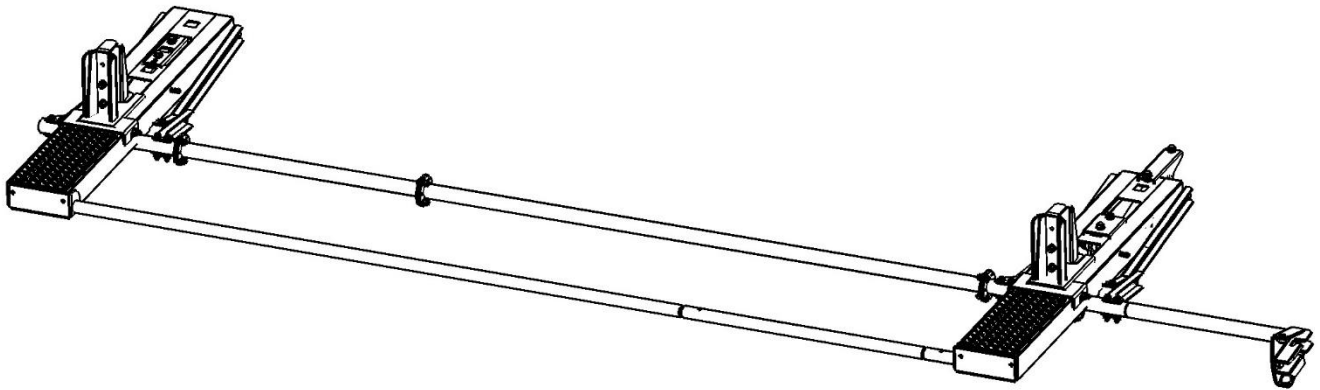


Holman

Instruction Guide 40913



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.

Table of Contents

Parts List	2
Hardware.....	3
Step 1 – Attach Dampener Mounts	4
Step 2 – Attach Front Pivot Assembly.....	4
Step 3 – Attach Rear Pivot Assembly.....	5
Step 4 – Install Dampeners.....	5
Step 5 – Attach Torque Tube	6
Step 6 – Install Rollers and Axles.....	6
Step 7 – Assemble Ladder Pan.....	7
Step 8 – Attach Actuator	7
Step 9 – Install Ladder Hooks and Ladder Stops	8
Step 10 – Attach Ladder Pan Stiffener.....	9
Step 11 – Install Rubber Bumpers	10

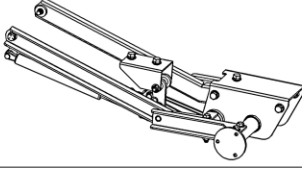
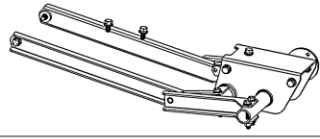
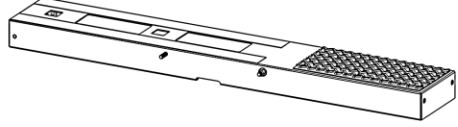





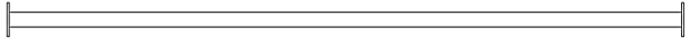
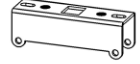
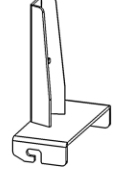

Tools Needed

7/16", 1/2", 9/16" Sockets and Wrench	7/16", 1/2" Box Wrenches
Tape Measure	Rubber Mallet

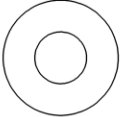


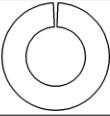
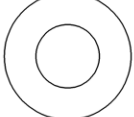
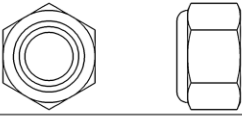
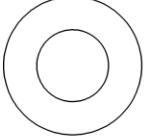
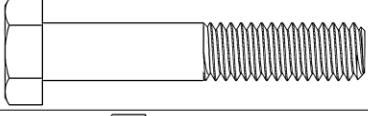
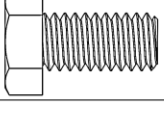
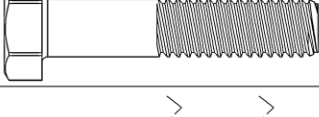

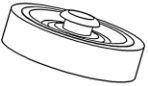


Before You Begin

- Read all instructions prior to assembling or installing any Holman product.
- **Always locate your installation locations prior to performing any work.**
- **ENSURE SAFETY WHILE INSTALLING OR DRILLING INTO VEHICLE.**

Parts List

NO.	ITEM	PART NUMBER	DESCRIPTION	QTY.
1		40993-08	DAMPENING PIVOT ASSEMBLY	1
2		40993-09	PIVOT ASSEMBLY	1
3		40993-30	PAN ASSEMBLY	2
4		40993-832	STEEL LADDER PAN STIFFENER, LONG END	1
5		40993-831	STEEL LADDER PAN STIFFENER, SHORT END	1
6		40993-45	ACTUATOR ASSEMBLY	1
7		40993-40-002	ACTUATOR EXTENSION	1
8		40993-25	TOSRION TUBE EXTENSION	1
9		40993-24	TORQUE TUBE	1
10		40993-12	DAMPER MOUNT ASM	1
11		40900-31	LADDER HOOK ASSY.	2
12		40900-30-004	LADDER STOP	2
13		18-00806	HARDWARE KIT	1

