

INSTALLATION GUIDE

Toyota Tundra 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.

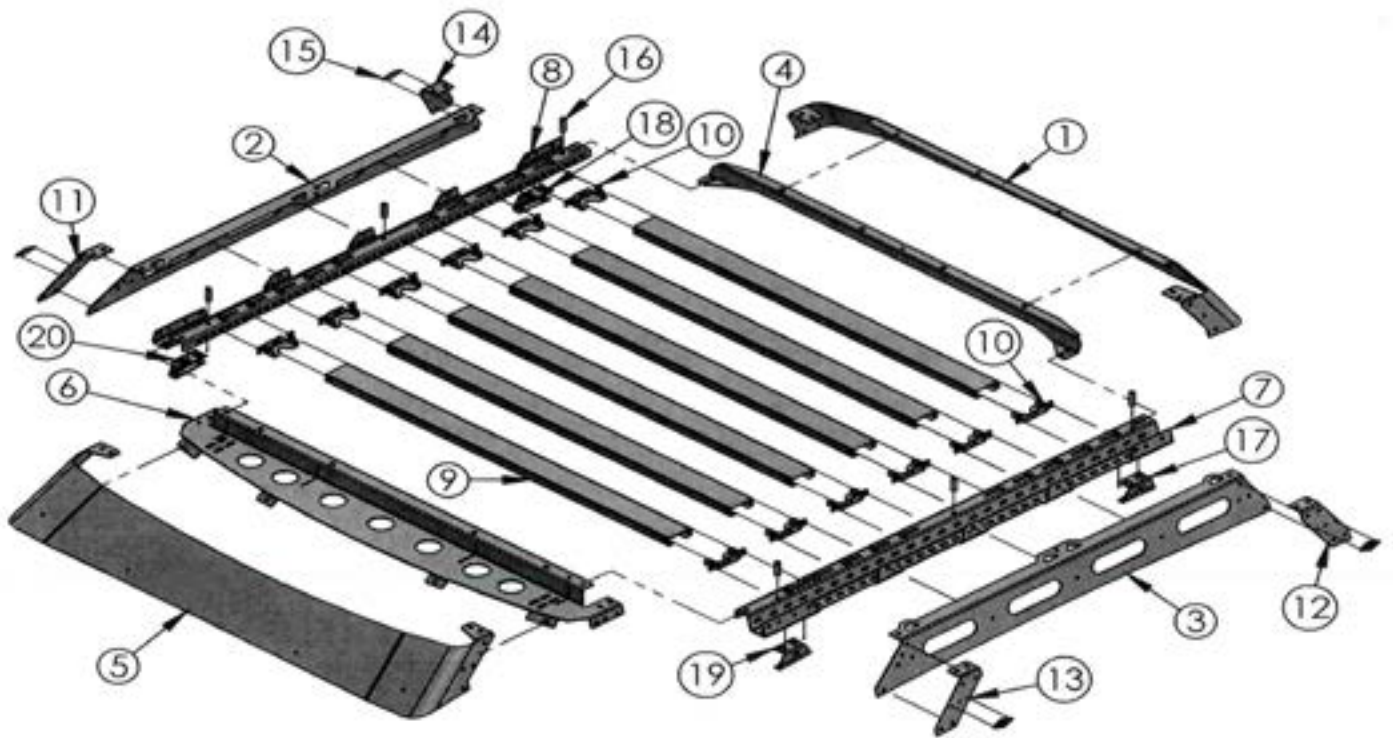
We always recommend professional assistance when installing our vehicle products.

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.



ITEM NO.	QTY.	DESCRIPTION
1	1	SHELL REAR
2	1	SHELL RIGHT
3	1	SHELL LEFT
4	1	REAR BRACE
5	1	SHELL FRONT
6	1	FRONT BRACE
7	1	INTERNAL RAIL LEFT
8	1	INTERNAL RAIL RIGHT
9	6	SPREADER
10	12	SPREADER BRACKET

ITEM NO.	QTY.	DESCRIPTION
11	1	SEAM JOINER FRONT RIGHT
12	1	SEAM JOINER REAR LEFT
13	1	SEAM JOINER FRONT LEFT
14	1	SEAM JOINER REAR RIGHT
15	4	MULE LOGO BADGE
16	6	SPACER
17	1	REAR LEFT ROOF MOUNT
18	1	REAR RIGHT ROOF MOUNT
19	1	FRONT LEFT ROOF MOUNT
20	1	FRONT RIGHT ROOF MOUNT

HARDWARE

HARDWARE

ITEM	QTY
A - Mounting Brackets	4
B - 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
C - 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
D - Spacer Kit (For Leveling as Needed)	
Round Spacer	10
Rectangular Spacer	8
Tube Spacer	6
E - Weather Stripping - 63"	1
- Foam Stripping - 18"	1



