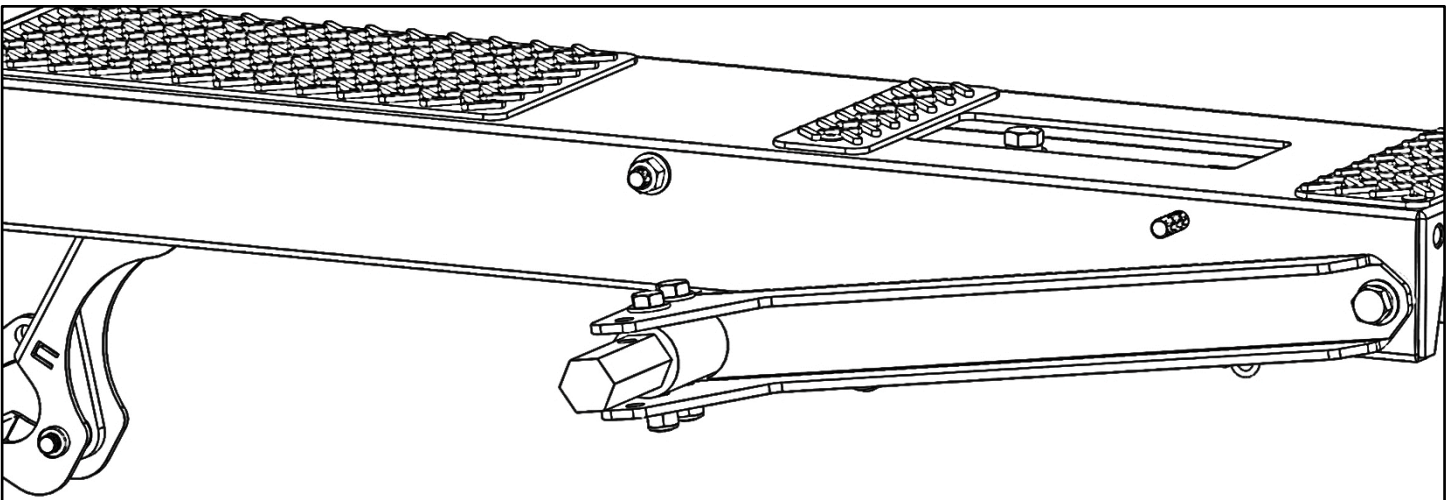
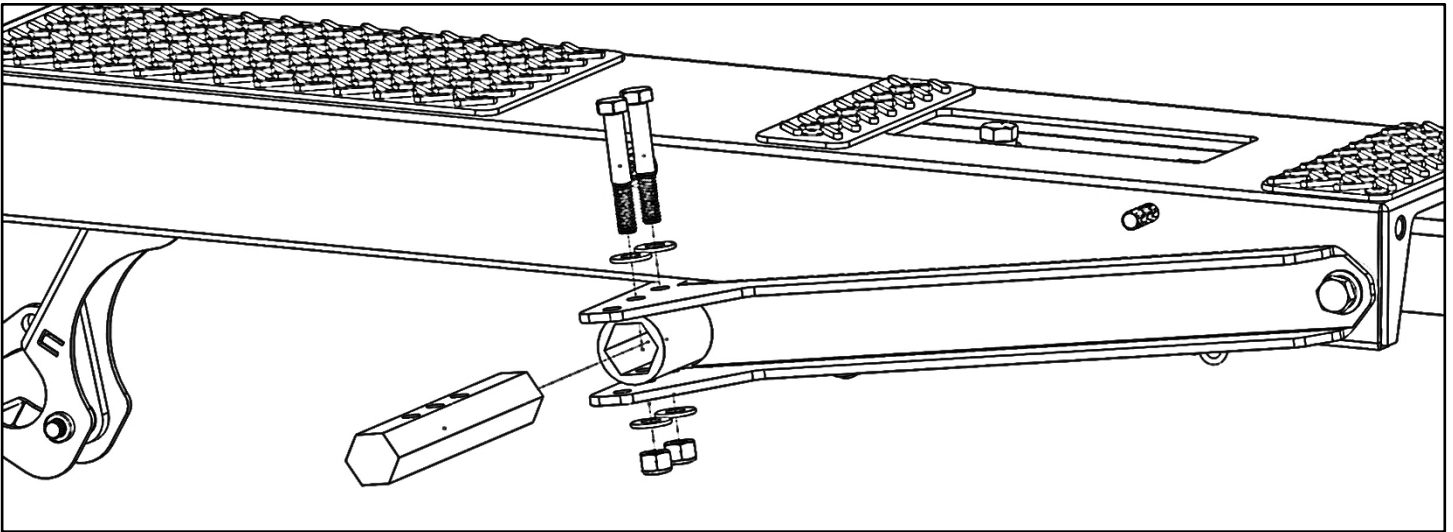


