



**SHERPA**  
PREMIUM RACK SYSTEMS

# THE JEEP JLU QDHD RACK

RACK SYSTEM INSTALL GUIDE

# HARDWARE CHECKLIST

**1**

WIND FAIRING



**10**

CROSSBARS - 56"



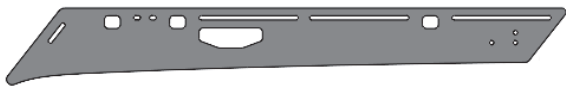
**1**

CROSSBAR - 43"



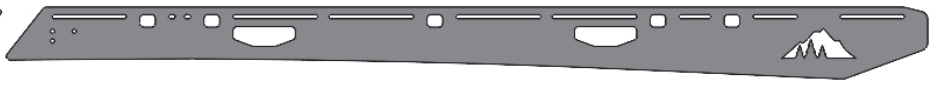
**2**

SIDEPLATES -  
FRONT



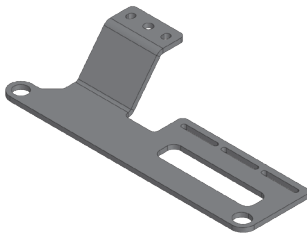
**2**

SIDEPLATES -  
REAR



**2**

FRONT MOUNTS



**2**

SUPPORT PIN  
BRACKETS



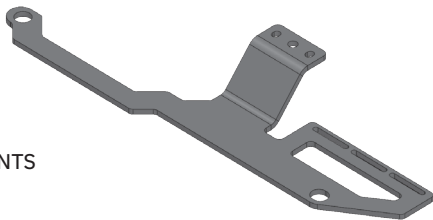
**2**

BUSHING  
BRACKETS



**2**

MIDDLE MOUNTS



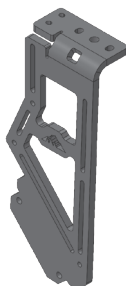
**1**

Name Plate



**2**

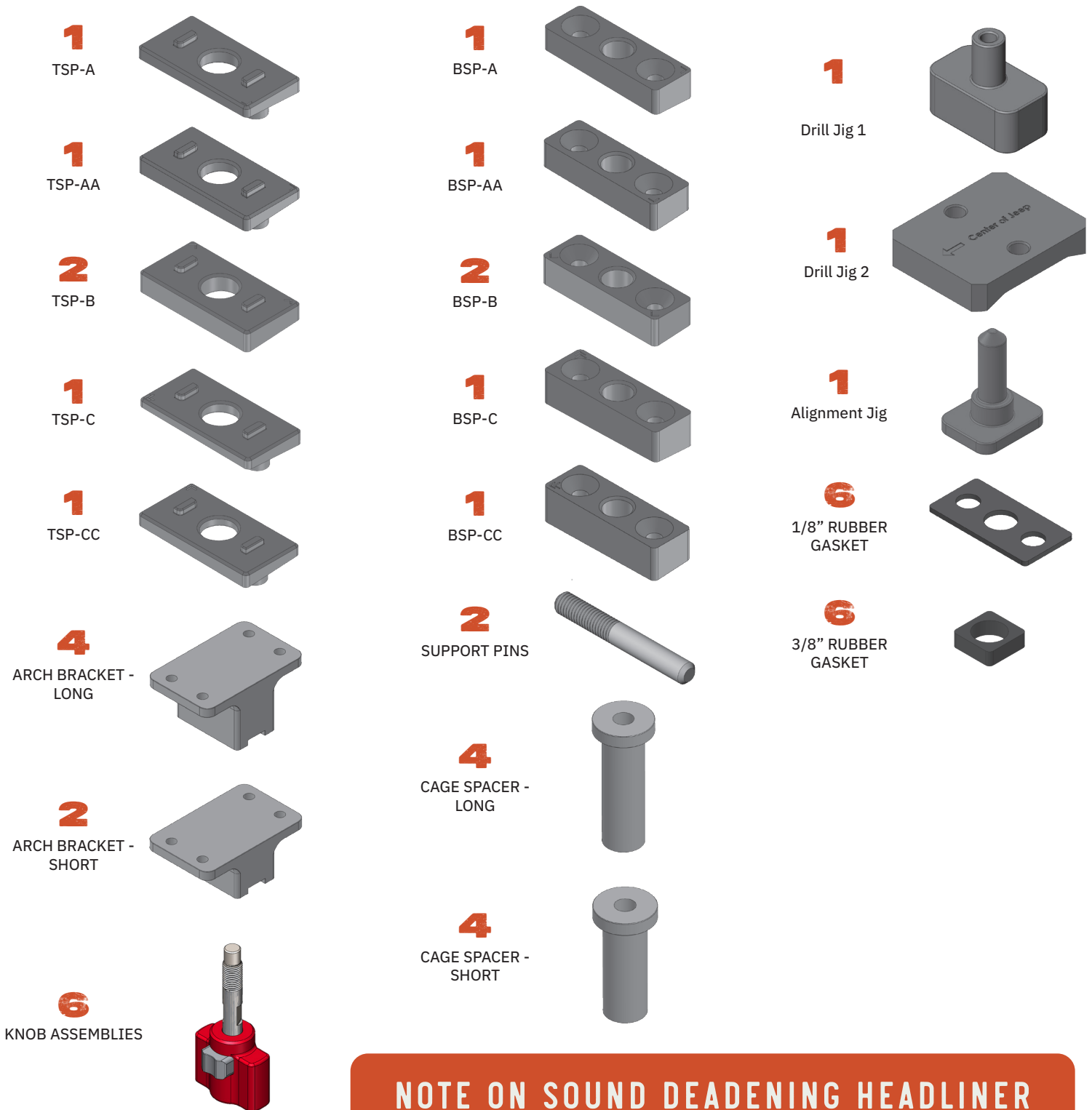
REAR MOUNTS



## TOOLS REQUIRED:

- 1** 3/16" Allen Key
- 1** 5/32" Allen Key
- 1** 5mm Allen Key
- 1** 7/16" Wrench
- 2** 9/16" Wrenches or socket/ratchet
- 1** 3/4" Wrench
- 1** T50 Torx Bit
- 1** 1/4" Drill Bit
- 1** 5/8" Drill Bit
- 1** Drill
- 1** Tape Measure

# HARDWARE CHECKLIST



## NOTE ON SOUND DEADENING HEADLINER

The Sandwich Plates are designed to bottom out for the thickness of the fiberglass. This transfers the load through the rack components and enables a proper seal from the gasket. Due to this, sound deadening headliner panels must be removed or trimmed to fit.

