

INSTALLATION GUIDE

RAM 2500 19+ Crew Cab Mule Ultra Rack



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SKILL LEVEL - 4 STARS



1 STAR

EASY - No tools required

2 STARS

BASIC - Requires standard tools, basic mechanical knowledge and understanding

3 STARS

MODERATE - Requires standard tools. Some drilling and/or cutting.

4 STARS

ADVANCED - Requires speciality tools. Drilling, cutting, and/or welding

5 STARS

EXPERT - Professional installation recommended.

DISCLAIMER

Expedition One is not responsible for any damages to vehicle or injury.

We always recommend professional assistance when installing our vehicle products.

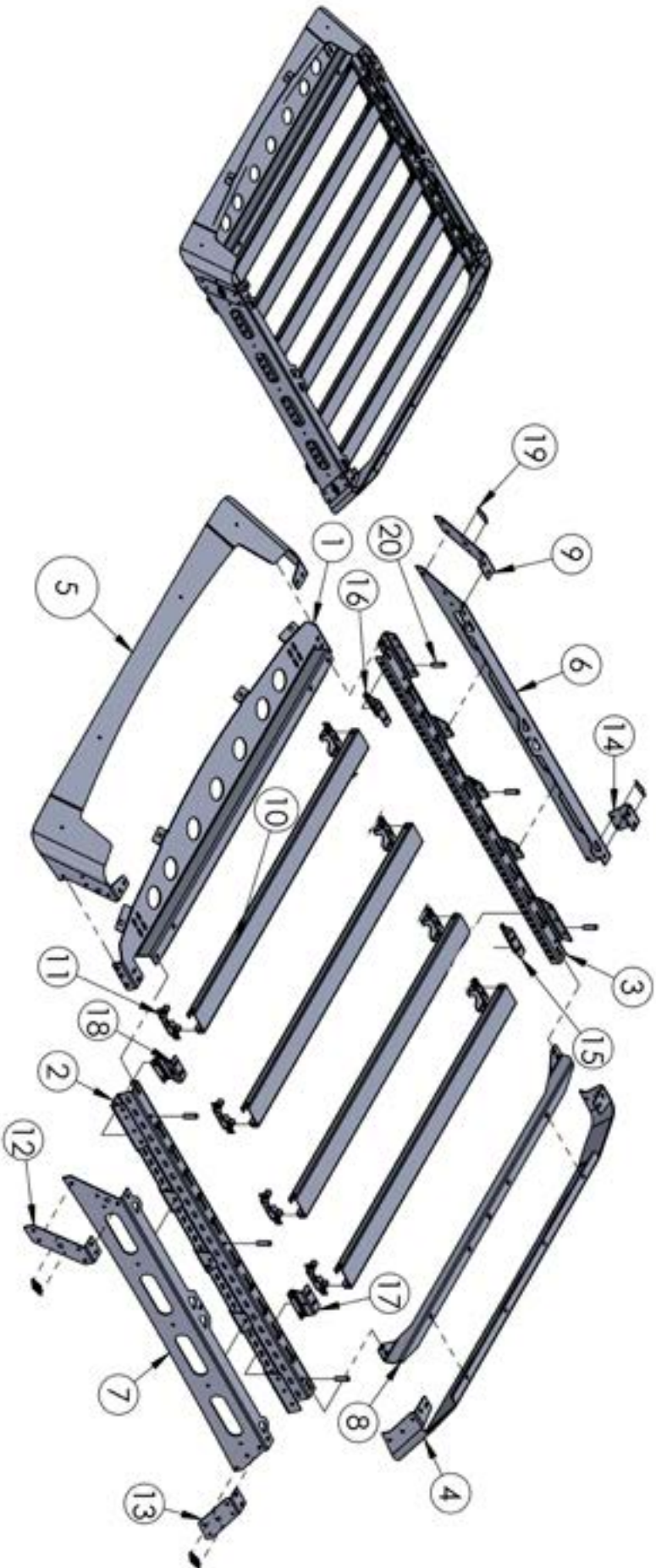
Always follow safety precautions including the use safety gear and devices.

NOTE

Due to the nature of aluminum, rack pieces including fascia parts may require time to “relax” or return to shape before mounting.

Do not force parts into place. Leave all hardware loose before tightening to allow for adjustment.