- Install wheel assembly. Slide wheel axle in the end of the rear bow.
- Place a wheel on each end of the axle. **Be sure cap on end the wheel remains in place.**



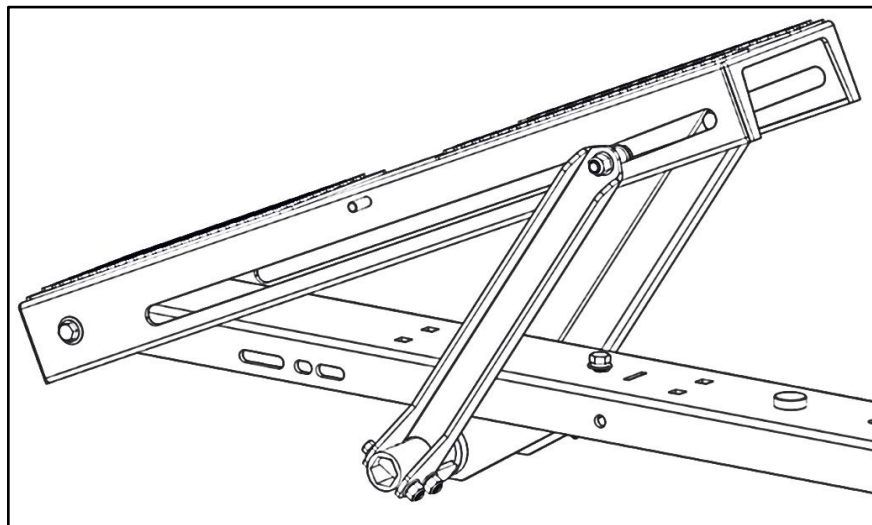
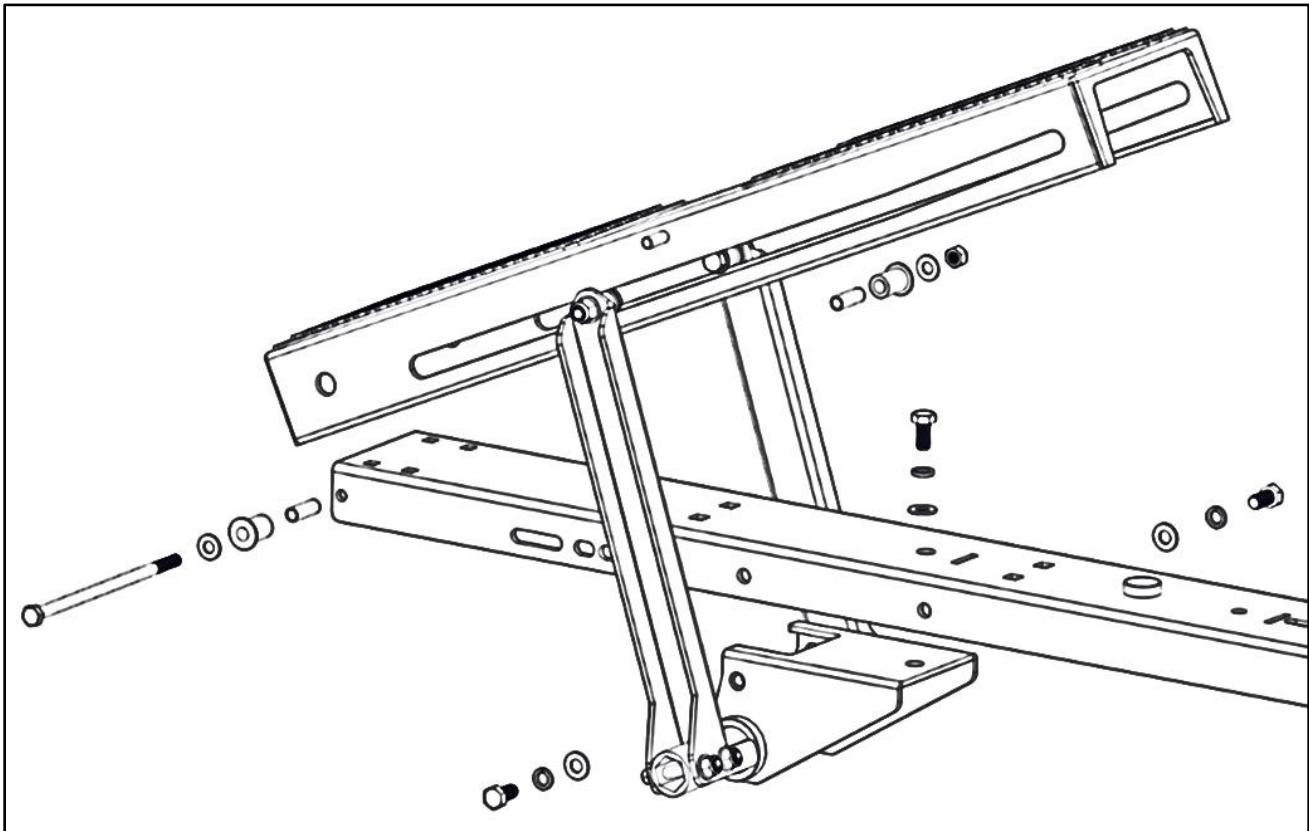
Step 6 – Install Rear Pan