# HARDWARE CHECKLIST

**6**  
1/4"-20  
(1/2") SB BOLTS -  
BLACK



**80**  
1/4" FLAT  
WASHERS - BLACK



**4**  
M8-1.25 (25MM)  
COUNTERSINK  
BOLTS



**4**  
1/4"-20  
(3/4") SB BOLTS -  
BLACK



**24**  
1/4" FLAT  
WASHERS - SILVER



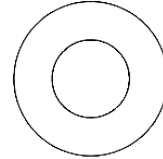
**36**  
1/4" TNUTS



**56**  
1/4"-20  
(1") SB BOLTS -  
BLACK



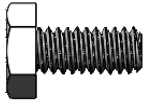
**16**  
3/8" WASHERS -  
SILVER



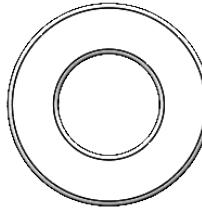
**12**  
1/4"-20 NYLOCK  
NUTS - BLACK



**24**  
1/4"-20  
(9/16") HEX BOLTS  
- SILVER



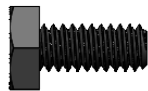
**2**  
1/2" WASHERS -  
SILVER



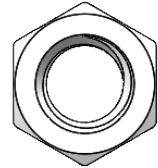
**8**  
3/8"-16 NYLOCK  
NUTS - SILVER



**2**  
1/4"-20  
(9/16") HEX BOLTS  
- BLACK



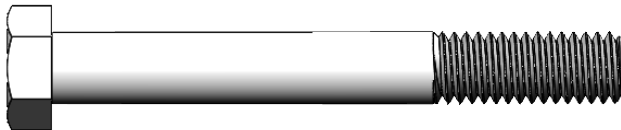
**2**  
1/2"-13 NYLOCK-  
NUTS - SILVER



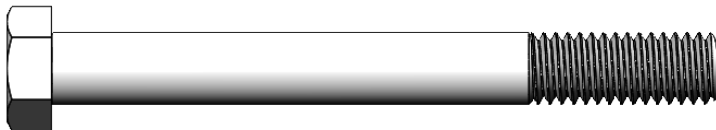
**12**  
5/16"-18  
(3/4") COUNTERSINK  
BOLTS - SILVER



**4**  
3/8"-16X3" HEX  
BOLTS - SILVER



**4**  
3/8"-16X3.5" HEX  
BOLTS - SILVER



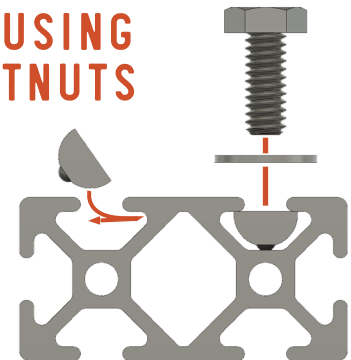
## BEFORE YOU START

Confirm you have the factory fiberglass roof. This product is not intended to be used with aftermarket tops.

Count all of your parts against the hardware sheet to ensure you're ready to install. Grab the required tools.

The below assembly images may differ slightly in appearance from actual product.

## USING TNUTS





# INSTALL PREP

## 01 FAIRING ASSEMBLY

Required Components:

- 1 Fairing
- 1 Crossbars 56"
- 6 1/4"-20x1/2" SB Bolt
- 1 1/4" Washer

Drop 6 nuts into the slots on the crossbar and line them up with the holes in the fairing. Secure with 6 bolts and washers.



## 02 RUBBER INSTALL

Required Components:

- 4 Arch Bracket Long
- 2 Arch Bracket Short
- 6 3/8" Rubber Gasket

Insert the rubber into all 6 of the arch brackets



# MOUNT INSTALL

## 01 FRONT MOUNT INSTALL

Required Components:

- 2 Front Mount
- 4 Cage Spacer - Short
- 4 3/8"-16 x 3" Hex Bolt
- 8 3/8" Washer
- 4 3/8"-16 Nylock Nut

Remove the Freedom Panels and set aside. Remove the T50 Torx fasteners from the rear roof portion then remove it from the vehicle.

Install the mount by inserting the cage spacers through the steel mounts and then positioning the assembly into the holes in the top of the factory roll cage. Follow "D/P" labeling for driver and passenger sides.

Note: On early JL's these holes are round and on later JL's these holes are square

Insert the bolts with a washer top and bottom and torque the nylock nuts to 17 ft-lbs



# MOUNT INSTALL

## 02 MIDDLE MOUNT INSTALL

Required Components:

- 2 Middle Mount
- 4 Cage Spacer - Long
- 4 3/8"-16 x 3.5" Hex Bolt
- 8 3/8" Washer
- 4 3/8"-16 Nylock Nut

Install the mount by inserting the cage spacers through the steel mounts and then positioning the assembly into the holes in the top of the factory roll cage. Follow labeling for driver and passenger sides.

Note: On early JL's these holes are round and on later JL's these holes are square

Insert the bolts with a washer top and bottom and torque the nylock nuts to 17 ft-lbs

Reinstall the rear roof portion and the Freedom Panels fully.



# MOUNT INSTALL

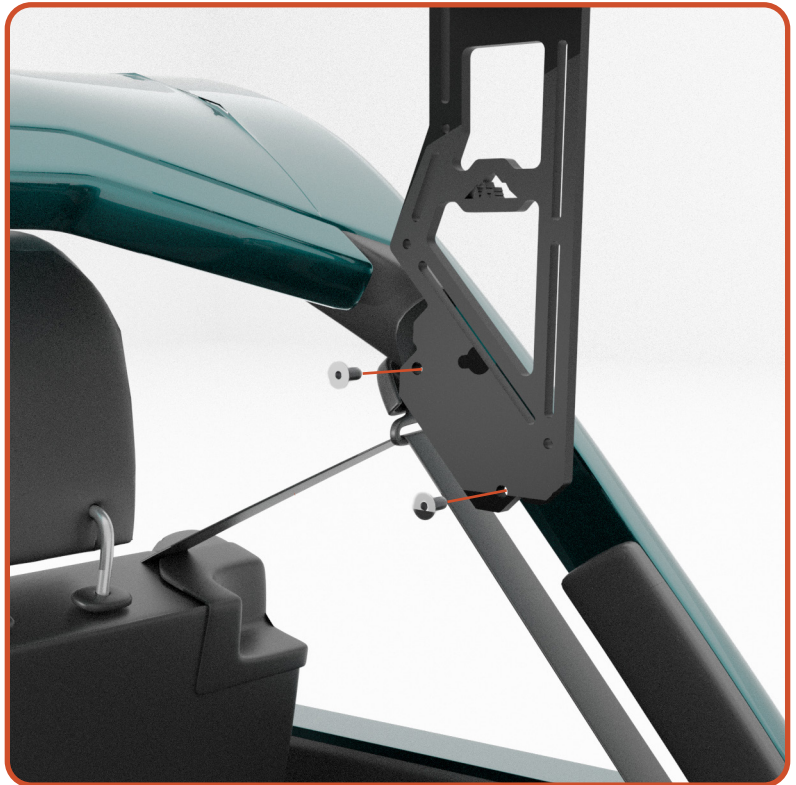
## 03 REAR MOUNT INSTALL

Required Components:

- 2 Rear Mount
- 4 M8 x 25mm Countersink Bolt
- 1 Crossbar 43"

Remove the snap-in plastic cage covers from the rear of the roll cage. Follow labeling for driver and passenger sides.

Install the mount by inserting M8 bolts. Follow labeling for driver and passenger sides.



## 02 MOUNT CROSSBAR

Required Components:

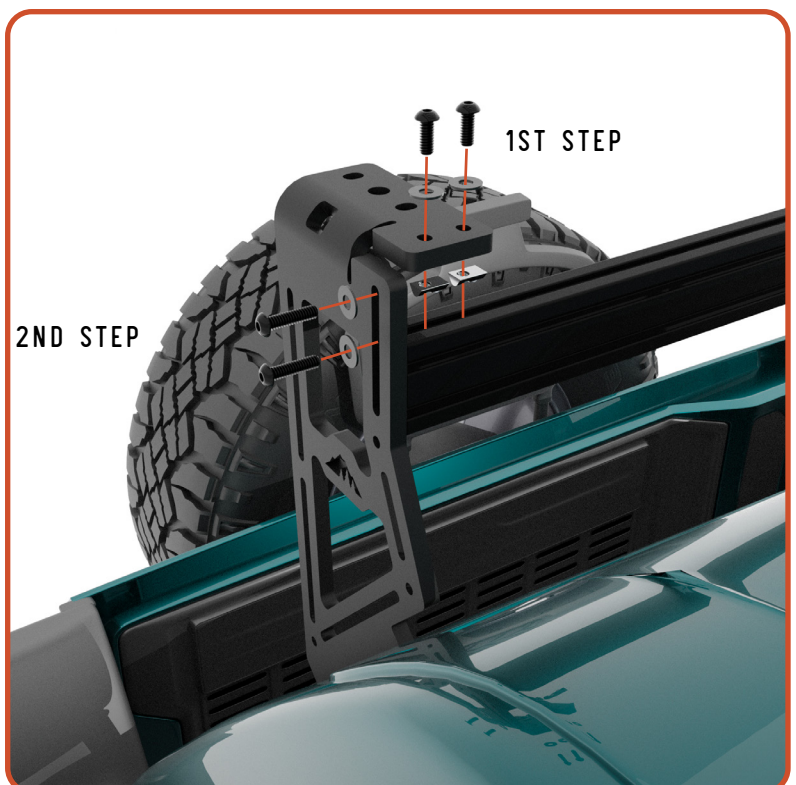
- 1 Crossbar 56"
- 2 1/4"-20x1" SB Bolt
- 6 1/4"-20x3/4" SB Bolt
- 8 1/4" Washer
- 4 Tnut

Add the tnuts to the 43" crossbar as shown and attach them with the 3/4" long SB screws and washers. Next insert 1" fasteners and washers from the side.

Torque the M8 bolts to 16 ft-lbs.

**Note: This crossbar is critical to ensure proper alignment of the rack to the roof.**

Reinstall the rear roof portion and the Freedom Panels fully.



# DRILL ROOF

## 01 DRILL MOUNT HOLES

Required Components:

- 1 Drill
- 1 1/4" Drill Bit
- 1 Drill Jig 1

Install the Drill Jig 1 into the center hole on a steel mount. Next, using it as an alignment tool, drill upward through the fiberglass. Repeat for all 6 total locations

**Note:** Hold the drill as vertical as you can to ensure the best fit. Higher speed and lower pressure work best to ensure a clean hole. Don't worry if some of the fiberglass chips, it will be covered and sealed by the brackets. A vacuum can be helpful if you have assistance to minimize fiberglass dust in the vehicle.

**Always wear safety glasses and breathing protection when modifying fiberglass.**

Again remove the roof panels for final drilling operations





# DRILL ROOF

## 02 DRILL ADDITIONAL HOLES

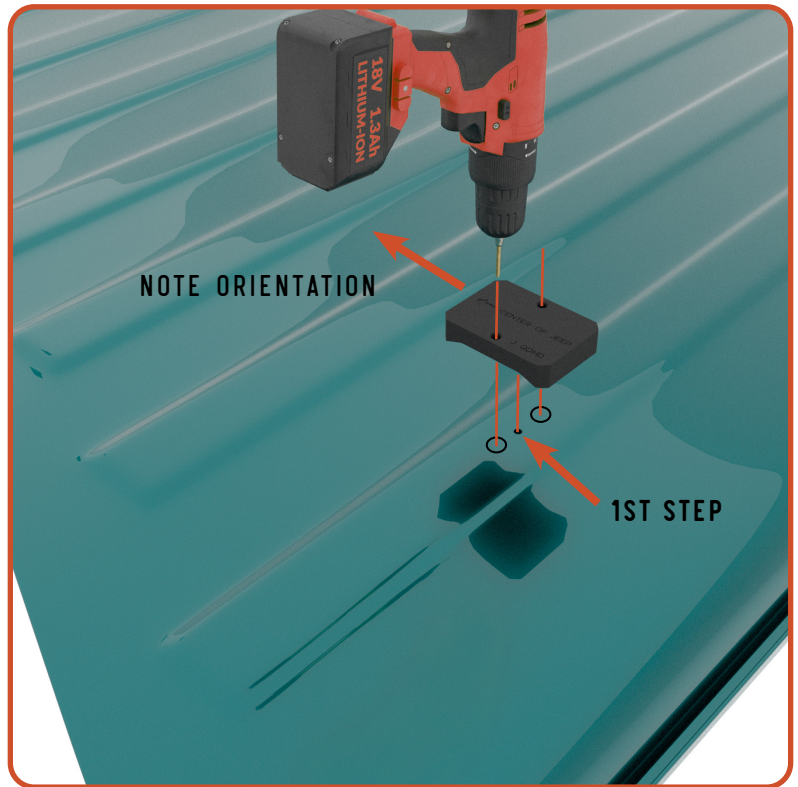
Required Components:

- 1 Drill
- 1 1/4" Drill Bit
- 1 Drill Jig 2

Install the Drill Jig into one of the holes from the outside of the roof panel. Ensure the arrow in the jig is pointing towards the centerline of the vehicle. Align the features in the jig with the rib on the roof. Drill out the remaining two holes with the 1/4" drill bit. Repeat at all 6 locations.