EM NO.	QTY.	PART NUMBER	DESCRIPTION	ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	1	ML-10RAM-ULTRA-LTBAR-RK101	FRONT BRACE	11	12	ML-10RAM-ULTRA-LTBAR-RK111	SPREADER BRACKET
2	1	ML-10RAM-ULTRA-LTBAR-RK102	INTERNAL RAIL LEFT	12	1	ML-10RAM-ULTRA-LTBAR-RK112	SEAM JOINER FRONT LEFT
3	1	ML-10RAM-ULTRA-LTBAR-RK103	INTERNAL RAIL RIGHT	13	1	ML-10RAM-ULTRA-LTBAR-RK113	SEAM JOINER REAR LEFT
4	1	ML-10RAM-ULTRA-LTBAR-RK104	SHELL REAR	14	1	ML-10RAM-ULTRA-LTBAR-RK114	SEAM JOINER REAR RIGHT
5	1	ML-10RAM-ULTRA-LTBAR-RK105	SHELL LIGHTBAR FRONT	15	1	ML-10RAM-ULTRA-LTBAR-RK115	ROOF MOUNT REAR RIGHT
6	1	ML-10RAM-ULTRA-LTBAR-RK106	SHELL RIGHT	16	1	ML-10RAM-ULTRA-LTBAR-RK116	ROOF MOUNT FRONT RIGHT
7	1	ML-10RAM-ULTRA-LTBAR-RK107	SHELL LEFT	17	1	ML-10RAM-ULTRA-LTBAR-RK118	ROOF MOUNT REAR LEFT
8	1	ML-10RAM-ULTRA-LTBAR-RK109	REAR BRACE	18	1	ML-10RAM-ULTRA-LTBAR-RK119	ROOF MOUNT FRONT LEFT
9	1	ML-10RAM-ULTRA-LTBAR-RK117	SEAM JOINER FRONT RIGHT	19	4	ML-10RAM-ULTRA-LTBAR-RK120	MULE LOGO BADGE
10	4	ML-10RAM-ULTRA-LTBAR-RK110	SPREADER	20	6	ML-10RAM-ULTRA-LTBAR-RK121	SPACER



HARDWARE

HARDWARE

ITEM	QTY
Mounting Brackets	4
A - Mule Ultra Truck Hardware Kit	
1/4"-20 X 1/2" Button Head Bolts	16
1/4"-20 X 3/4" Button Head Bolts	48
1/4"-20 Nylock Nuts	64
5/16"-18 X 3/4" Hex Cap Bolts	8
5/16"-18 X 3/4" Button Head Bolts	38
5/16"-18 X 2 1/2" Button Head Bolts	6
5/16"-18 Nylock Nut	44
5/16" Flat Washer	8
B - Riv Nut Hardware Kit	
1/4"-20 X 3/4" Hex Cap Bolts	8
1/4"-20 X 2" Hex Cap Bolt	1
1/4"-20 X 3/8" Riv Nut	8
1/4" X 0.625" SAE Washers	10
1/4" Serrated Crimp Washer	1
3/8" X 1.125" Coupler Nut	1
Riv Nut Crimp Tool	1
C - Spacer Kit (For Leveling as Needed)	
Round Spacer	10
Rectangular Spacer	8
Tube Spacer	6
D- Weather Stripping - 63"	1
- Foam Stripping - 18"	1



RACK ASSEMBLY

ATTENTION

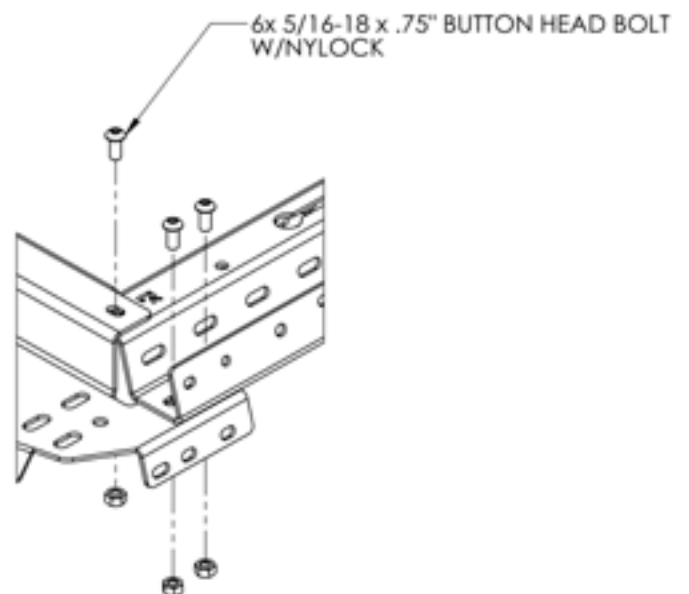
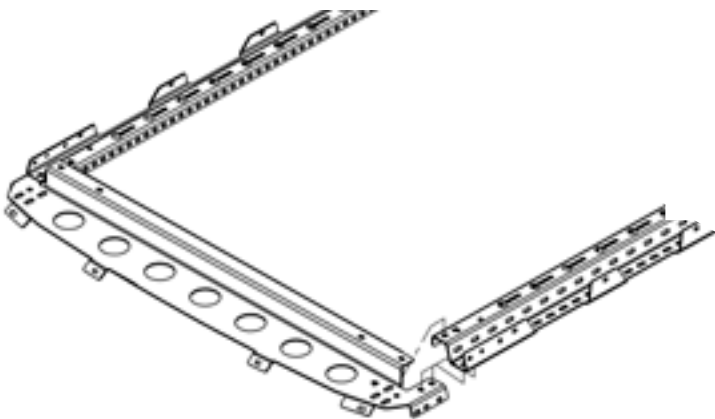
When assembling the Mule Ultra Rack, remember to hand-tighten all bolts relatively loose until the very end of the install. This allows everything to fit into place before everything is tightened down.