- Place rear pan on top of wheels and bow. **Be sure the wheel caps do NOT come off.**
- Slide handle hex bar into position shown.
- Bolt together using 5/16" x 2" hex head bolts, 5/16" washers, and 5/16" lock nuts, leaving the hole furthest from the pan empty as shown.
- Snug tighten, but allow movement.



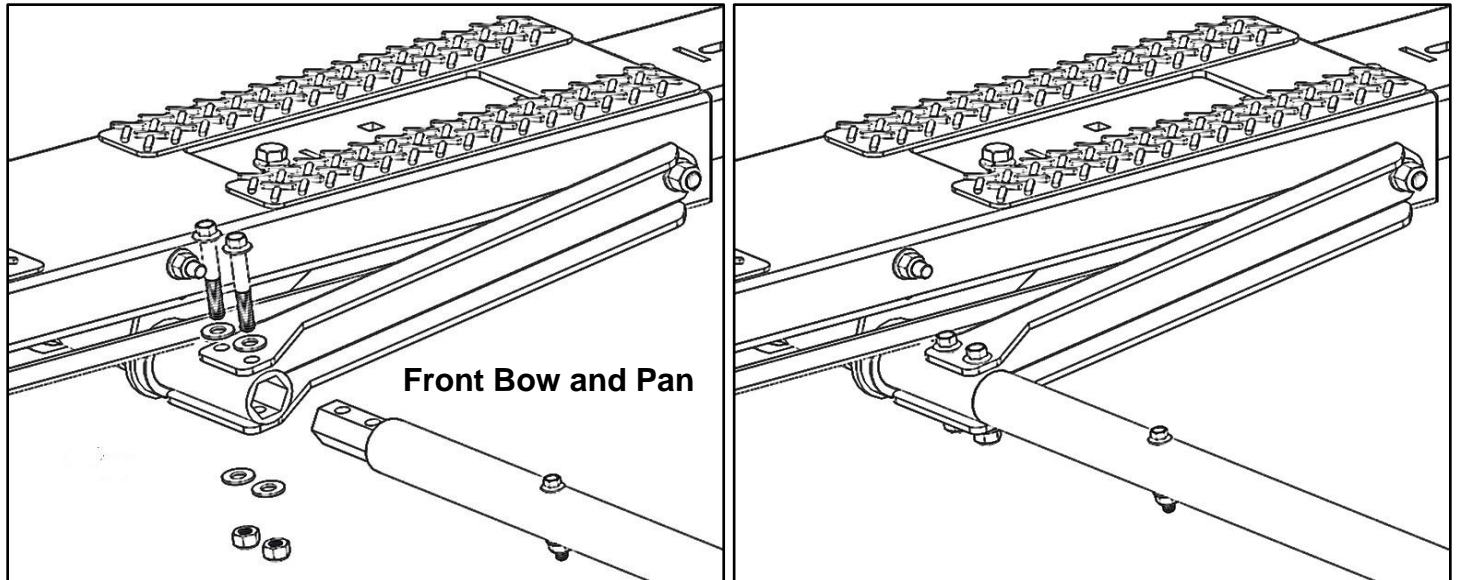
Step 7 – Install Front Pan

- Place front pan on top of front bow.
- Place cantilever housing under bow as shown.
- Bolt pan arms to cantilever housing using existing bolts.
