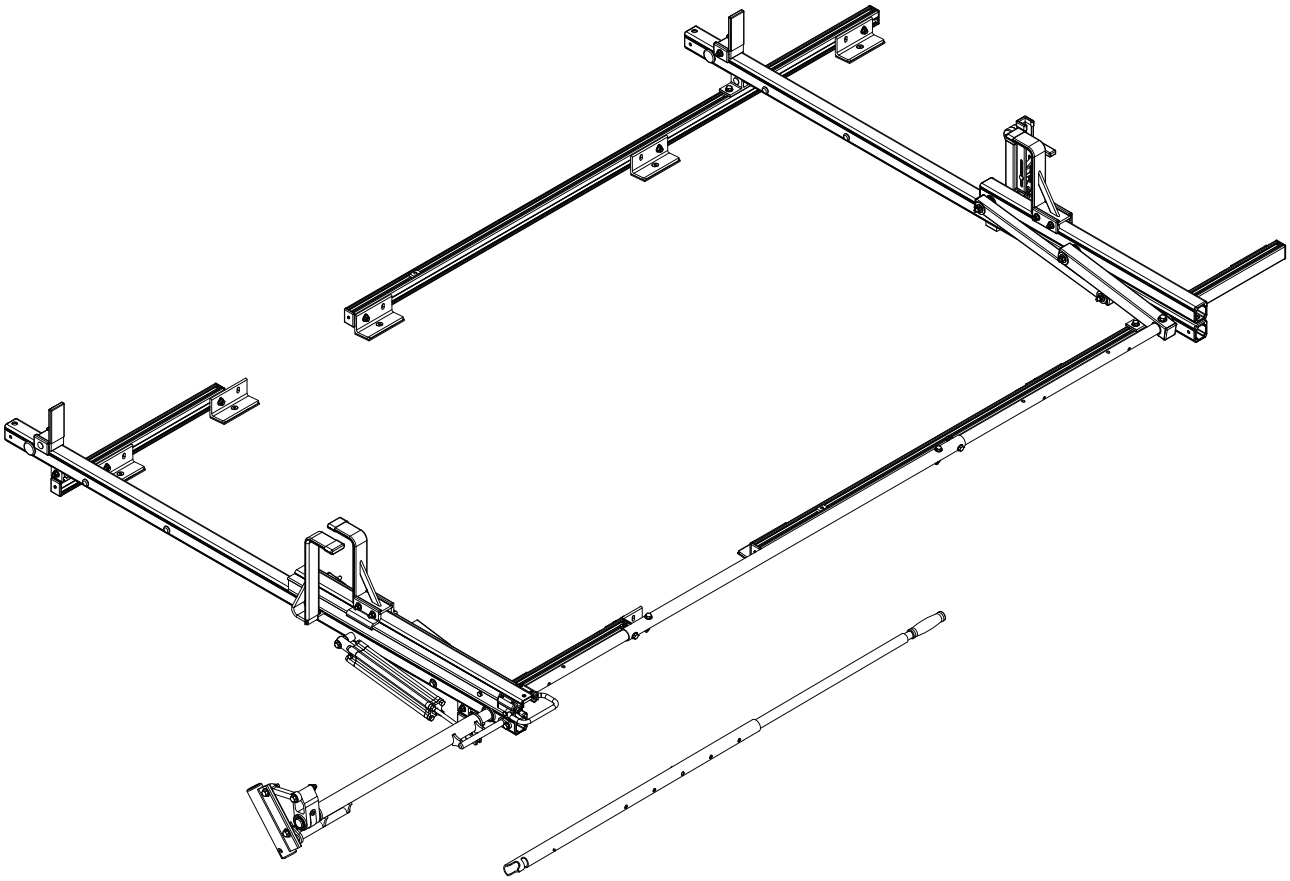
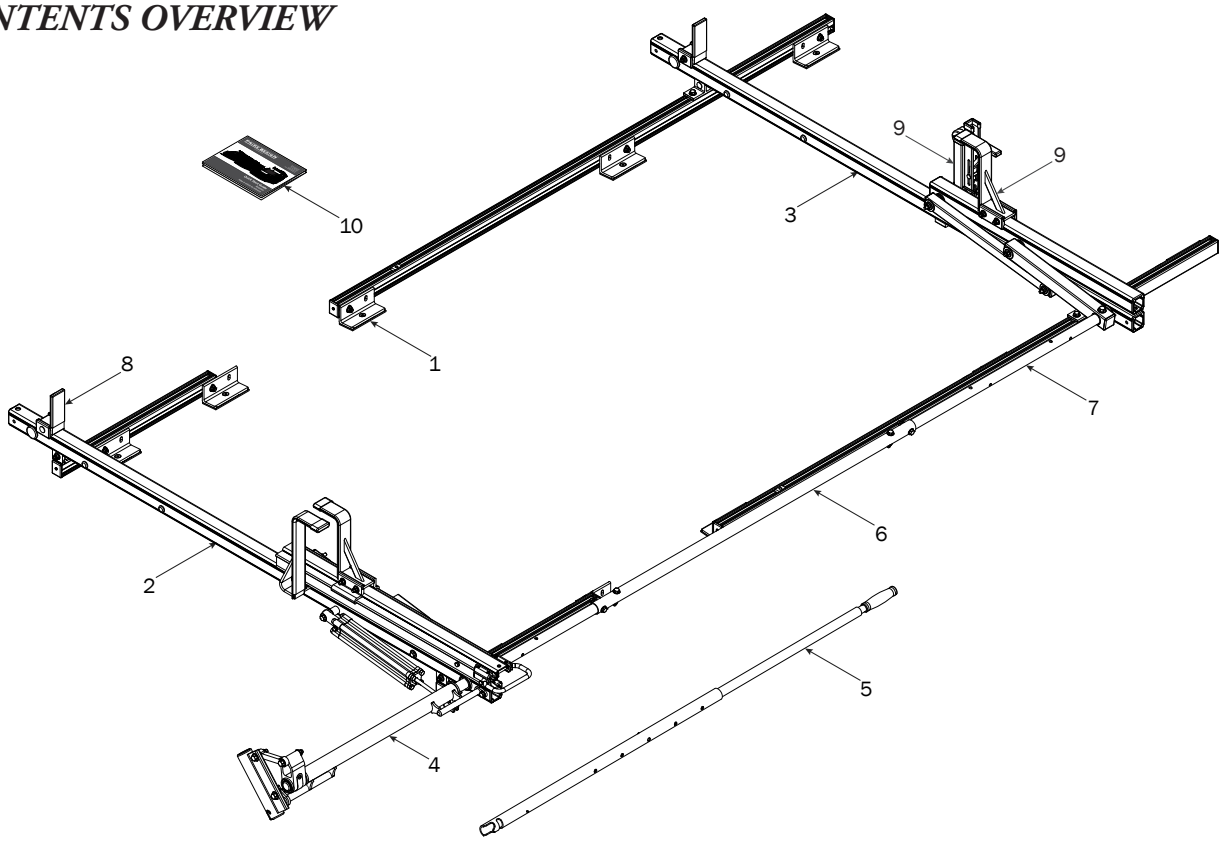
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CONTENTS OVERVIEW

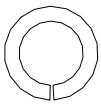


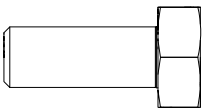
1—FBM-0094 ..... (Qty 1)
Channels w/Hardware

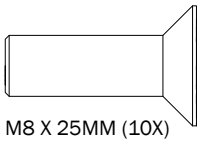

23” Channels (2X)

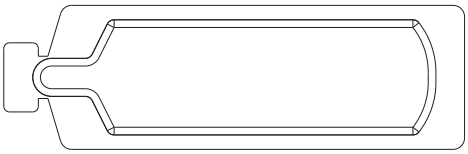

74” Channels, Pre-assembled (2X)

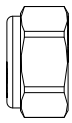

Channel Bracket (4X)

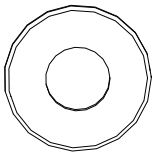

5⁄16" Lock Washer (4X)


M8 x 20MM (4X)


M8 X 25MM (10X)


Anti-Seize (1X)

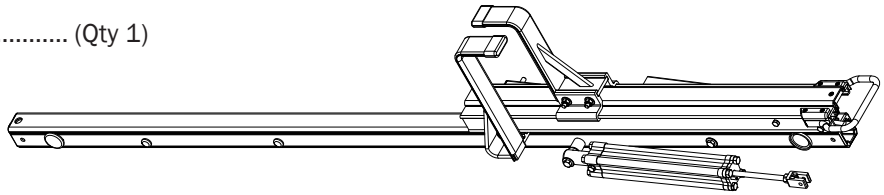

M8 Lock Nut (10X)


5⁄16" Flat Washer (14X)

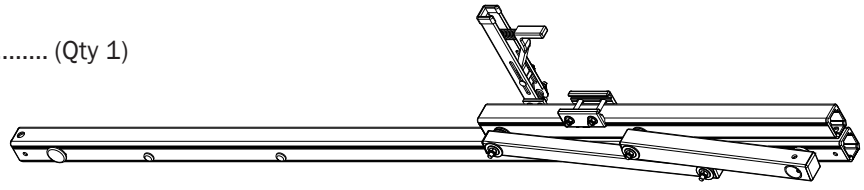

Mounting Bracket (10X)


Foam Pad (10X)

2—Rear Crossbar Assembly..... (Qty 1)

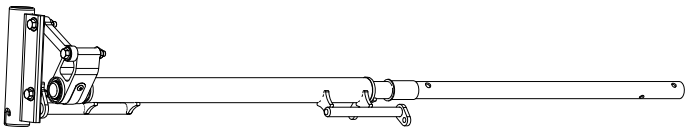


3—Front Crossbar Assembly..... (Qty 1)