RACK ASSEMBLY

ATTENTION

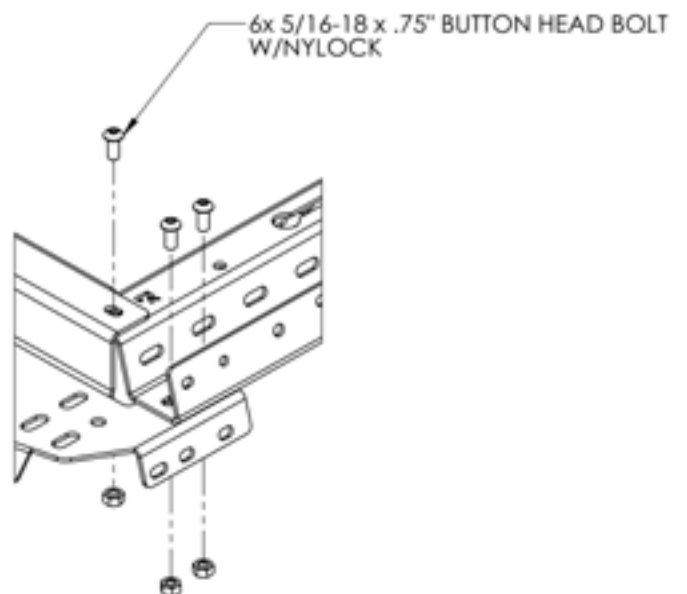
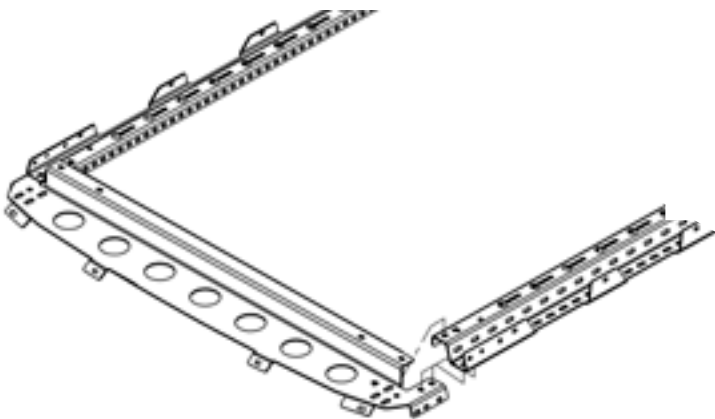
When assembling the Mule Ultra Rack, remember to hand-tighten all bolts relatively loose until the very end of the install. This allows everything to fit into place before everything is tightened down.

