

**upTOP Subaru**  
**crossTREK 2012-2021**  
**Impreza Wagon 2012-2021**



**Effective 2023 we are making some changes to our products that might not be reflected in this guide. Major changes for 2023 include:**

- Removal of **lock washers** from hardware kits in some cases.
- Switching to through-bolt assembly on Alpha roof racks instead of rivet nuts.
- Foot to rack bolts upgraded to lock nuts.
- Revised slot array in grooveTEK on Alpha/Bravo roof racks.

Thank you for selecting upTOP™ as the choice for your Subaru. The roof rack designed for your vehicle requires competency in aligning, drill holes, and installing rivNUT/plusNUT fasteners. If you are unfamiliar with this type of fastener or you feel it is above your pay grade you are encouraged to seek professional installation of this product.

#### **TOOLS REQUIRED**

5/32 Allen wrench  
5mm Allen wrench  
13mm wrench  
Sharpie Marker  
Tape Measure/Ruler  
Drill (Cordless Preferred)  
rivNUT/plusNUT installation tool  
Silicone Sealant  
VibraTITE VC-3 Threadlocker (Included)  
Masking Tape

The dynamic load of your roof rack will depend on the proper installation of the rivNUT/plusNUT installation. Maximum dynamic weight load of properly installed roof rack is 225 pounds for the Subaru crossTREK/Impreza Wagon.

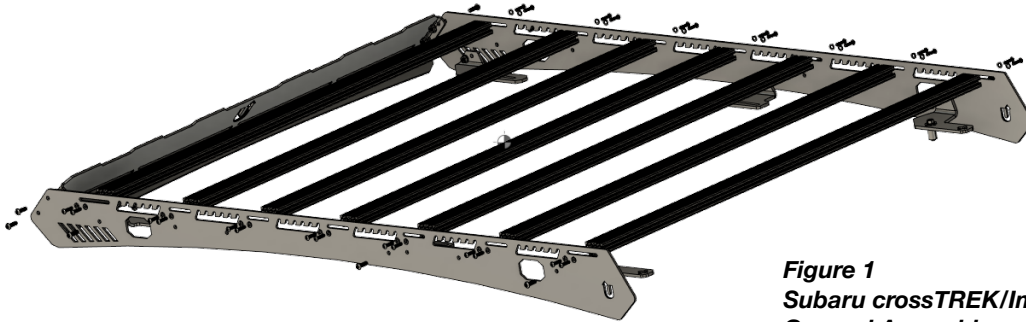
***This guide covers both the Alpha and Bravo product lines. Confirm your model prior to assembly and installation. The products share some similar components but the assembly is totally different for each product line. The installation is identical for both racks/vehicle platforms. Refer to REAR of guide for Alpha assembly instructions.***

**You will need adequate floor space to assemble your roof rack prior to installing it to your vehicle. An area 80x80" is recommended for this assembly.**

**It is necessary to assemble the rack and place it on the car roof to use the rack as a the general alignment template for placing the holes required for mounting. You will sit the roof rack on the vehicle once. At this time you will align, center, measure and mark the location of the six (6) mounting feet with masking tape. Leave the tape in place as this will help you to sit the rack back in place on the roof during installation in the exact same location. It is more accurate to use the roof rack as a template for drill locations as opposed to OEM designated measuring points as those vary.**

The assembly and installation instructions will begin on the next page.

## Exploded Diagram Subaru crossTREK/Impreza Wagon (BRAVO)



**Figure 1**  
**Subaru crossTREK/Impreza**  
**General Assembly**  
**Shown from driver side.**

Your parts are identified by part number but the orientation above can also serve as a reference for general assembly of the rack. The rear and mid feet are interchangeable but will utilize specific mounting holes outlines in this guide to achieve the proper height offset.

Hardware is sorted by step (of assembly order) and identified on each bag. You will access these bags of hardware in a specific order. **DO NOT** dump everything into a pile on the floor.

Part Number	Quantity	Description
2017	1	Driver Side Body Plate
2018	1	Passenger Side Body Plate
2217-22XX	1	Fairing-Application Specific
1340.2	1	Passenger Rear Foot
1341.2	1	Driver Rear Foot
1342	1	Passenger Middle Foot
1343	1	Driver Middle Foot
1344	1	Passenger Front Foot
1345	1	Driver Front Foot
LB47	7	Load Bar 47 Inch

Major components listed above. Hardware assortments included (not listed).  
 Light Bar hardware tethered to fairing cut option and is application specific.

## **Installation Preparation**

***The installation process requires drilling and installing plus nuts. In order to provide clearance for the required drill bit and the attachment hardware prior to compression it is REQUIRED to REMOVE or DROP the vehicle headliner to **remove the factory roof rack** and ensure damage to the vehicle side impact air curtains does not occur.***

***It is the sole responsibility of the person(s) tasked with the installation of this roof rack system to ensure that critical OEM installed safety devices are not damaged, rendered ineffective or permanently removed from the vehicle.***

***The process for removing the headliner from the Subaru platform requires extensive knowledge and ability in the disassembly of vehicle interior trim components. Some clips and fasteners may not be reusable and could require replacement components to be sourced from OEM vehicle manufacturer.***

***If the need arises for replacement OEM trim clips, panels, hardware or other components be sure to use the vehicle identification number (VIN) for the specific vehicle the installation is completed on and contact a Subaru dealer directly.***

***OEM parts are not available from upTOP overland or authorized dealers of upTOP overland products.***

***It is HIGHLY RECOMMENDED that you obtain vehicle specific service documentation for the removal and reinstallation of the headliner.***

***The next steps pertain to the steps to remove the headliner from the Subaru Impreza. The steps for the crossTREK are nearly the same.***

***The assembly and installation of the upTOP roof rack for your vehicle takes between 2-4 hours based on competency levels. Familiarize yourself with the headliner removal process, tools required, and estimate your time to complete the task and make sure if you are working outside you will have time to complete all of the steps.***

***It is also beneficial to develop a plan of attack for any wiring that you'll need to complete as this process will be easier to tackle while the headliner is out of the way.***

***You will also find content on YouTube™ with videos and tutorials for removing the factory roof rack.***

## Subaru crossTREK/Impreza Wagon Headliner Removal

### A Pillars

- Start by squeezing the top of the A pillar on the driver side of the car. This is the piece of plastic trim that runs along your windshield from the edge of the dashboard to the headliner. You will see a bright yellow/green clip. Use a pry tool to pop that clip out of its socket. Wiggle the A pillar back and forth while pulling back toward you to slide it out of position.

**NOTE: The speaker grill might come loose and come with the pillar. This is okay.**

- Release the three (3) clips securing the factory antenna cable to the back of the A pillar.
- Slide the A pillar up and out of the car.
- Repeat the process on the Passenger Side A Pillar.

**NOTE: The passenger side A Pillar has a harness attached to it that must be freed and unplugged from its socket to remove this pillar.**

### B Pillars-Seat belt removal

- Use your thumb to apply and keep pressure on the adjuster tab.
- With your other hand grip and remove the cover to expose 14mm bolt.
- Remove the 14mm bolt and drop the seat belt assembly.

### B Pillars-LOWER

- Pull back the rubber from area surrounding the panel.
- Using your fingers release the lower plastic panel.
- Pull the panel out and towards you.
- Slide the lower panel down and out of the way. No need to remove from car.

### B Pillars-UPPER

- Use a 10mm socket to remove the bolt you gained access to with the removal of the lower panel.
- Unseat the one (1) clip and two (2) hooks that secure the panel up underneath the headliner.
- Drop the panel down and remove it.

### C Pillars-UPPER

- Start at the rear of the car at the bottom where the upper and lower panel seams come together.
- Wedge in a pry tool and give it a twist. The panels should separate at the seam.
- Work your hands in between the gap and unseat the clips for the upper C pillar.
- Pull towards you and down to remove.

### GRAB HANDLES

- Note the pry points Subaru has marked on the grab handles.
- Insert your pry tool and unseat the clips. With both sides loose tug the handle out of location.
- Repeat the process for all four (4) grab handles.

### VISORS

- Locate notch on side of of the hook that the visor snaps into.
- Insert a pick tool or small flat screw driver into the notch and work the clip loose.
- Pull down and remove.
- Locate the notch nearest the windshield on the swivel housing of the visor.
- Remove cover with pick tool to access two (2) Phillips head screws.
- Remove screws and remove visor from vehicle by pulling down to unseat clips.
- Repeat process for both visors.

## STEP I RACK ASSEMBLY

Because the rack will be used as a fitting template for marking the drill locations in the drip rails of your vehicle you need to complete the assembly of the rack including the fairing. The rack will be sat in place, adjusted, the feet/hole locations marked and the rack will be removed to complete the drilling and installation of the plus nuts.

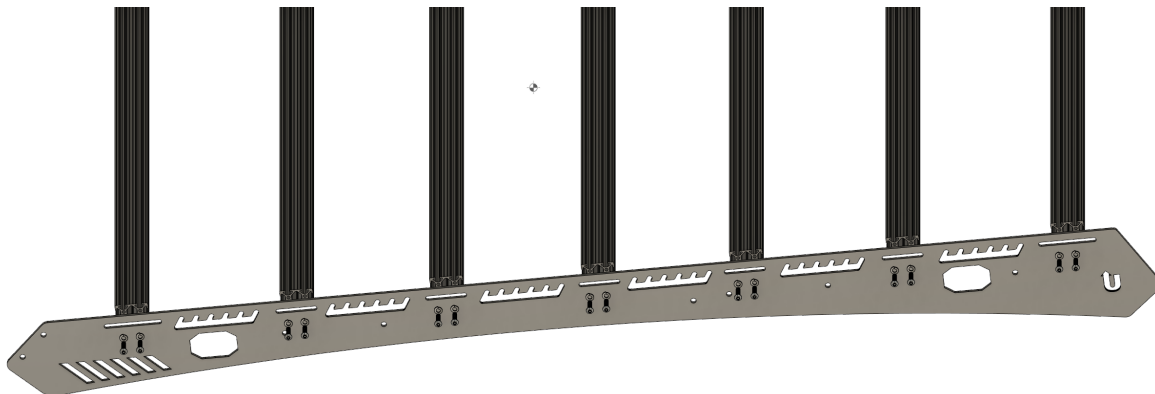
In order to save weight at this point we recommend you **DO NOT** install any lighting or wiring into the rack assembly and complete that step prior to final installation of the rack onto the roof of your vehicle.

Locate the following:

- Bag of hardware labeled "Load Bars"
- 2017/2018 Driver and Passenger Body Plates
- All seven (7) of your load bars.