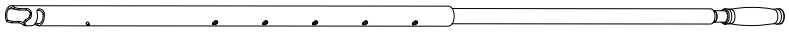


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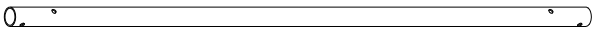
4—Rear Drive Shaft ..... (Qty 1)
Right Hand, A Version, 50.00”



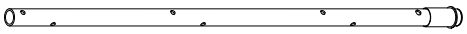
5—HHR Handle Assembly ..... (Qty 1)
35.00”



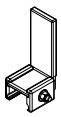
6—Connecting Bar ..... (Qty 1)
4.00’



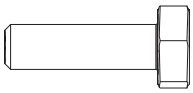
7—Front Drive Shaft ..... (Qty 1)
B Version, 35.75”



8—Ladder Stop Assembly ..... (Qty 2)
1.75”



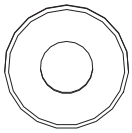
9—L & Z Post Kit..... (Qty 1)
Adj. Z Post, 7.25”, L Post, w/HKT-0160



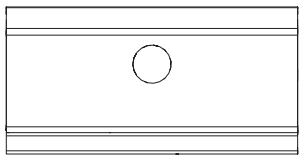
M6 x 20MM (1X)



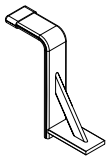
¼ Lock Washer (1X)



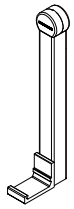
¼ Flat Washer (1X)



L Post Bracket Clamp (1X)

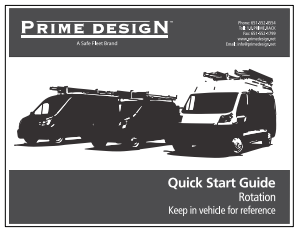


Z Post (1X)



L Post (1X)

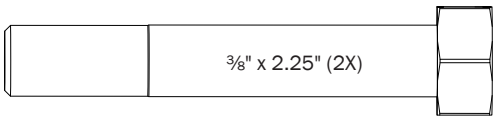
10—USQSG-Ergorack ..... (Qty 1)
Quick Start Guide, Rotation



11—HKT-8163 (Not called out in Overview)..... (Qty 1)

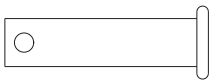




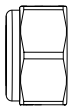




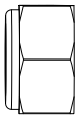
Cotter Pin (1X)



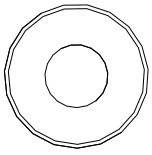
Clevis Pin (1X)



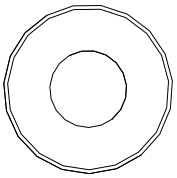
M8 Lock Nut (5X)



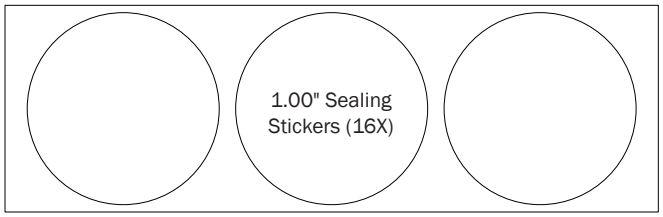
⅜" Lock Nut (2X)

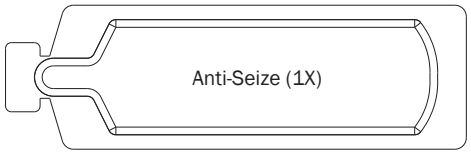


5/16" Flat Washer (10X)



⅜" Flat Washer (4X)







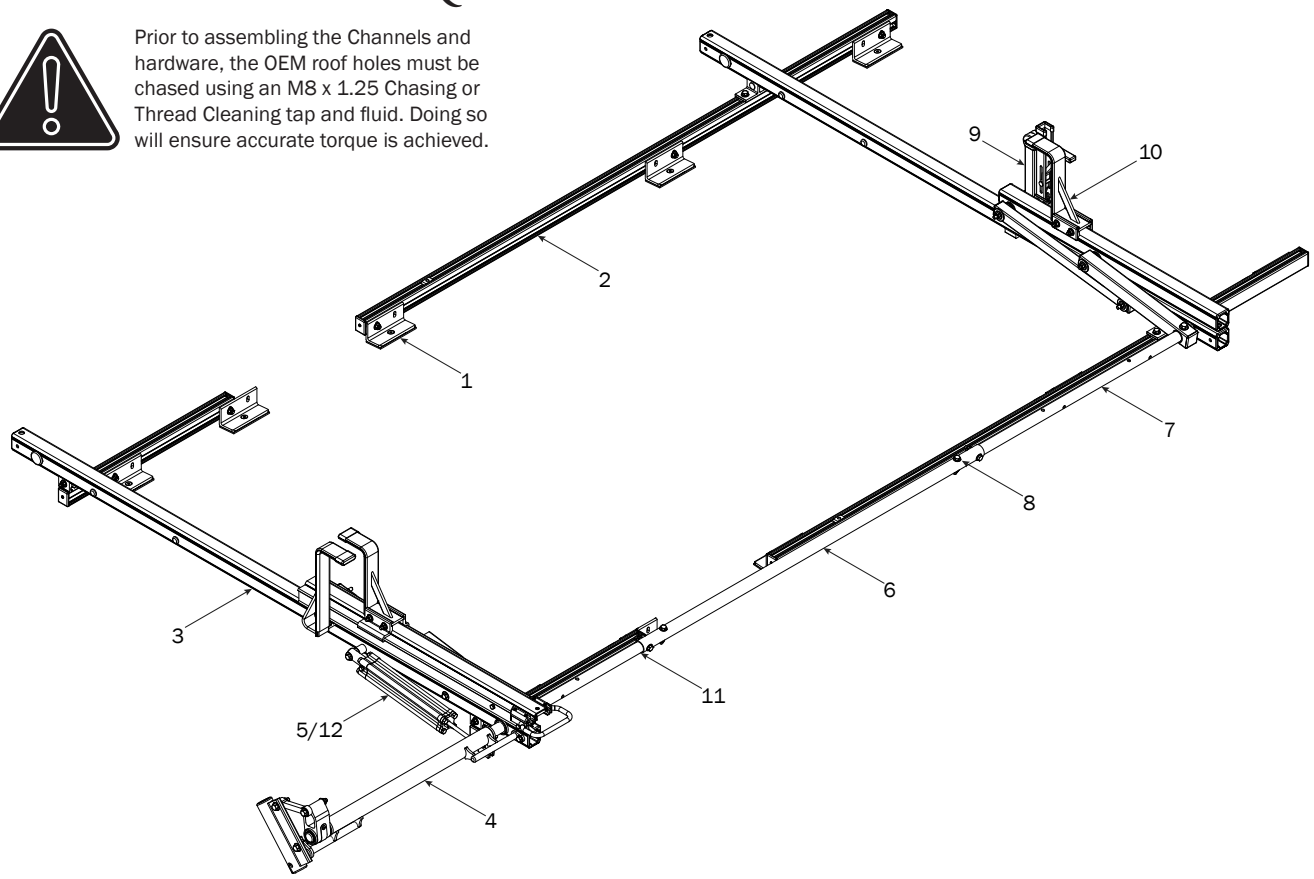
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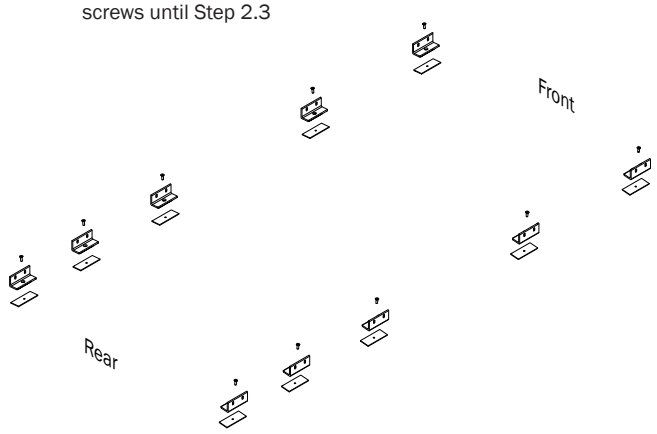
RIGHT SIDE ASSEMBLY SEQUENCE

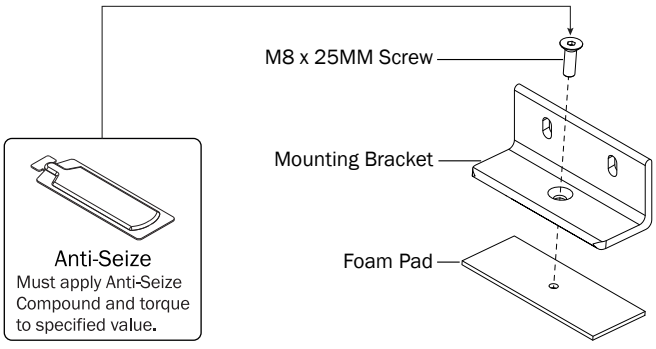
Prior to assembling the Channels and hardware, the OEM roof holes must be chased using an M8 x 1.25 Chasing or Thread Cleaning tap and fluid. Doing so will ensure accurate torque is achieved.