1 OEM ROOF RACK REMOVAL

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

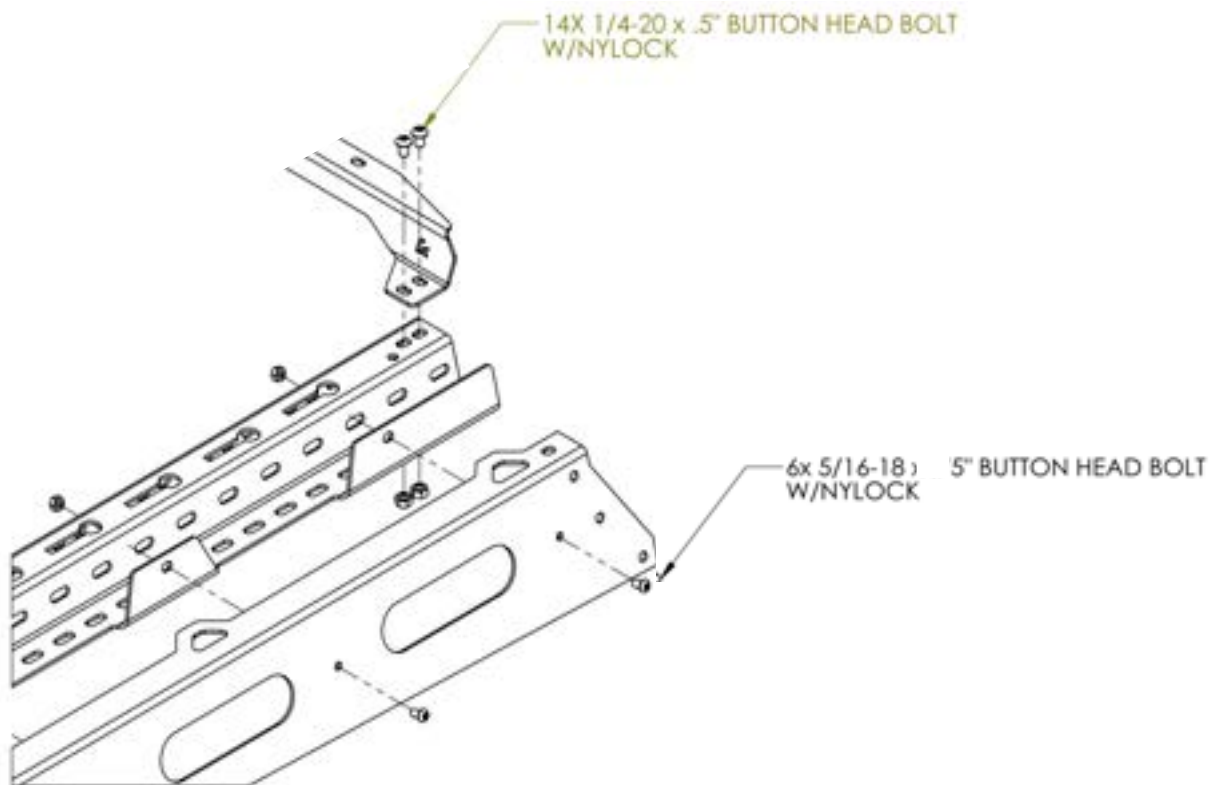
2 FRONT AND SIDE BRACES MOUNTING

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

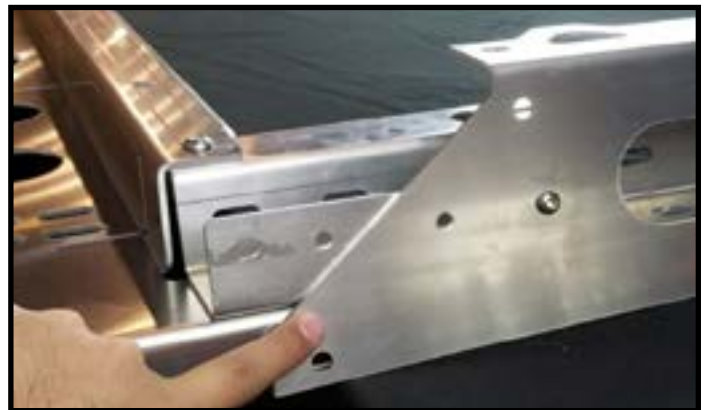


3 REAR BRACE AND SIDE FASCIA MOUNTING

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

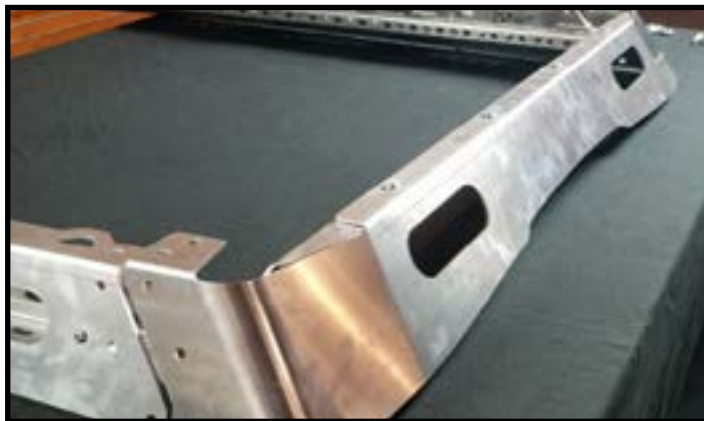


SIDE FASCIA CONTINUED

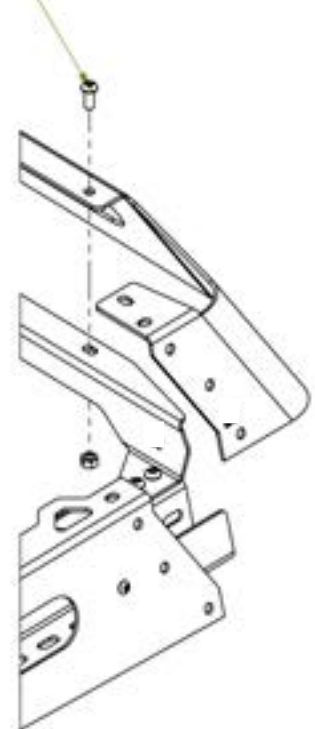


4 REAR FASCIA MOUNTING

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



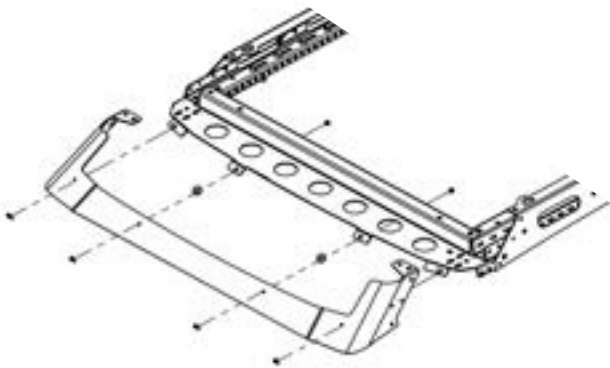
4X 3/8-16 x .75" BUTTON HEAD BOLT
W/NYLOCK