All seven (7) load bars on the Subaru platform are adjustable. (Sliding)

Begin by aligning your load bars with the horizontal slots in the side of your rack and start (by hand) the load bar bolt (each one gets a lock washer) into the threaded ends of the load bars.



**Figure 2**  
**Load Bar Installation**  
**Driver Side**

Because of the adjustability of the load bars it is critical to make sure the load bars are fully seated in the same position within the slots to ensure the rack assembly is square.

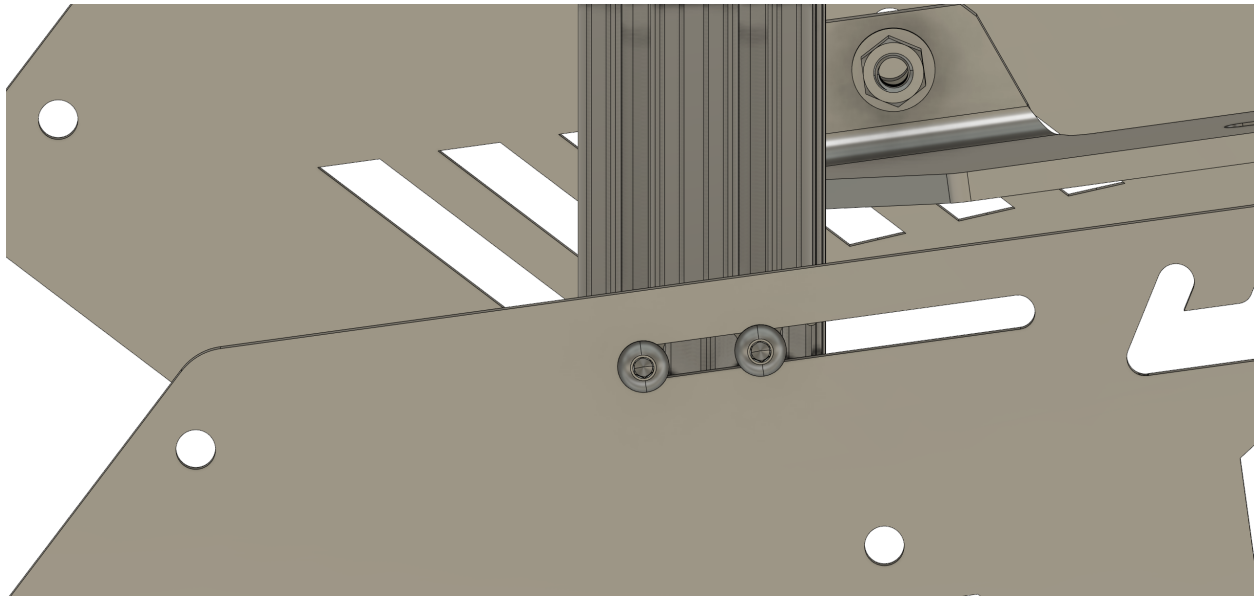
- Push the **FRONT** load bar all the way forward. Tighten to 21 inch pounds.
- Push the **REAR** load bar all the way back. Tighten to 21 inch pounds.
- For the remaining five bars forward or backward does not matter. Just make sure the position in the slot of the load bars on the driver side matches the position of the load bars in the slots on the passenger side.

## FULLY SEATED LOAD BARS

The driver side (2017) is shown. Using a 5/32" Allen wrench seat the lock washers onto the bolts and slide them through the machined holes. Push the load bar all the way forward (as shown in **figure 3**) Thread the hardware into the load bars and tighten to 21 inch pounds.

Repeat the process on the passenger side (2018).

Install the other load bars with the provided hardware in the same manner. With the adjustable load bars ensure that the position in the slot on the drivers side of the rack matches the position in the slot on the passenger side of the rack. This will keep the load bars parallel from one another and the rack square which helps with aligning feet.



**Figure 3**  
**Bravo crossTREK**  
**Driver side shown**

### **NOTE!!**

*Fairings cut for specific light bars as well as universal 40 cuts will experience significant wind noise when installed into the rack assembly and driven at speed with the light bar absent from the assembly. Wind passes through the open holes and/or slot and is intercepted by the front slot on the load bars.*

*The fairings are designed with this in mind and the angles/openings are engineered to work in unison with the light bars to limit or eliminate noise/vibration.*

## STEP 2 Fairing Installation

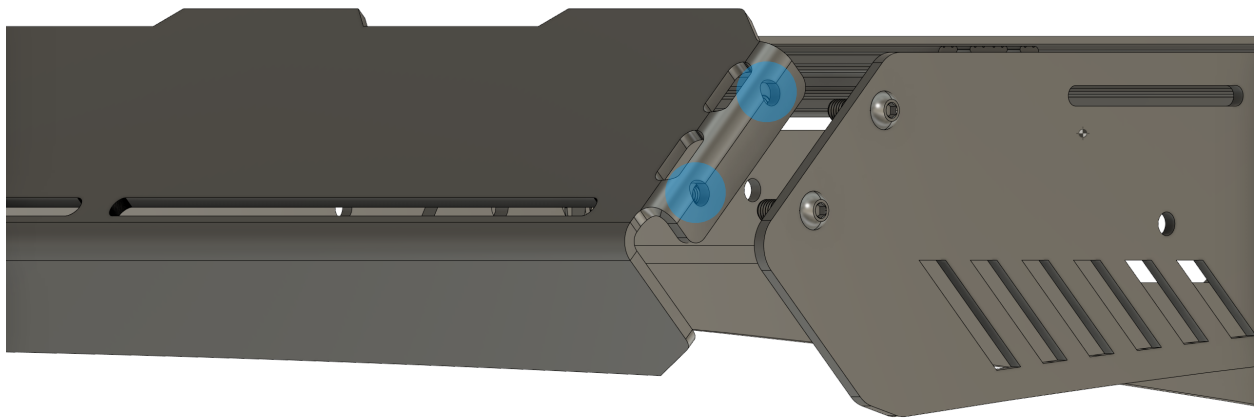
The fairing for your roof rack utilizes a splitter design that cuts through the air at speed and splits the wind. This patent pending design is the result of hundreds of hours of design, engineering and testing. The end result is a design that cuts through the air forcing air under the rack taking advantage of the aerodynamic signature of your vehicle as well as pushing air up and over the rack giving the roof rack a smaller aerodynamic profile that results in the least amount of wind noise possible with an aftermarket roof rack. The large upper face serves to cut air up and over any gear that you might have attached to it.

***If your fairing is cut for lighting we will ask you to postpone the installation of the lighting until AFTER the roof rack has been lifted on/off the vehicle to be used as the alignment template for marking/drilling your drip rails. Lighting alignment suggestions can be found in the rear of this guide.***

Locate the following:

- Fairing option specified in your order.
- Bag of hardware labeled "Fairing"
- vibraTITE VC3 Thread locking compound

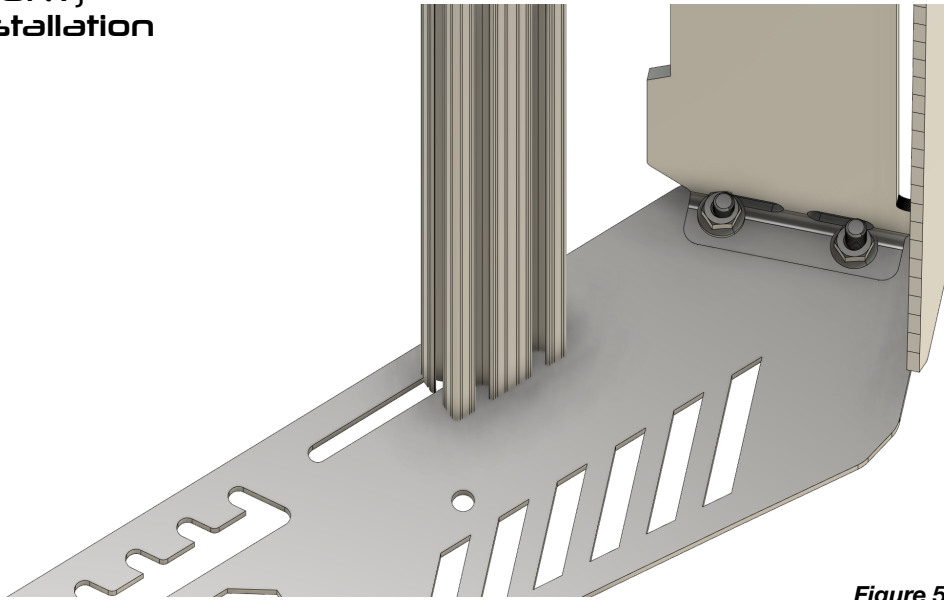
***\*If your fairing is cut for a specific light bar you will also been delivered a kit of hardware for that task. For now just leave that bagged up and sit it to the side. It will be used later.***



**Figure 4**  
**Fairing Install-Outer**  
**View**  
**Driver side shown**

***The folded tab of your fairing fits on the INSIDE of the rack body. Align the holes in the tabs on your fairing to the holes in the rack side (shown here in pink). Slide the bolts through both sets of holes and hand thread the supplied flange nuts onto the exposed threads on the inside of the fairing. (Shown in Figure 5)***

## STEP 2 (CONT) Fairing Installation



**Figure 5**  
**Fairing Install-Inner**  
**Driver side shown**

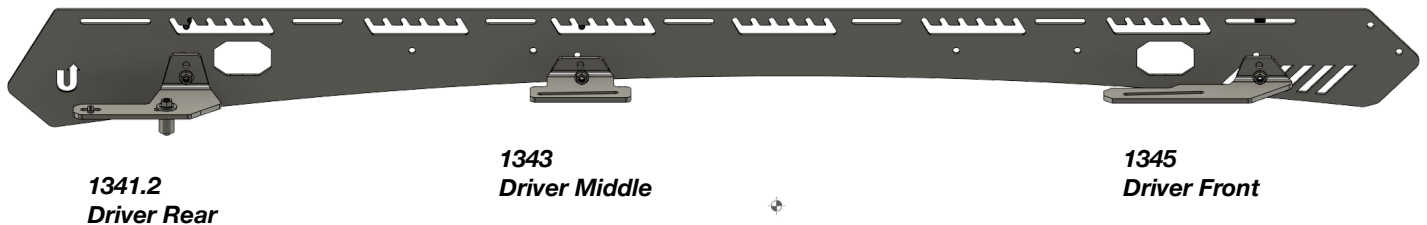
- Apply VC3 to the threads of each fairing bolt and allow to dry.  
*Dries in 5-10 minutes. Will remain gummy when cured.*
- Using a 5mm Allen wrench and 13mm wrench tighten the hardware to 35 inch pounds.
- Repeat the process on the passenger side.
- The fairing will be used as a locating measurement point when aligning the roof rack onto the roof of the vehicle for drill mark indexing.