- At the end of the bow, bolt pan to the bow using 5/16" x 7" hex head bolt, 5/16" flat washers, sleeve bearings and 3/8" shaft sleeve, in order shown.
- Bolt together using existing hardware. There are three sets of hardware attaching the cantilever housing to the bow.
- Snug tighten, but allow movement.

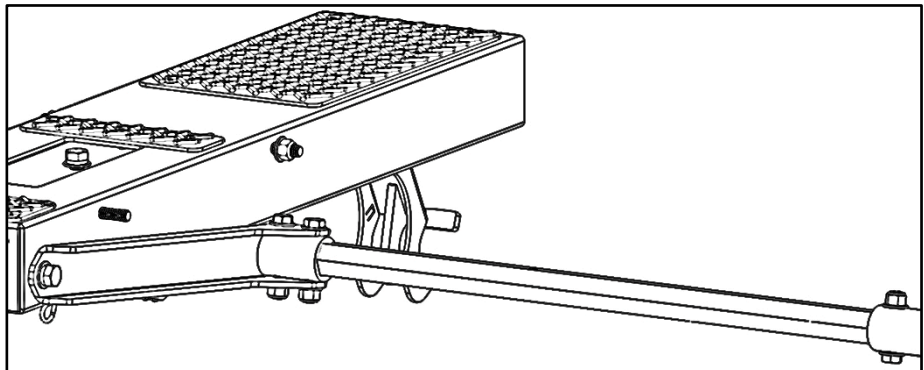
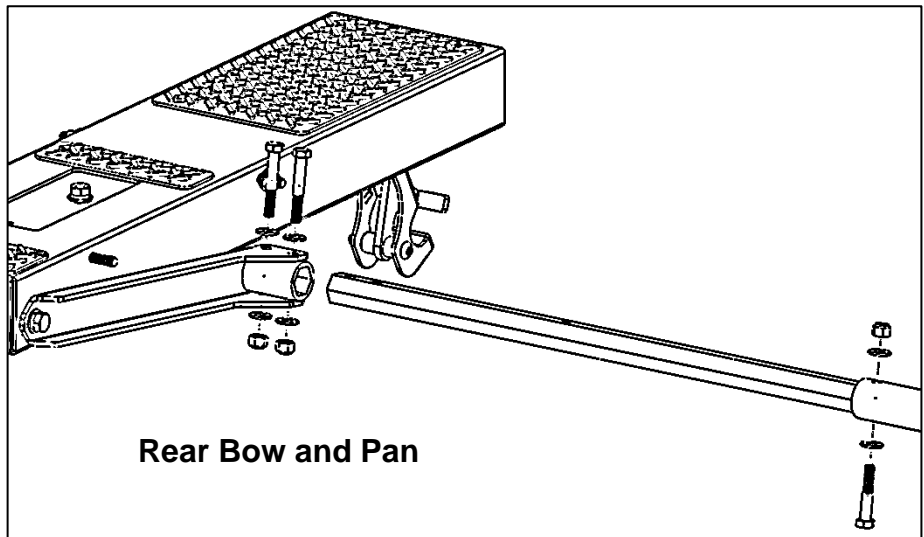


Step 8 – Install Hex Tube

- Install hex tube to front pan assembly using two 5/16" x 2" hex head bolts, four 5/16" washers, and two 5/16" lock nuts.
- Use the end of the hex tube assembly with two exposed holes to mount into front pan.