**Note: Hold the 1 as vertical as you can to ensure the best fit.**

**Always wear safety glasses and breathing protection when working around fiberglass**

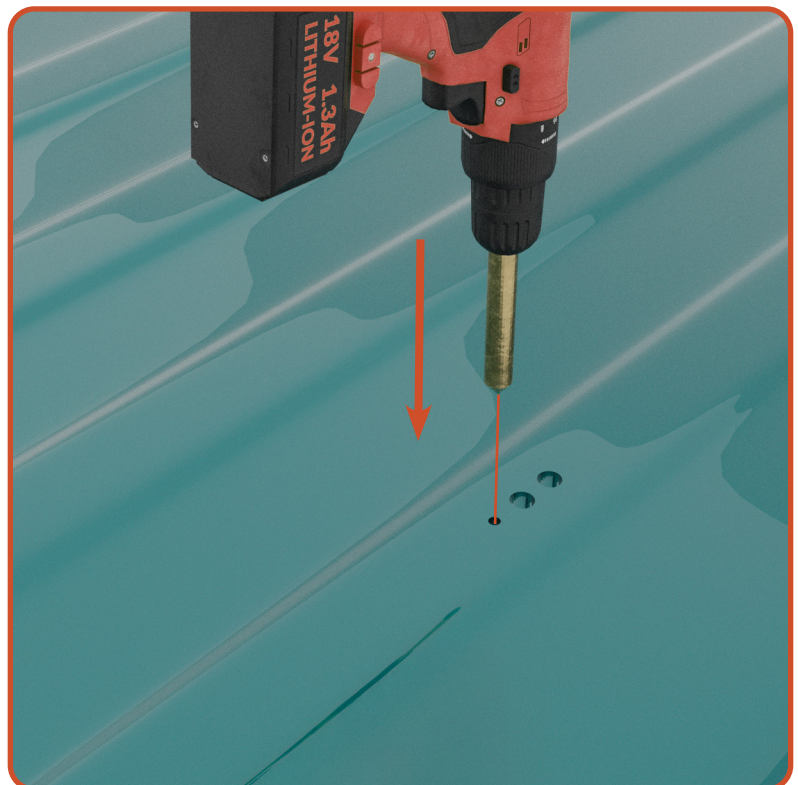


## 03 OVERSIZE HOLES

Required Components:

- 1 5/8" Drill Bit

Using the 5/8" Drill Bit, oversize all 18 holes in the roof. This accounts for some error in drilling and allows for flexibility on final installation.



# INSTALLATION

## 01 SANDWICH PLATES

Required Components:

6 TSP (A, AA, B, C, CC)

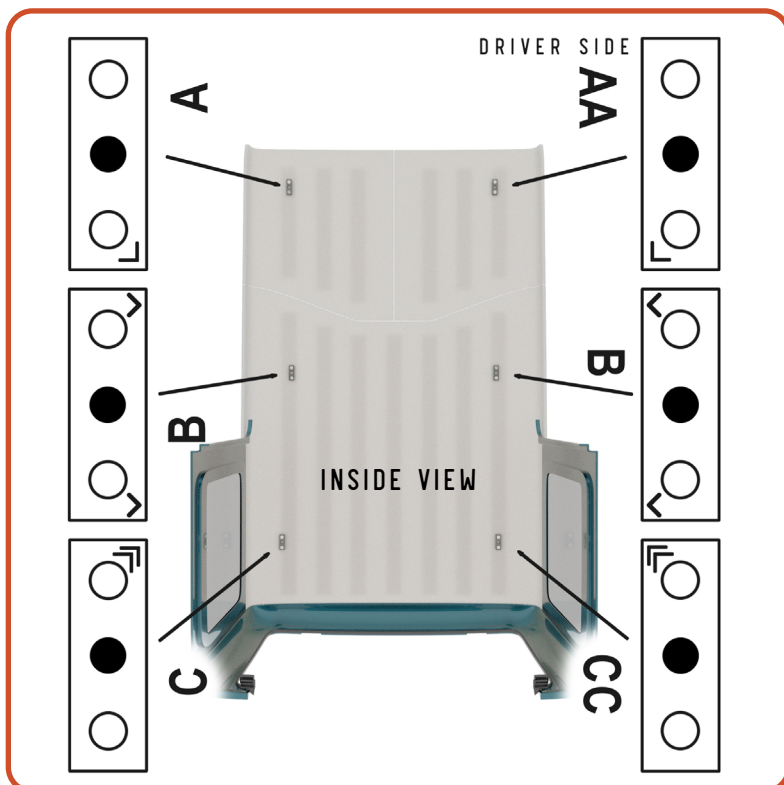
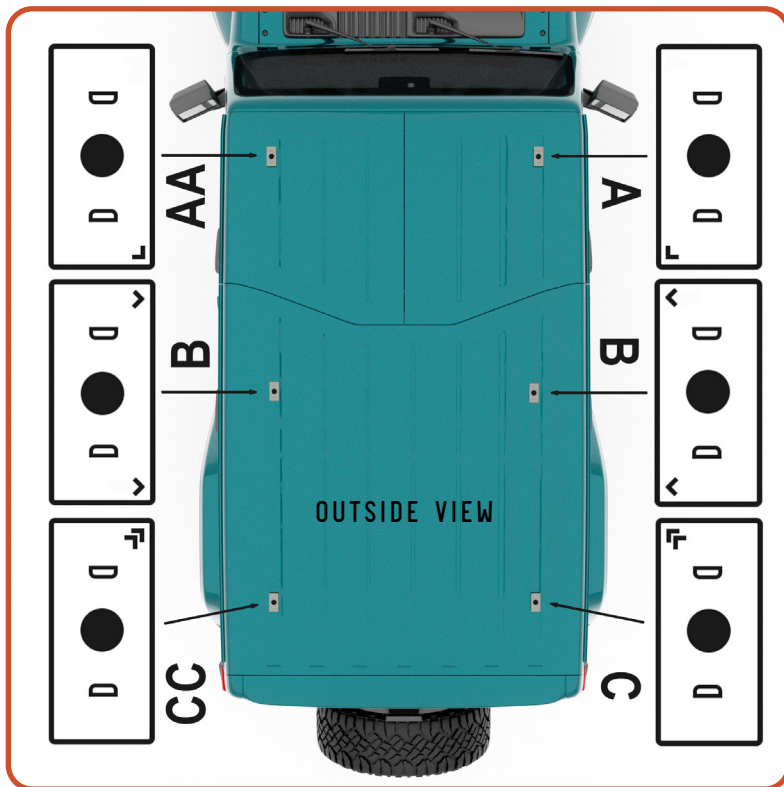
6 BSP (A, AA, B, C, CC)

6 1/8" Rubber Gasket

12 5/16"-18x3/4"  
Countersink Bolt

Install the sandwich plates as shown to all 6 locations with the rubber gasket on the outside of the roof. See the following page for more detail. Install countersink fasteners **leaving all hardware loose**.