1 OEM ROOF RACK REMOVAL

Remove the OEM roof rack from the vehicle by undoing the hardware located at each mount.

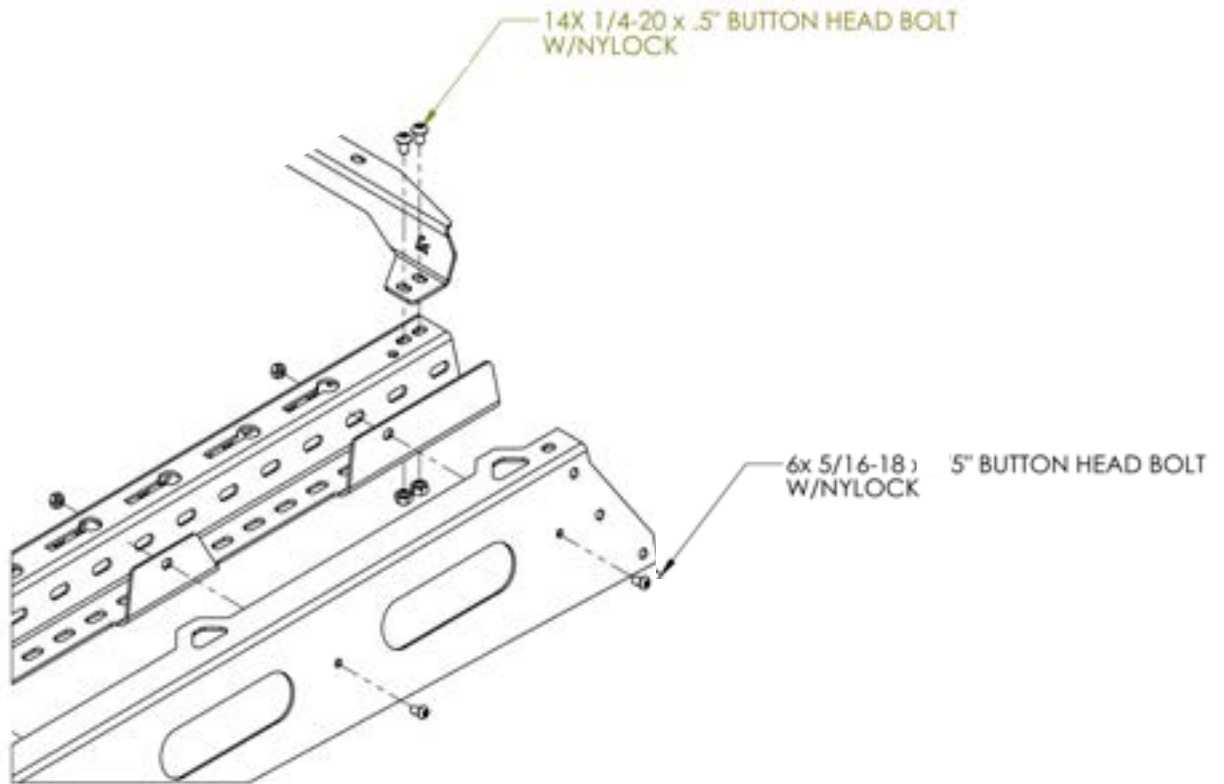
2 FRONT AND SIDE BRACES MOUNTING

Lay out the front and side braces as shown. Mount the braces together using the 5/16" bolts and nuts.

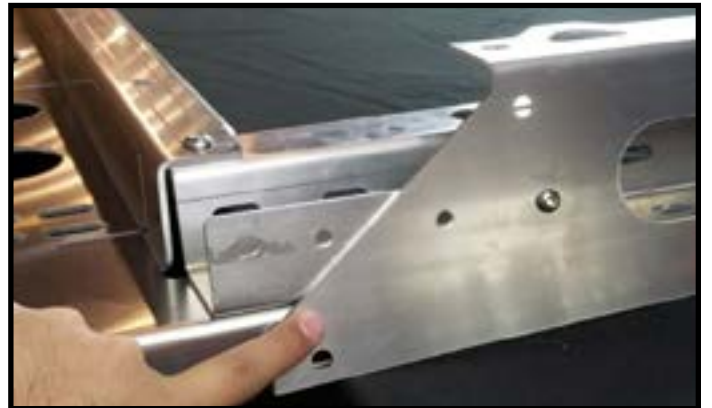


3 REAR BRACE AND SIDE FASCIA MOUNTING

Attach the rear brace using the provided 1/4" hardware. Mount the side fascis with 5/16" hardware on both sides as shown below.