Hardware

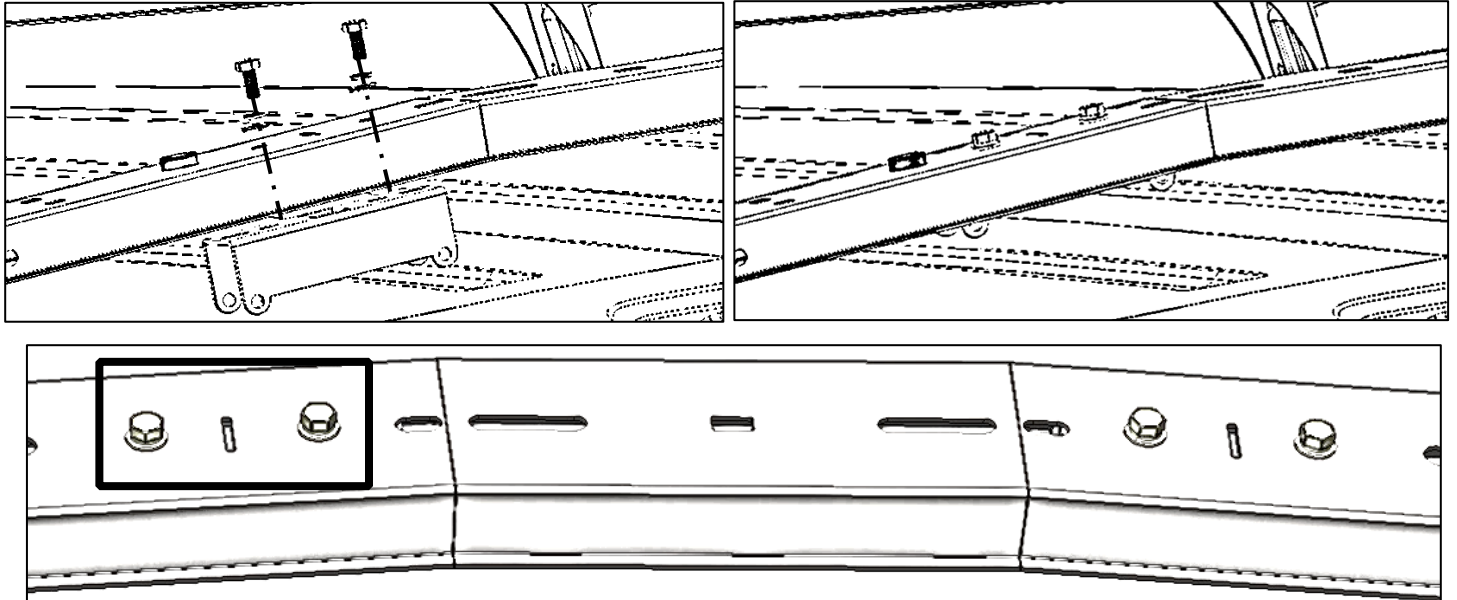
ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		33078	1/4" FLAT WASHER	18
2		37018	1/4"-20 NYLON INSERT LOCK NUT	9
3		13004	1/4"-20 X 7/8" HEX HEAD BOLT	9
4		1171067	5/16" LOCKING WASHER	4
5		92141A030	5/16" FLAT WASHER	10
6		0169777	5/16"-18 NYLOC	3
7			.39" ID X 3/4" OD FLAT NYLON WASHER	4
8		13010	5/16"-18 X 1-3/4" HEX HEAD BOLT	2
9		92865A580	5/16"-18 X 5/8" HEX HEAD BOLT	4
10		11241181	5/16"-18 X 1-1/2" HEX HEAD BOLT	1
11			AXLE	2
12	 NOT TO SCALE		2-1/4" X 9/16" POLYURETHANE WHEEL	4
13	 NOT TO SCALE		1" OD RUBBER BUMPER, 1/2" HOLE, 5/16" THK	2
14	 NOT TO SCALE		EXTENSION SPRING	1
15		60ML SEALANT	ADHESIVE SEALANT	1

DO NOT EXCEED MANUFACTURERS WEIGHT CAPACITY FOR ROOF!

Step 1 – Attach Dampener Mounts

Front End Only:

- Using 3/8" x 3/4" bolts, 3/8" lock washers, and 3/8" flat washers, bolt dampener mounting bracket underneath the crossbow, as shown below.

