

upTOP ALPHA

GX460 2010-Current



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 vehicle. The Alpha roof rack designed for your platform requires competency with basic hand tools and assembly procedures. If you are not comfortable 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
- 6mm Allen wrench
- 13mm wrench
- 1/2" wrench (2X)
- 7/16" wrench
- Silicone Sealant
- VibraTITE VC-3 Threadlocker (Included)

The dynamic (moving) weight capacity of your roof rack far exceeds the specifications set forth by Lexus. Please follow manufacturer recommendations for the safe roof load capacity for the Lexus GX460. upTOP recommends keeping evenly distributed cargo loads of 250 pounds on the Lexus GX460. Static (parked) weight restrictions are limited to 775 pounds.

You will need adequate floor space to assemble your roof rack prior to installing it to your vehicle. An area 96x96" is recommended for this assembly.

You are encouraged to inspect the contents of your package prior to completing assembly and installation. For any missing/damaged parts email pictures and descriptions to support@uptopoverland.com with your order number as reference in the subject line. A specialist will assist you with the process for field repair or component replacement.

It is important to plan for any wiring that needs to be completed during the course of rack installation. Incorporate these steps into the steps in this guide at points that reduce additional disassembly of the rack while it is installed on the vehicle.

Component Parts List

Figure 1 Master Component List **Lexus GX460 2010-Up**

Part Number	Quantity	Description
1043	1	Driver Side grooveTEK
1044	1	Passenger Side grooveTEK
1143	1	Driver Side Armor
1144	1	Passenger Side Armor
1308	1	Front Pressure Foot-Left
1309	1	Front Pressure Foot-Right
1333	4	Front/Mid Foot
1334	2	Rear Foot
LB50	7	Load Bar-50"
1241-12XX	1	Front Fairing
8007	1	Master Hardware Kit

This chart is the master component list for the 2010-up Lexus GX460 Roof Rack. These numbers will be referenced throughout this guide.

Front pressure feet (1308/1309) ship pre-assembled. Individual component numbers not listed in this guide.

The front fairing part identification is specific to each light bar configuration and numbers will vary. Fairings cut for light bars MIGHT include hardware required for mating that light bar to your upTOP fairing. The parts for this task ARE NOT included in the master component list. See the rear of this guide for lighting specific applications.

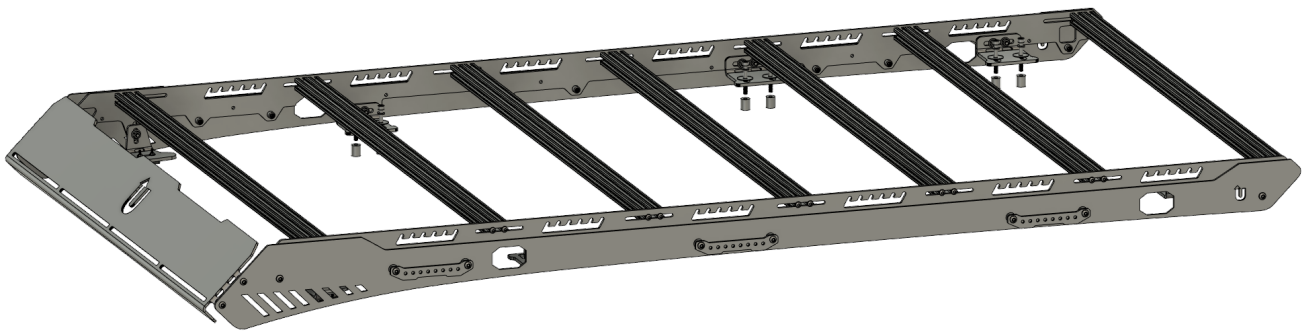


Figure 1
Assembled GX460 Alpha
Driver Side Prominent

STEP I Feet to Rack

The feet included with your kit were designed specifically for your vehicle and rack assembly. Each foot will attach to the rack at two locations to distribute the weight load of the rack and ensure structural integrity. The included pressure feet are designed to support the front of the roof rack to increase the static (parked) load capacity.