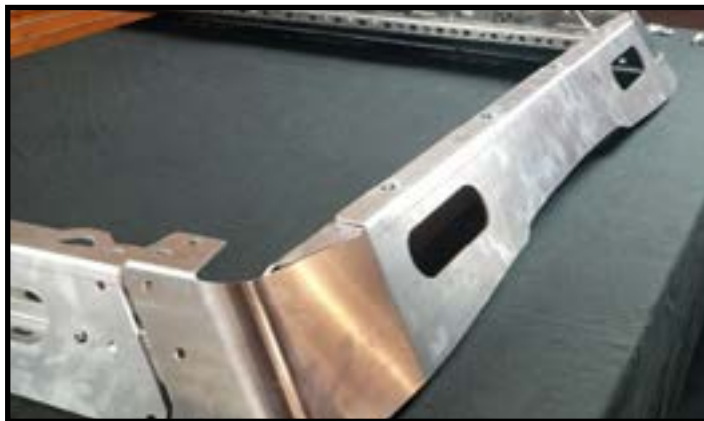


SIDE FASCIA CONTINUED

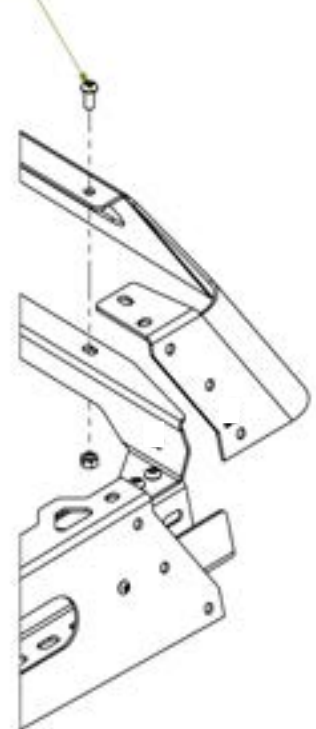


4 REAR FASCIA MOUNTING

Attach rear fascia as shown with 5/16" bolts and nuts.



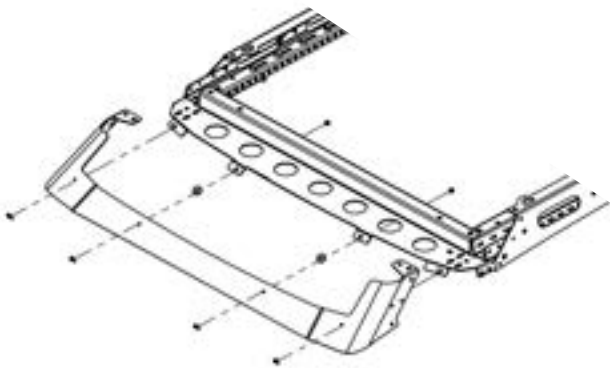
4X 3/8-16 x .75" BUTTON HEAD BOLT
W/NYLOCK



5 FRONT FASCIA MOUNTING

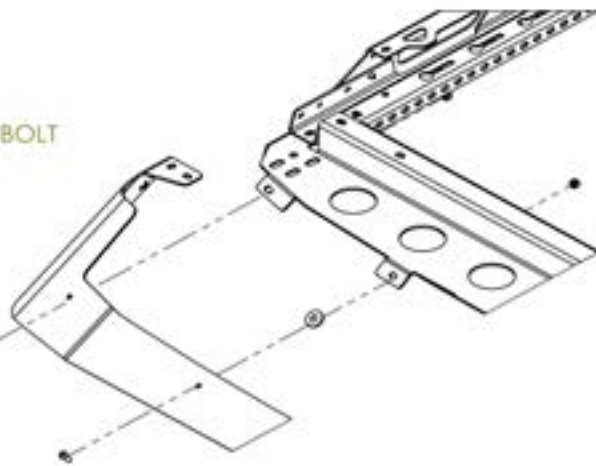
Attach the front fascia using 1/4" bolts. Use the provided round spacers to adjust the front fascia to match the curve of the roof when test fitting the roof rack during mounting.

NOTE: IF YOU HAVE A FASCIA WITH A LIGHT BAR CUTOUT, WE RECOMMEND INSTALLING THE LIGHT BAR PRIOR TO MOUNTING THE ROOF RACK.