5 FRONT FASCIA MOUNTING

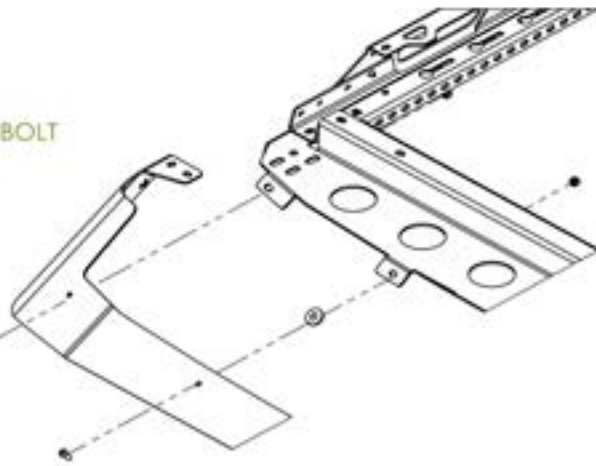
Attach the front fascia using 1/4" bolts. Use the provided round spacers to adjust the front fascia to match the curve of the roof when test fitting the roof rack during mounting.

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



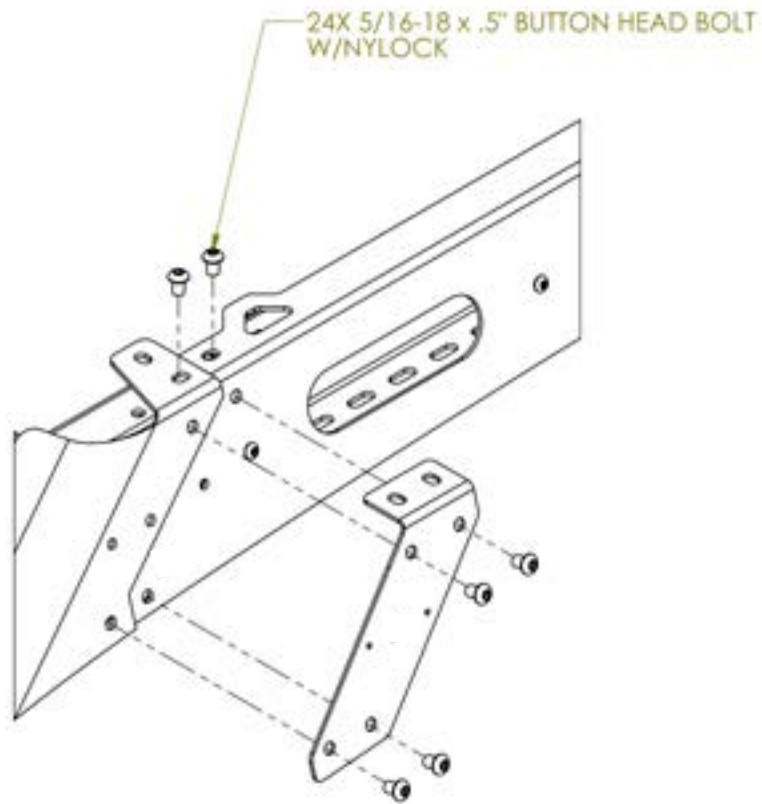
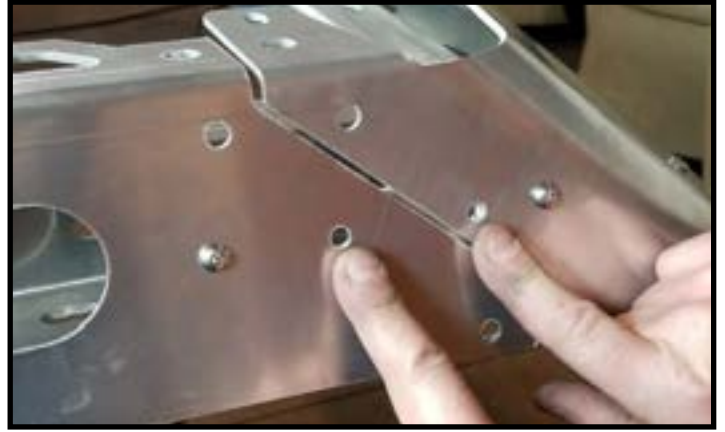
Install the weather stripping to the bottom of front fascia as shown and trim any excess.