The information for mating a light bar is covered in the rear of this guide and should be completed as one of the last steps.



### STEP 3 FEET

The feet sent with your rack are specific to the Subaru crossTREK and Impreza Wagon. To follow the curve of the roof it is critical that the feet are installed in the proper locations. The following drawings outline the orientation of each of the three (3) feet for the **DRIVERS SIDE**.



*The load bars and fairing are not visible in the illustrations to provide a better view of the exact fitment of each foot. At this point of assembly you will be working with the load bars and front fairing installed.*

**Figure 6**  
**Bravo crossTREK**  
**Drivers Side Shown**

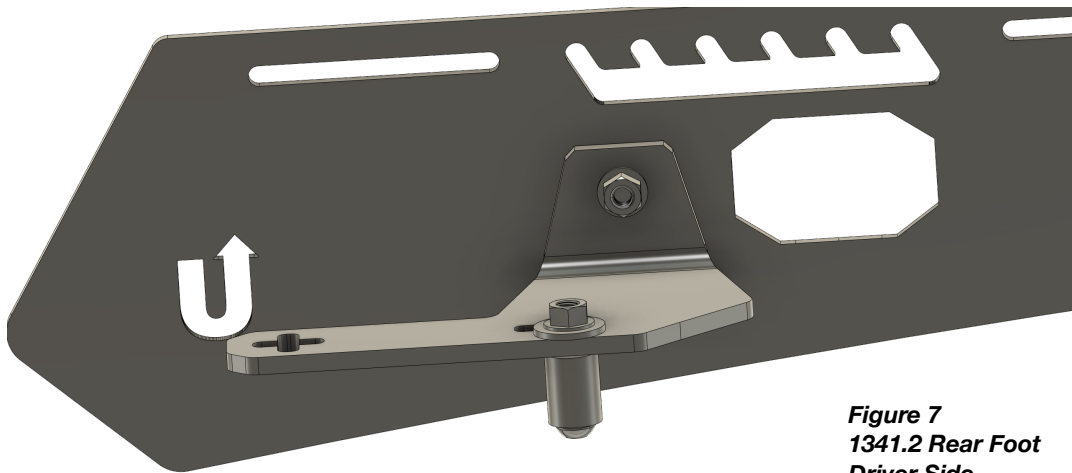
You will notice some hardware comes pre-installed to each of the rear feet. This assembly serves as a pressure foot for the rear of the rack and will be covered later.

Assemble the feet to the rack matching the orientation above for the driver side. Then repeat the process with the applicable feet for the passenger side.

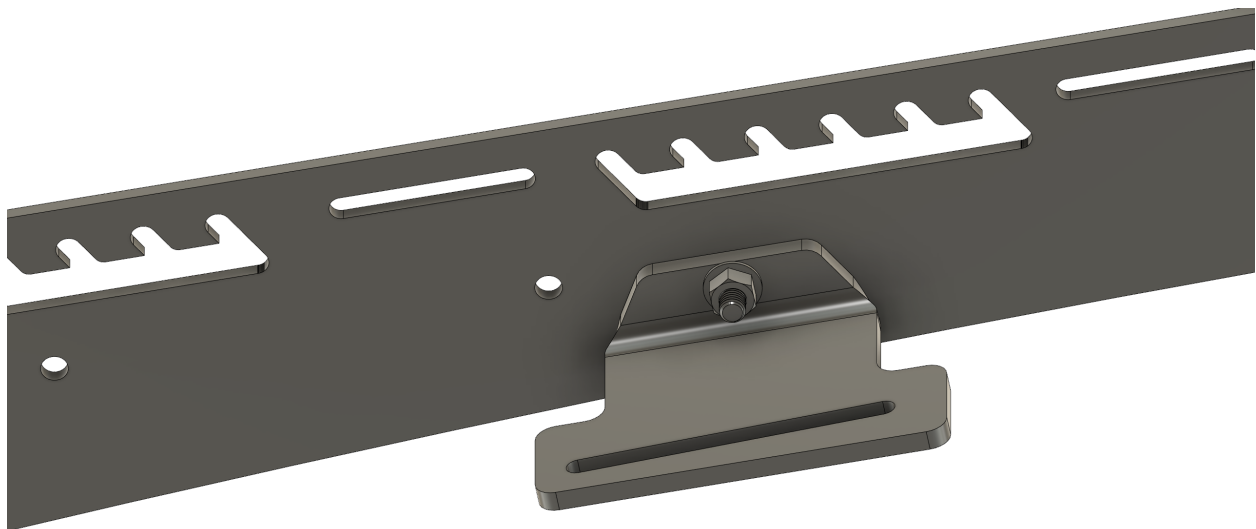
Use a 5mm Allen wrench and 13mm wrench to tighten the feet to 35 inch pounds.

**Step 3 (CONT)**  
**FEET**

The following drawings show detail of the rear, middle, and front foot on the drivers side of the rack. The passenger side will be a mirror image of this with the applicable part numbers on the feet. Reference the chart on the second page of this guide for the passenger side.

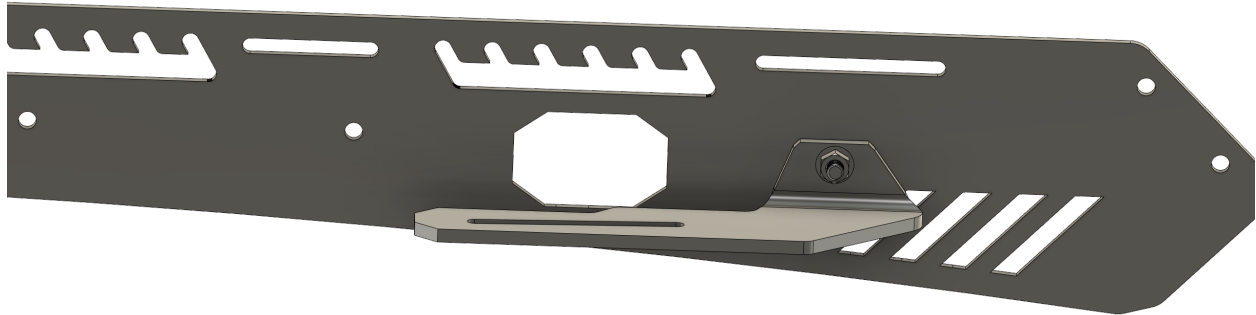


**Figure 7**  
**1341.2 Rear Foot**  
**Driver Side**



**Figure 8**  
**1343 Middle Foot**  
**Driver Side**

## STEP 3 (CONT) FEET



**Figure 9**  
**1345 Front Foot**  
**Driver Side**

## Step 4 Rack Alignment

It is strongly recommended that you complete this next step with someone to help you lift the rack onto the vehicle.

**PRIOR TO PROCEEDING REMOVE THE FACTORY DRIP RAIL COVERS (IF EQUIPPED).**

### **TECH TIP:**

**Place a moving blanket or other heavy weight, non-marring barrier on the roof of your vehicle. This will help to prevent accidental damage to the painted surfaces of the vehicle while making measurements.**

- Fold the driver and passenger side mirror in on the vehicle (if applicable) to free up some extra space.
- Ensure the area around the vehicle is free of obstructions (dogs, tricycles, skateboards, etc..)
- Lift the rack up trying to keep it as flat (Parallel to the ground) as possible and push it up into the air over your head.
- Walk the rack onto the vehicle FROM THE FRONT OF THE VEHICLE.
- GENTLY place the rack on the roof of the vehicle. The position at present isn't critical as the moving blanket/barrier will allow for calculated movements without damaging the exterior of the vehicle.
- Lift up the rack slightly (ONE SIDE AT A TIME) and bunch the moving blanket up underneath the load bars to expose the drip rails on your vehicle.
- Center the rack on the vehicle (Driver to Passenger Side) Take measurements to verify.
- Your load bars are 47.00" wide. You can mark them 23.5" at center at the front and back load bar to give indicators.
- Ensure that the slots in the feet are equally spaced over the drip rails.
- Check the front feet. Adjust as needed.
- Check the middle feet. Adjust as needed.
- Check the rear feet. Adjust as needed.
- For front to back alignment slide the rack forward until there is .500" (1/2") between the roof of your vehicle and the fairing AT THE DEAD CENTER. It helps to use the rear view mirror mount as reference for center of the vehicle. On the front fairing the "U" logo is always

centered. It MAY be necessary to scrunch the moving blanket/barrier up underneath the fairing to expose the roof of the vehicle. Take care not to scratch the paint.

- With the rack in place check antenna clearance. Adjust as needed.
- If EVERYTHING checks out you can now take a sharpie marker and mark the six (6) slot locations in the feet in relation to the drip rails on the vehicle. IT IS CRITICAL TO MARK THE CENTER OF THE DRIP RAIL. The feet on the Subaru racks offer no lateral movement to adjust the position of the rack.
- Verify the marker transferred to each location.
- Remove the roof rack and carefully sit on the ground.
- **SOME of the holes may line up over positions of holes of the factory roof rack. If this works out you can enlarge those holes to the size of the plus nuts (covered in step 5).**

#### **F.A.Q**

**Why the hell don't you guys give us measurements on exactly where to drill?**

*The truth is that if you use landmarks like spot welds, gasket edges, etc...and measure them across five vehicles you will get five different results. Minor changes and variances in vehicle manufacturing in regards to body blending (i.e. roof to crash cages) are a place that manufacturers will "take up the slack" on vehicle platforms and spot welds might not always be in the exact same spot. It is our opinion that using the rack for the vehicle on the actual vehicle it is going on results in a dead nuts measurement and alignment every single time. Is it a little harder to do? Depends. Ever tried to weld up a hole that was drilled in the wrong spot on a painted surface that is packed with seam sealer? You're Welcome.*

## **STEP 5 DRILLING**

Your kit includes the drill bit required for the provided plusNUT for your installation. This is a 9mm (23/64" for you imperial fanatics) drill bit. It is recommended that you start with a smaller pilot bit to center the hole and start the process working your way up to the larger 9mm drill bit for the attachment hardware. This step will take place with the factory drip rails removed. You will not be re-using them after installation. Catalog and store them to put back on the vehicle should you ever trade it in.