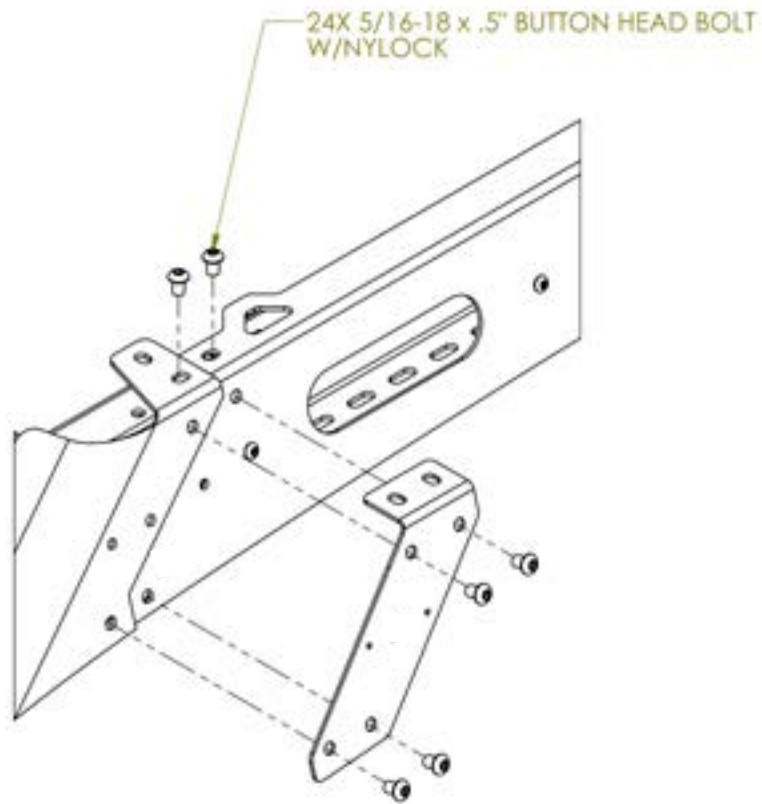
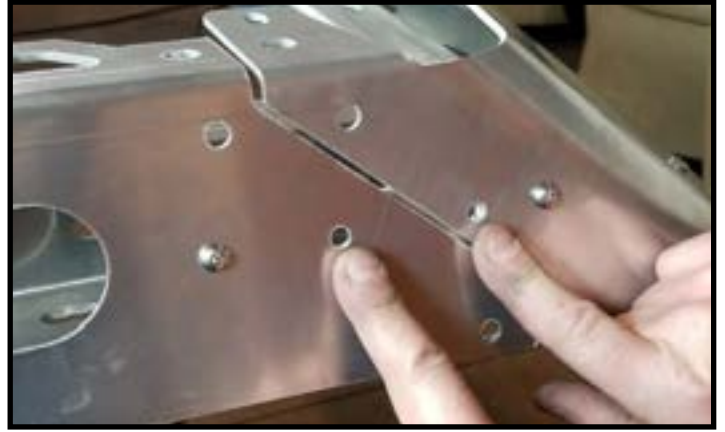
Install the weather stripping to the bottom of front fascia as shown and trim any excess.