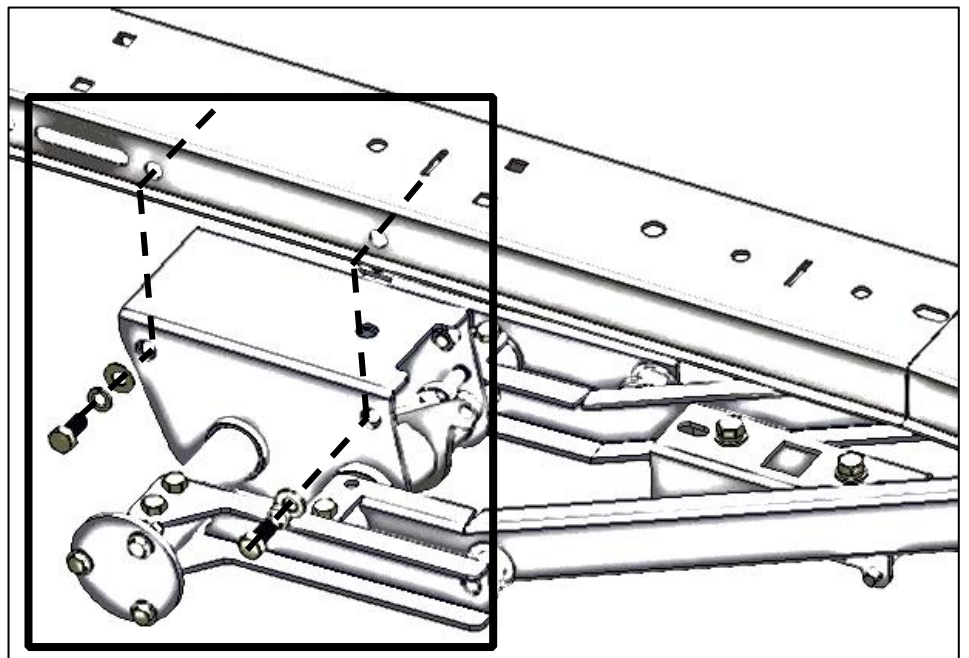


Step 2 – Attach Front Pivot Assembly

Front End Only:

You may need to un-bolt the crossbow from the mounting foot to complete this step.

- Using pre-installed 3/8" x 3/4" hex bolts, 3/8" lock washers, and 3/8" flat washers, install torque tube pivot assembly underneath the front crossbow, as shown below.
- Repeat this step on the other side of the bow.

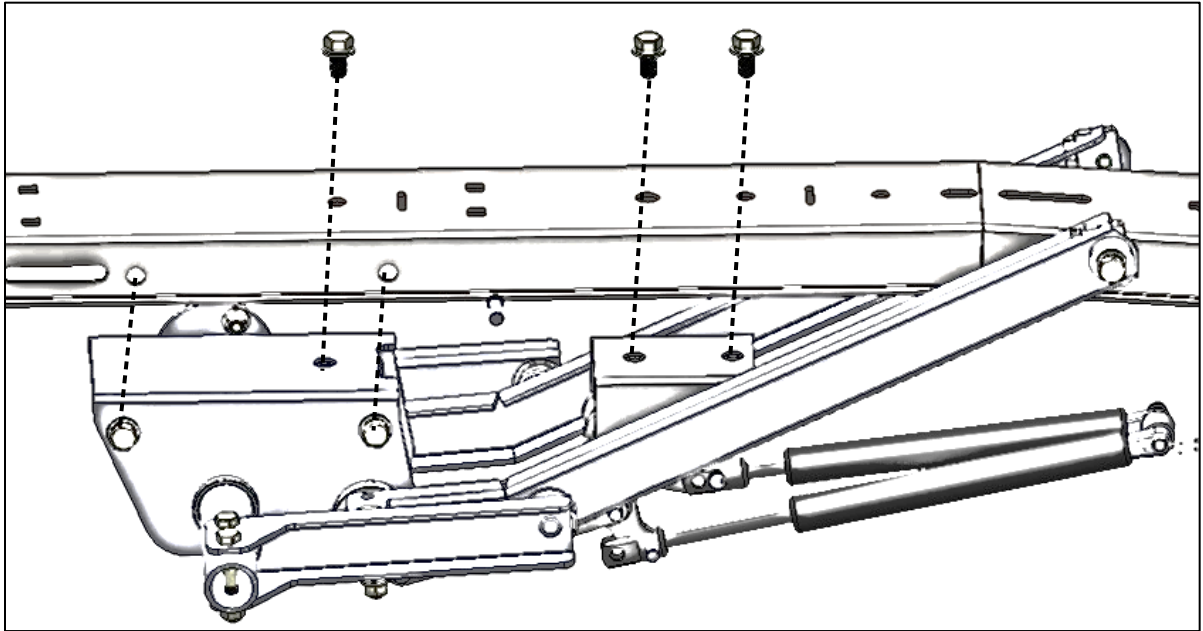


Step 3 – Attach Rear Pivot Assembly

Rear End Only:

You may need to un-bolt the crossbow from the mounting foot to complete this step.

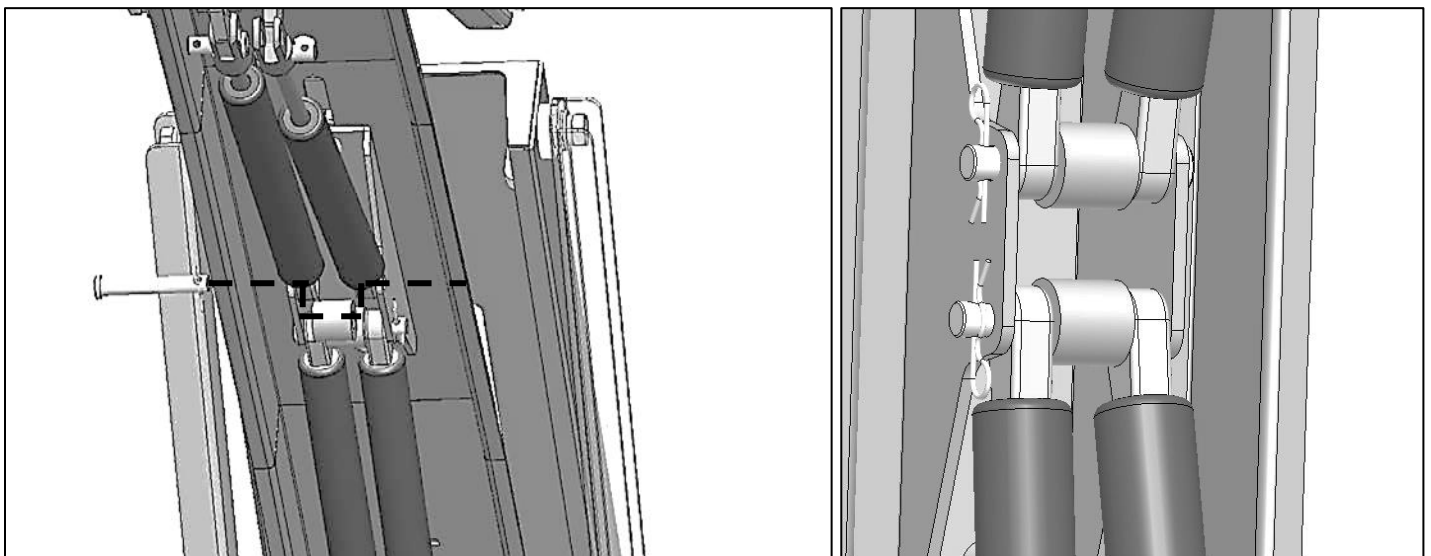
- Using 3/8" x 3/4" hex bolts, 3/8" lock washers, and 3/8" flat washers, bolt torque tube pivot assembly underneath the rear crossbow, as shown below.