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



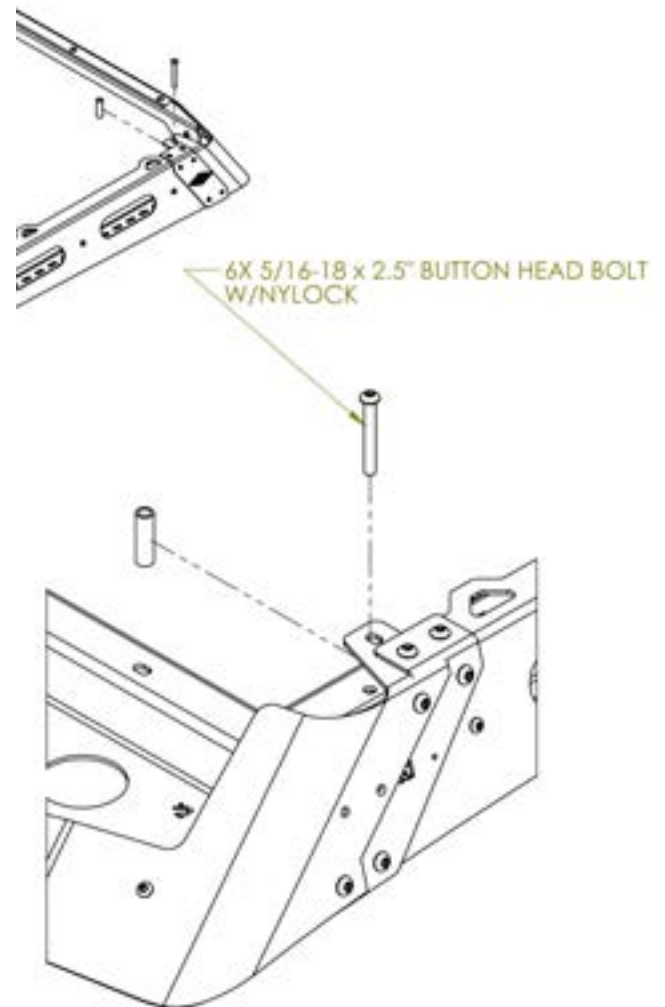
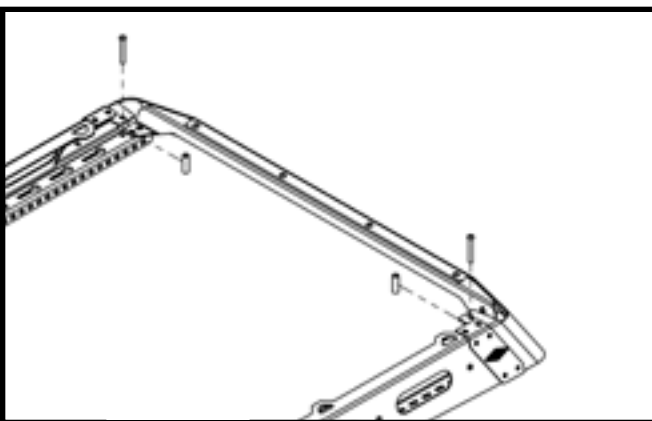
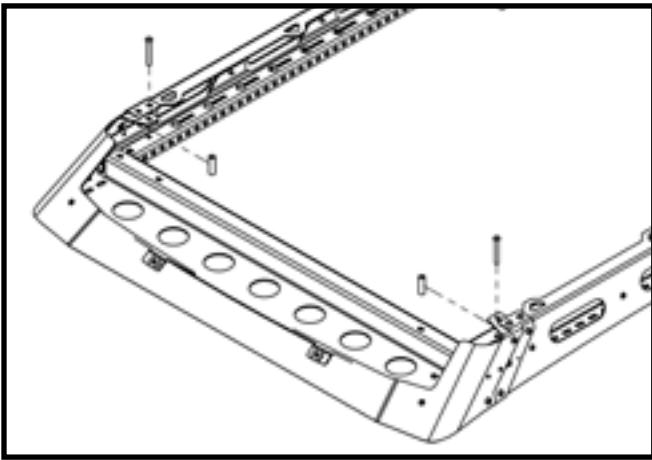
6 SEAM JOINERS

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.