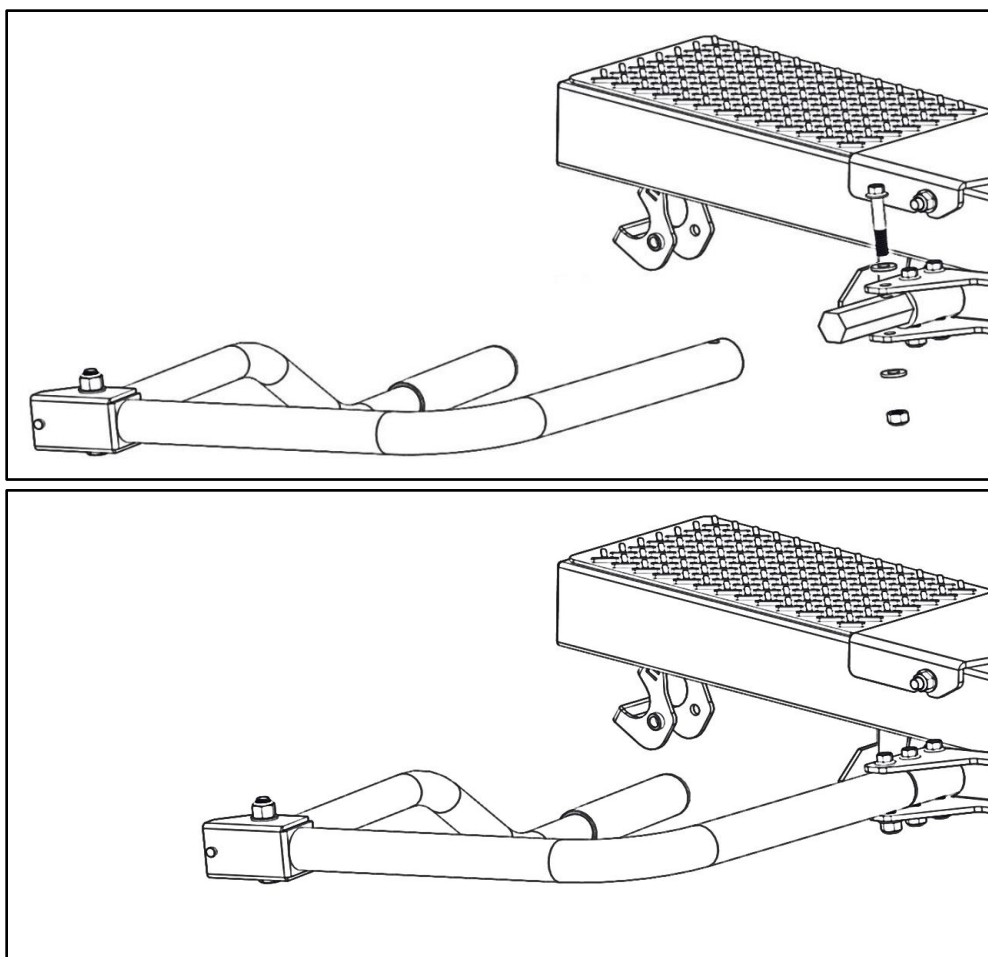


- Slide hex tube and install on rear pan.
- Bolt to rear pan using two 5/16" x 2" hex head bolts, four 5/16" washers, and two 5/16" lock nuts.
- It may be necessary to remove center bolt in hex tube assembly to install to rear pan.
- Once bolted to rear pan, adjust hex tube to line holes up with the hex sleeve.
- Once aligned, bolt through both the hex sleeve and hex tube using supplied 5/16" x 1-3/4" hex bolt, 5/16" washer, and 5/16" lock nut.
- TIGHTEN all bolts on both front and rear bows.