You have specific feet for the front and rear locations on your vehicle in this kit. The feet are mirrored by design so there is NO LEFT or RIGHT orientation to worry about.

We will start the assembly with the feet for the driver side of the rack. These steps and drawings will outline that process in depth and when completed simply repeat the steps with the feet on the passenger side until all four (4) feet are installed.

GATHER THE FOLLOWING

- 1043 Driver Side grooveTEK
- 1044 Passenger Side grooveTEK
- 1308 Driver Front Pressure Foot
- 1309 Passenger Front Pressure Foot
- 1333 Front Feet (Quantity 4)
- 1334 Rear Feet (Quantity 2)
- Hardware Kit "Feet to Rack"
- 1/2" wrench (2X)
- VC3 thread compound

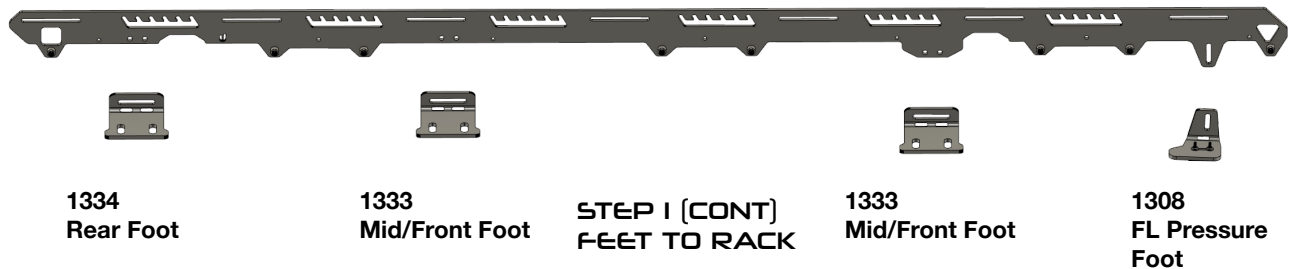


Figure 2

Driver Side (1043) Shown from inside rack assembly. Triangle opening indicates front of roof rack.

This layout is mirrored for the passenger side (1044).

This guide will focus on the assembly and installation of components to the DRIVER side of the vehicle for simplicity and all steps can be mirrored to the passenger side to complete the steps.

The only variance will be the 1309 foot used for the front passenger (FR).

The hardware for Alpha rack systems uses 5/16-18 Stainless Steel hardware.

Apply the included VC3 to all fourteen (14) bolts and allow to cure. This takes around 15 minutes and the material will remain gummy. The VC3 is basically a shock absorber for your hardware.

STEP I (CONT)
Feet To Rack

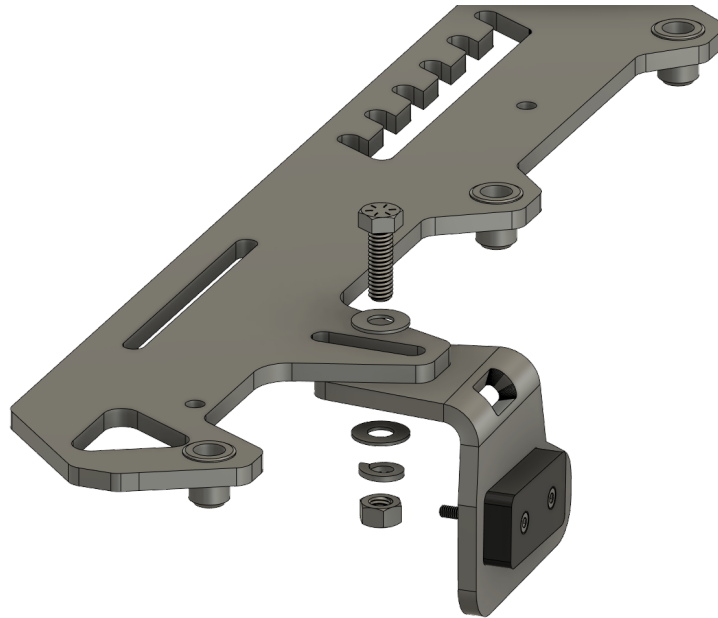


Figure 3
Driver Front Pressure Foot (1308) shown mated to 1043 Driver Side grooveTEK