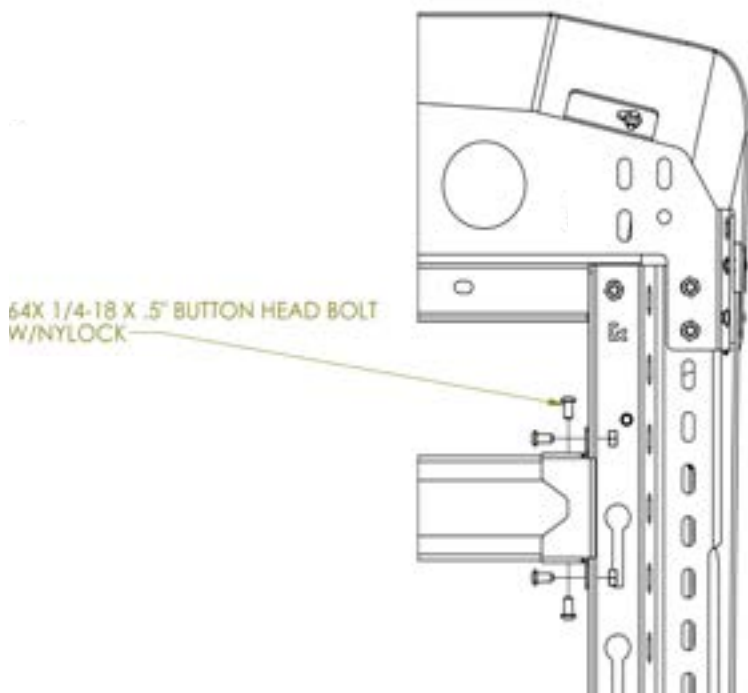
8 LOAD BAR ASSEMBLY

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 AREA

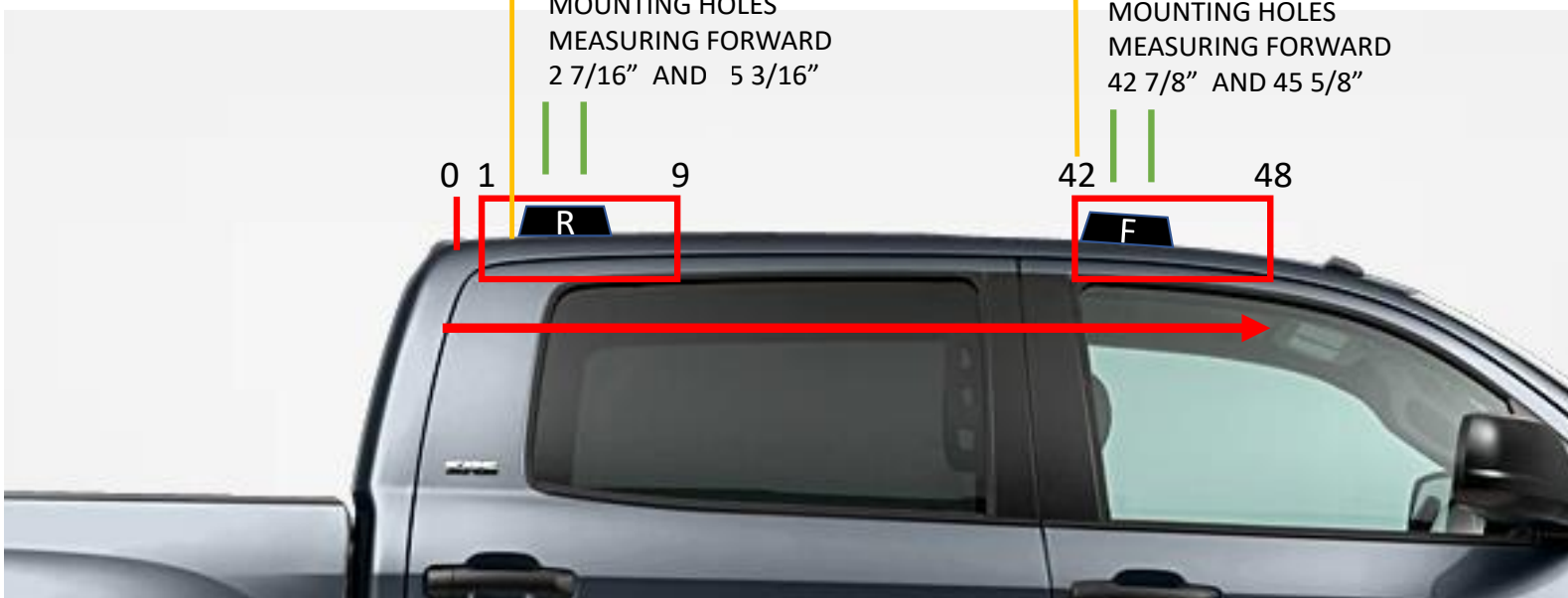
Start by removing the roof trim on each side as shown. Towards the back of the trim, you'll need to remove it from the separate trim piece that runs along the back end of the vehicle



