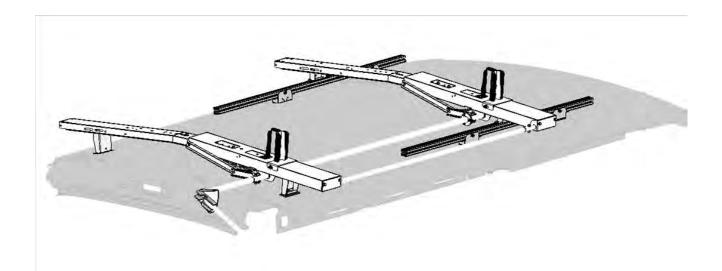


WE PUT EVERYTHING WITHIN REACH.

Installation Guide

4099H





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

1/2" Wrench and Socket	7/16" Wrench and Socket
9/16" Wrench and Socket	Tape Measure
Phillips Drive	

Table of Contents

Parts List	
Hardware List	3
Step 1 Install Actuator	
Step 2 Install Front and Rear Bow Assembly	
Step 3 Torque Tube	
Step 4 Ladder Pan Support	
Step 5 Ladder Stops and Hooks	
Step 6 Install Rack	1C
Step 7 Install handle bar clip	

Before You Begin

• Read all instructions.



<u>Parts</u>

rai	4099H PARTS	DESCRIPTION	QTY
А	010 10	Front Bow Assembly	1
В		Rear Bow Assembly	1
С	9	Torque Tube	1
D		Support Tube	1
Е		Support Tube End	1
F		Actuator	1
G	Qe	Removable Handle	1
Н		Ladder Hook	2
I		Ladder Stop	2
J		Torque Tube Extender	1
K	000	Handle Extender	
L	0 0	Support Tube Extender	1
		HARDWARE	1



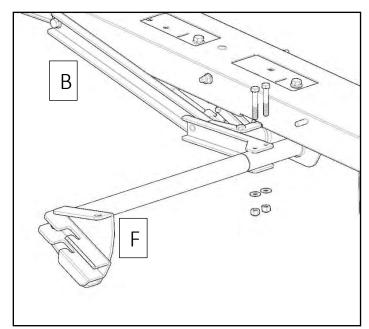
<u>Hardware</u>

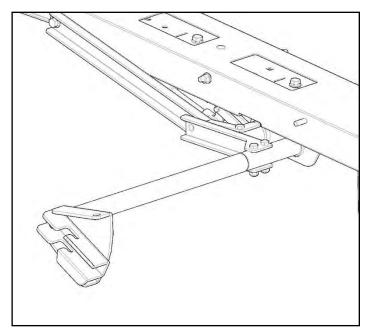
ITEM NO.	TO SCALE	DESCRIPTION	QTY.
1		10-24 x .625 PH Phillips Drive	2
2		10-24 Nyloc Nut	2
3		.25 flat washer	18
4		.25-20 NYLOC NUT	9
5		.25-20 x .875 HH	9
6		.312 Flat Washer	10
7		.312-18 x .625 HH	4
8		.312 Split Lock Washer	4
9		.312-18 Nyloc Nut	3
10		.312-18 x 1.50 HH	1
11		.312-18 x 1.75 HH	2
12		Handle Bar Holder	2
13		E6000	



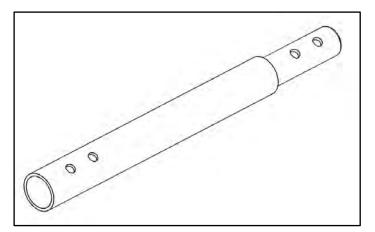
Step 1 – Install Actuator

- This can be done on or off the van.
- Remove existing hardware from the Rear Bow Assy. (B) as shown
- Keep Hardware, This will be re-used.
- Install the Actuator (F) with the "triangle" opening towards the end of the bow.
- Be sure to put E6000 into tube swedge and around the bolt holes.





If installing on a High Roof Extended Transit, the Handle Extension (L) will be used. This extension goes inbetween the rear bow (B) and the actuator (F).