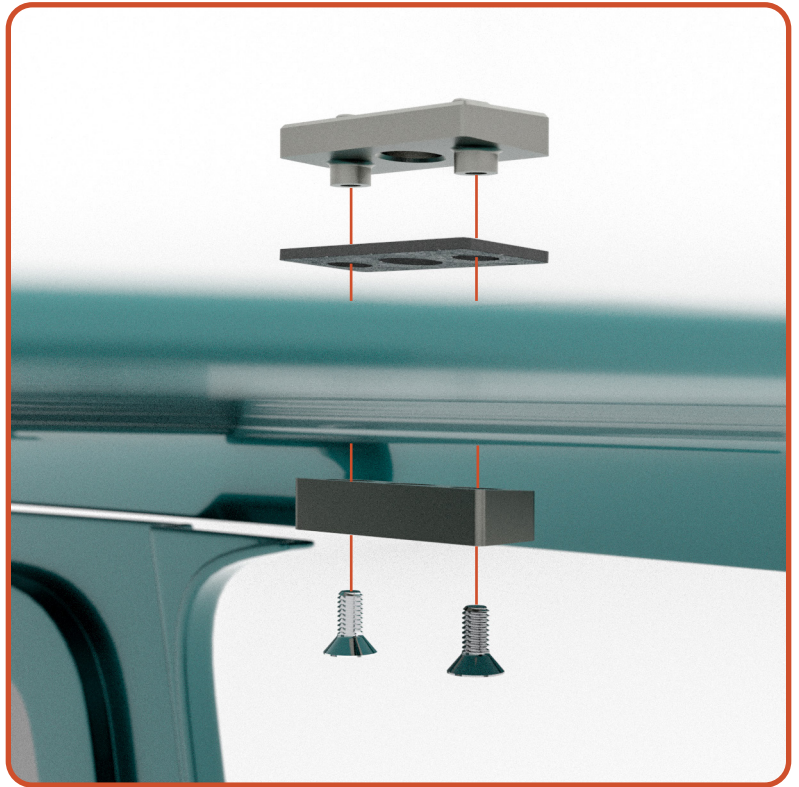
**Note:** For top and bottom plates all chevrons (arrows) point toward the center of the vehicle. "AA" plates are on driver corner of vehicle.



# INSTALLATION

## 02 SANDWICH PLATES CONT

When sandwich plate install has been completed, reinstall all roof portions fully and tighten all T50 Fasteners.





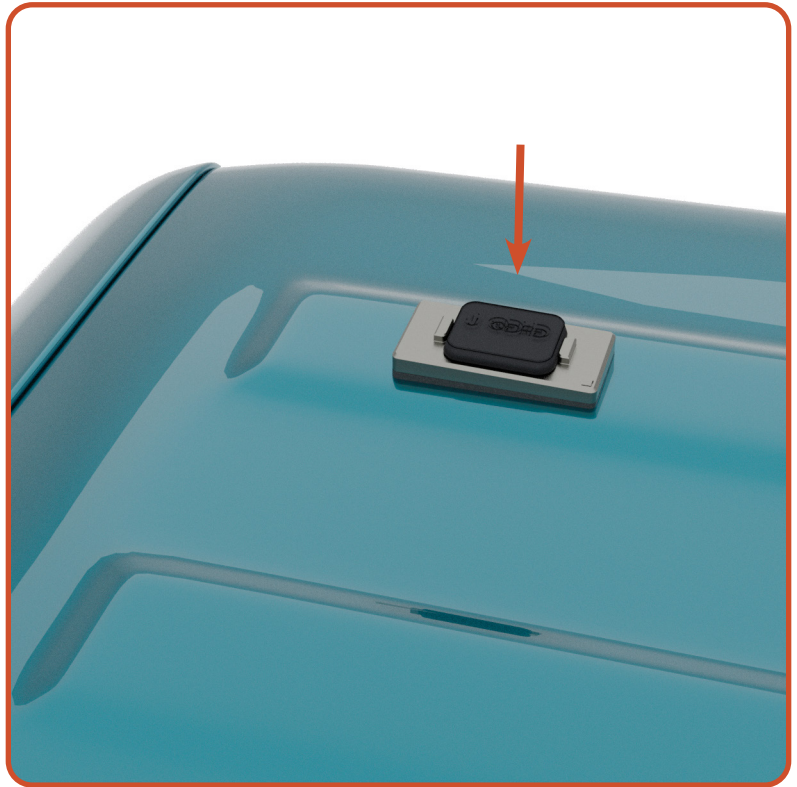
# INSTALLATION

## 03 ALIGN SP'S

Required Components:

**1** Alignment Jig

For each location at a time, install the Alignment Jig from the top of the roof and ensure it is fully seated. Next tighten the 5/16" countersink screws in all sandwich plates.