- Assemble the hardware as shown above (**Figure 3**) and attach the pressure foot to the grooveTEK. The slot(s) are machined in to allow adjustment of the pressure foot to match the contour of the roof of your vehicle after installation.
- **REPEAT THE PROCESS** for the 1309 Passenger passenger foot and mate it to 1010.2 Passenger grooveTEK.
- Leave the hardware loose enough to allow adjustment until after installation of the roof rack is completed. Final torque specification is **35 inch** pounds.

The rubber dampers on the pressure feet are pre-assembled when your rack is packaged for shipment to lessen the amount of tooling you need to complete rack assembly.

They are designed to impact the factory installed rubber drip rail trim to avoid damage to the painted surface of the roof of your vehicle.

Once the rack is fully installed you can use a pair of 1/2" wrenches to adjust the pressure feet into position.

This is accomplished by pushing the pressure foot assembly down hard until it is completely in contact with that rubber trim gasket. Sometimes to get them to fully seat you'll need someone available to push the rack UP towards the sky while you push the pressure foot DOWN into position and tighten.

The single bolt design allows the pressure foot to adjust to the angle of the front of your vehicle for a firm footing.

STEP I (CONT)
Feet to Rack

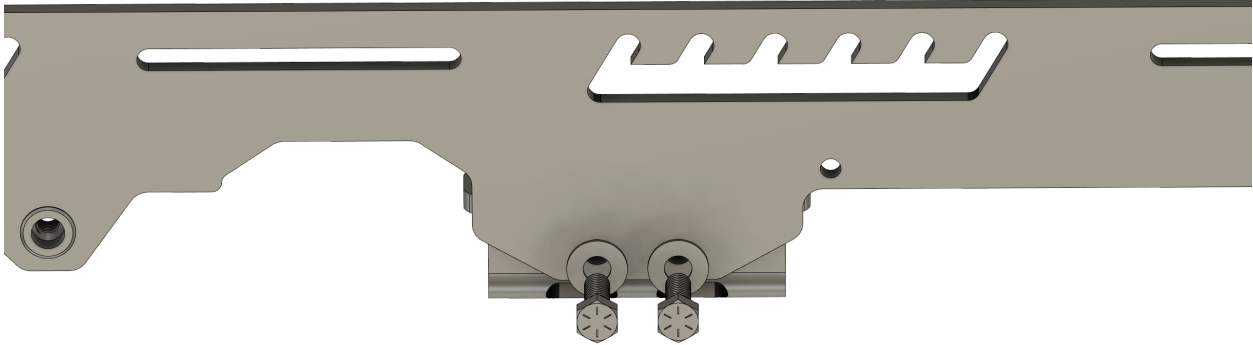


Figure 4
1333 Front/Mid Foot Shown
Driver Side Referenced/Outer View

The slot machined into the 1333/1334 feet allow for some lateral adjustment of the roof rack when it is installed to the vehicle.

The four (4) feet for the FRONT and MIDDLE will use PN#1333 and the two (2) very rear feet will use PN#1334. The only difference here is that the rear feet extend out and away from the vehicle a bit further to account for the taper of the vehicle from front to back.