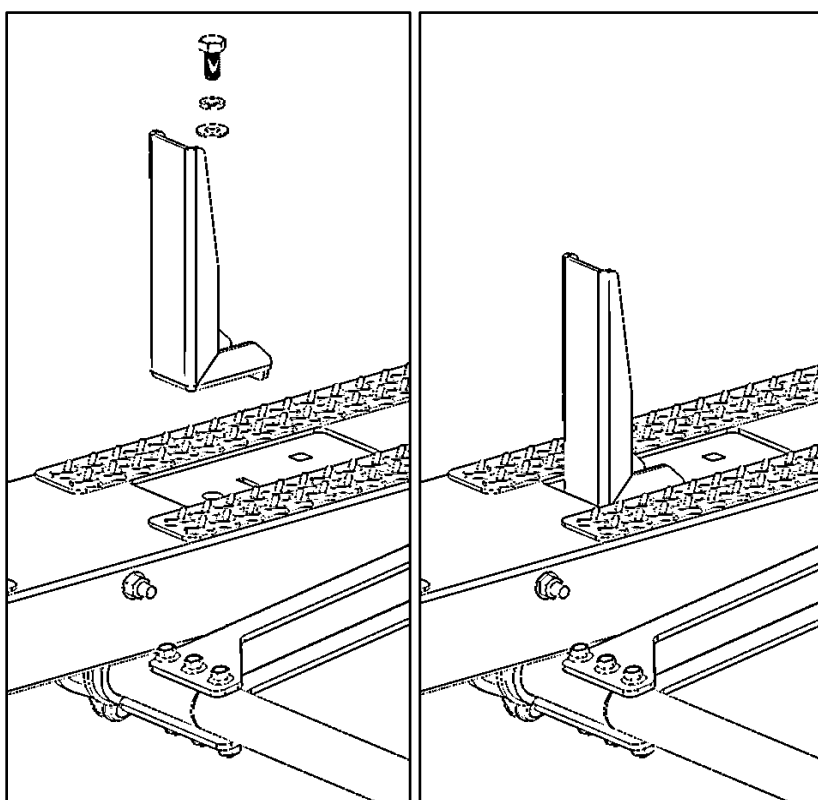
Step 9 – Attach Handle

- Attach handle to rear pan using 5/16" x 2" hex head bolt, two 5/16" flat washers and a 5/16" lock nut.
- TIGHTEN.



Step 10 – Install Ladder Stop

- Using the hardware on the bows, bolt the ladder stop in the orientation shown. **Be sure to line up slot in bow with slot in stop.**
- TIGHTEN.
- Repeat for second bow and ladder stop.