***BE CAREFUL! The airbag curtains of the vehicle can be danger close to the roof of the vehicle. Without care in this step you can penetrate the bodies of the air bag system. With the headliner removed or dropped you should be able to physically touch the air bag curtains with your hands. While it is not necessary to remove them completely it is highly advantageous to use a barrier (a piece of wood, metal, a notebook, etc...) between the roof of the vehicle and the side curtain air bag pouches while drilling. This serves as an extra layer of protection to keep the drill bit from biting and tearing into the side curtain airbag.***

**BEFORE PROCEEDING WITH THE NEXT STEP DISCONNECT THE NEGATIVE TERMINAL OF YOUR BATTERY AND WAIT 20 MINUTES BEFORE DRILLING ANY HOLES.**

**Take this time to gather the hardware and tools required:**

- **Pilot Bits (see below)**
- **Cordless Drill**
- **RivNut/plusNUT setting tool (links provided below for alternatives)**

**TECH TIP:**

**DO NOT JUST COWBOY UP AND TRY AND PUNCH THROUGH YOUR DRIP RAILS WITH THE PROVIDED 9mm DRILL BIT. This bit is provided to you because it is the PERFECT slip size for rivnuts and plus nuts. You are encouraged to start with smaller bits and graduate to the 9mm.**

**For example:**

**Pilot .125" (1/8)**

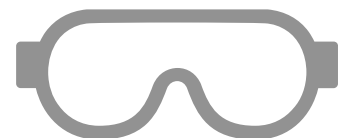
**Pilot .1875" (3/16)**

**Pilot .250 (1/4)**

**Pilot .3125 (5/16)**

**Then complete the hole with the 9mm drill bit with the supplied stop collar set at .375" (3/8") Re-torque the stop collar after every completed hole.**

- Wear eye protection for the following steps.
- Drill each of the 10 (10) holes and clean away the debris.
- Test fit each Plus Nut to verify the insert passes through the hole freely or would drop in with very little force applied.



## STEP 6 THREADED INSERT INSTALLATION (Rivnuts and Plus nuts)

A special tool is available (Amazon) for this process but you can also set them with a bolt and two washers. Links are provided below to videos that explain the process in depth:

plusNUT: <https://www.youtube.com/watch?v=Q21D-gKpUk8>

If you are using a dedicated tool for this process you will need an M6x1.00 Mandrel.

It is also possible to set these fasteners without a specialized tool. The link for that process can be found here:

# cargovanconversion



***Carefully install/set all ten (10) threaded inserts with either the specialized tool or the bolt/nut method.***

***Hand thread an m6x1.00 Bolt (the roof rack bolts are this pitch) into each rivnut/plus nut to ensure that the inserts are fully seated and locked into place. Apply a small amount of torque by hand to each fastener to ensure the threaded inserts do not slip. If you meet resistance try cleaning the threads with an M6x1.00 tap.***

***It is easier to complete this test while the rack is off the vehicle.***

***If you encounter any inserts that are not fully seated make adjustments with the tool. Spare inserts are provided to you to account for bad sets.***

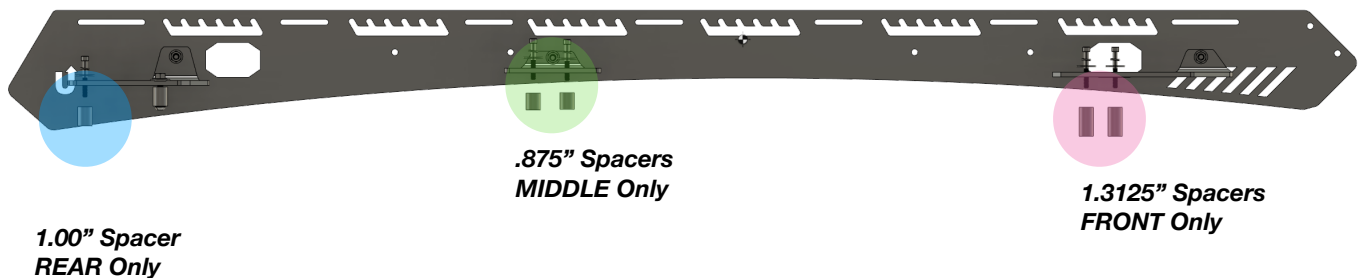
## STEP 7 FINAL INSTALLATION

With the inserts installed you can prep the vehicle roof area for final assembly.

***It is recommended to use an exterior grade RTV silicone product for sealant. Brand names are not important just make sure the product you purchase is EXTERIOR GRADE. Color is not important as the sealant will not be visible after the rack is installed.***

- Apply a generous amount of silicone sealant INTO the threaded portion of the inserts you installed. Cover the surface area with sealant paying special attention to the flange edges of the inserts and make sure that sealant fully encapsulates the threaded insert area.
- Locate the bag of hardware labeled rack to roof.
- Position the aluminum spacers in the silicone piles you applied to the drip rails. Observe the size (height) of the spacers in the drawing below. Place the spacers as close to centered directly over the threaded holes inside the inserts.

***The .875" (7/8") spacers will be used under the MIDDLE feet.  
The 1.00" (1") spacers will be used under the REAR feet.  
The 1.3125 (1 5/16") spacers will be used under the FRONT feet.***



***Figure 10 Subaru Spacer Placement  
Shown Drivers Side-Inside View***

***The BLUE circle indicates the REAR of the rack. Position the 1.00" spacers underneath the REAR feet.***

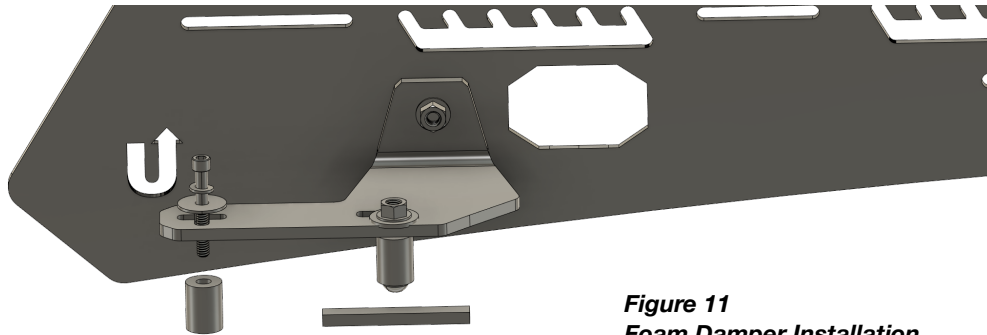
***The GREEN circle indicates the MIDDLE locations. Position the .875" spacers underneath the MIDDLE feet.***

***The PINK circle indicates the FRONT locations. Position the 1.3125" spacers underneath the FRONT feet.***

***Repeat the process for both the driver (shown) and passenger side of the drip rails.***

## STEP 7 (CONT) Final Installation

**Using the drawing below (Figure 11) apply the supplied foam tape into the drip rail of your vehicle in position so that the pre-installed pressure foot assembly will contact the foam damper after installation. The foam should be installed on both the DRIVER and PASSENGER side.**



**Figure 11  
Foam Damper Installation  
Rear Foot Hardware Assembly**

With the assistance of another person once again lift the rack up and place it on the roof. Take care to sit the Feet of the rack down **DIRECTLY** on top of the spacers. The spacers should hold themselves in place seated the sealant you applied. If they scoot around a bit you can align them again using a small pick tool. Slide the pick tool through the slot in the foot, down through the spacer and use the head of the pick tool to align with the threaded insert.

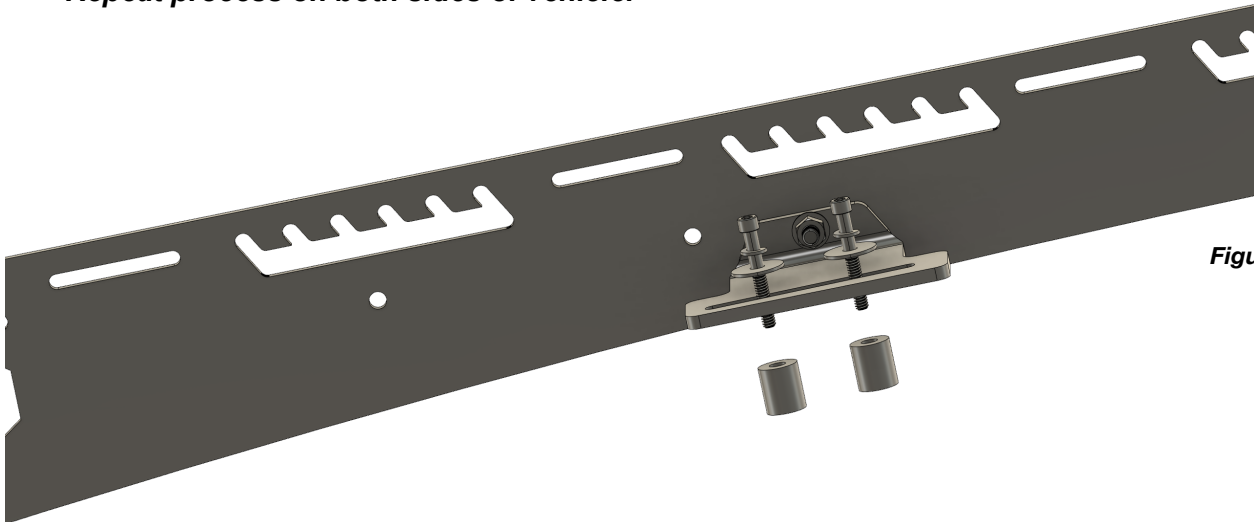
**All ten (10) fasteners that attach the roof rack to the vehicle are the same length and require a lock washer as well as a fender washer.**

- Start each fastener/lock washer/ fender washer assembly into each of the threaded inserts. You can use a 5mm Allen wrench to get them started but **DO NOT** fully tighten. You will want them loose so you can align the rack front to back and make sure it is centered.
- **Start with the REAR feet on both sides.** (55mm Bolts) **Figure 11**



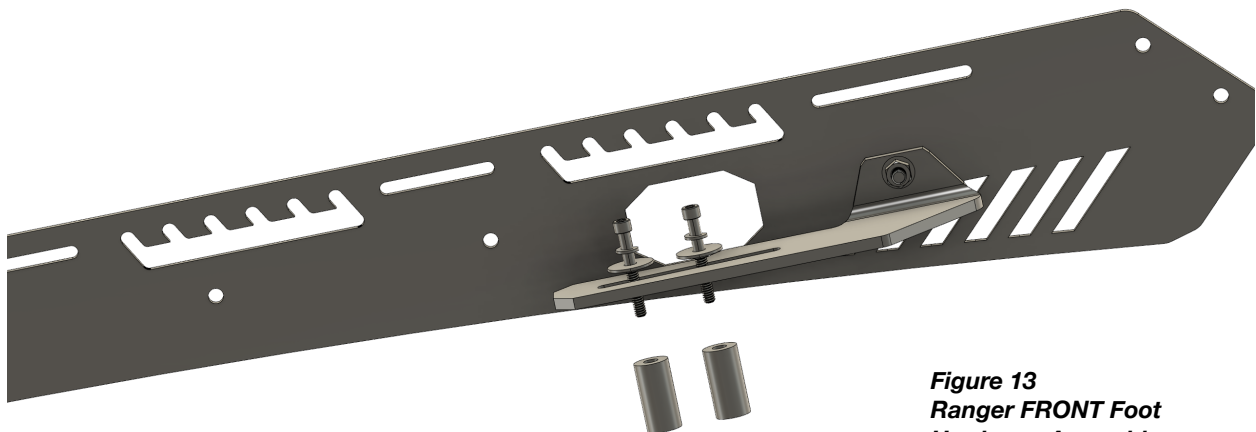
**STEP 7 (CONT)**  
**FINAL INSTALLATION**

- *Install the MIDDLE feet hardware (55 mm bolts) as shown in Figure 12*
- *Repeat process on both sides of vehicle.*



*Figure*

- *Install the FRONT feet hardware (55mm bolts) as shown in Figure 13*
- *Repeat process on both sides of vehicle.*



*Figure 13*  
*Ranger FRONT Foot*  
*Hardware Assembly*  
*Driver Side Shown*

## STEP 7 (CONT) FINAL INSTALLATION

- Measure the rack against the roof of the vehicle to ensure the rack is centered front to rear on the roof. Make adjustments as needed.
- Tighten all twelve (12) bolts to 21 Inch Pounds.