Step 4 – Install Dampeners

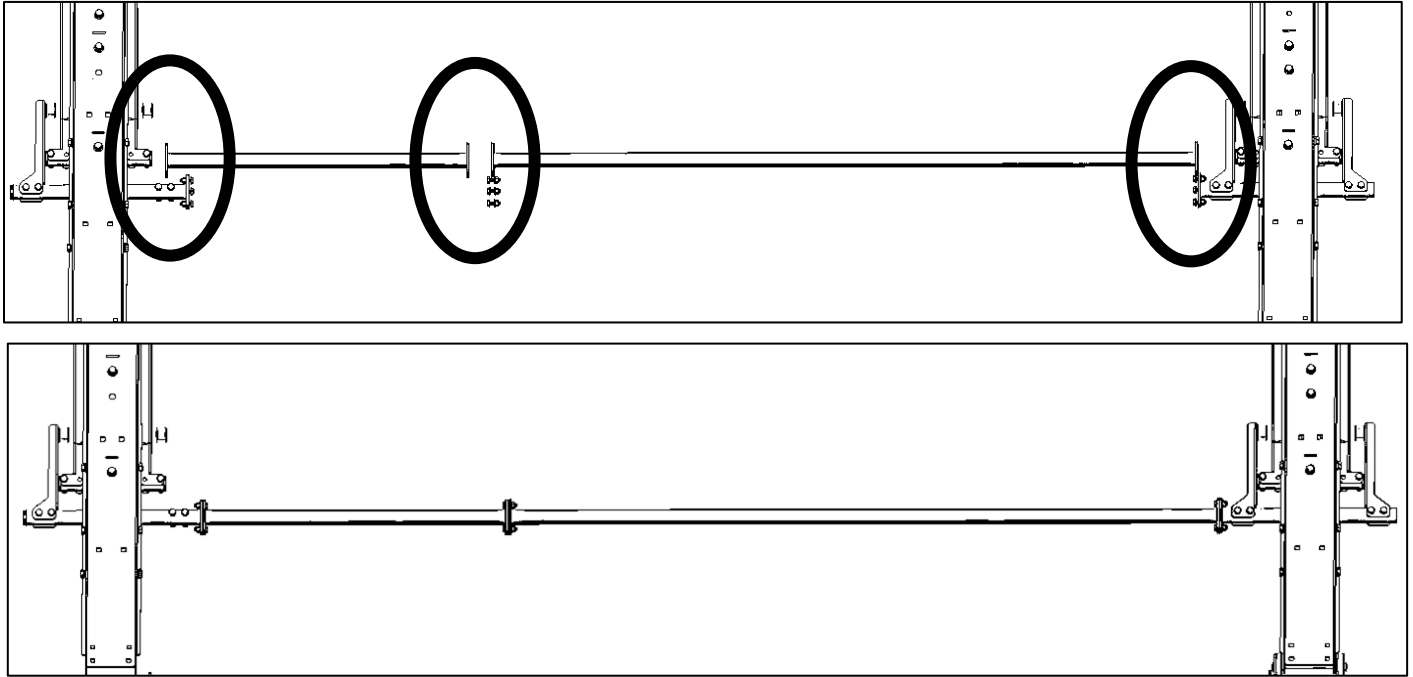
Rear End Only:

- Sandwich a nylon spacer between the two damper ends.
- Insert the 5/16" x 2-1/4" pin through the center bracket, the damper ends, and the nylon spacer.