MOUNTING BRACKETS

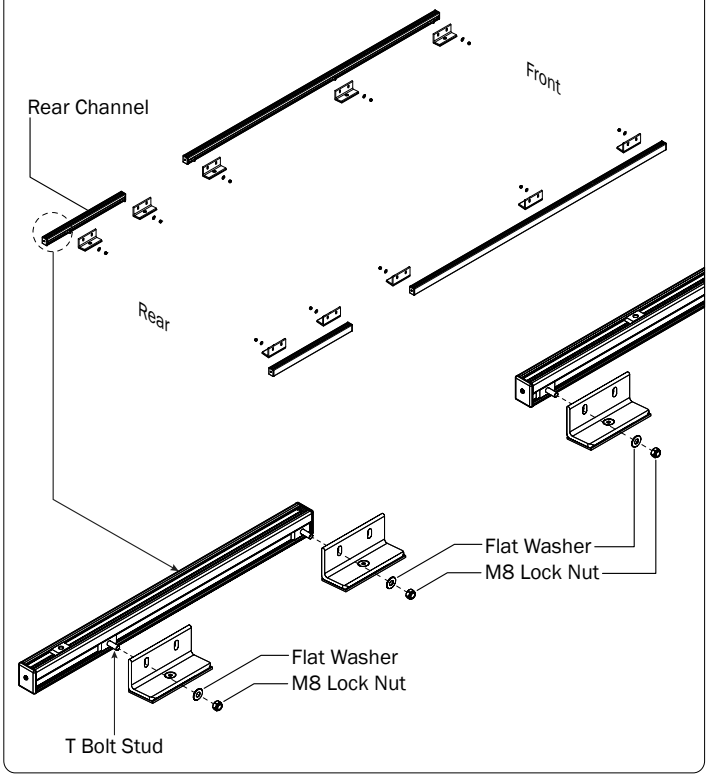
1 Apply Anti-Seize to all M8 x 25MM Flat Head Screws and install the Channel Mounting Brackets with Foam Pads onto the vehicle's roof mounting holes. Do not tighten screws until Step 2.3





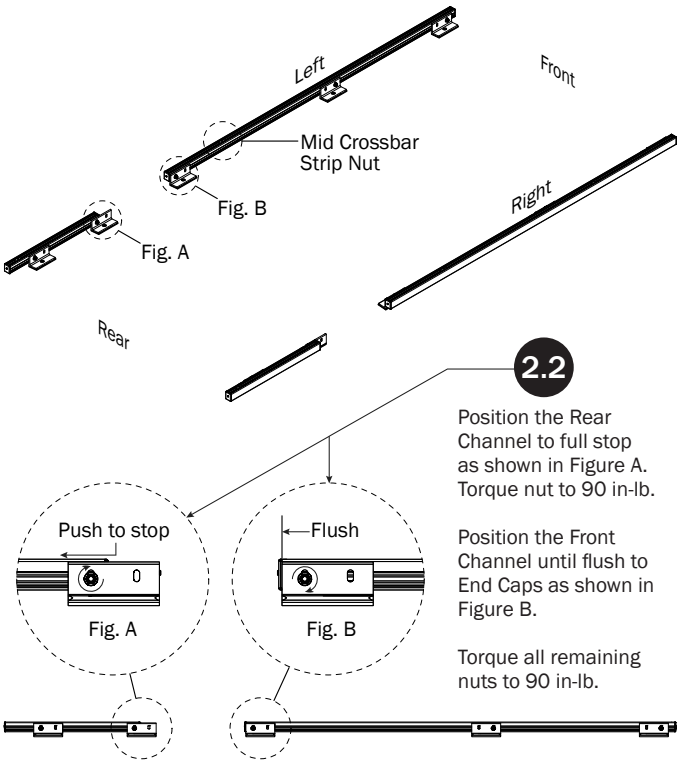
CHANNELS

2.1 Apply Anti-Seize to all M8 T Bolt studs, then attach to Mounts using the indicated hardware. Do not tighten until Step 2.2



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The Front Channels include two aluminum Strip Nuts per Channel for use in a three Crossbar configuration. For two Crossbar configurations, disregard the rear Strip Nut in each Front Channel.



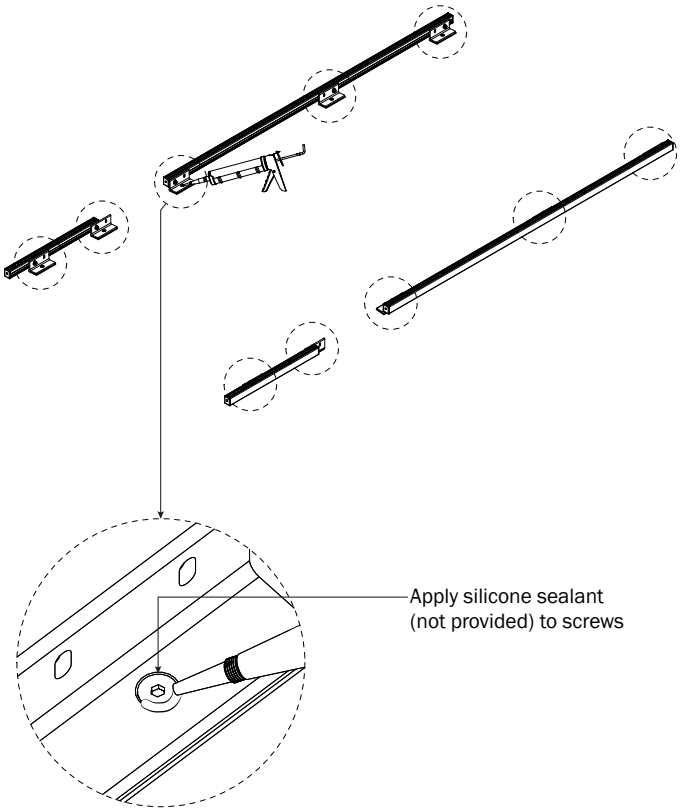
2.2

Position the Rear Channel to full stop as shown in Figure A. Torque nut to 90 in-lb.

Position the Front Channel until flush to End Caps as shown in Figure B.

Torque all remaining nuts to 90 in-lb.

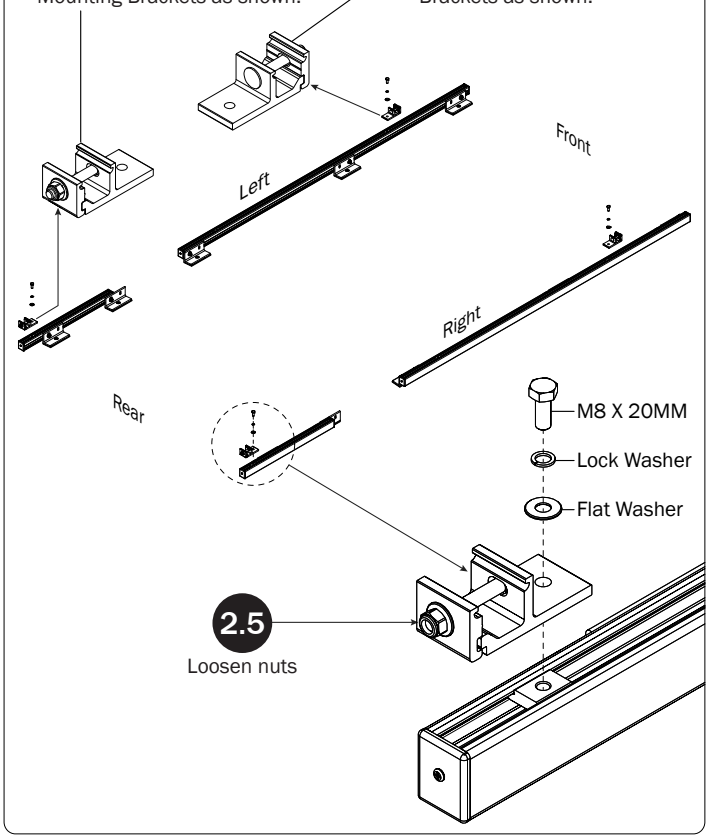
2.3 Torque all M8 x 25MM Flat Head Screws to 150 in-lbs. Apply Silicone Sealant to screw heads to seal against water intrusion.



2.4 Attach Mounting Brackets to the Aluminum Strip Nuts located in the Channels

Position the rear and center Mounting Brackets as shown.

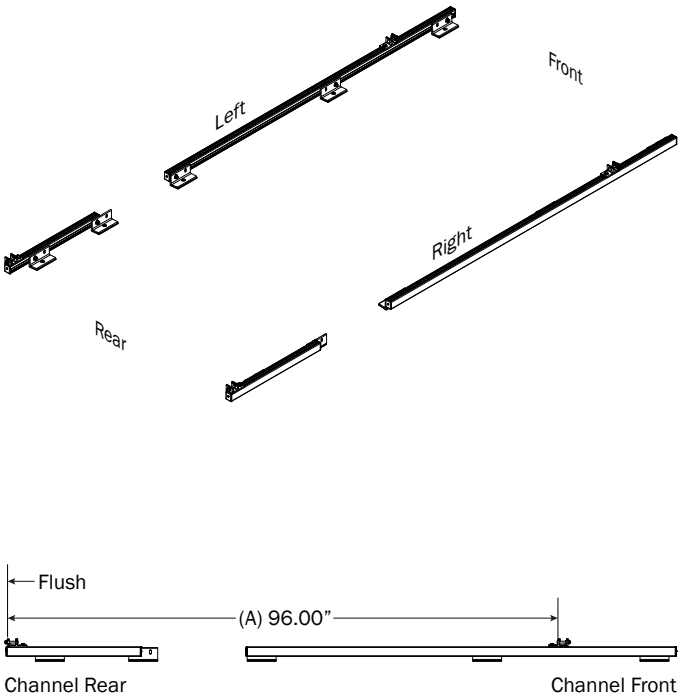
Position the front Mounting Brackets as shown.