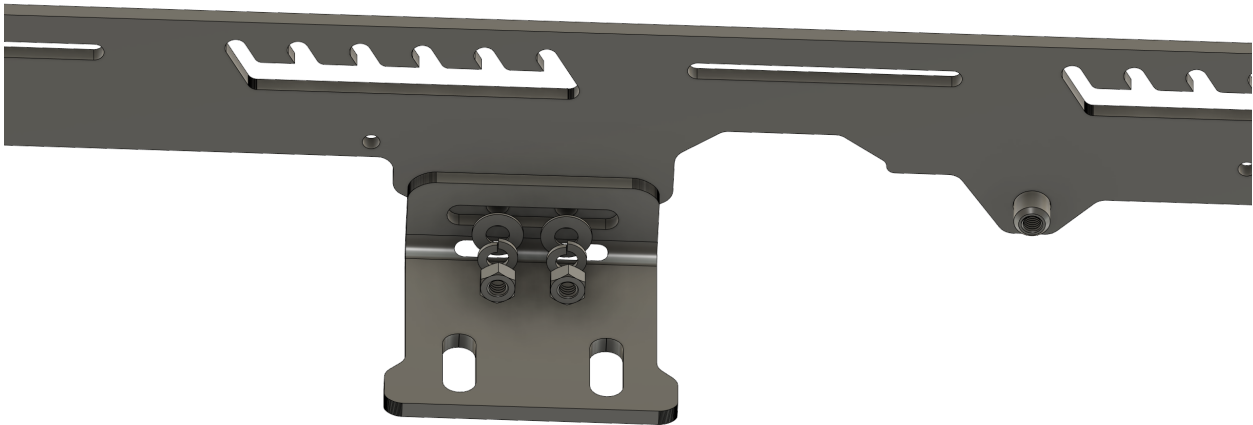


Figure 5
1333 Front/Mid Foot Shown
Driver Side Referenced/Inner View

- Assemble the hardware in the order shown above (**Figure 3/4**) and install all six (6) feet to the driver (1043) and passenger (1044) side grooveTEK.
- Snug the hardware but leave loose enough for adjustment during installation of the rack to the vehicle.
- Final torque specification for the fastener(s) is **35 inch pounds**.

Step 2 Load Bars

GATHER THE FOLLOWING:

- LB50 Load Bars (Quantity 7)
- 5/32 Allen wrench
- 7/16" wrench
- Hardware Kit "Front and Rear Load Bars"
- Hardware Kit "Load Bars-Other"

The included 50" load bars run from driver to passenger side and feature hardware grooves on all sides allowing for gear attachment points. Two different types of hardware are required for this step. The *HEX nuts* are for the front and rear load bar. We use these so that the load bars can be adjusted with a wrench after the armor is installed.

Start with the FRONT and REAR load bars. The HEX bolts are used for the FRONT and REAR so that they can be adjusted with a 7/16" wrench once the armor is installed.



Figure 6

1043 Driver Side Shown

Fully seated (All the way forward) Front Load bar

Use the hardware to install the FRONT and REAR load bar into the rack assembly. Each load bar will attach with:

- (4) 1/4-20x1 Button Head Bolts
- (4) Lock Washers
- (4) Flat Washers

During assembly the FRONT and REAR load bars need to be pushed all the way in one direction (we use forward for the front and backwards for the rear) in order to square the rack sides with each other during assembly. Once the rack is installed to the vehicle these load bars can be adjusted to any position within their respective slots.

STEP 2 (CONT) Load Bars (All Other)

The remaining five (5) load bars will install with the 1/4-20x1 Button head bolts and lock washers. Use a 5/32" Allen wrench to install the hardware to the load bars in each slot in your grooveTEK as shown below.



Figure 6
*Driver Side (1043) shown
All other load bar positions*

Each load bar will receive the following:

- (4) 1/4-20x1 Button Head Bolt
 - (4) 1/4" Lock Washer
-
- Use a 5/32" Allen wrench to install all of the load bars to the driver side grooveTEK (1043)
 - Repeat the process on the passenger side (1044) to complete the load bar installation.