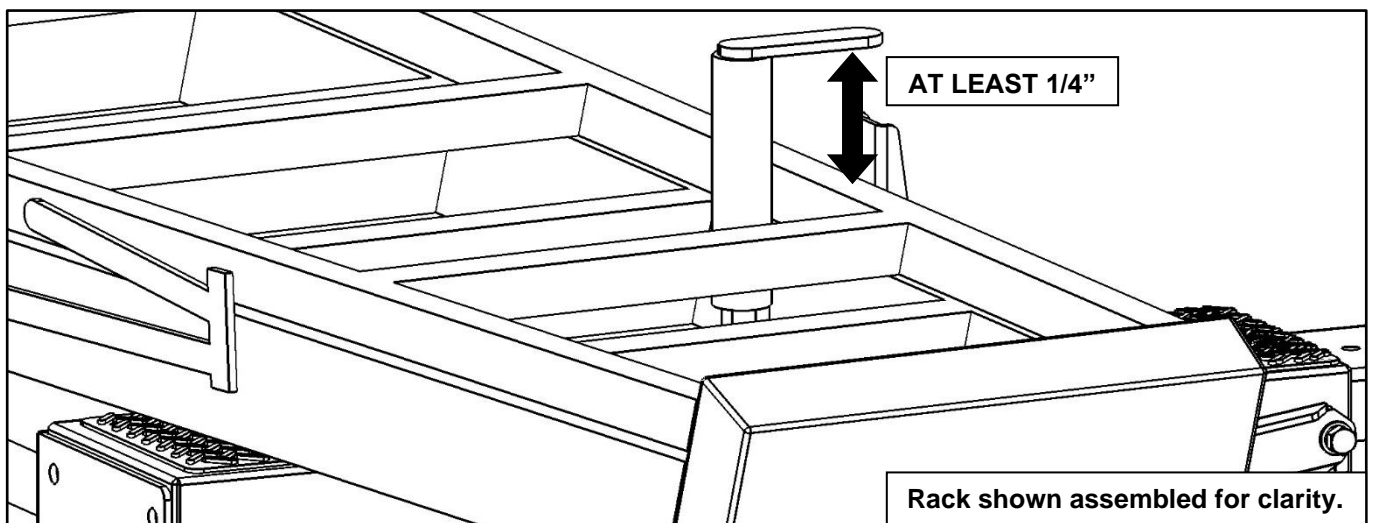
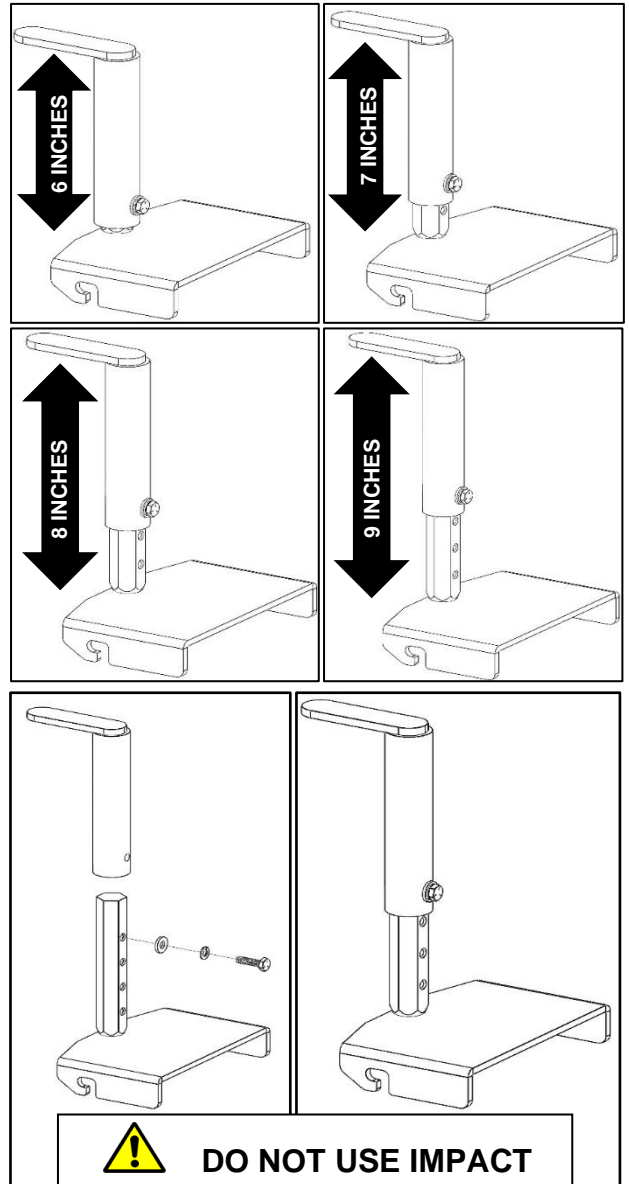
Step 11 – Assemble Ladder Hooks

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.