2.5

Loosen nuts

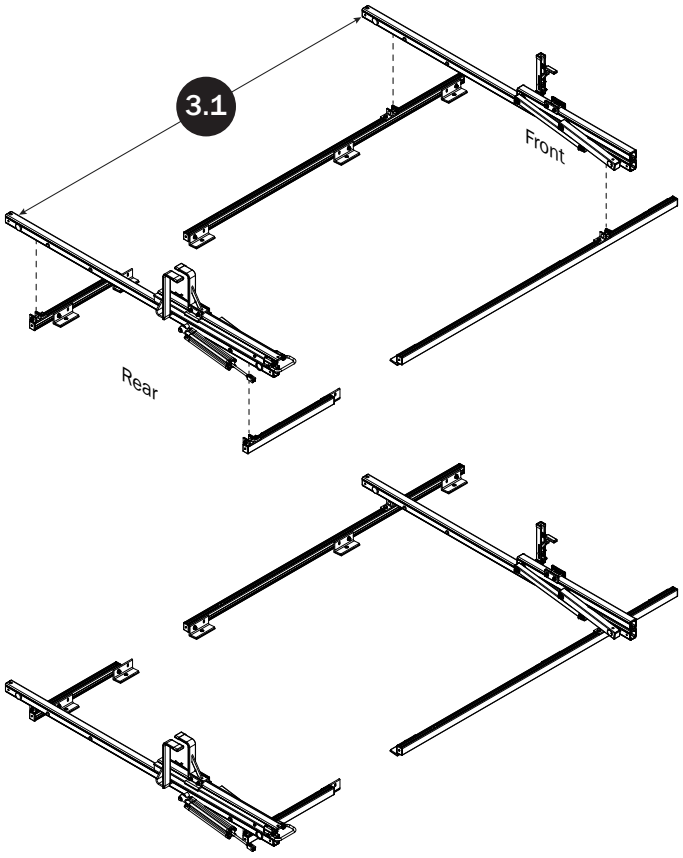
2.6 Position Mounting Brackets to designated dimension shown below, then torque the M8 X 20MM bolt to 90 in-lbs. Proceed to Step 3.1.



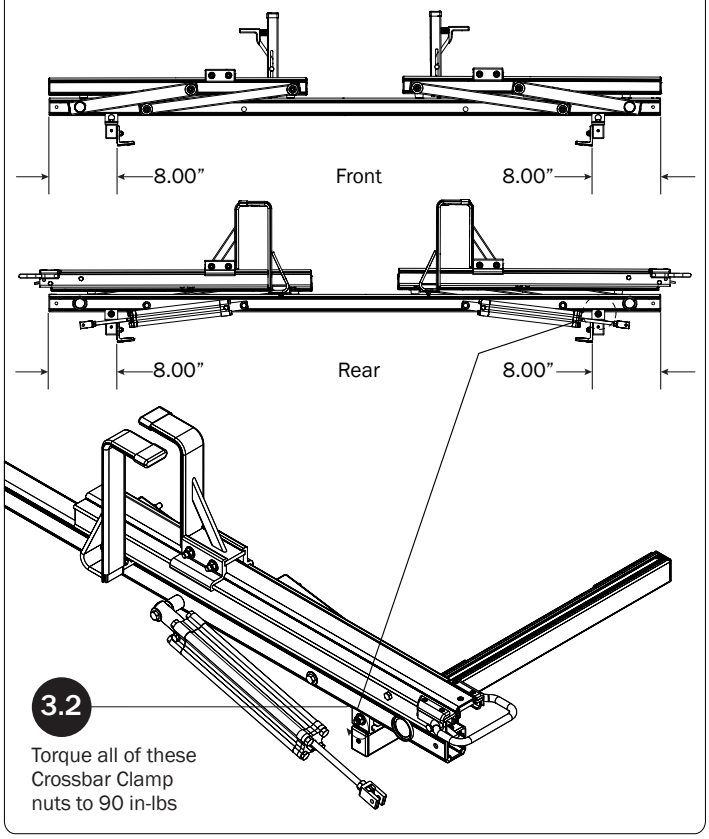
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CROSSBARS

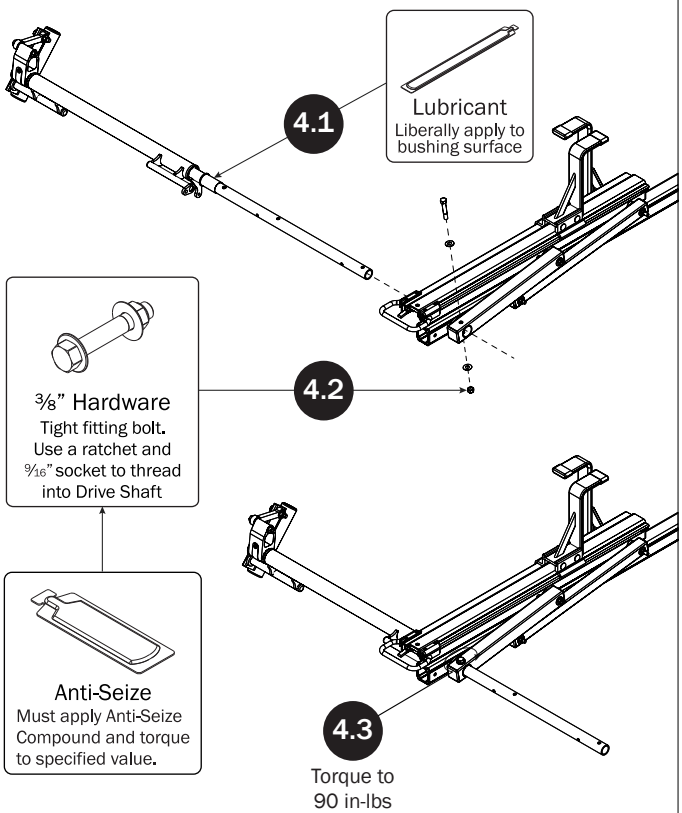


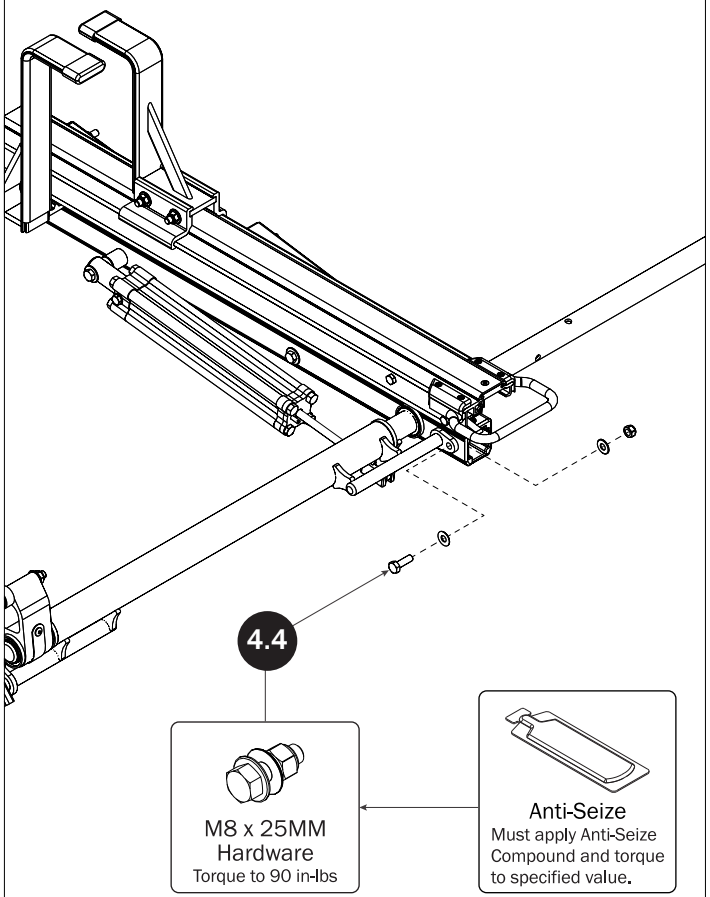
CROSSBAR ADJUSTMENT



REAR DRIVE SHAFT

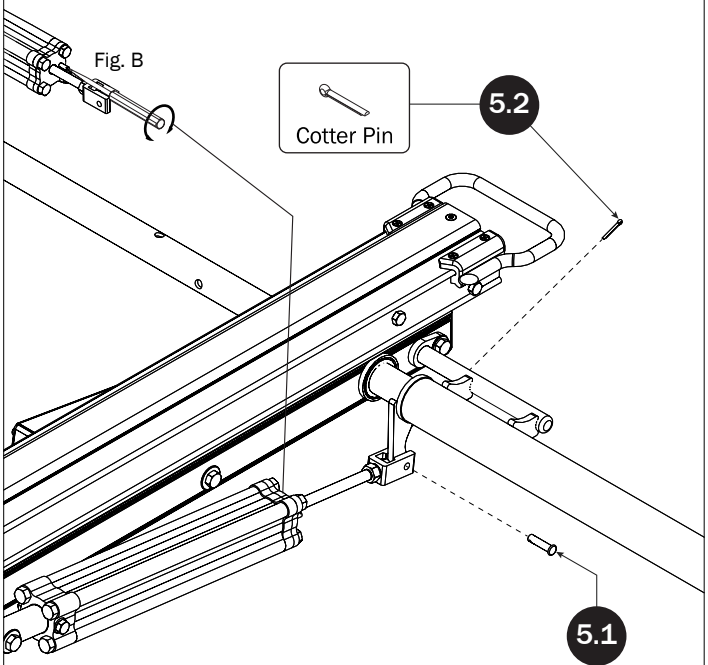
NOTE: For instructional clarity, the FBM Mounting System will not be shown for the remainder of this Assembly Manual.