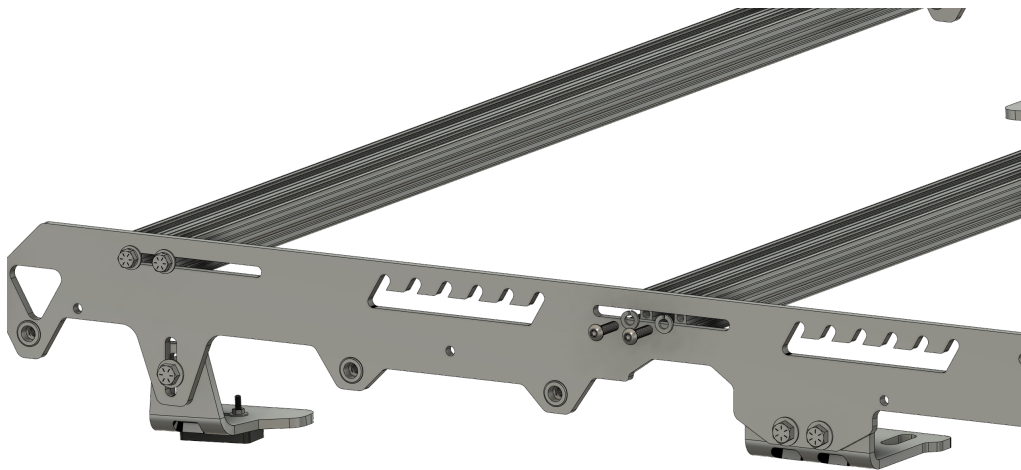


Figure 7
Driver Side (1043) shown

- Indicates different in hardware for front/rear load bars and all others.

STEP 3 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 and linked below.

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 4 Armor to grooveTEK

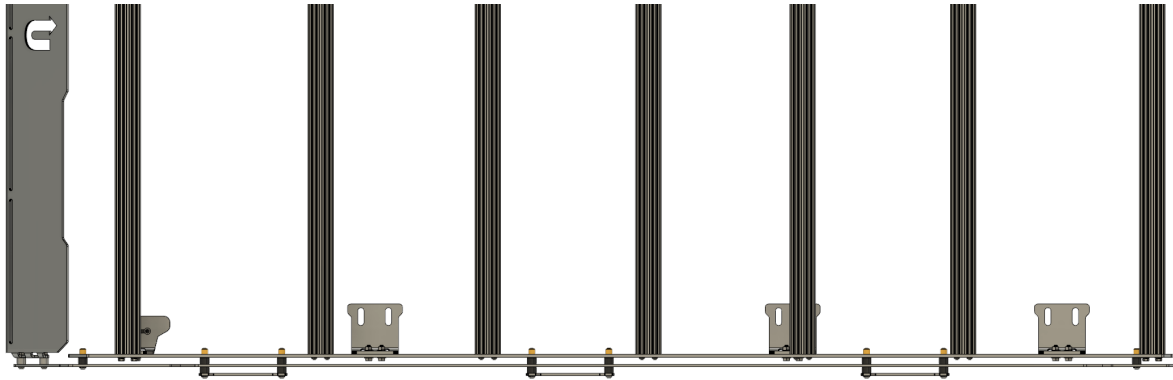


Figure 8
Birds Eye View
Driver Side Shown

Completed assembly of DRIVER side of Lexus GX460 Alpha Roof Rack

GATHER THE FOLLOWING

- 1143 Driver Side Armor
- 1144 Passenger Side Armor
- Handle assemblies completed in step 3
- Hardware Kit “Armor to grooveTEK”
- Hardware Kit “Grab Handles”
- 5mm Allen wrench

NOTE

If you are installing our quickWIRE™ (optional) or other wiring (not included) into the rack assembly you are strongly encouraged to complete those tasks before proceeding. Instructions are available on our website under the instructions tab.

If you are installing our scenePOD™ (optional) products into your rack you are strongly encouraged to trim the tabs on the scenePOD knockouts prior to installing the armor to the grooveTEK. Instructions for this task are available on our website under the instructions tab.