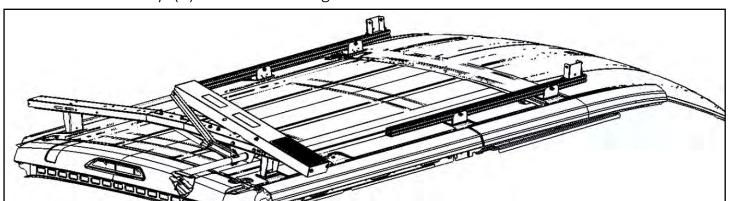


<u>Step 2 – Install Front and Rear Bow</u>

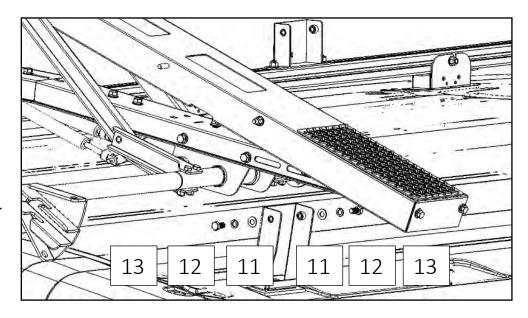
If you have a lift you can skip this step and continue building the rack on a bench

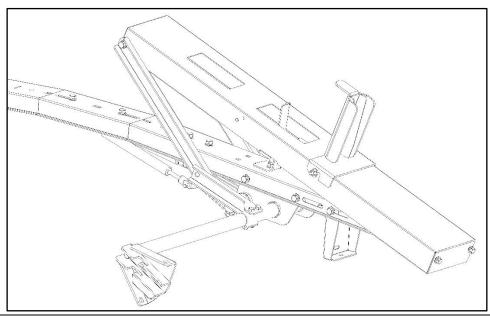
A. Rear Bow

• Set Rear Bow Assy. (B) on rear mounting feet as shown.



- Place a foam block from the packaging to hold the bow in the up position in order to access the mounting slots.
- Insert .375"x .75" hex head bolts (13) with .375" flat washer(12) and .375" lock washer(11) as shown.
- Leave loose until the the rack is assembled.
- Repeat on other side of bow.

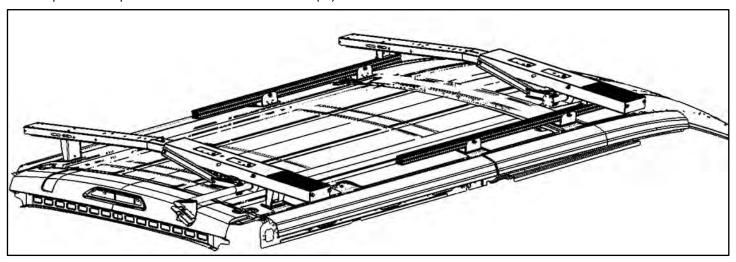






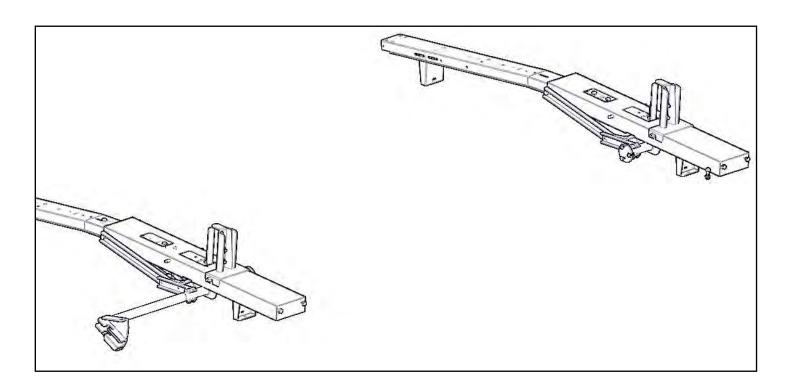
B. Front Bow

• Repeat the process for the front bow (A).