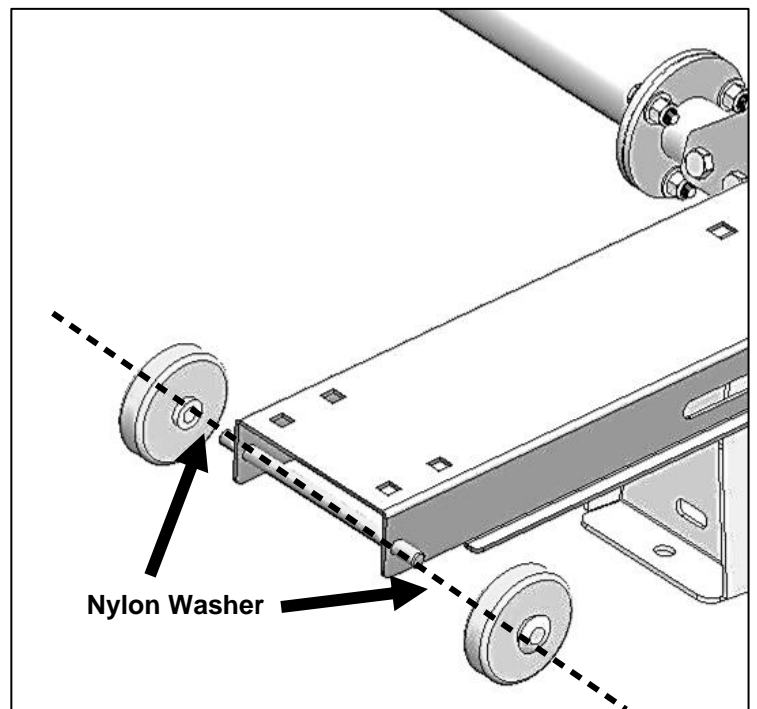
Step 5 – Attach Torque Tube

- Using 1/4" x 7/8" hex bolts, 1/4" lock nuts, and 1/4" flat washers, attach the torque tube extension to the torque tube.
- Check that the distance between feet on both driver and passenger side are EXACTLY the same to insure the bow assemblies are parallel.



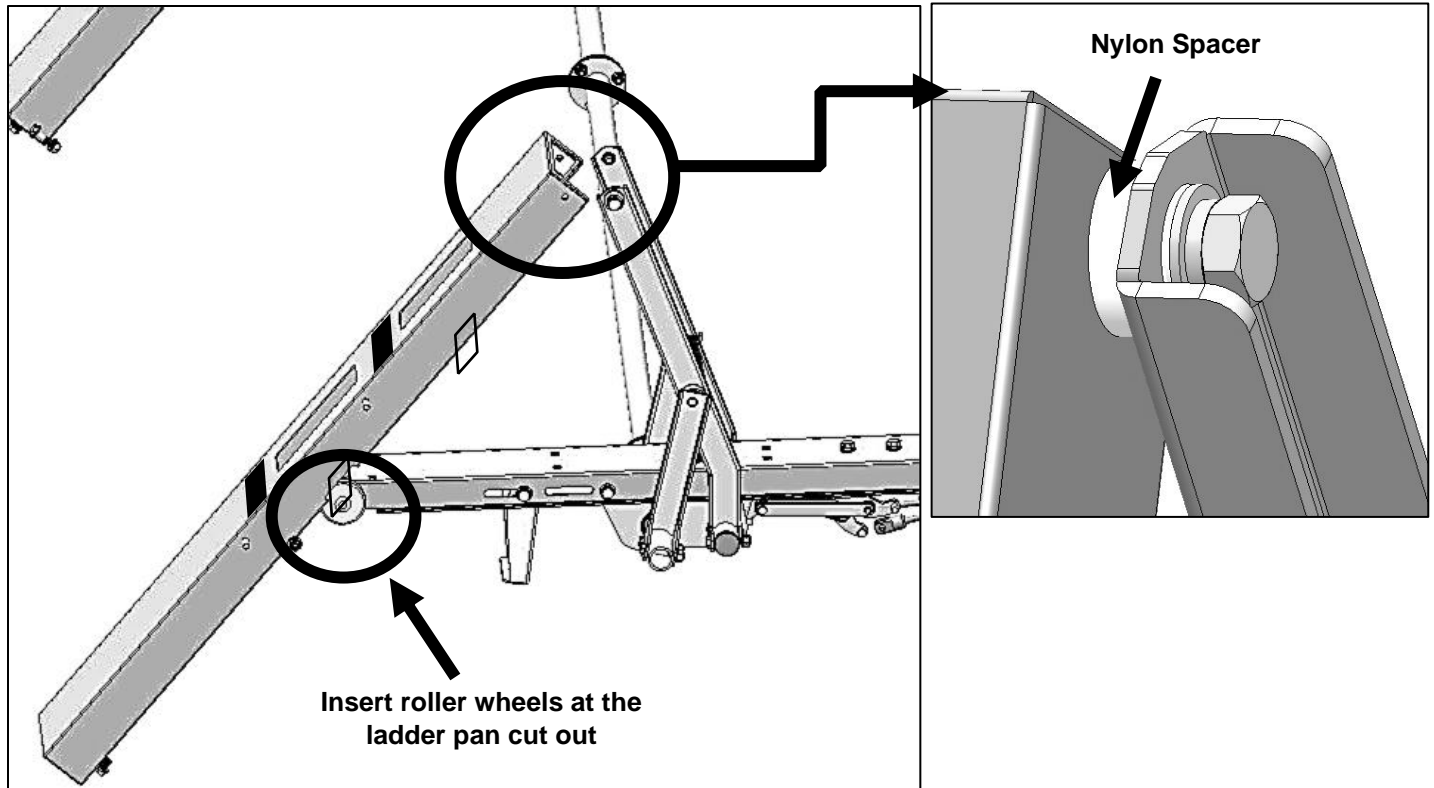
Step 6 – Install Roller Wheels and Axles

- Slide axle into the holes at the end of a crossbow.
- Slide a nylon washer over each end of axle.
- Push roller wheels over the ends of each axle, as shown below. **Be sure the nylon washers are between the wheels and crossbow. Be sure plastic caps on wheels stay attached.**



Step 7 – Assemble Ladder Pan

- Align cutouts in ladder pan assembly with the roller wheels and guide the arms onto the torque tube pivot assembly.
- As you lower the pan assembly onto the rollers, remove the bolt, washers, and spacers pre-installed on ladder pan and secure the arm with ladder pan. **Be sure to keep the bolt, washers, and spacers in the same order as you removed them from.**