The hardware kit includes two (2) different length bolts:

- 35mm (used for front and rear attachment points)
- 55mm (used for grab handle attachment points)

The spacers and lock washers are of common size and will be used throughout the process.

The spacers provide a void in between the armor and grooveTEK to allow wiring to pass and remain protected on the trail. There are machined attachment points for completing this task outlined in the quickWIRE installation guide.

STEP 4 (CONT) Armor to grooveTEK

Figure 9

1043 Mating to 1143 Shown

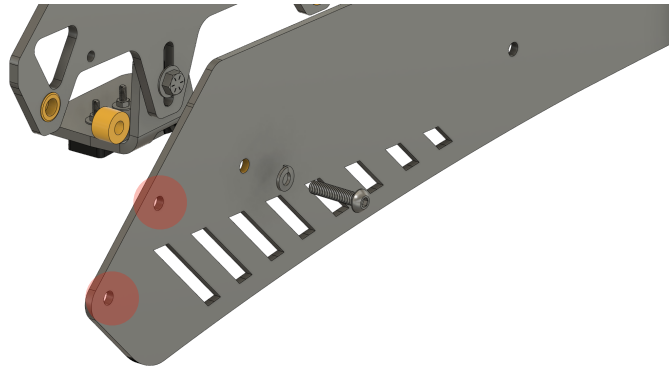
Driver Front

- 35mm Bolt
- 8mm Lock Washer
- Plastic Spacer

The two holes highlighted in **RED** are for attaching the front fairing. **DO NOT USE** either of them to try and align the armor to the grooveTEK.

- Using a 5mm Allen wrench slide the bolt through the lock washer. Push that assembly through the armor.
- Repeat the process with the passenger side armor (1144).

Torque Spec: **25 Inch Pounds**



NOTE

*For clarity the plastic spacers shown in these images are yellow. The spacers shipped with your kit are **BLACK**.*

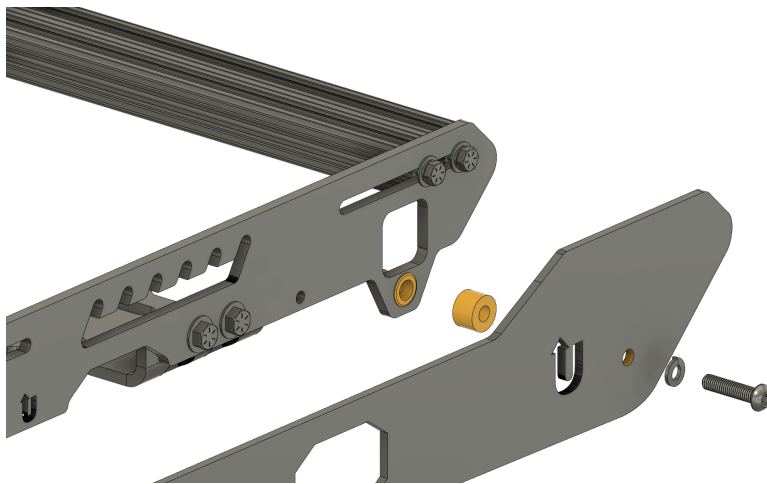


Figure 10

1043 Mating to 1143 Shown

Driver REAR

- 35mm Bolt
- 8mm Lock Washer
- Plastic Spacer

- Using a 5mm Allen wrench slide the bolt through the lock washer. Push that assembly through the armor.
- Place a spacer over the threads and thread the bolt into the insert (shown here in green).
- Repeat the process with the passenger side armor (1144).