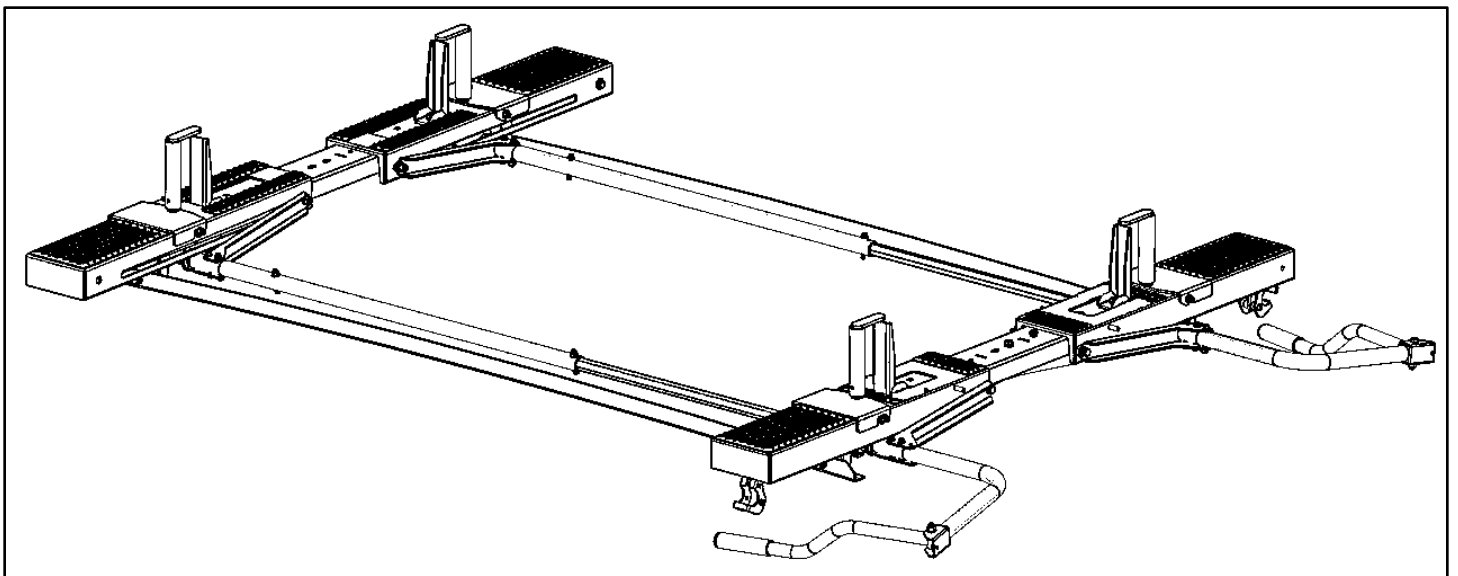
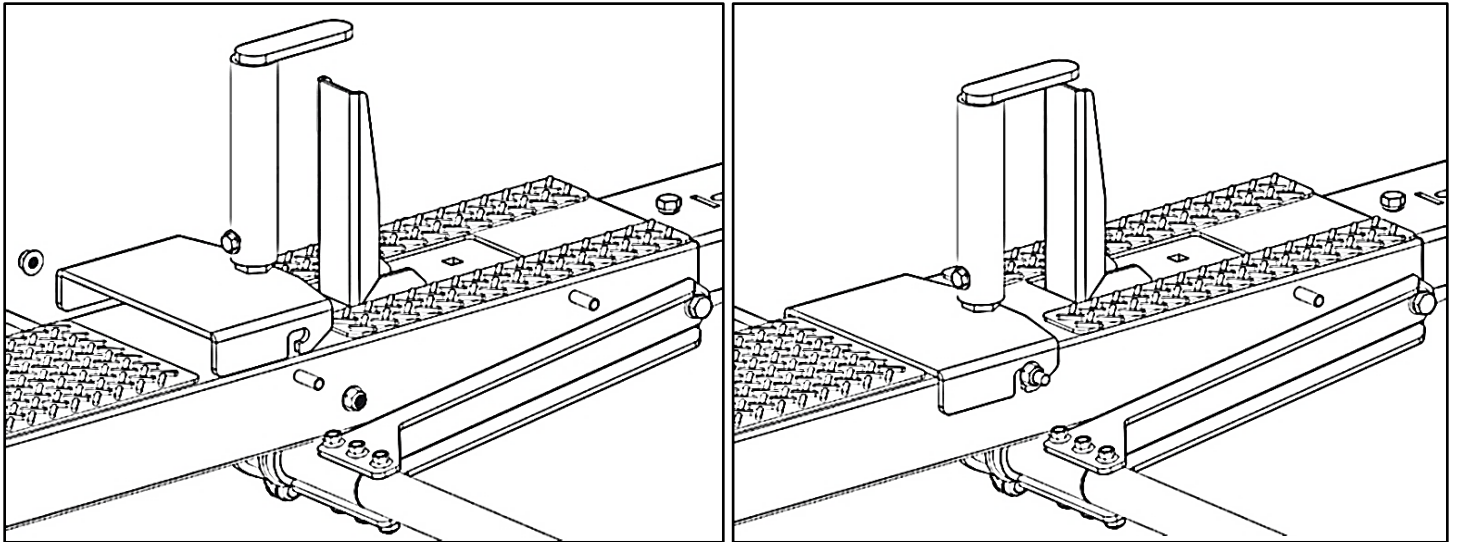
NOTE: Roof height clearance is affected by the hook mounting location used. Please verify and be aware of the total height of the vehicle with rack installed.

- 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 12 – Install Ladder Hooks

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



GO BACK AND TIGHTEN ALL BOLTS FROM PREVIOUS STEPS.

BE SURE HARDWARE IN MOUNTING IS TIGHT.

INSTALLATION IS COMPLETE.