### **NOTE**

*The provided hardware is stainless steel.*

- **DO NOT USE POWER TOOLS.**
- **DO NOT OVER TIGHTEN.**
- **DO NOT FORCE HARDWARE THAT FEELS STUCK.**
- **RE-TAP (M6x1.00) ANY THREADED INSERTS THAT GIVE TOO MUCH RESISTANCE.**

If you have additional lighting to install into the fairing or if you are using the optional scenPOD™ accessories you can now complete that task and terminate the wiring.

***Optional accessories such as gear mounts, grab handles, etc...can be installed/removed at any time using our drop in hardware that does NOT require the disassembly of the load bar components for hardware insertion.***

## FAIRING LIGHTING (OPTIONAL)

upTOP offers fairing solutions that are cut for specific light bar profiles. This design nests the light bars into the fairing keeping them concealed until they are powered on providing protection of the light bar from trail hazards.

Optional fairing cuts are provided with hardware for installing your light bar into our fairings. We provide rotation and height adjustability brackets and hardware designed to thread into the bracket mounts of your light bar.

These are specific to:

***Baja Designs- 1/4-20 hardware on S8 and OnX6 models***

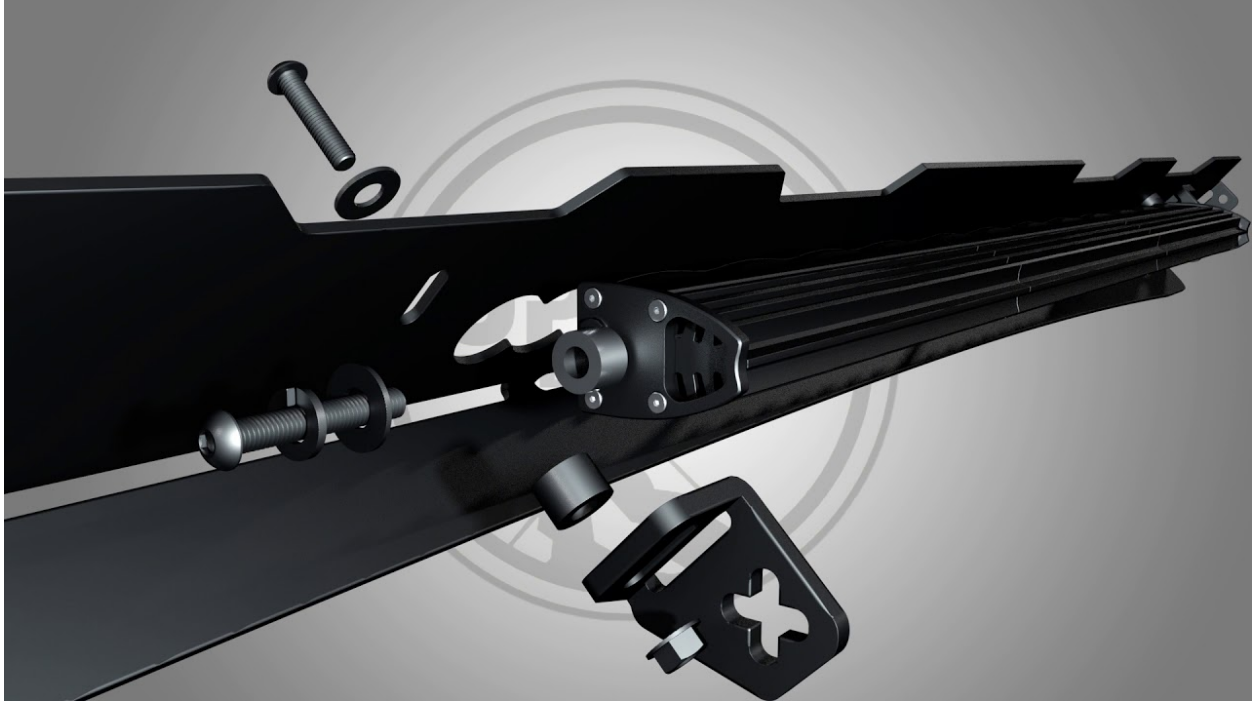
***Extreme LED-M8x1.25 on X6s models***

Universal 40 fairings come complete with drop in load bar hardware and stainless steel hardware (m6x1.00). The Universal 40 fairings will accommodate ALL light bars up to 41" in width. In this application it is intended that you would use the brackets provided with your light bar.

The light bar assembly would attach to the FRONT on the very front load bar on your roof rack. Use the slide adjustment of the load bar to nest the light bar as close to the fairing as you can without touching. Any contact between the light bar and fairing could cause vibration.

## FAIRING LIGHTING (CONT)

A brief tutorial on the layout of spacers and hardware is available on our website by using this link:



### **NOTE**

*The light bar shown in the video is an Extreme LED brand. The spacer inserted between the light bar and the mounting bracket (NOT THE BRACKET AND THE FAIRING) is NOT required or included with fairings cut for Baja Designs Light Bars.*

*The spacer is required on Extreme LED products to provide clearance for the cable gland where the wiring exits the light bar.*

## upTOP ALPHA Subaru crossTREK/Impreza Wagon Assembly Instructions

The vehicle mating instructions covered throughout this guide cover a process which is identical between the Alpha and Bravo product line for your vehicle. This supplement will cover the assembly order and hardware assortment for the Alpha product line.

Part Number	Quantity	Description
1063	1	Driver grooveTEK
1064	1	Passenger grooveTEK
1159	1	Driver Armor
1160	1	Passenger Armor
129X-XX	1	Fairing-Optional Cuts
1340.2	1	Passenger Rear Foot
1341.2	1	Driver Rear Foot
1342	1	Passenger Mid Foot
1343	1	Driver Mid Foot
1344	1	Passenger Front Foot
1345	1	Driver Front Foot

Be sure you have adequate floor space to assemble the rack components. 80"x80" minimum is recommended.

### Tools Required

- 5/32 Allen wrench
- 5mm Allen wrench
- 13mm wrench
- 1/2 wrench (2X)
- Sharpie Marker
- Tape Measure/Ruler
- Drill (Cordless Preferred)
- rivNUT/plusNUT installation tool
- Silicone Sealant
- VibraTITE VC-3 Threadlocker (Included)

## Step IA Load Bars

The roof rack assembly uses seven (7) 47.00" load bars. The front and rear load bars will install with hex bolts to allow access for adjustability once the armor is installed. The remaining five (5) load bars will install with button head bolts.

### Gather the following:

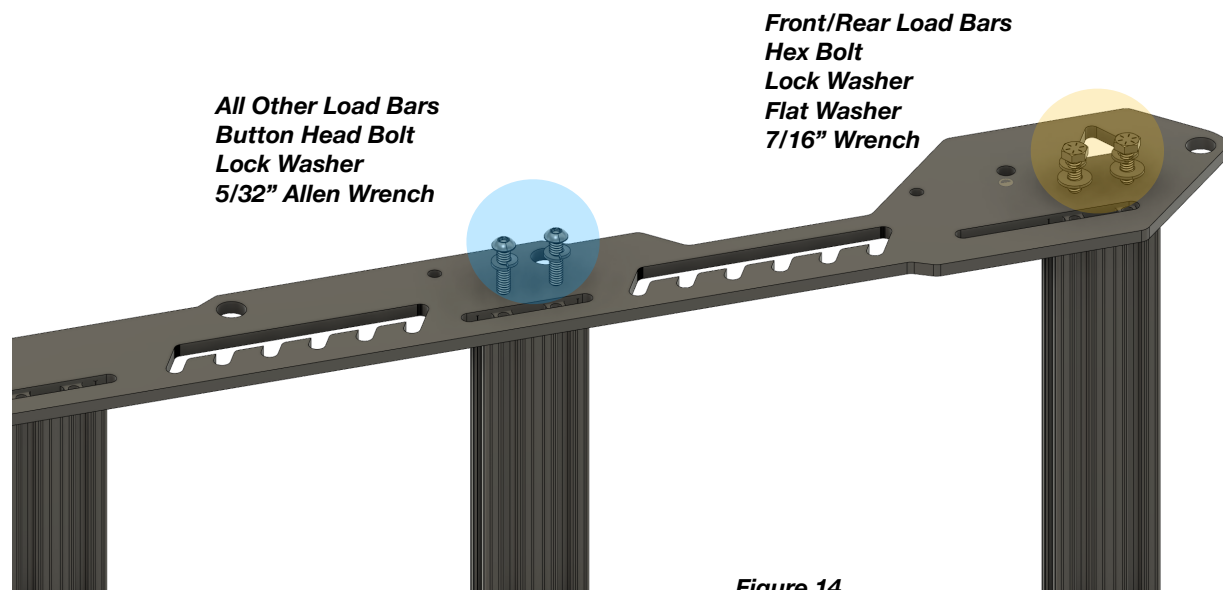
- 7/16" Box End Wrench
- 5/32 Allen wrench
- (7) Load Bars
- Hardware bag(s)
  - **Front/Rear Load Bars**
  - **All Other Load Bars**
- 1063-Driver Side grooveTEK
- 1064-Passenger Side grooveTEK

It is important that the load bars are fully seated in their respective slot during assembly. This will ensure that the rack goes together square (parallel on the driver and passenger side) which will aid in placing and installing the rack in later steps.