11 MOUNTING BRACKET LOCATIONS

REFERENCE DIAGRAM

-  SAFE ZONE
-  EDGE OF BRACKET
-  MOUNTING HOLES



MOUNTING BRACKET LOCATIONS - CONTINUED



With the trim removed, start marking the mount locations by placing the tape measure at the end of the trim piece at the rear of the cab (circled below). From this point measure forward to the specified dimensions below for placing the mounting brackets. Once located mark the hole locations for drilling and repeat for the other side of the vehicle.

Use the reference diagram as needed.

All mounts will have the open end facing out.

REAR MOUNTS - (R marking)

Measurements for the rear mounts are as follows

1" & 9"

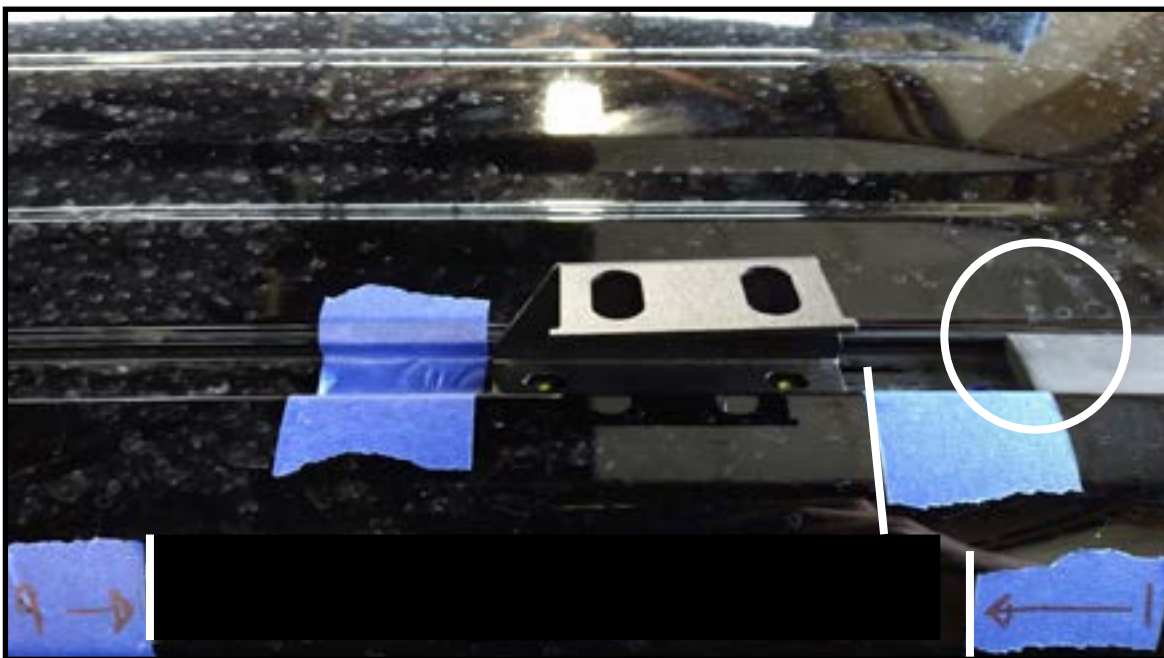
This the safe zone for drilling. Drilling outside of this area will cause damage. Mark these locations for reference. (see bottom tape marks).

1 3/4"

The location to the edge of the bracket measuring forward. (see top right tape mark).

2 7/16" & 5 3/16"

Hole locations for drilling. Use both the bracket and measurements it double check there locations.