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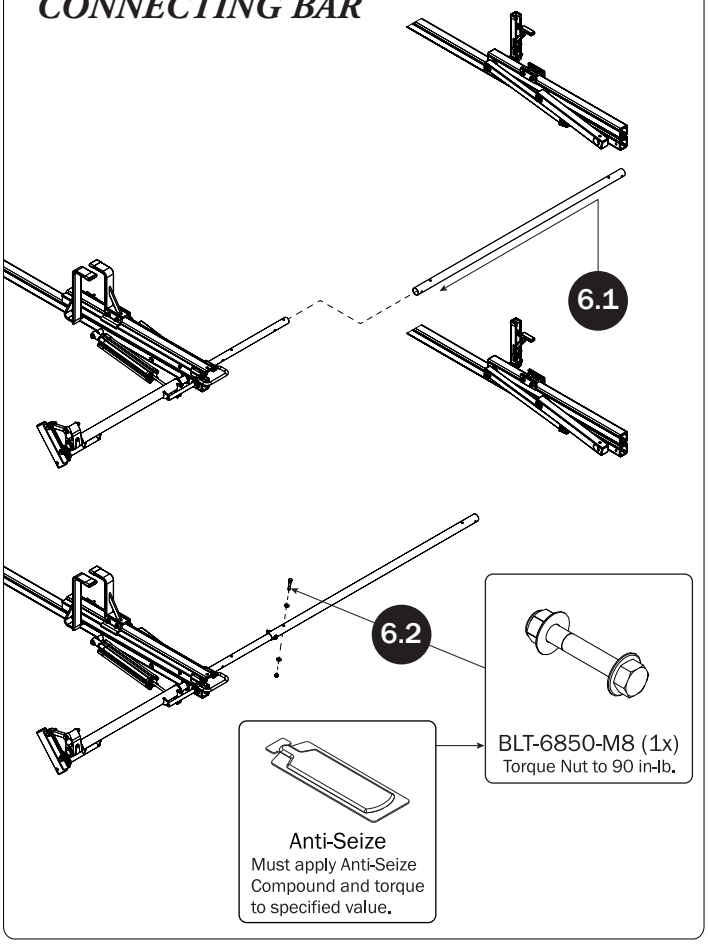
CYLINDER HARDWARE



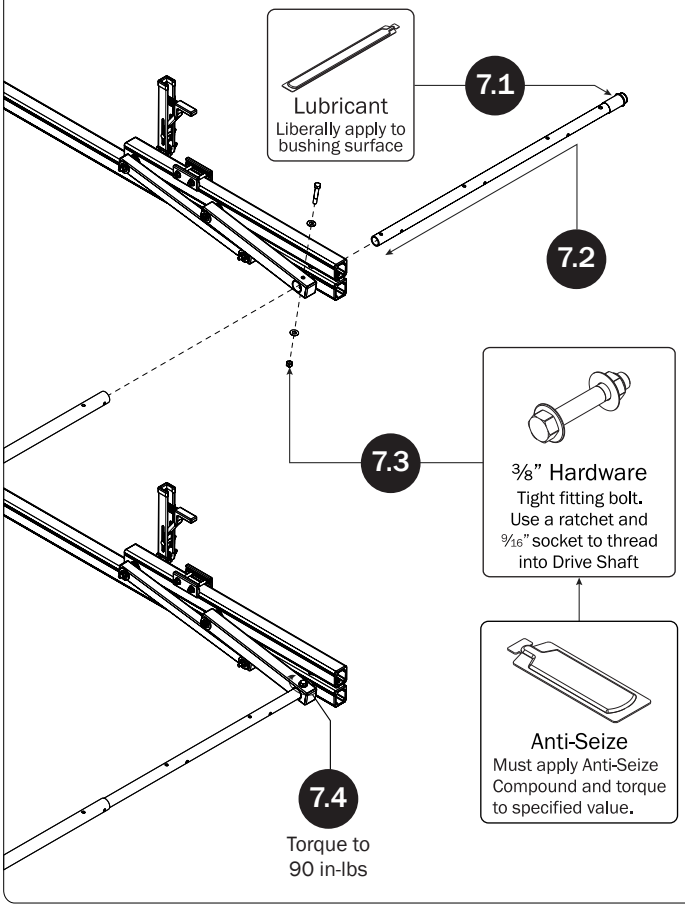
NOTE: Loosen the Cylinder Flow Control Screw (Fig. B) as needed to allow movement for this step sequence.

When finished with Cylinder Hardware, tighten the Flow Control Screw all the way closed then turn back open 1½ turn.

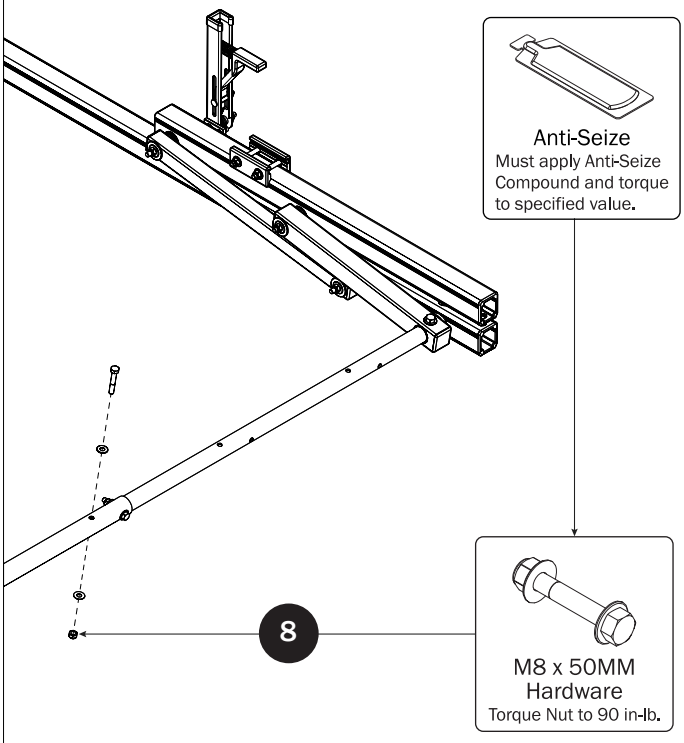
CONNECTING BAR



FRONT DRIVE SHAFT



CONNECTING BAR FASTENERS



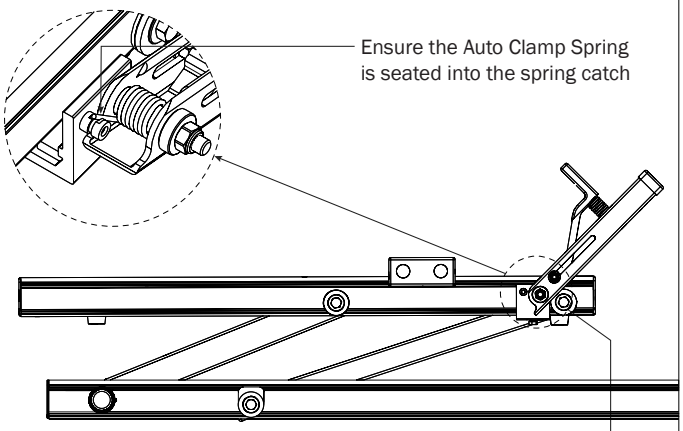
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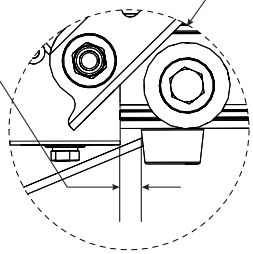
L POSTS

SEE QUICK START GUIDE FOR ADJUSTMENTS

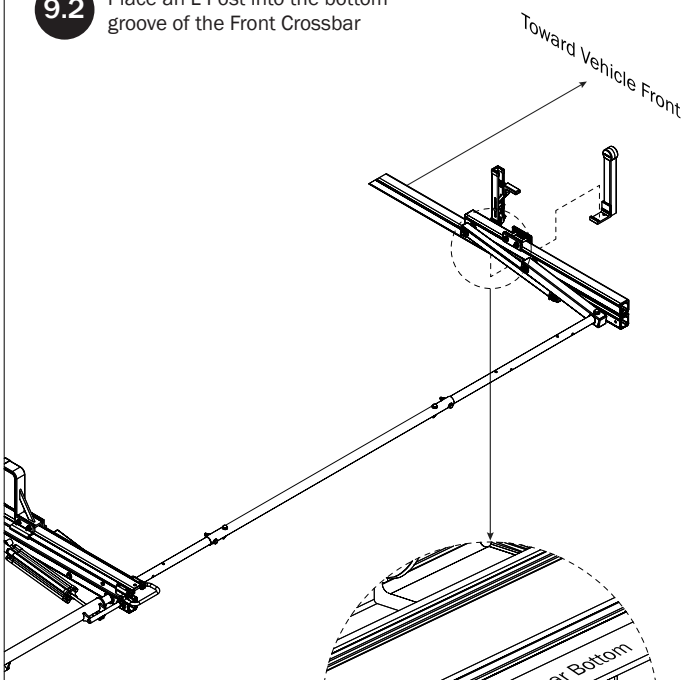
NOTE: The front Auto Clamp come preset from the factory for packaging purposes only. To assemble the L Post to the Crossbar, the Auto Clamps must be repositioned.