# INSTALLATION

## 04 MOUNT CROSSBARS

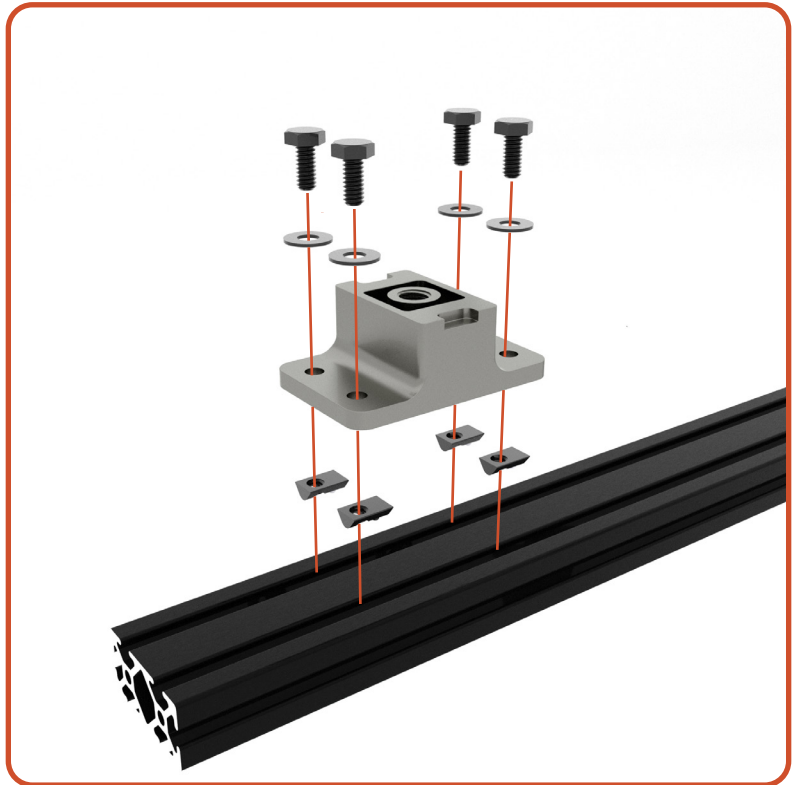
Required Components:

- 4 Arch Bracket Long
- 2 Arch Bracket Short
- 3 Crossbar 56"
- 24 1/4"-20x9/16" Hex Bolt
- 24 1/4" Washer Silver
- 24 Tnut

Install 8x Tnuts, bolts, and washers with 2 Long Arch Brackets onto a crossbar leaving the fasteners loose. Roughly space the brackets 6" from the end of the crossbar.

Repeat for a 2nd assembly.

Repeat the assembly one additional time, but with 2 Short Arch Brackets



# INSTALLATION

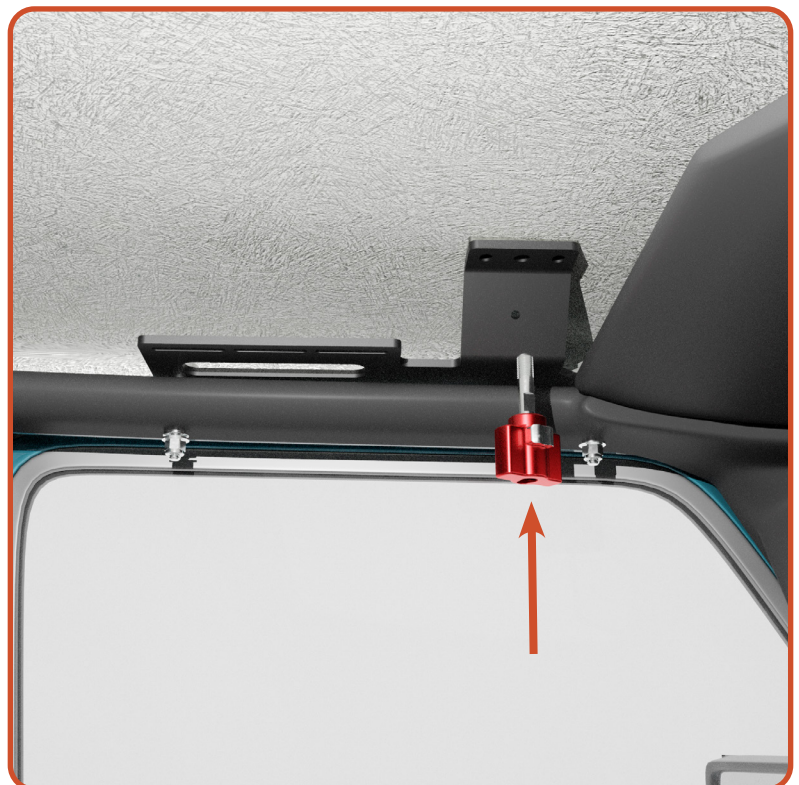
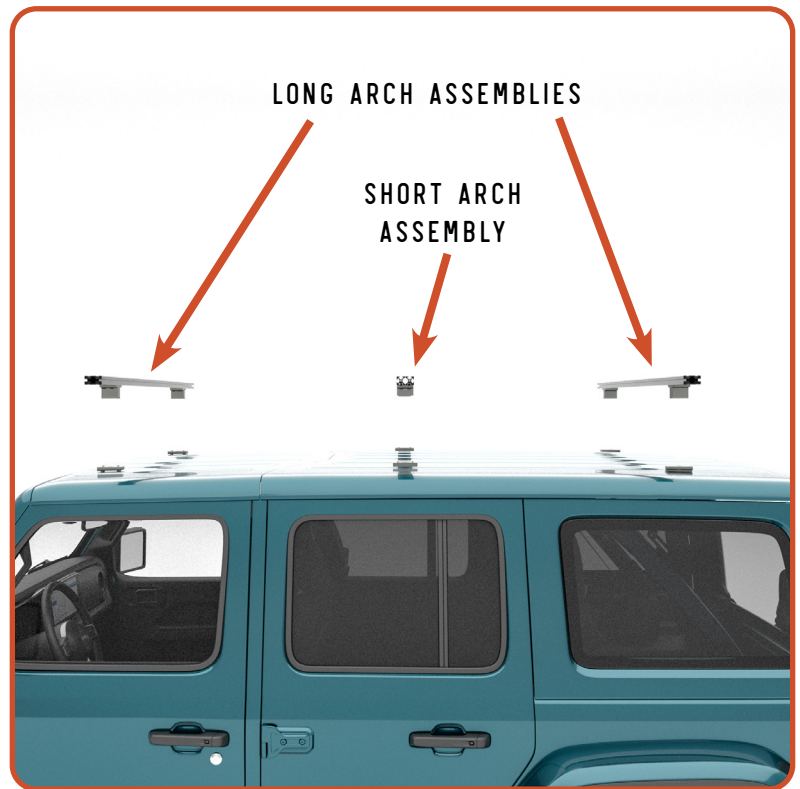
## 05 INSTALL CROSSBARS

Required Components:

- 2** Crossbar Assembly - Long
- 1** Crossbar Assembly - Short
- 6** Knob Assembly

Set the crossbar assemblies onto the roof with the long arch brackets going on the front and the rear and the short going in the middle. Install the knobs, with them in the extended position, from the inside of the vehicle and tighten.