<u>Step 3 – Torque Tube Installation</u>

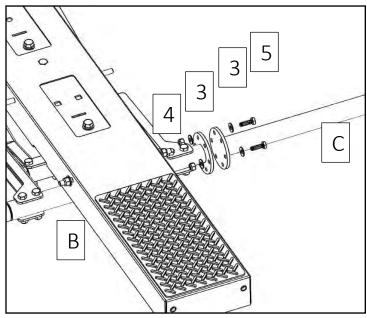
BE SURE THE BOTH FRONT AND REAR LADDER PANS ARE ALL THE WAY DOWN ON THE BOWS WHILE TIGHTENING

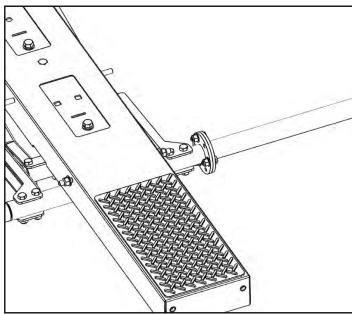




• Bolt Torque Tube(C) to Rear Bow Assy(B) using three .25"x .875" hex head bolts (5) six .25"flat washers(3) and three .25" nyloc nuts(4).

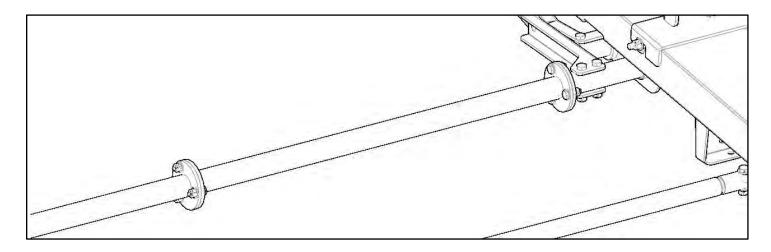
You may want to put a foam packing block under the front of torque tube (C) to make it level while tightening.





- Repeat process to bolt to the front bow assembly(A).
 - **If installing on a High Roof Extended Transit, the Torque Tube Extension (K) will be used**

 This extension goes inbetween the torque tube (C) and the front bow (A)

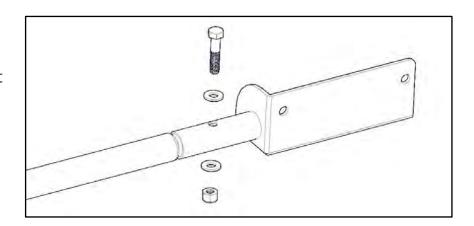




<u>Step 4 – Ladder Pan Support</u>

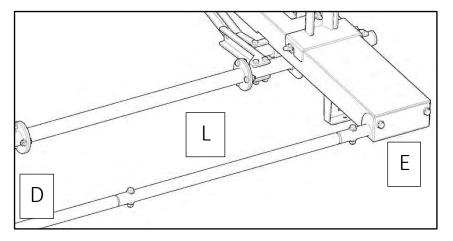
<u>A.</u>

 Assemble Support Tube(D&E). Put E6000(13) into tube swedge and around the bolt holes to prevent water from getting into tubes.



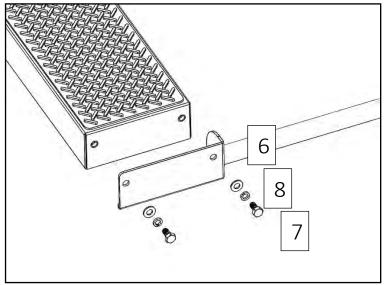
If installing on a High Roof Extended Transit, the support tube extension (L) will be used

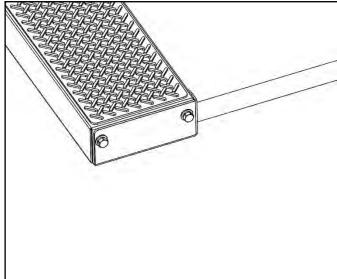
This extension goes inbetween the support tube (D) and the support tube end (E)



В.

• Attach Support Tube(D&E) to the Ladder pan as shown using .312" x .625 hex head (7) with .312" lock washers(8) and .312" flat washers(6)