***The end of the grooveTEK with the Triangular opening is the FRONT of the rack.***

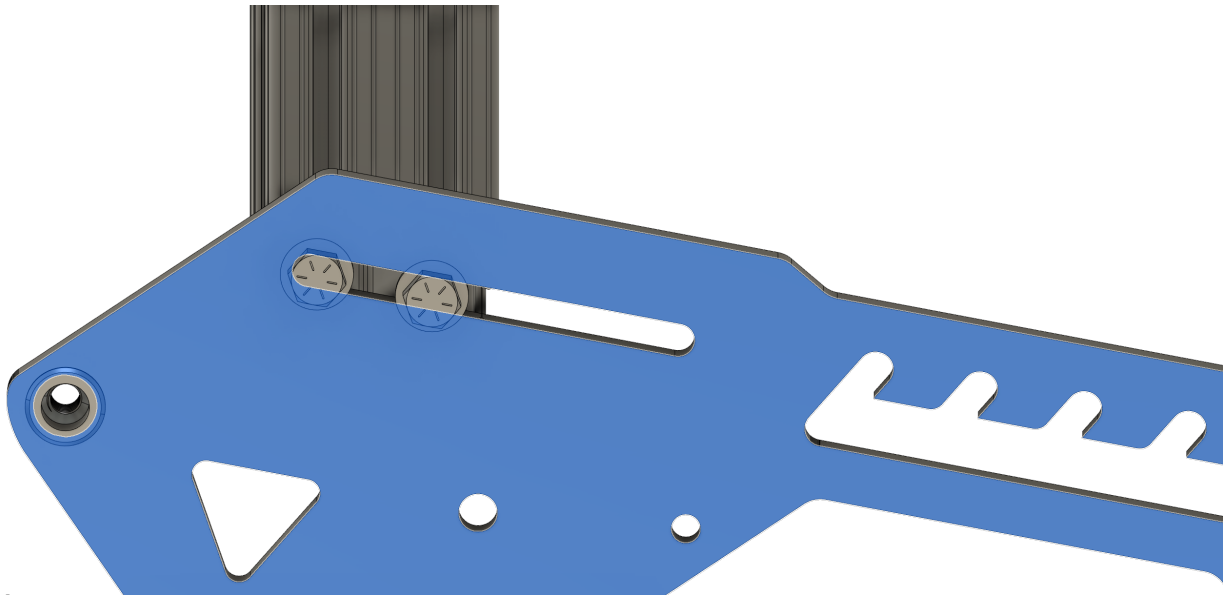
After the rack is installed to the vehicle the load bars can be moved/shifted into any position inside the slots to facilitate better alignment options with various pieces of kit that will be installed on the racks load bars.

The following drawing (**Figure 14**) shows the two (2) hardware variants for the load bars for this roof rack assembly.



**Figure 14**  
**Load Bar Hardware Variants**  
**Subaru crossTREK/Impreza Wagon**  
**Driver Side Shown**

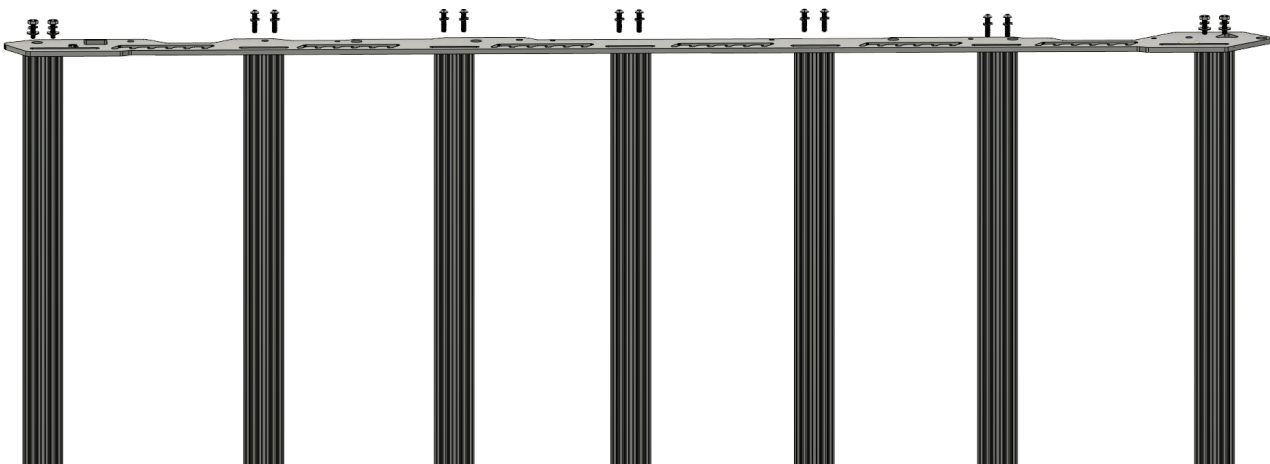
**Step 1A (Cont)  
Load Bars**



**Figure 15**  
The grooveTEK in this image (highlighted in blue) shows the slot location of the front load bar with the applicable hardware “fully seated”. This will have the load bar pushed all the way forward. Install the bolts to the front and rear load bars in this orientation to square the grooveTEK.

**Complete the process on the DRIVER and PASSENGER side for the front and rear load bars.**

Effective 2023 you will have additional holes at the front of your grooveTEK for your wind screen. (Not pictured)



**Figure 16**  
Install the **BUTTON HEAD** hardware along with the remaining five (5) load bars and tighten with a 5/32” Allen wrench. Again make sure that each load bar is full seated in the slot. They can be moved later.

**Complete the process on the DRIVER and PASSENGER side of the rack assembly.**

## STEP 2A Feet to Rack

Once you have all seven load bars installed to the grooveTEK plates you can gather the following and install the feet.

The feet sent with your rack are specific to the Subaru crossTREK and Impreza Wagon. To follow the curve of the roof it is critical that the feet are installed in the proper locations. The following drawings outline the orientation of each of the three (3) feet for the **DRIVERS SIDE**.



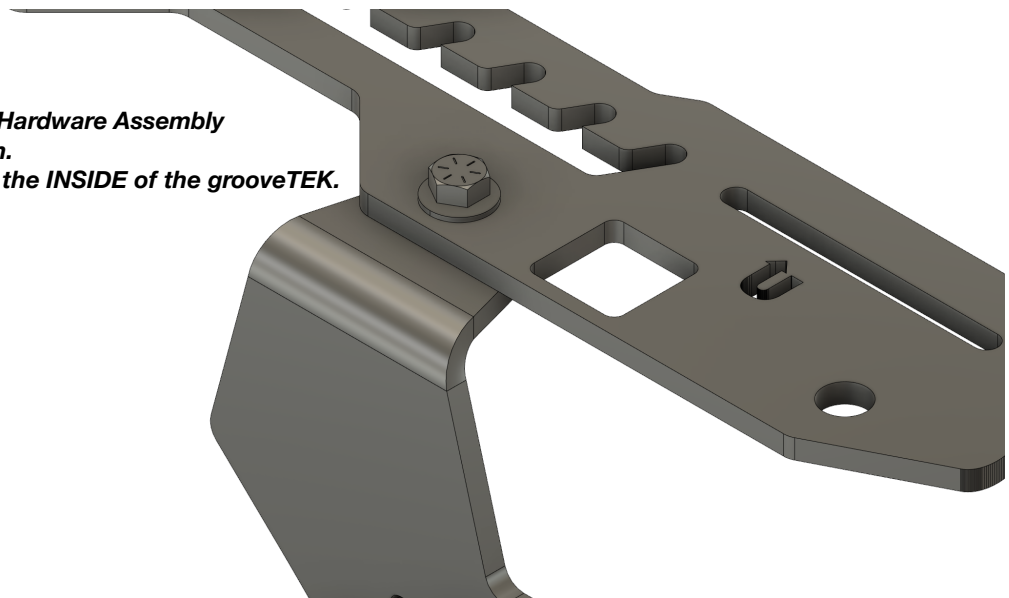
**Figure 17**  
**Subaru crossTREK Foot mount hole location(s).**  
**Driver Side (OUTER) shown.**  
**Front of rack shown on left side of illustration.**

**DO NOT mistake the pre-installed rivNUT locations for foot mount locations. The rivNUT locations will be used for armor and grab handle attachment in later steps.**

### **Gather the following:**

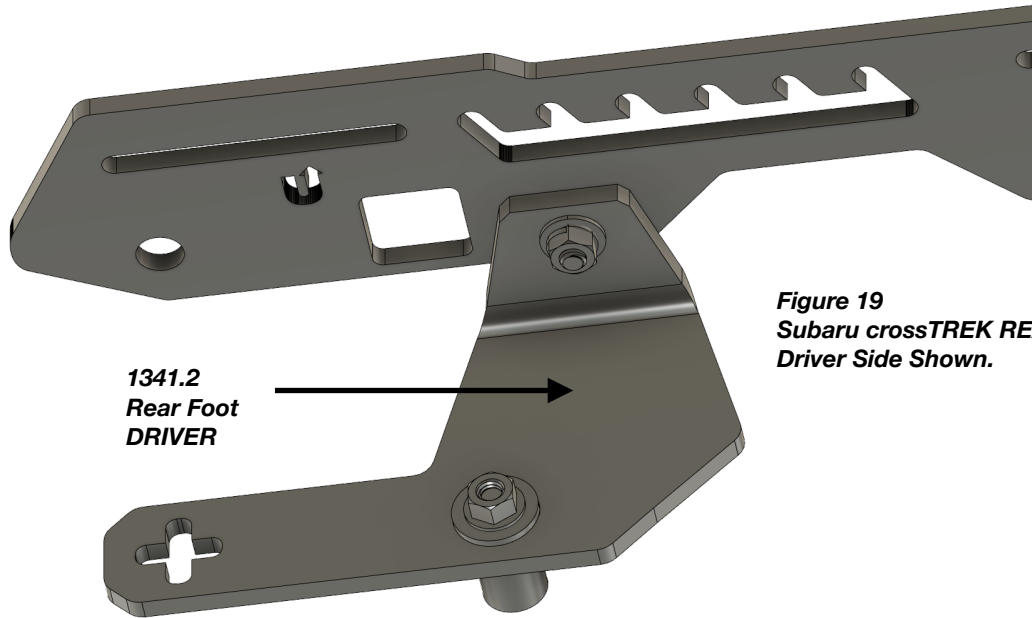
- 1341.2 Driver Rear Foot      1340.2 Passenger Rear Foot
- 1343 Driver Mid Foot              1342 Passenger Middle Foot
- 1345 Driver Front Foot.      1344 Passenger Front Foot
- Hardware Bag:
  - **Feet to Rack**
- (2) 1/2" wrenches