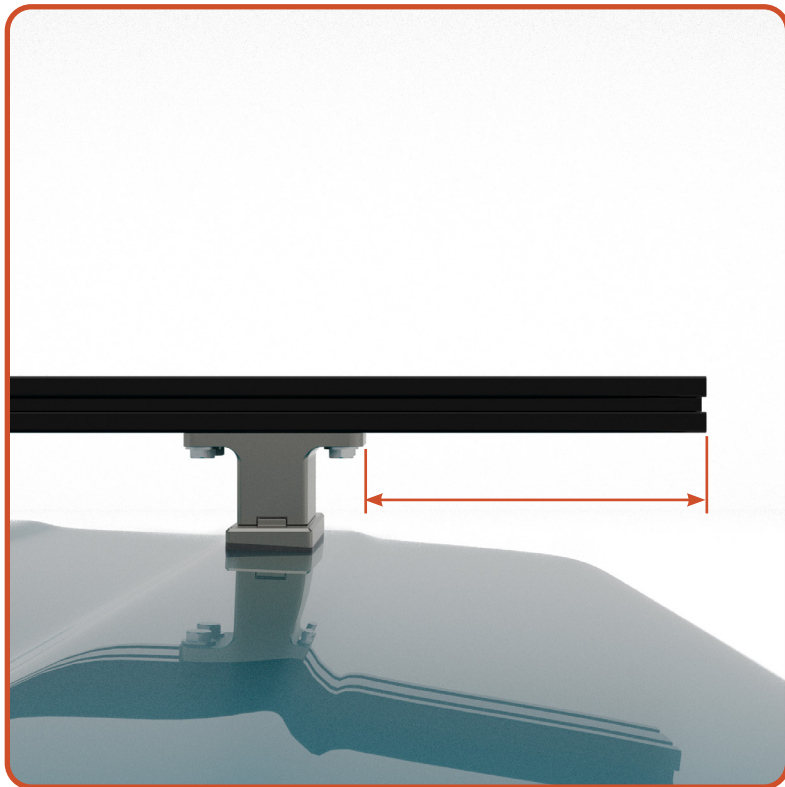
Note: Make sure the two alignment keys on each sandwich plate are indexed to the appropriate arch brackets. See next page for additional photos detail.



# INSTALLATION

## 06 CENTER CROSSBARS

After the main support crossbar have been secured to the vehicle, use a tape measure and center all of the bars on the vehicle. Measure from the inside edge of the mount to the outside face of the crossbar and make these equal side-to-side. Tighten the hardware to the crossbar.



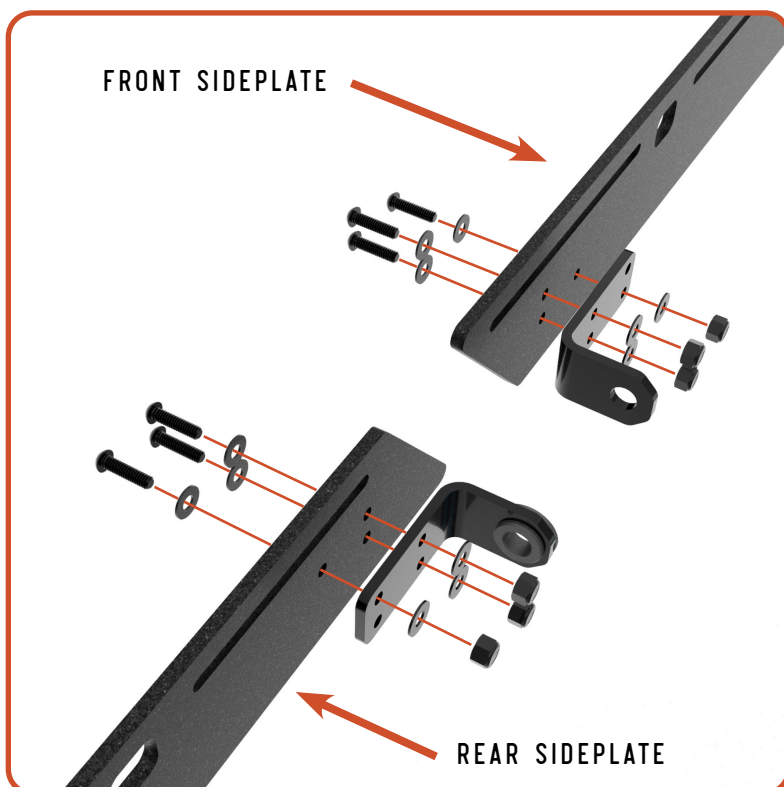
## 07 INSTALL BRACKETS

Required Components:

- 2 Bushing Bracket
- 2 Support Pin Bracket
- 12 1/4"-20x1" SB Bolt
- 24 1/4" Washer
- 12 1/4"-20 Nylock Nut

Install a bushing bracket to the rear sideplate with the bolts, washers, and nuts as shown. Repeat for the other sideplate.

Install a bolt bracket to the front sideplate with the bolts, washers, and nuts as shown. Repeat for the other sideplate.



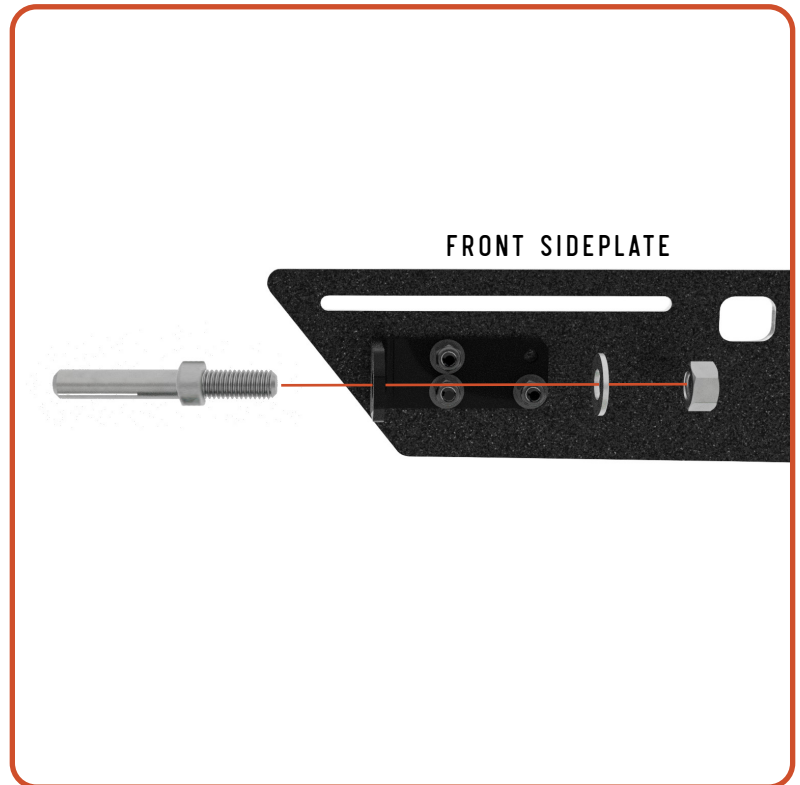
# INSTALLATION

## 08 INSTALL SUPPORT PINS

Required Components:

- 2 Support Pin
- 2 1/2"-13 Nylock Nut
- 2 1/2" Washer

Thread a 1/2" nut onto the support pin till the end of the threads followed by a washer. Install the support pin into one of the support pin brackets on the front rack with the long end pointing towards the rear rack. Install another washer followed by another nut then torque to 65-75 ft-lbs.