4X 1/4-20 x .75" BUTTON HEAD BOLT
W/NYLOCK



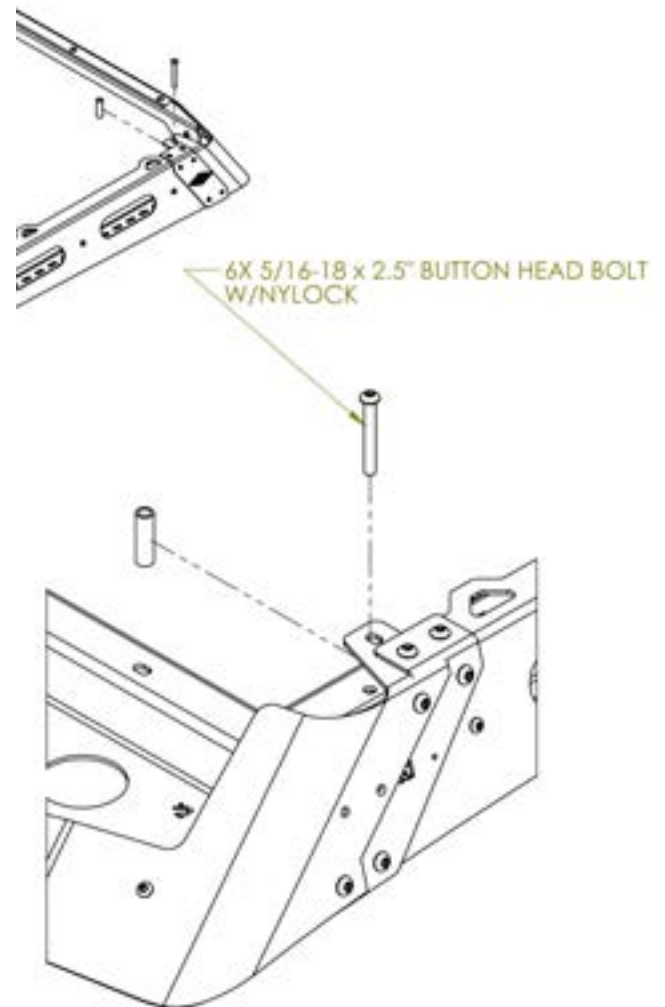
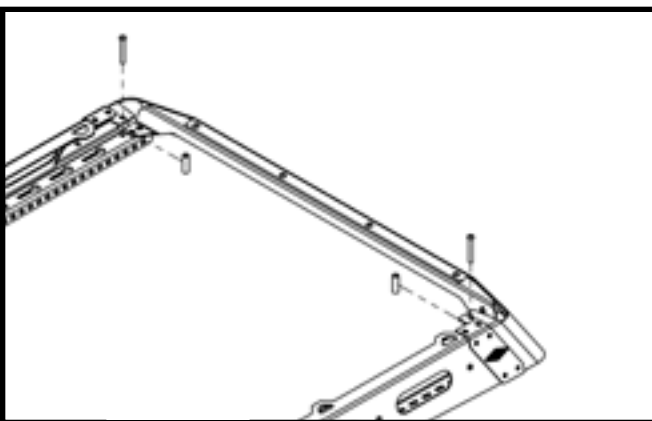
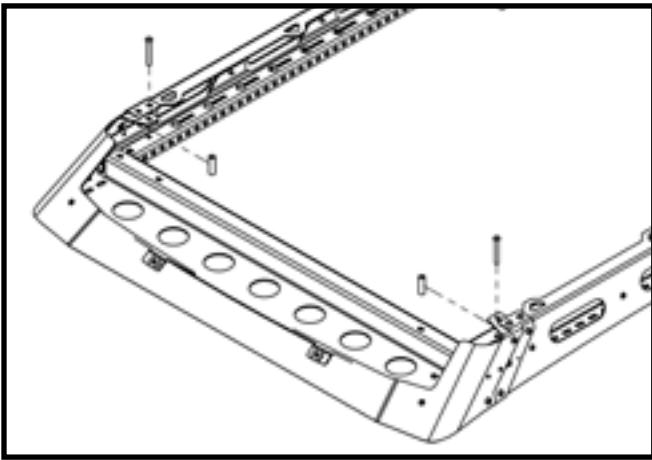
6 SEAM JOINERS

Mount both front and rear seam joiners with 5/16" hardware as shown top and bottom.



7 REINFORCEMENT SPACERS

Attach reinforcement spacers as shown on all 6 hole locations (3 each side) with the provided hardware.



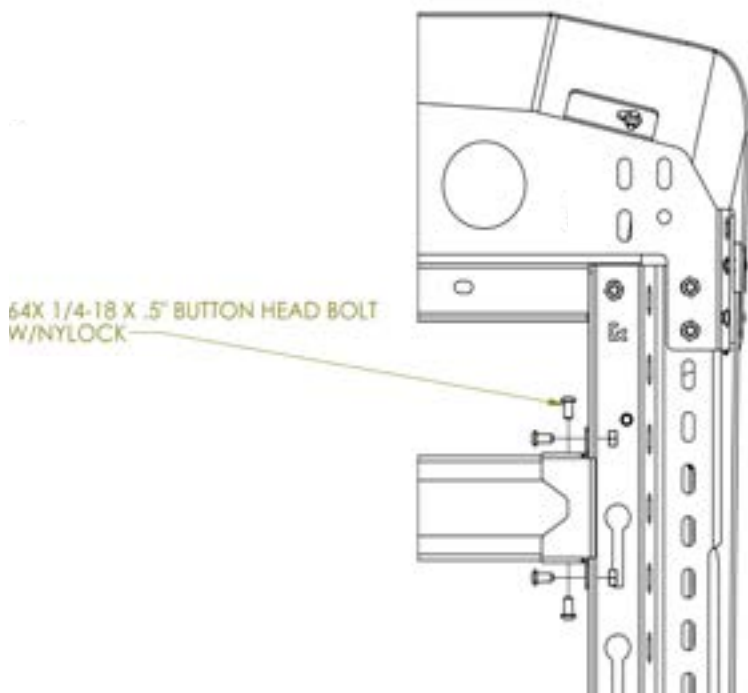
8 LOAD BAR ASSEMBLY

Assemble the load bars with the provided mounts using 1/4" bolts and nuts. Repeat for all load bars.