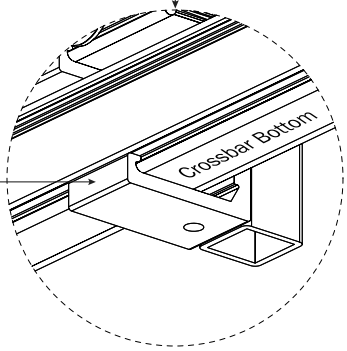
9.1 Beginning with the Front Crossbar, loosen the bolt at the bottom of the Auto Clamp, then slide the Auto Clamp toward the inside end of the Rotation Upper. Reposition the Auto Clamp leaving a minimum of 1/4" distance from the rubber bumper to the edge of the Auto Clamp Bracket as shown, then finger-tighten if adjusting later, or torque to 80 in-lbs.



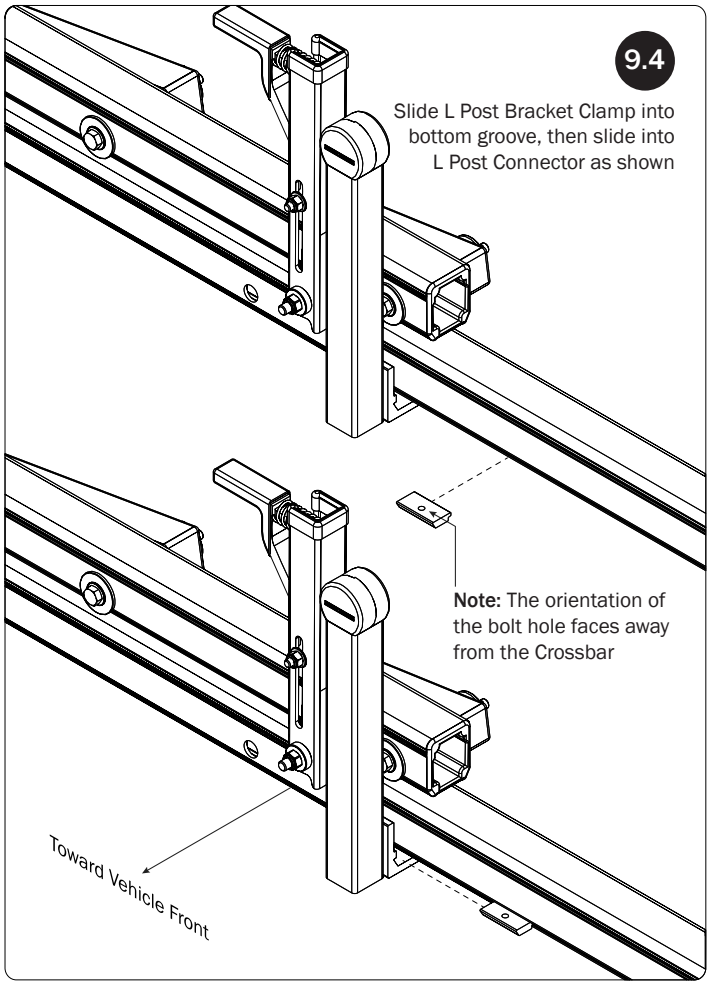
9.2 Place an L Post into the bottom groove of the Front Crossbar



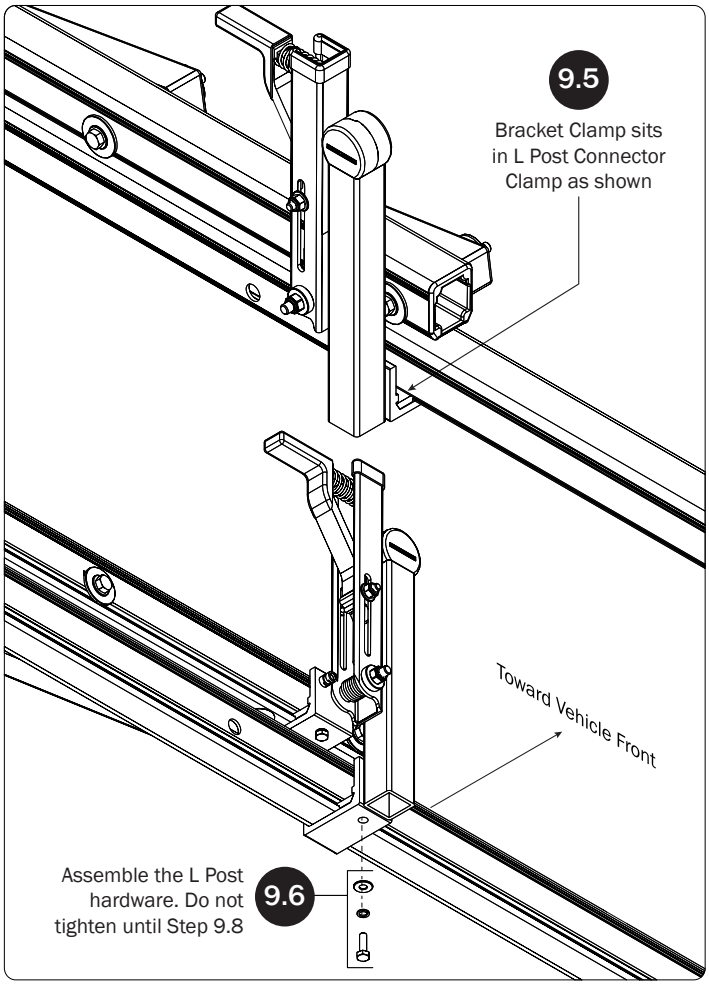
9.3 L Post seats into the Crossbar's inside bottom groove as seen from the rear of the Front Crossbar



9.4 Slide L Post Bracket Clamp into bottom groove, then slide into L Post Connector as shown



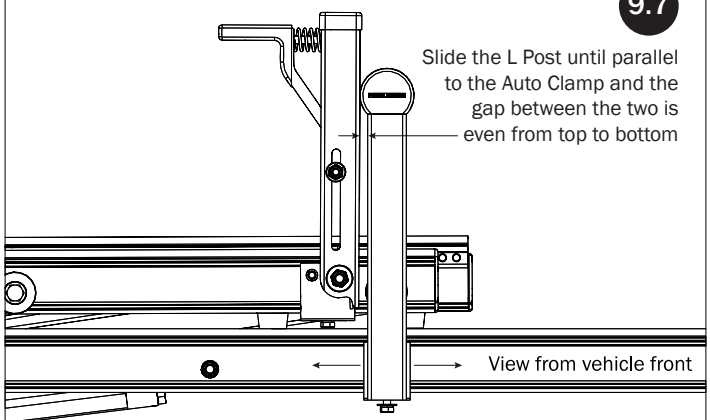
9.5 Bracket Clamp sits in L Post Connector Clamp as shown

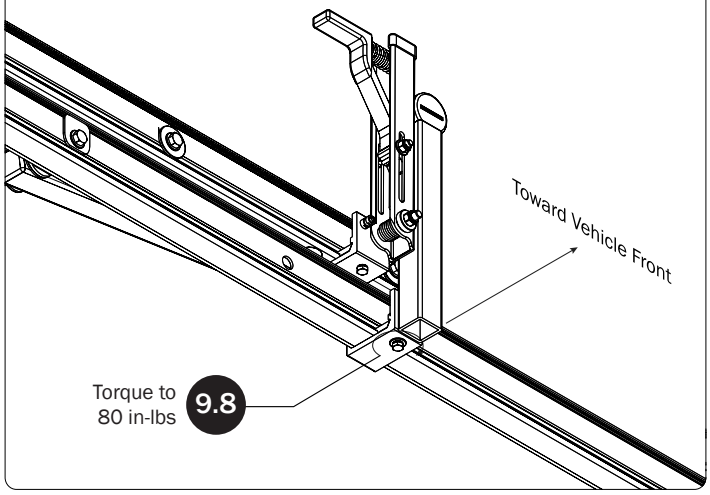


9.6 Assemble the L Post hardware. Do not tighten until Step 9.8

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9.7 Slide the L Post until parallel to the Auto Clamp and the gap between the two is even from top to bottom