MOUNTING BRACKET LOCATIONS - CONTINUED

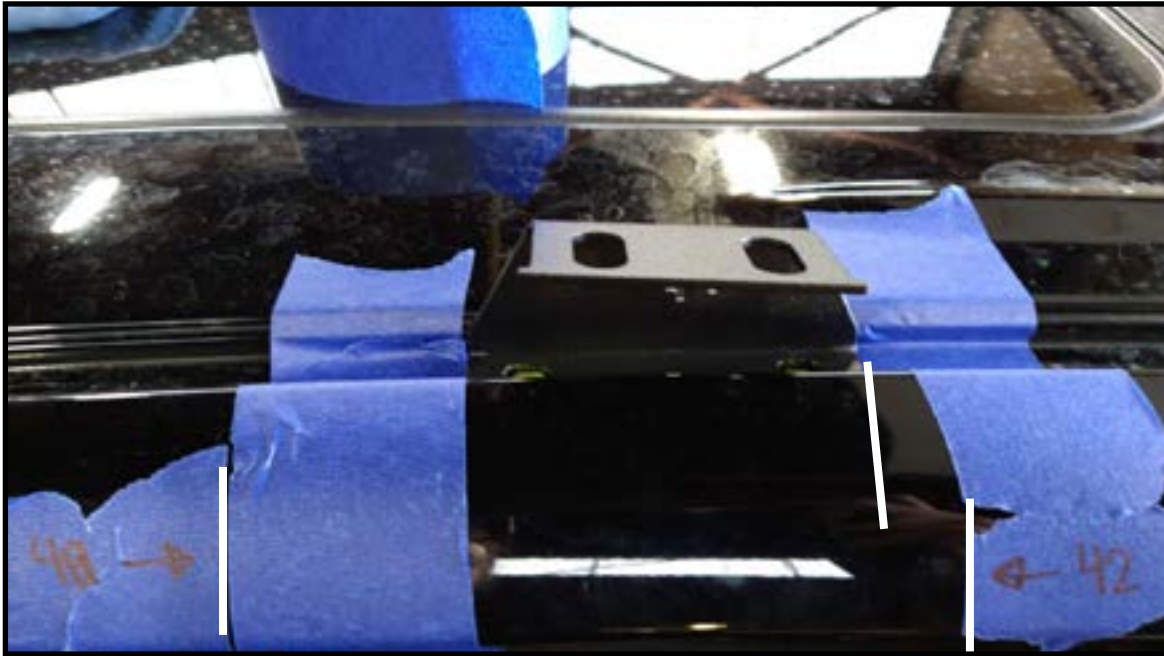
FRONT MOUNTS - (F marking)

Measurements for the front mounts are as follows

42" & 48" This the safe zone for drilling. Drilling outside of this area with cause damage. Mark these locations for reference. (see bottom tape marks).

42" The location to the edge of the bracket measuring forward. (see top right line mark).

42 7/8" & 45 5/8" Hole locations for drilling. Use both the bracket and measurements it double check there locations.

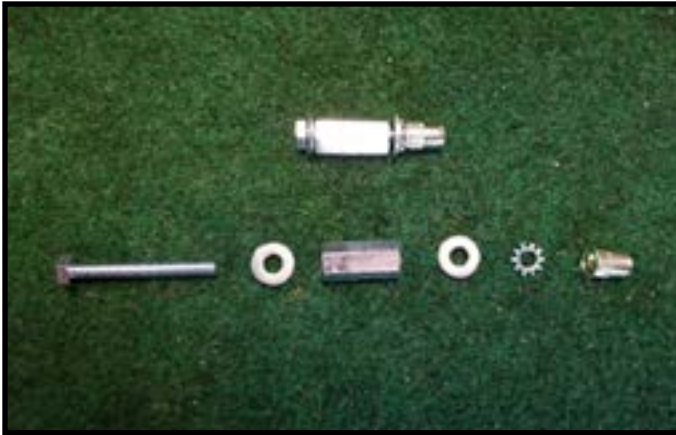


For reference notice the location of the front mounting brackets (circled) relative to the position of the sunroof (if applicable) and roof lines.

DRILLING HOLE LOCATIONS

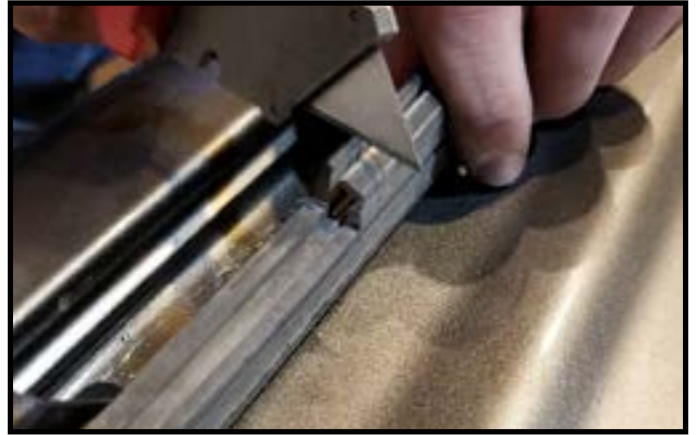
12 MOUNTING HOLES

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.



13 REPLACING ROOF TRIM

Once all brackets are secure, place the rubber trim strips back into position. You will need to mark off the areas around the mount brackets with a sharpie. With a box cutter or sharp blade, slice downwards as shown below half way down and then cut horizontally. If your cut measurements are correct, your rubber trim should lay across nicely around the mount brackets.



14 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.