9 LOAD BAR INSTALLATION

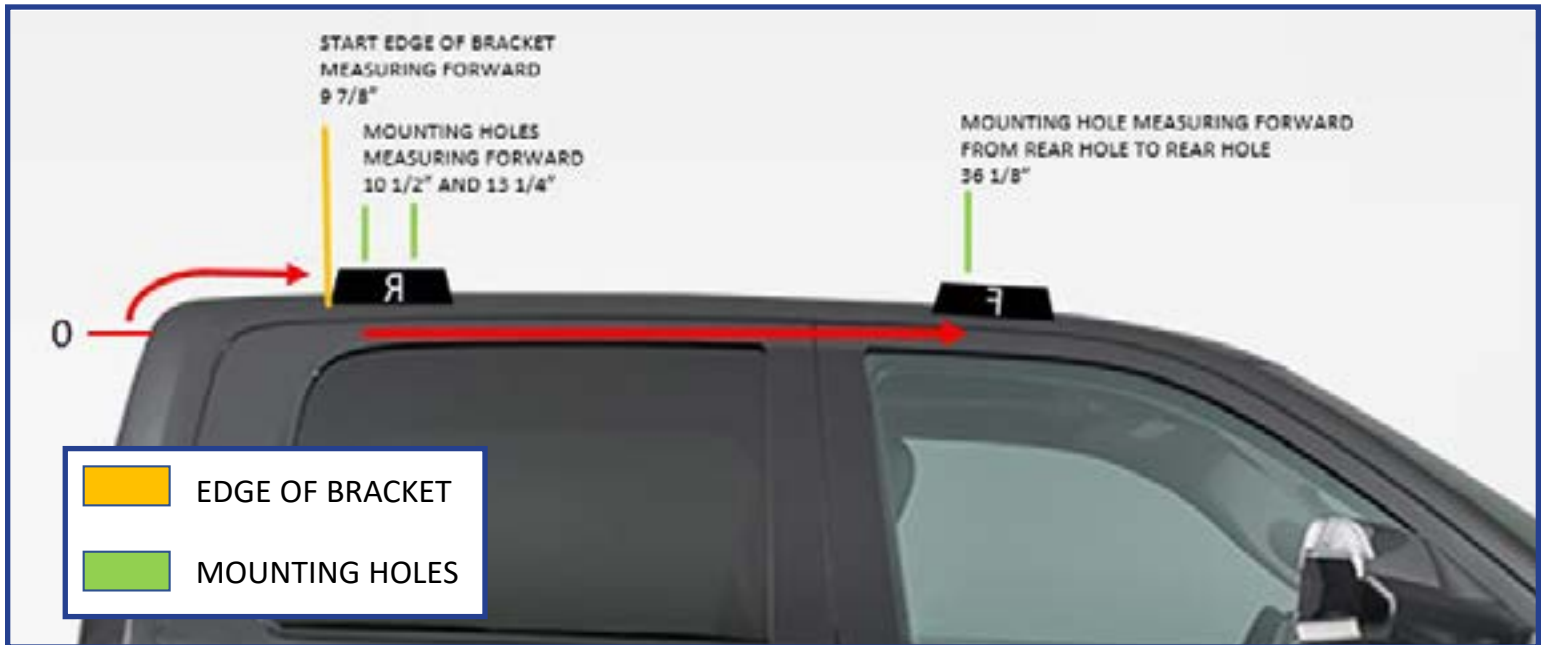
Flip roof rack over and attach load bars as shown. Using provided nuts and bolts, you may begin tightening down each load bar with two bolts and nylocs for each side.



ROOF RACK MOUNTS

10 MOUNTING BRACKET LOCATIONS

REFERENCE DIAGRAM



REAR MOUNTS - (R marking)

Measurements for the rear mounts are as follows

9 7/8" The location to the edge of the bracket measuring forward. (see top right tape mark).

10 1/2" & 13 1/4" Hole locations for drilling. Use both the bracket and measurements it double check there locations.

Measure from the end of the roof trim piece above the rear window, following the curve of the roof. The start of the bracket location should measure 9 7/8". Placing the mounting bracket on the roof, and mark with a sharpie the ends of the mount where you'll need to cut the rubber trim (14"). Verify the hole locations are at 10 1/2" and 13 1/4" before cutting and repeat for the other side of the vehicle.



MOUNTING BRACKET LOCATIONS - CONTINUED

FRONT MOUNTS - (F marking)