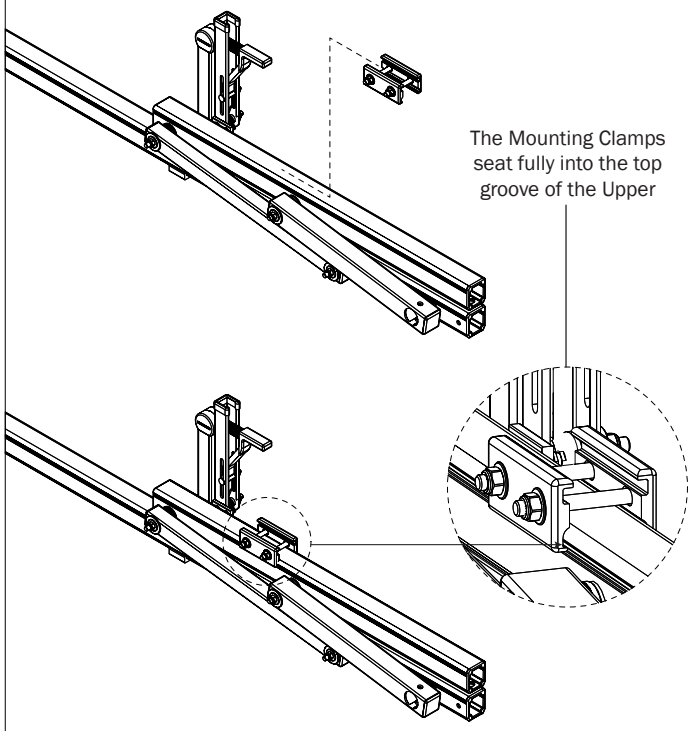


Torque to 80 in-lbs 9.8

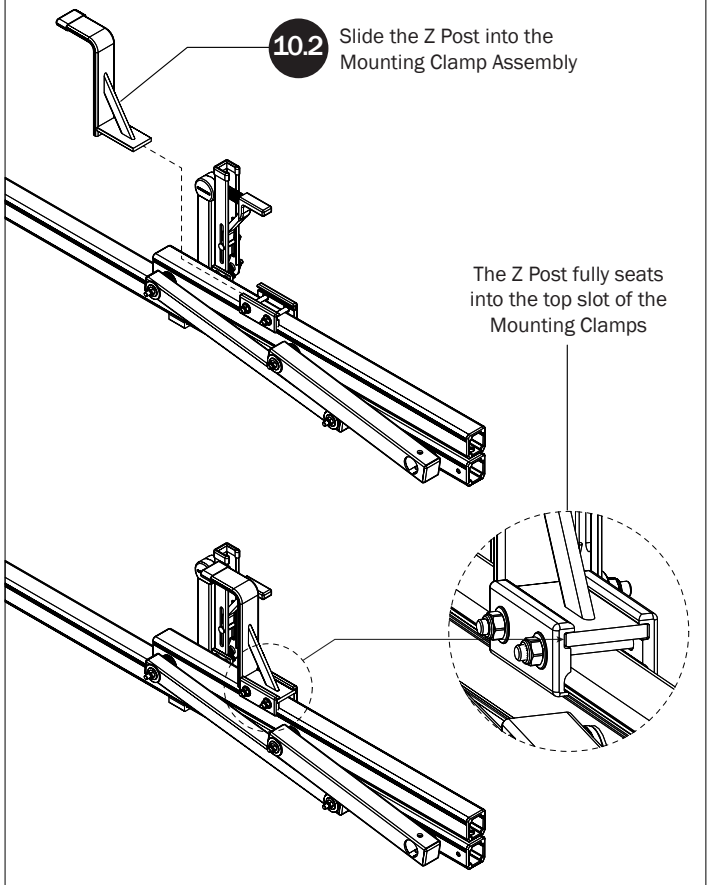
Z POSTS

SEE QUICK START GUIDE FOR ADJUSTMENTS

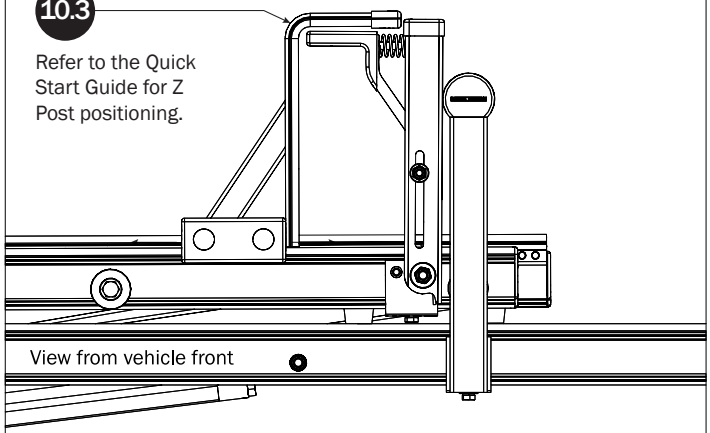
10.1 Assemble the Z Post Mounting Clamp Assembly onto the Rotation Upper. Do not tighten until Step 10.4

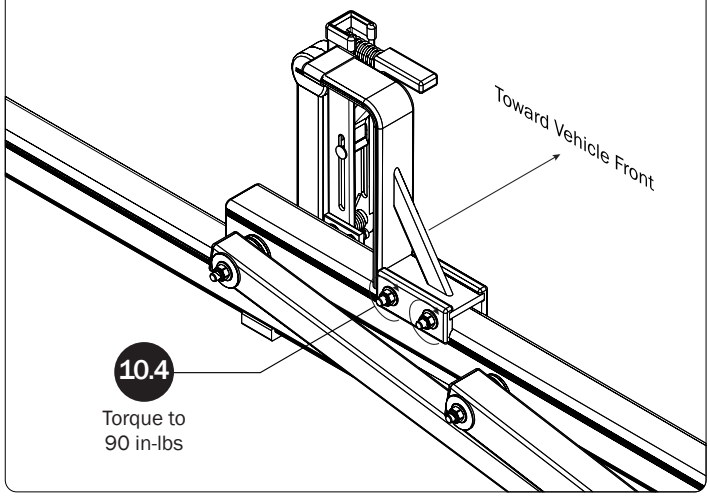


10.2 Slide the Z Post into the Mounting Clamp Assembly



10.3 Refer to the Quick Start Guide for Z Post positioning.



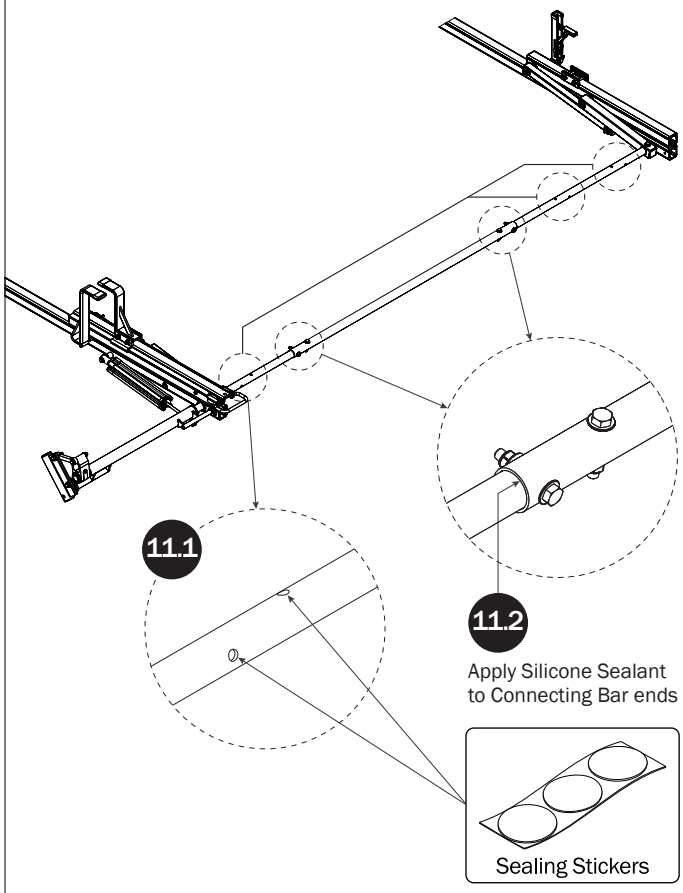


10.4 Torque to 90 in-lbs

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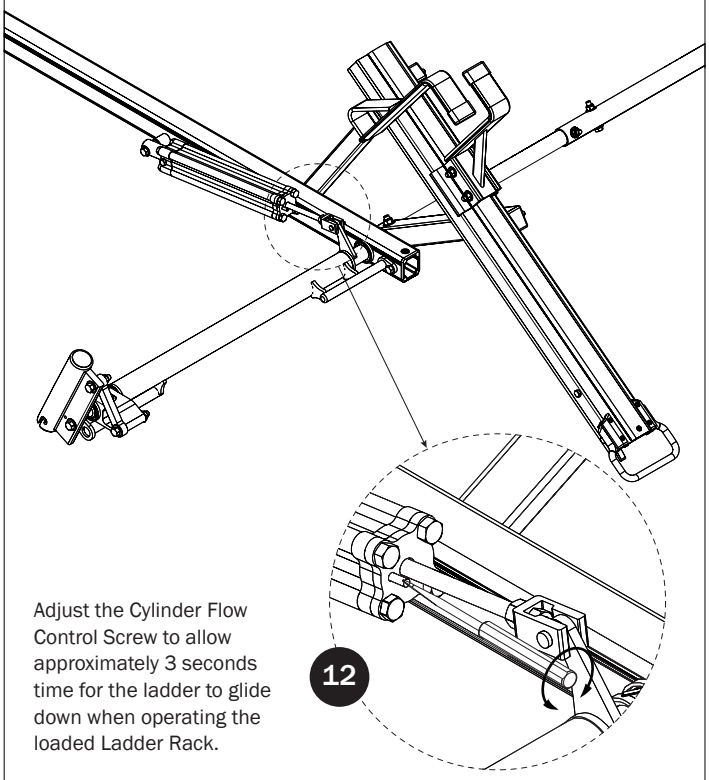
DRIVE SHAFT SEALING