# INSTALLATION

## 09 INSTALL R SIDEPLATES

Required Components:

- 2** Rear Sideplate
- 8** 1/4"-20x1" SB Bolt
- 8** 1/4" Washer

Install rear sideplates with 2x of each washer and bolt in each crossbar per side.



## 10 INSTALL R CROSSBARS

Required Components:

- 4** Crossbar 56"
- 16** 1/4"-20x1" SB Bolt
- 16** 1/4" Washer

Install 4 of the remaining crossbars to the rack system. Space evenly or position according to your load requirements using the arrows as a target location.



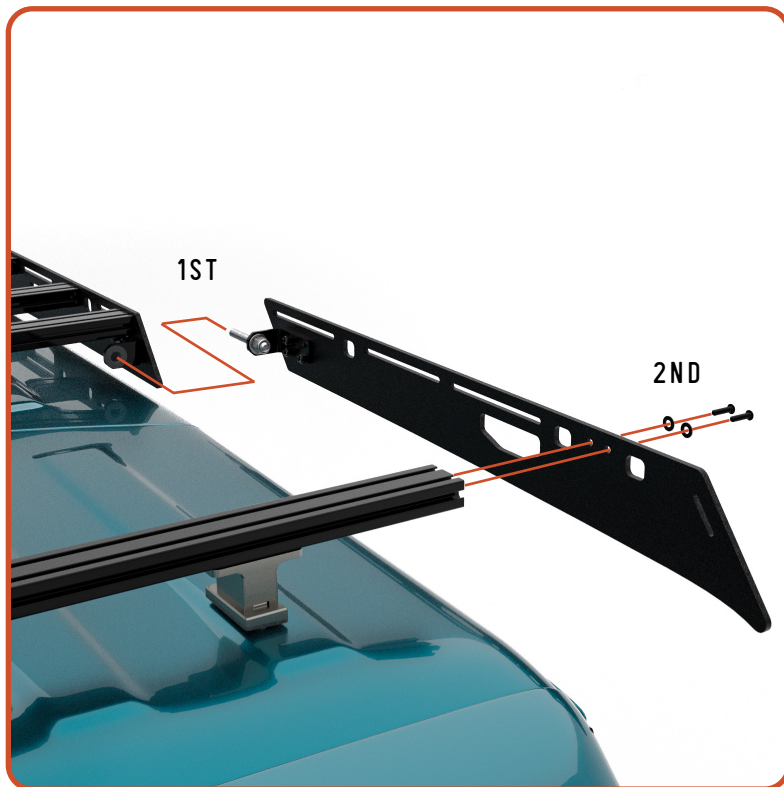
# INSTALLATION

## 11 INSTALL F SIDEPLATES

Required Components:

- 2 Front Sideplate
- 4 1/4"-20x1" SB Bolt
- 4 1/4" Washer

Install front sideplates by inserting the support pin into the bushing on the rear rack and attaching the sideplate to the front crossbar with 2x of each washer and bolt per side.



## 12 INSTALL FAIRING

Required Components:

- 1 Fairing Assembly
- 4 1/4"-20x1" SB Bolt
- 4 1/4" Washer

Position the wind fairing in line with the diagonal slot at the front of the rack. Align the bottom of the fairing with the tip of the roof rack and secure it using bolts and washers.

The fairing can be adjusted up or down if wind noise is detected. Small adjustments make a big difference here.





# INSTALLATION

## 13 INSTALL F CROSSBARS

Required Components:

- 2 Crossbar 56"
- 8 1/4"-20x1" SB Bolt
- 8 1/4" Washer

Install 2 of the remaining crossbars to the rack system. Space evenly or position according to your load requirements using the arrows as a target location.



## 12 PLASTIC TRIM

The last step is to trim the factory plastic roll cage covers to fit nicely around the rear mounts.





# CONVERSION

## 01 NO FREEDOM PANELS

To run the rack without the Freedom Panels remove the front knobs, slide the front portion of the rack forward, and lift away. The rear portion can be run by itself.



## 04 NO-ROOF MODE

To run the rack without the fiberglass roof panels, first remove the front knobs and remove the front rack portions. Second, remove the rear knobs and rack.

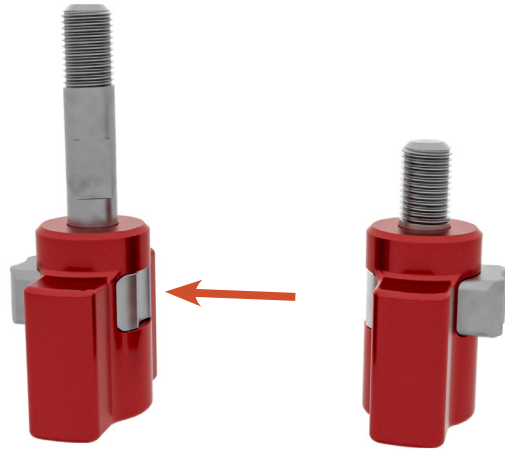
Remove the Freedom Panels and rear fiberglass roof section. Reinstall the rack portions to sit on the mounts. Convert the knobs to the short position and engage the locks. Install all knobs.



# ADDITIONAL NOTES

## KNOB NOTES

When rack is attached with the roof installed the lock button on the knob can be in either position. The lock must be engaged to hold the knob in the short position when running the rack without the roof.



## TROUBLESHOOTING

If you have trouble aligning the knob into the arch brackets or it tries to crossthread: loosen the arch from the crossbar and repeat the steps for aligning the sandwich plates with the alignment pin. When viewed from above, the hole from the top sandwich plate should be concentric with the mount below.