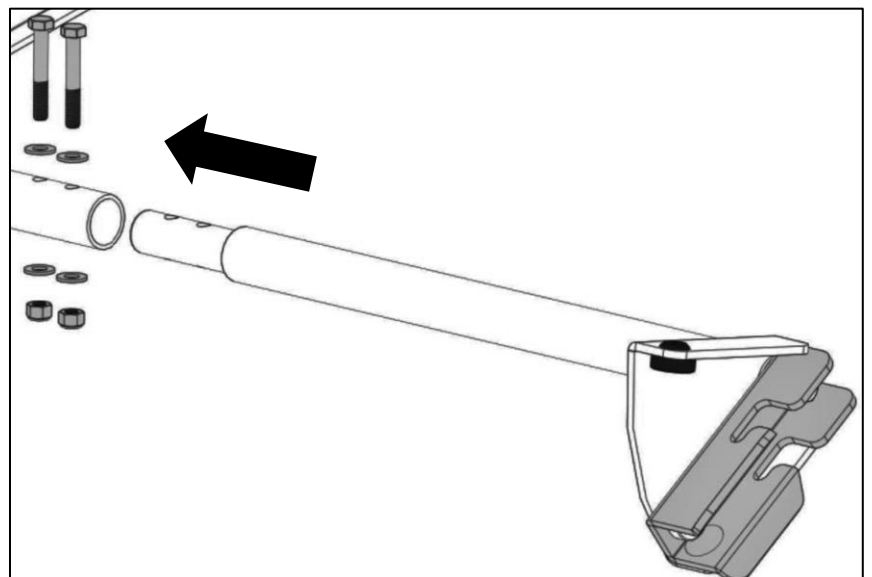


- Caution: Make sure the nylon spacer is sandwiched between the arm and ladder Pan, and lock washer or lock nut is used on this assembly.

Step 8 – Attach Actuator

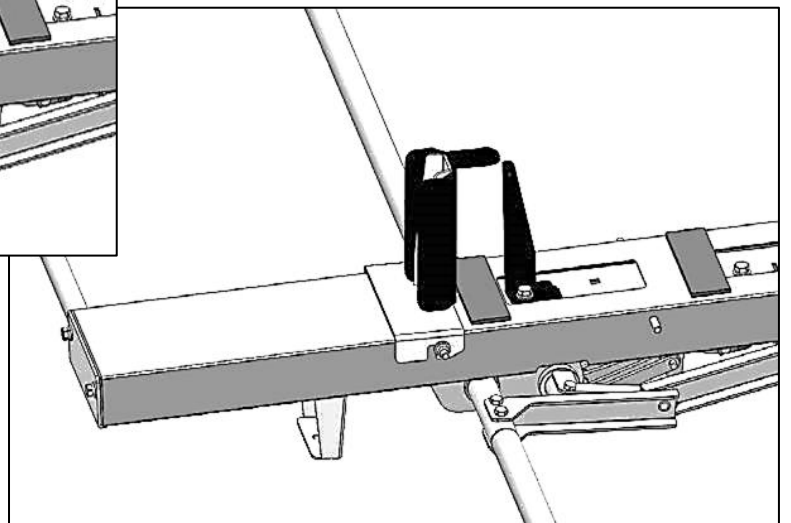
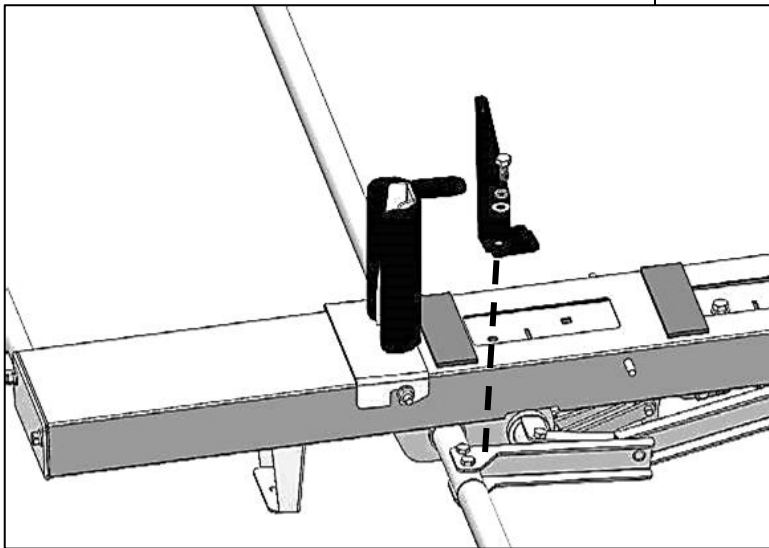
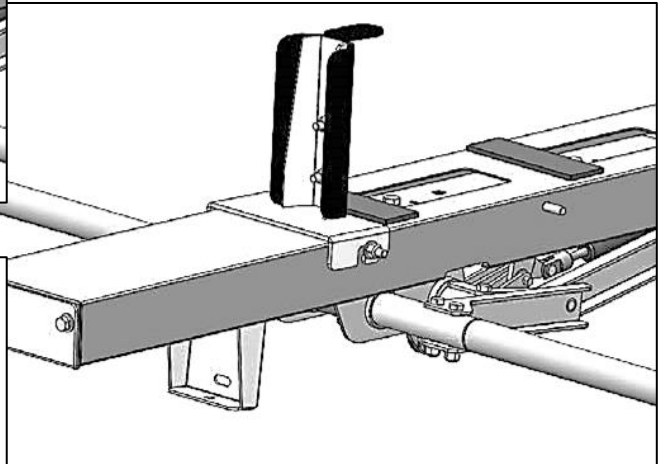
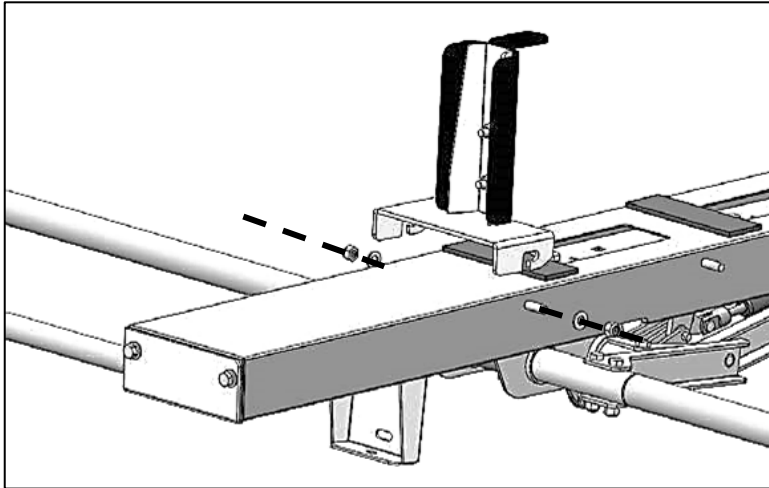
Extension can be installed at this point if necessary.