Torque Spec: **25 Inch Pounds**

The remaining armor attachment points on BOTH sides of the rack will incorporate the grab handle assemblies you tied in **STEP 3.**

Step 4 (CONT)
Armor to grooveTEK

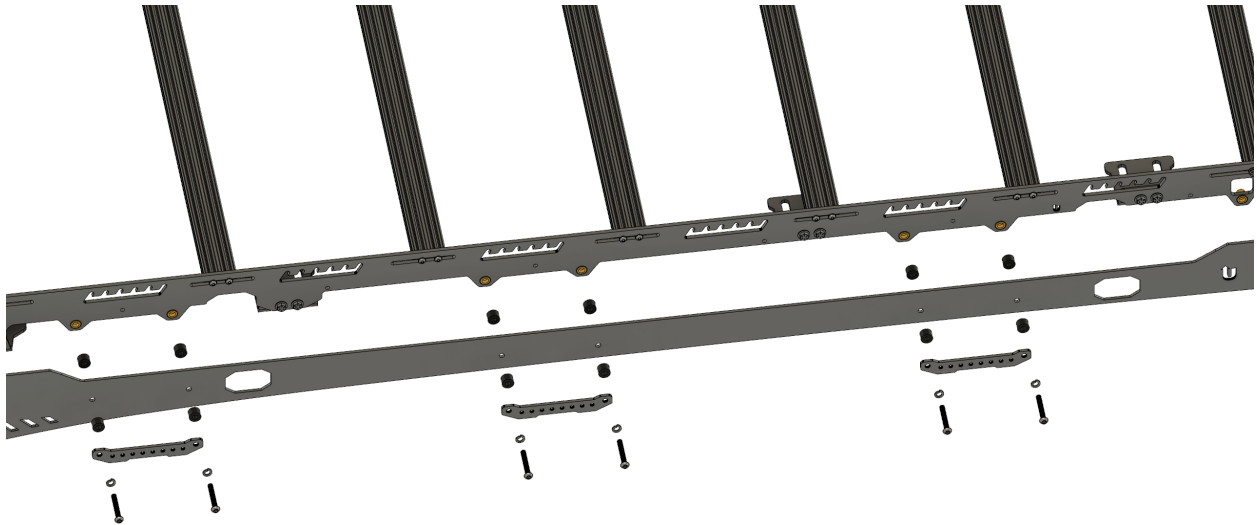


Figure 11

Grab Handle Lace Plates

Armor grooveTEK/Driver Side (1143) Shown

- 55mm Bolt (2)
 - 8mm Lock Washer (2)
 - Plastic Spacer (4)
 - This process will be repeated for each of the six (6) grab handles.
-
- Using a 5mm Allen wrench slide the bolt through the lock washer. Push that assembly through one of holes on the lace plate.
 - Slide a spacer over the threads.
 - Pass that assembly through the armor.
 - Slide another spacer over the threads.
 - Thread that assembly into the insert in the grooveTEK (shown here in green).

Repeat for the remaining two (2) grab handles on the driver side and all three (3) for the passenger side.

The torque specification for the grab handle fastener(s) is **25 inch pounds**.

STEP 5 Fairing Installation

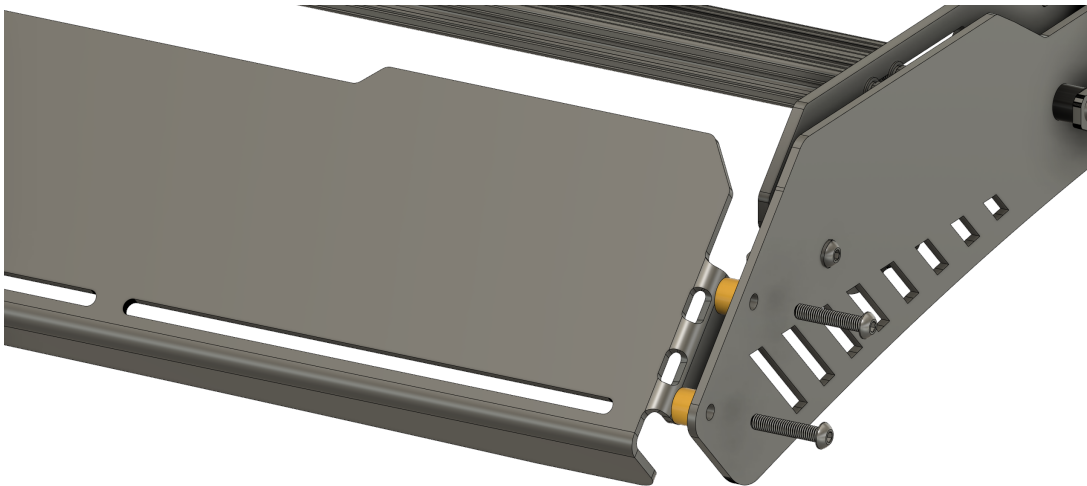
The fairing for your roof rack utilizes a splitter design that cuts through the air at speed and splits the wind. This patent pending design is the result of hundreds of hours of design, engineering and testing. The end result is a design that cuts through the air forcing air under the rack taking advantage 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 you are encouraged to install the light bar(s) prior to installing the roof rack on the vehicle. This will add some weight during the process of lifting the roof rack onto the vehicle but it is far easier to install the light bars into the fairing whilst it is off the vehicle and at a good working height. The rear of this guide contains information on mating a light bar to your fairing.