**Apply a small amount of VC3 thread locker to the threads of the fasteners and allow that to dry. Slide a Hex head bolt w/flat washer through the grooveTEK and align/slide the feet over the threads of the bolt on the **INSIDE** of the grooveTEK.**



**Figure 18**  
**Subaru crossTREK Foot Hardware Assembly**  
**Drivers side REAR shown.**  
**Notice the feet mount to the **INSIDE** of the grooveTEK.**

**STEP 2A (CONT)**  
**Feet to Rack**

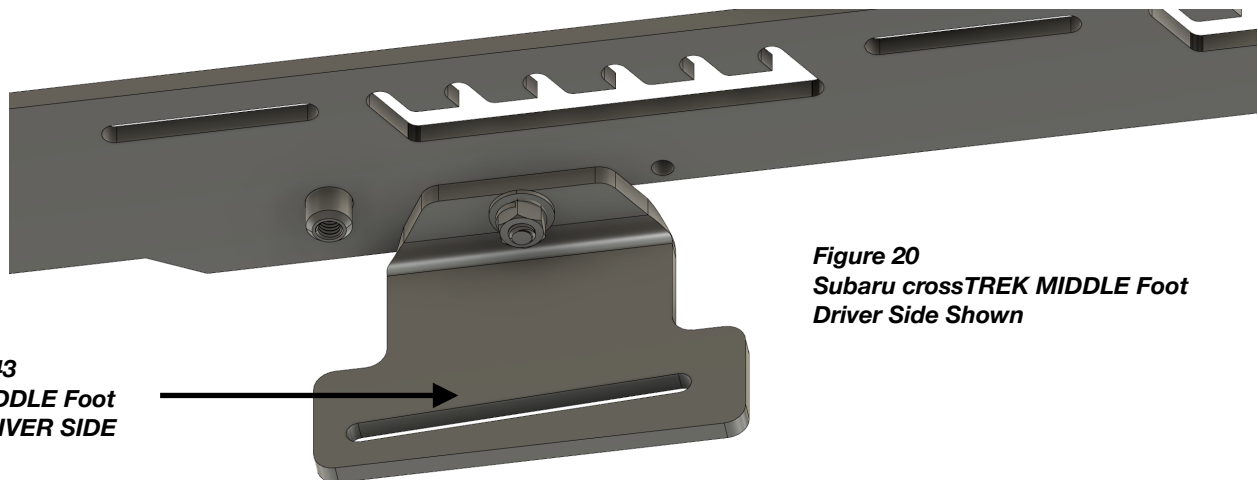


*Figure 19*  
*Subaru crossTREK REAR Foot*  
*Driver Side Shown.*

**1341.2**  
**Rear Foot**  
**DRIVER**

Install a flat washer against the foot followed by a lock washer and finally the hex nut. Using 1/2" wrenches tighten the foot bolt. 30 Inch pounds is the recommended torque spec for all of the foot assembly hardware. **Repeat the process with PN# 1340.2 for the REAR passenger side.**

***You will notice some hardware comes pre-installed to each of the rear feet. This assembly serves as a pressure foot for the rear of the rack and is covered in Step 7 in the Final Installation instructions found earlier in this guide.***



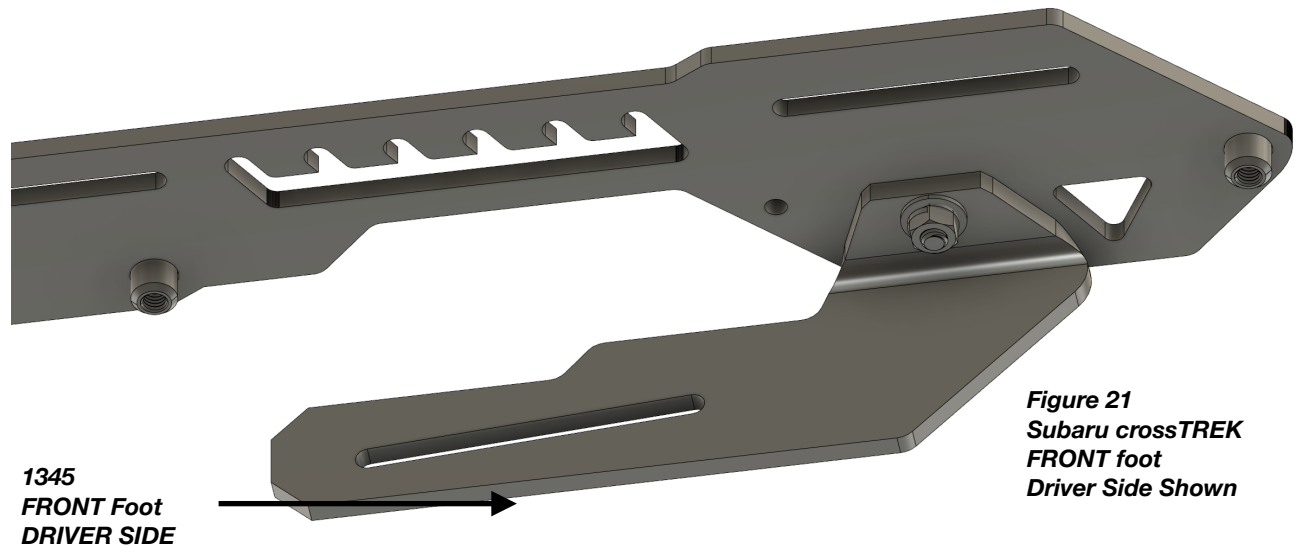
*Figure 20*  
*Subaru crossTREK MIDDLE Foot*  
*Driver Side Shown*

**1343**  
**MIDDLE Foot**  
**DRIVER SIDE**

Using the same order of assembly for the hardware attach and tighten the middle foot. **Repeat the process with PN#1342 for the MIDDLE passenger side.**



## STEP 2A (CONT) Feet to Rack



Using the same order of assembly for the hardware attach and tighten the front foot. **Repeat the process with PN#1344 for the FRONT passenger side.**

## STEP 3A Grab Handle Tying

### TOOLS REQUIRED:

- Needle Nose Pliers
- Lighter
- Crimp Tool
- Side Cutting Pliers

As the grab handles are installed to the rack as a completed assembly the next step is to tie and complete the safety wire installation for the grab handles of your rack. The installation of the armor to your roof rack requires the grab handle lace plate as part of the final attachment.

The grab handles and their required components are packaged by themselves. Locate the bag and proceed with tying the handles.

**Our process for handle tying is outlined in a video on our website under the instructions tab.**

Feel free to follow our method or get creative with your paracord knots and go your own route. The kits are shipped with standard black 550 paracord but you can order any color that you like from paracord planet or other online sources.

The included safety wire and crimp replacements are available on our website or by calling our technical support Monday-Friday from 8am-4pm MST.

Once you've tied all included handles you can proceed to step 4: Armor attachment

## STEP 4A Armor to grooveTEK

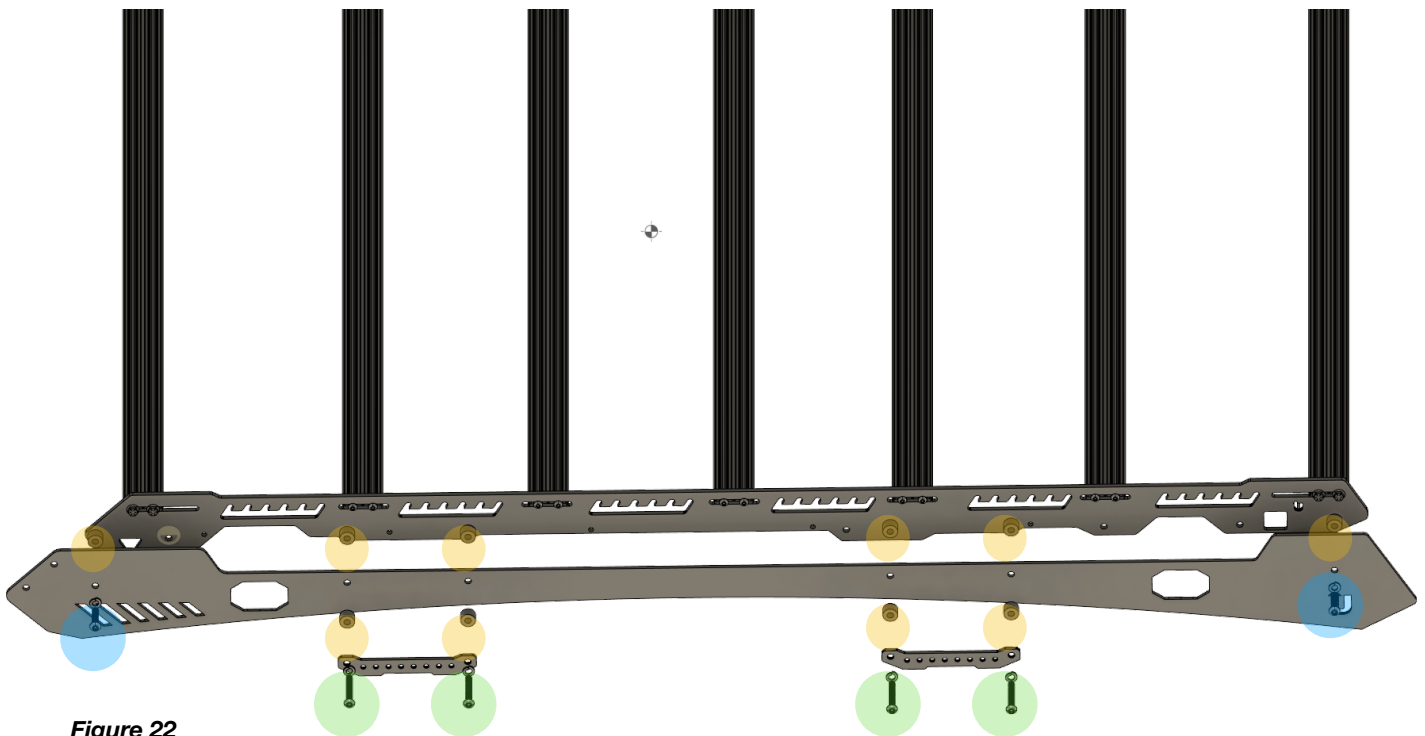
Before you attach the armor if you are installing an optional **quickWIRE™** harness or otherwise wiring the roof rack for lighting you should proceed with that part of the installation at this time.