- 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 9 – Install Ladder Hooks and Ladder Stops

- Next attach the ladder hooks and ladder stops. Attach ladder hooks to ladder pans on 5/16” studs in desired location.
- Attach ladder stops to coincide with ladder hooks by removing 3/8” x 3/4” bolt and placing stop so the tab on the stop goes into the corresponding slot.
 - If using a step ladder, mount ladder hooks in the upper location in the rear.
 - If you are using an extension ladder use the same location as the front bow.

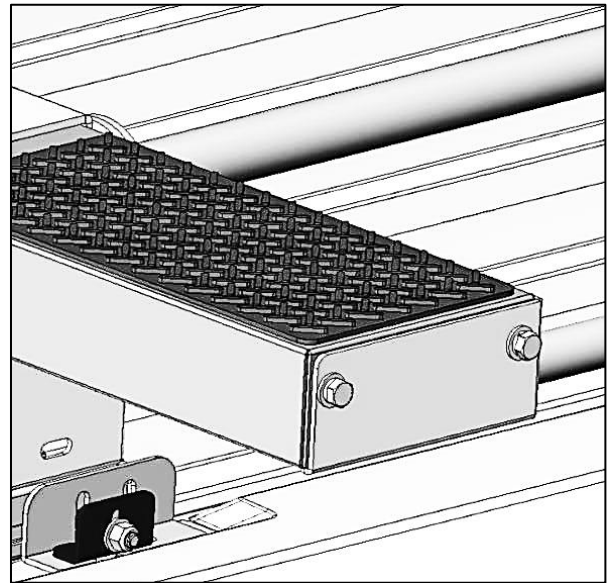
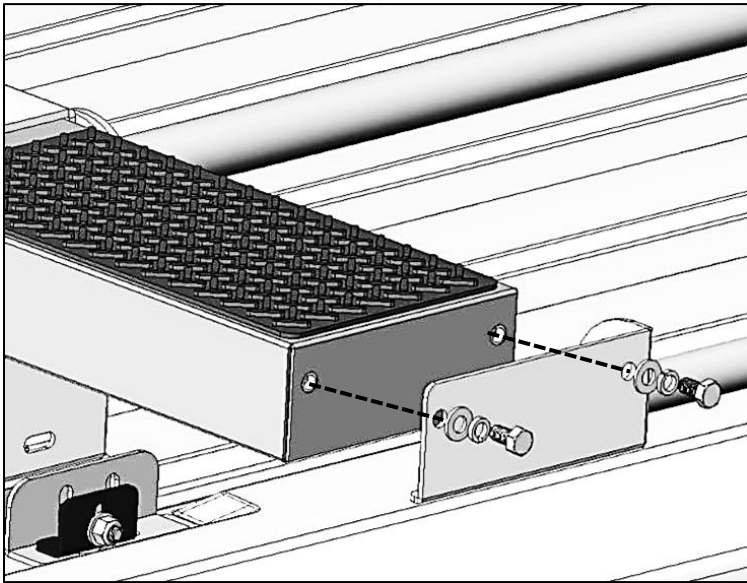