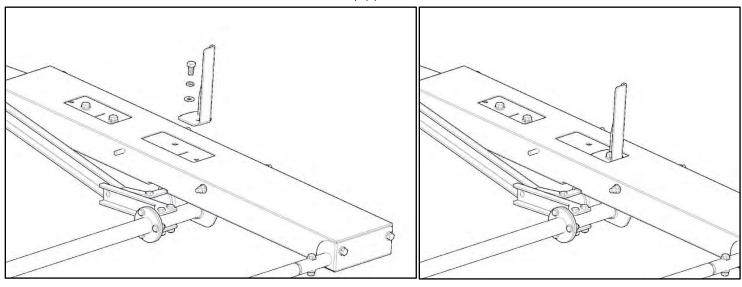




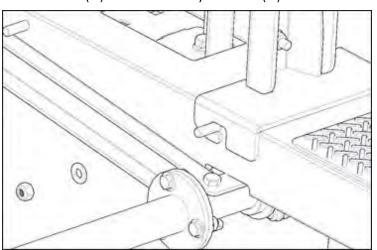


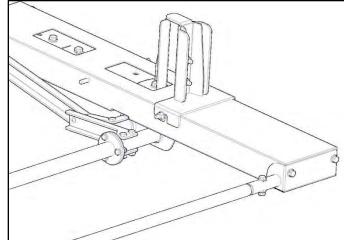
<u>Step 5 – Ladder Stops and Hooks</u>

• On the front bow (A), remove 3/8"x3/4" bolt, 3/8" split lock washer and 3/8" flat washer from shown location and install Ladder Stop(I).

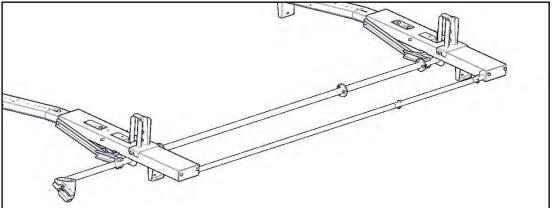


• Bolt Ladder Hook (H) to the lower position where the pem studs are installed. Use a .312 flat washer(6) and a.312 nyloc nut (9).





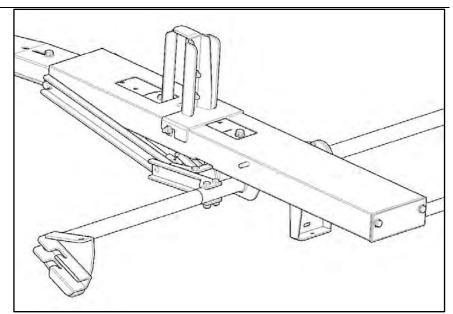
- Repeat on both sides of ladder hook (H).
- If using an "Extension Ladder" put the Ladder Stop(I) at the same location on the Front & Rear Bow Assy.(A&B).

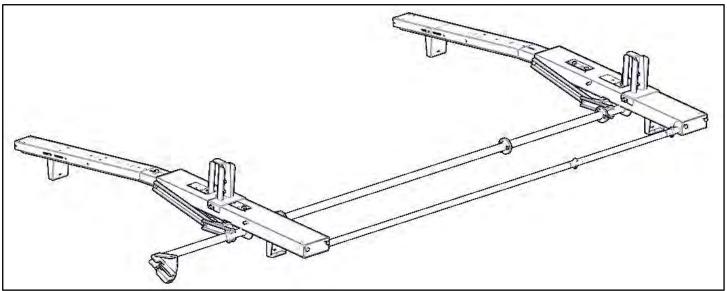




Step Ladder Set-Up

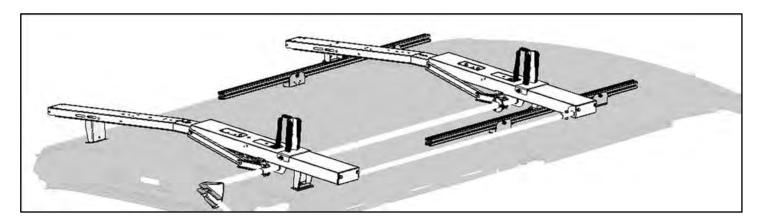
- If installing for a "Step ladder", The ladder hook (H) and the ladder stop (I) change positions on the rear bow.
- Both of these parts move higher up on the bow and are installed using the other pem studs.





Step 6 – Installing Rack

- If you built the rack on the bench you can now set the rack on the mounts as described in Step 2.
- Be sure rack is centered on the van then TIGHTEN all the hardware.





<u> Step 7 – Install Handle Bar holder</u>

- Install handle bar holder clip from hardware kit to your preference. Most install at the rear of the van, on the backside of a shelving unit.
- Install clips using #10 hardware provided.

GO BACK AND ENSURE ALL HARDWARE IS TIGHT

Your installation is now complete.