***In an effort to lessen the weight on the rack it is recommended that you DO NOT install and lighting into the front fairing prior to using the rack as a guide template (STEP 4 earlier in this guide). You can install the light bar into the rack while it is off the car prior to completing the final installation.***

The armor attaches to the grooveTEK and is the mount point for the front fairing. The profiles on the armor are designed to follow the silhouette of your vehicle. They will fit very close to the body of the vehicle.

### Gather the following:

- 1159-Driver Side Armor
- 1160-Passenger Side Armor
- Grab Handle Assemblies (completed in step 3A)
- Hardware Bag(s):
  - Armor to grooveTEK**
  - Grab Handles**
- 5mm Allen wrench



**Figure 22**  
**Subaru crossTREK Armor to grooveTEK**  
**Drive Side Shown/Front of rack on left of image**

The **BLUE** circles indicate the 35mm bolts/lock washers used at the front and rear of the rack.  
The **GREEN** circles indicate the longer 55mm bolts/lock washers used through the lace plates in the middle.  
The **ORANGE** circles indicate the Black plastic spacers that go between the armor and grooveTEK as well as the lace plates and the armor.

Use a 5mm Allen wrench to tighten. 25 inch pounds is Torque spec for these fasteners. **Repeat for Both Sides.**

**Effective 2023**

Your wind screen will attach directly to your grooveTEK and **NOT YOUR OUTER ARMOR** to provide greater serviceability for wiring and lighting.

## STEP 5A Fairing Installation

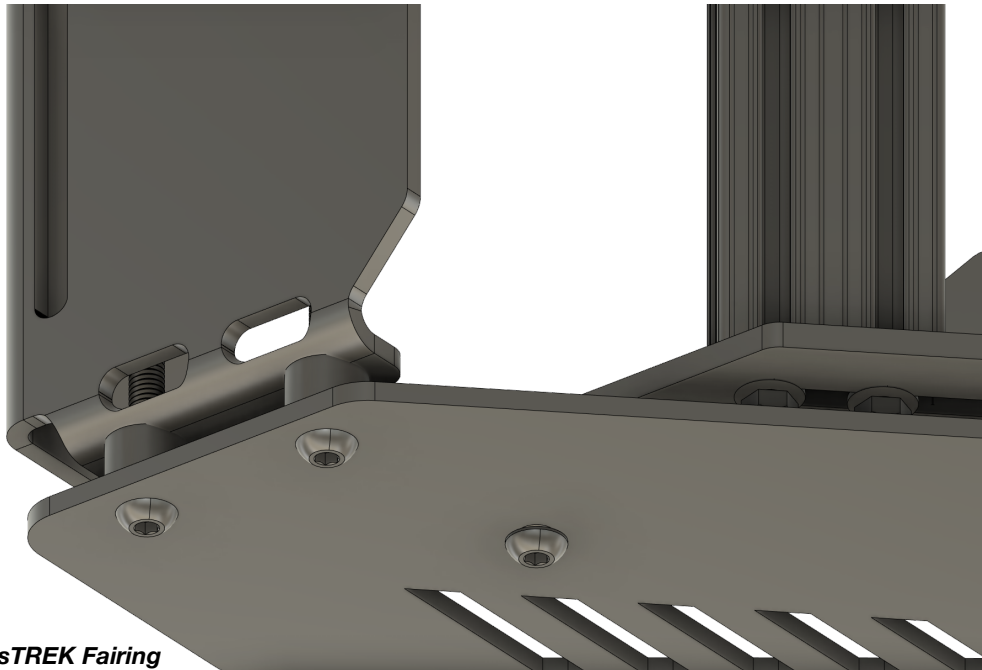
The fairing for your roof rack utilizes a splitter design that cuts through the air at speed and splits the wind. This patent pending design is the result of hundreds of hours of design, engineering and testing. The end result is a design that cuts through the air forcing air under the rack taking advantage of the aerodynamic signature of your vehicle as well as pushing air up and over the rack giving the roof rack a smaller aerodynamic profile that results in the least amount of wind noise possible with an aftermarket roof rack. The large upper face serves to cut air up and over any gear that you might have attached to it.

***If your fairing is cut for lighting we will ask you to postpone the installation of the lighting until AFTER the roof rack has been lifted on/off the vehicle to be used as the alignment template for marking/drilling your drip rails.***

**Gather the following:**

- Fairing specified in your order.
- Hardware bag:
  - Front Fairing**
  - 5mm Allen wrench
  - 13mm wrench

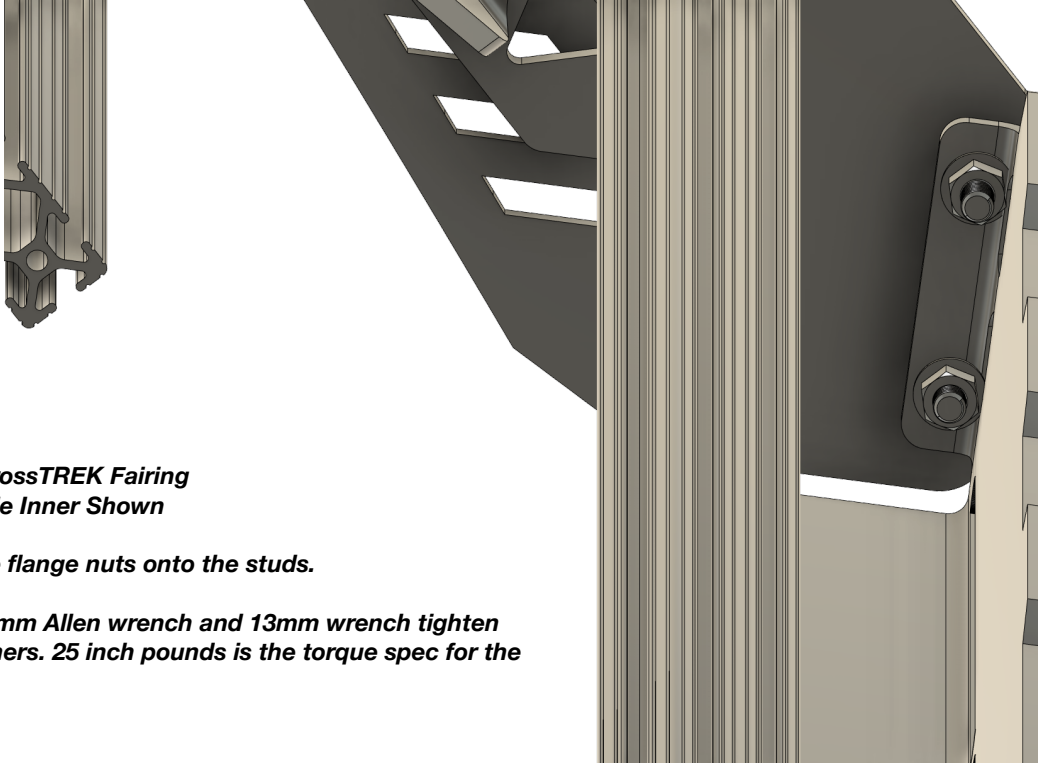
***\*If your fairing is cut for a specific light bar you will also be delivered a kit of hardware for that task. For now just leave that bagged up and sit it to the side. It will be used later.***



**Figure 23**  
**Subaru crossTREK Fairing**  
**Driver Side Outer Shown**

*This is an outdated image. Effective 2023 your wind screen will attach directly to your grooveTEK and you WILL NOT be using the plastic spacers between the wind screen and grooveTEK. The updated version is more serviceable for wiring.*

## STEP 5A (CONT) Fairing Installation



**Figure 22**  
**Subaru crossTREK Fairing**  
**Driver Side Inner Shown**

**Install the flange nuts onto the studs.**

**Using a 5mm Allen wrench and 13mm wrench tighten the fasteners. 25 inch pounds is the torque spec for the fasteners.**

## INSTALLATION

This concludes the general assembly for the Subaru crossTREK/Impreza Wagon Alpha Roof Rack.

Instructions for alignment, drilling and installation can be by referencing Step 4-7 earlier in this guide.

The additional steps for installing the Alpha are identical to the Bravo roof rack including the hardware requirements and assembly order of the rack to roof hardware.

### **NOTE!!**

*Fairings cut for specific light bars as well as universal 40 cuts will experience significant wind noise when installed into the rack assembly and driven at speed with the light bar absent from the assembly. Wind passes through the open holes and/or slot and is intercepted by the front slot on the load bars.*

*The fairings are designed with this in mind and the angles/openings are engineered to work in unison with the light bars to limit or eliminate noise/vibration.*

For additional information on installing light bars into the front fairing please reference the section in this guide for ***FAIRING LIGHTING***.

## **upTOP finePRINT**

- **It is recommended to inspect the rack hardware at regular intervals to ensure fasteners are tight. If the rack ever needs to be removed and reinstalled you will need to repeat the silicone sealant steps before reinstallation of the rack to roof hardware.**
- **The powder coated finish on your rack uses a chemical compound to maintain UV stability for years to come. Wash the roof rack at regular intervals to keep the load bar channels, drip rails and mounting components free of dirt and debris. Foreign objects (mud) can dry and cause noise and vibration.**
- **If your color matched components are painted care for them in the same manner as you care for the exterior finish of your vehicle.**
- **Repair or replace worn parts with expediency. All hardware is available for purchase by calling our technical support line at 720.730.6381 Monday-Friday 8am to 4pm MST or by email 24/7 364 (we don't answer email on Christmas-get over it) support@uptopverland.com**
- **It is the responsibility of the end user to ensure all electrical connections are secured and fused properly for the circuit load they are carrying.**
- **upTOP Roof Rack dynamic (moving) weight capacity can often exceed the OEM vehicle manufacturers specification. In all cases the OEM specifications supersede the upTOP dynamic rated load capacity.**
- **DO NOT use the upTOP product in a manner inconsistent with its design intention. This will void your warranty.**
- **DO NOT modify or alter structural components of upTOP roof rack assemblies. This will void your warranty.**
- **Excessive speeds over rough terrain can exceed dynamic weight loads causing structural fatigue or failure of aluminum and steel components. Use your best judgement and common sense before committing to full send with an overloaded rack product.**
- **Component damage or failure due to negligence will result in voided warranty claims. Any failed component must be returned to upTOP with a properly submitted RMA request. Any product received without authorized RMA request will be returned to sender at their expense.**
- **Leave. No. Trace. Our planet is fragile. Some parts of it have been undisturbed for generations. Stay on trails and designated routes. DO NOT LITTER. Pack it in Pack it out. Basically be a decent human and protect our culture, wild lands and ecosystems.**