Apply Silicone Sealant to Connecting Bar ends

Sealing Stickers

CYLINDER ADJUSTMENT

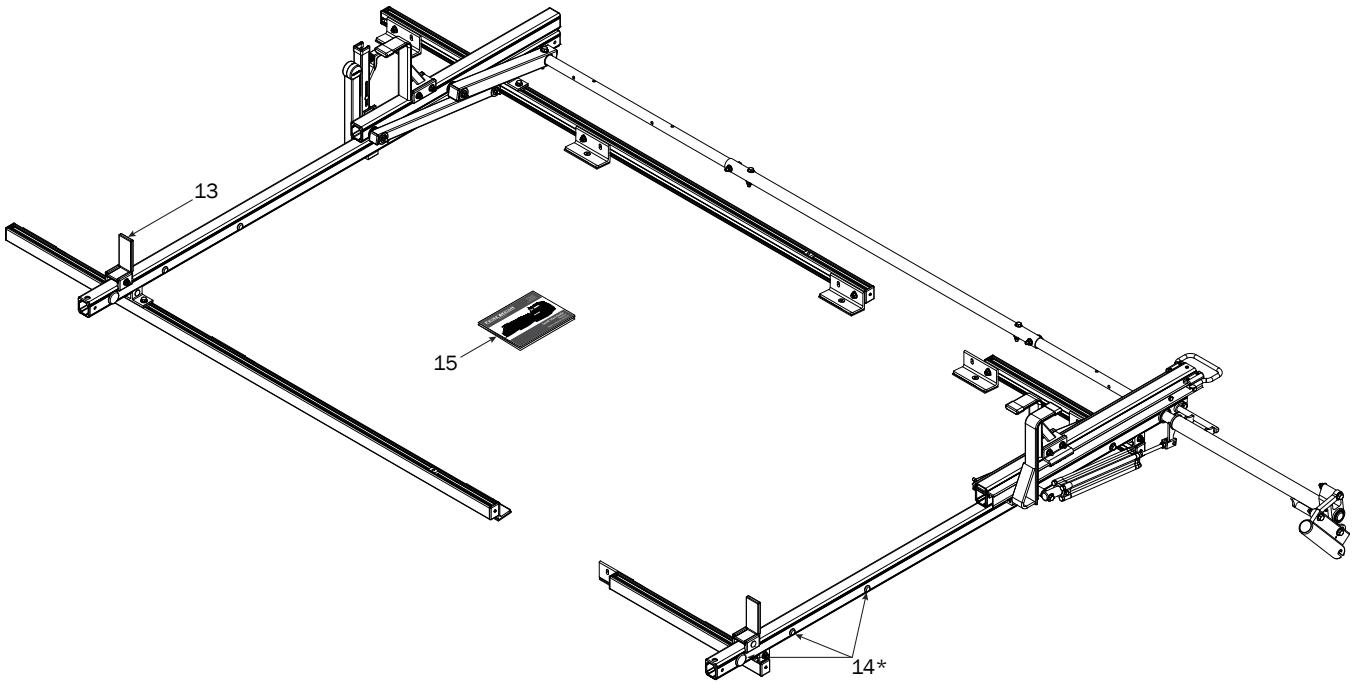


Adjust the Cylinder Flow Control Screw to allow approximately 3 seconds time for the ladder to glide down when operating the loaded Ladder Rack.

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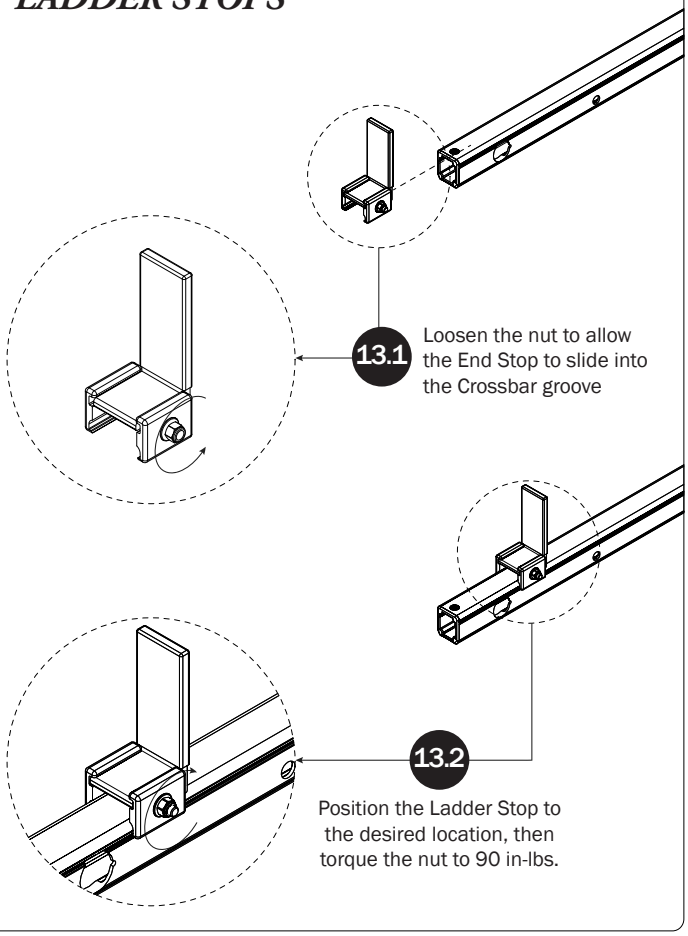
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LEFT SIDE ASSEMBLY SEQUENCE



** NOTE: Crossbars may not have Caps installed from the factory. If factory-installed, proceed to Step 13 and ignore Step 14. If not installed, Caps will be included in the Hardware Kit. Press them into the Crossbars as shown in Step 14.*

LADDER STOPS

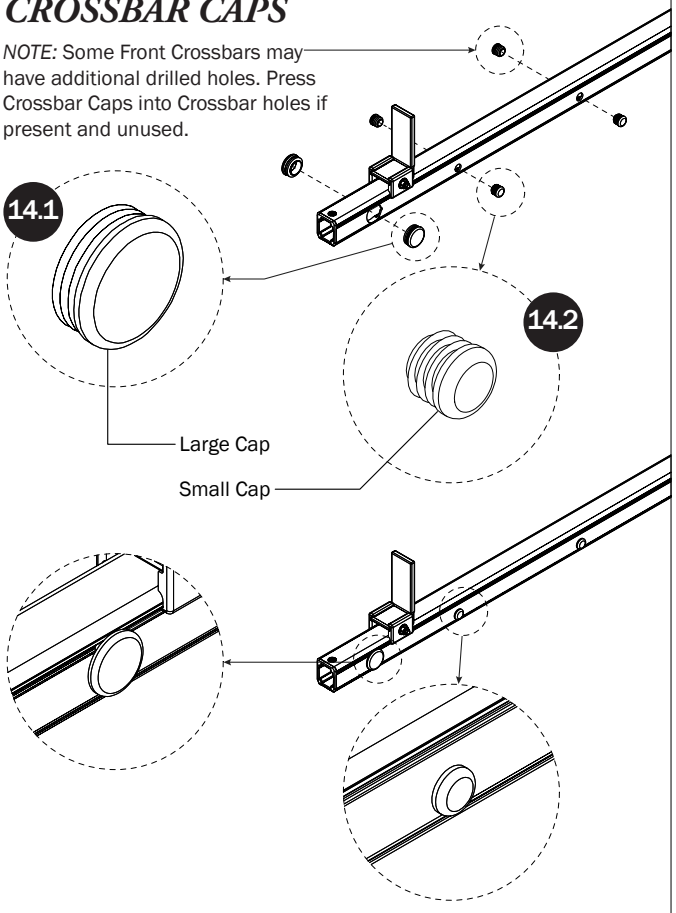


13.1 Loosen the nut to allow the End Stop to slide into the Crossbar groove

13.2 Position the Ladder Stop to the desired location, then torque the nut to 90 in-lbs.

CROSSBAR CAPS

NOTE: Some Front Crossbars may have additional drilled holes. Press Crossbar Caps into Crossbar holes if present and unused.

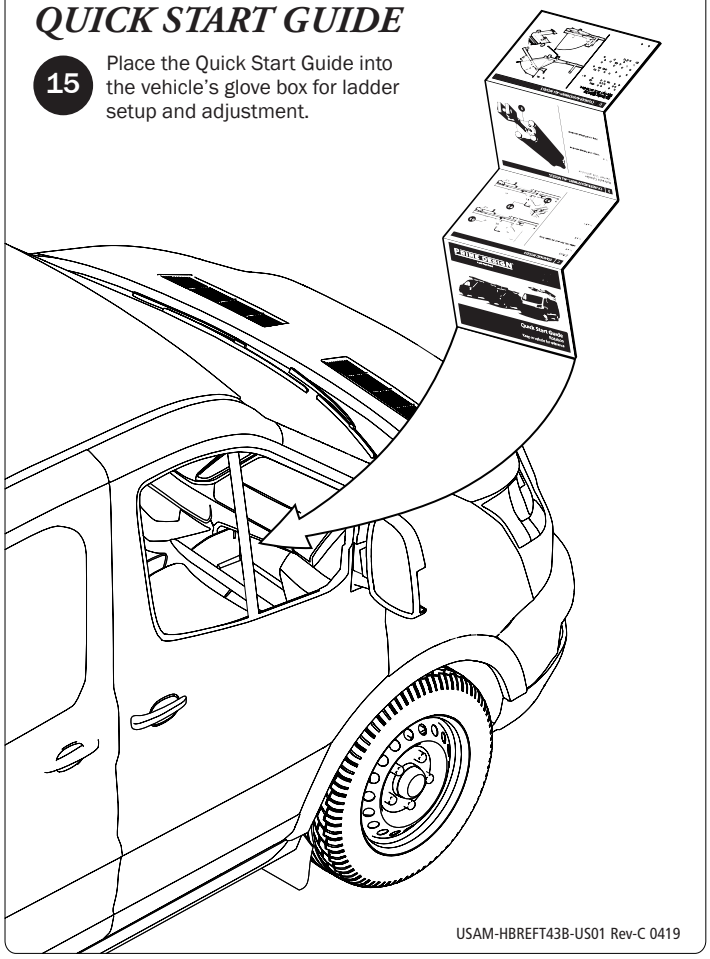


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QUICK START GUIDE

15 Place the Quick Start Guide into the vehicle's glove box for ladder setup and adjustment.



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