Step 10 – Attach Ladder Pan Stiffener

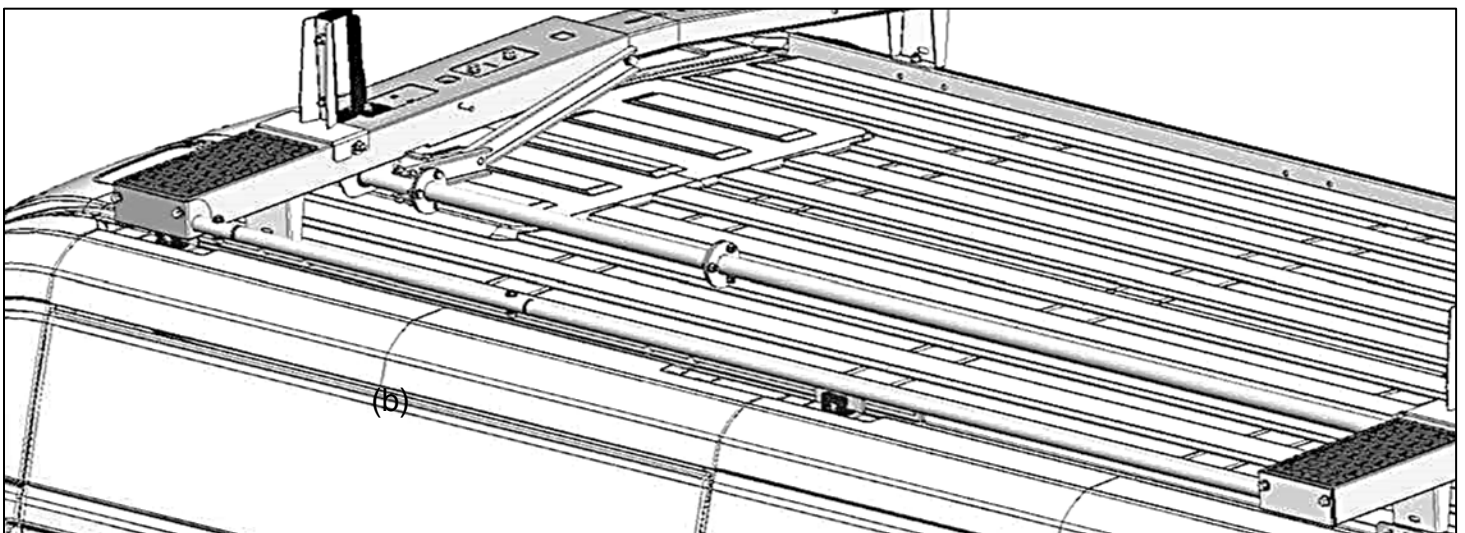
- First using 5/16" x 1-1/2" Hex bolt with two 5/16" flat washers and 5/16" lock nut to connect the ladder pan stiffener and **USE sealant AROUND HOLES.**



- Attach ladder pan stiffener, in the closed position, using 5/16" x 5/8" bolts with 5/16" lock washers and 5/16" flat washers.

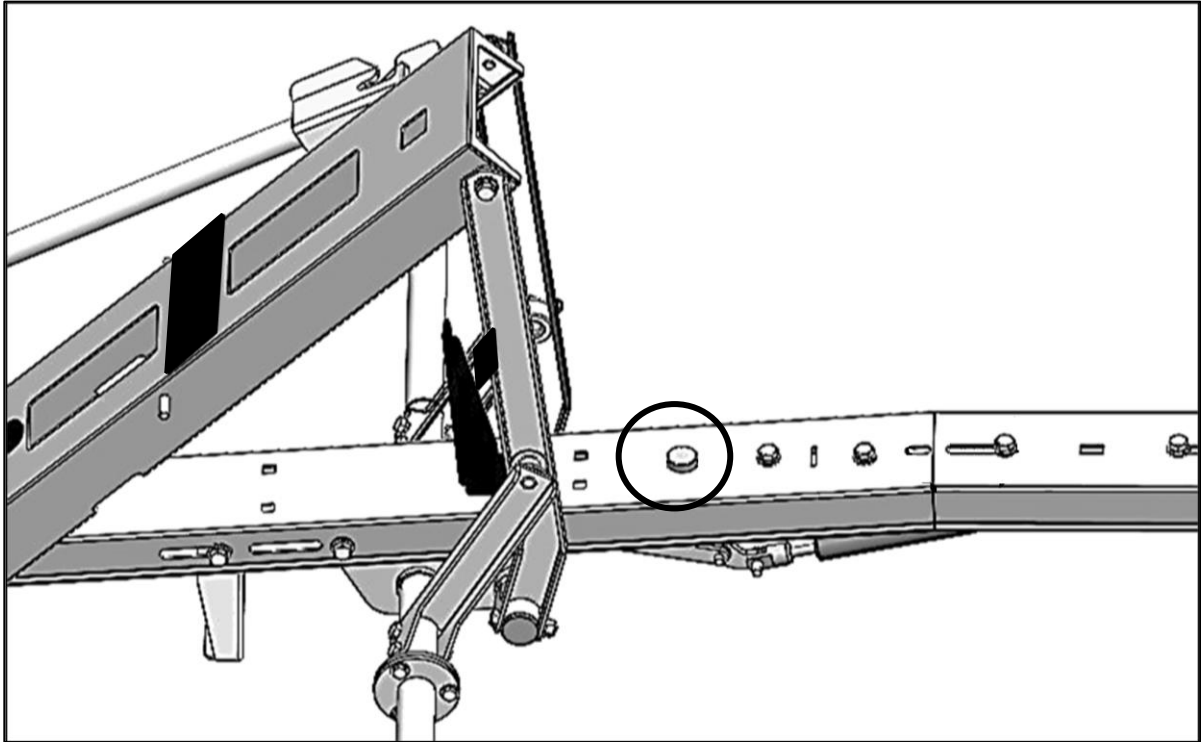


- **Be sure that distance between passenger side feet and driver side feet are still EXACTLY the same.**
- Tighten the feet for the front and rear bow assemblies.



Step 11 – Install Rubber Bumpers

- Place the rubber bumper to both front and rear crossbow as shown below.



GO BACK AND TIGHTEN ALL HARDWARE.

INSTALLATION AND ASSEMBLY ARE COMPLETE.