Measurements for the front mounts are as follows

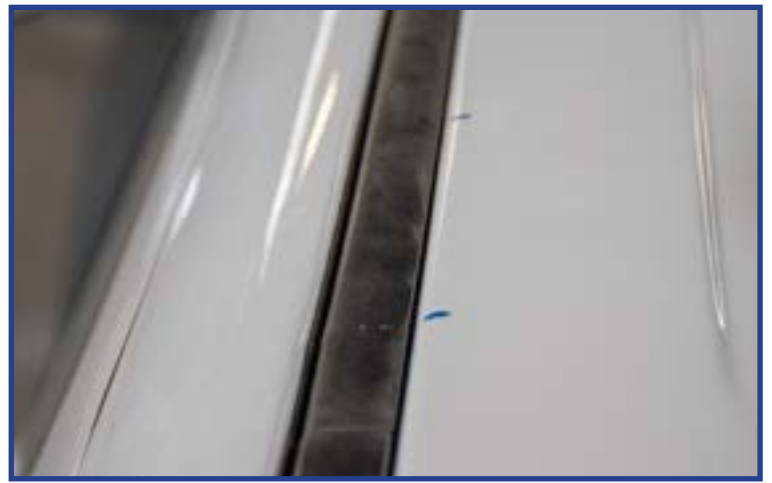
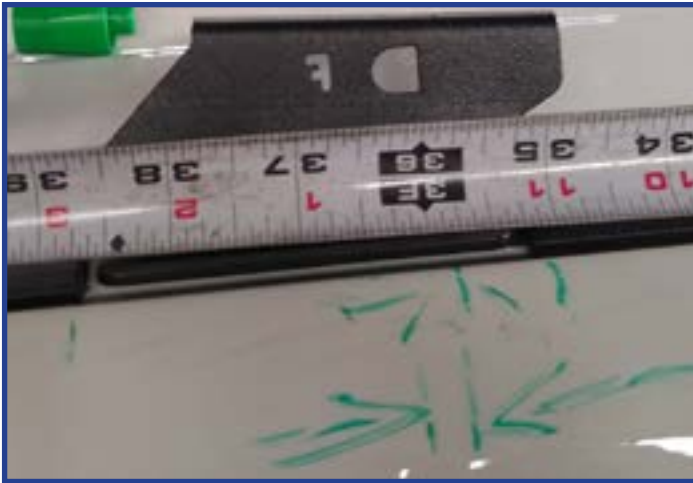
36 1/8"

Rear hole location for drilling.

Measuring forward from the rear most hole center (Rear Mount) to the rear most hole center (Front Mount).

The front brackets location and front hole will be based for of this dimension.

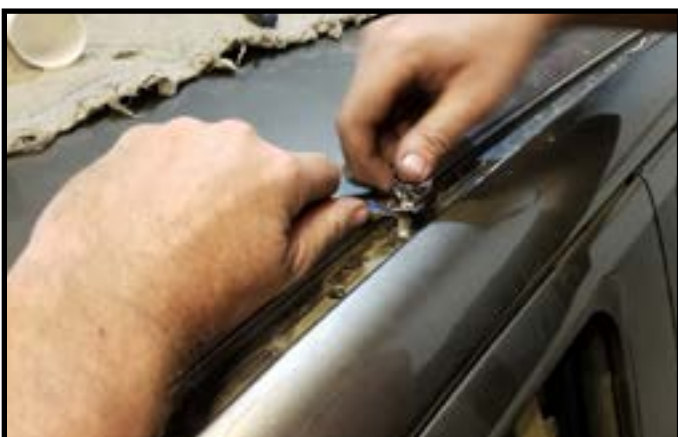
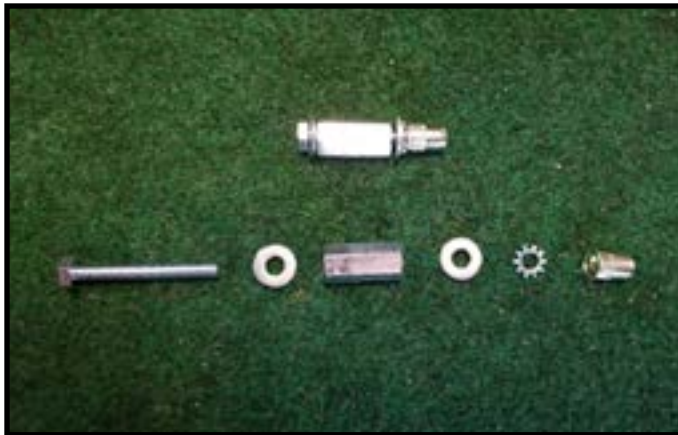
For the front mounts, measure from the middle of the 1st bolt hole location of rear roof mount (nearest the rear of vehicle) measure forward to the 36 1/8" mark for the center of the first hole location. Placing the mounting bracket on the roof, and mark with a sharpie the ends of the mount where you'll need to cut the rubber trim. Verify the hole location before cutting and repeat for the other side of the vehicle.



DRILLING HOLE LOCATIONS

11 MOUNTING HOLES

With the hole locations marked, drill each hole to roughly 3/8" in size. Next, add some caulk sealant to riv nut as shown. (this will help seal the nut into the roof from the elements). with two wrenches, begin twisting your riv nut down into the roof until you feel it 'sit' snug. Then go ahead and hold the bottom wrench in place and twist off the long bolt. Your riv nut should remain firmly in place. Continue this with the other drilled hole and then repeat these steps for the other rear side of vehicle. Cover the mount locations with the provided foam strip and mount the brackets using the provided hardware.



12 ROOF RACK MOUNTING

Place the roof rack onto vehicle with help of a friend and align with each bracket. Use the provided 5/16" bolts and washers for each mount hole location and tighten down roof rack to each bracket as shown below. Spacer kit may be used to level and adjust the roof rack. Tighten all hardware once completed.