Gather the following:

- Fairing specified in your order*
- Hardware kit "Fairing"
- 5mm Allen wrench
- 13mm wrench

Apply VC3 Thread locking compound to the threads of all eight (8) feet to rack bolts and allow to dry. 15-20 minutes. Compound will remain gummy.



***Figure 12
Fairing Installation
Driver Side Shown***

The fairing mourning tabs go to the INSIDE of the armor parts.

- Align the holes on the rack side to the holes on the tab of your fairing.
- Slip the hardware through both sets of holes.
- Slide a spacer over each of the bolts between the armor and the fairing.
- REPEAT THE PROCESS on the passenger side.

****If your fairing is cut for a specific light bar you will also be delivered a kit of hardware for that task that is NOT listed in the parts for this step. Refer to rear of guide for lighting installation.***

STEP 5 (CONT) Fairing Installation

The supplied flange nuts install onto the threads of the fairing attachment bolts. Reach inside the rack assembly and start each flange nut by hand. With all four (4) flange nuts started use a 5mm Allen wrench and 13mm open end wrench and tighten the fasteners to **35 inch pounds**.

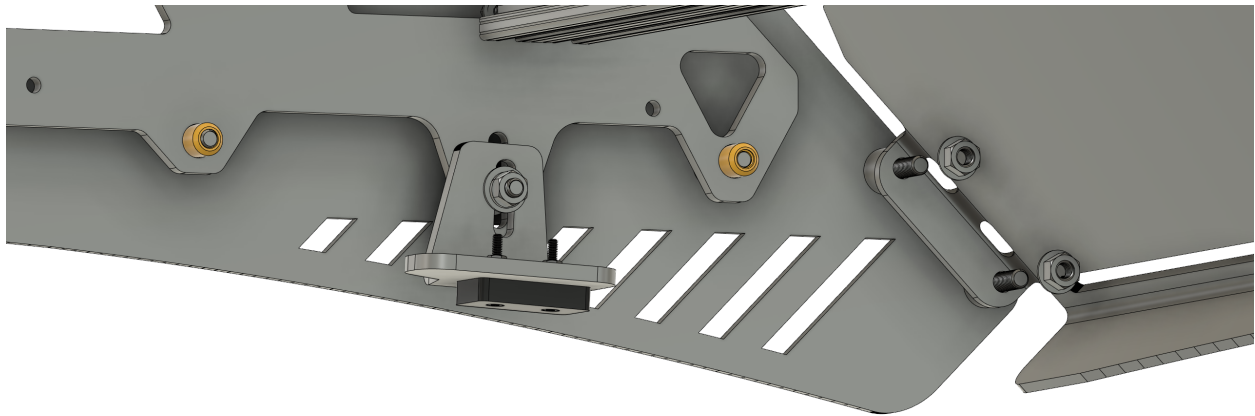


Figure 13
Fairing Installation Inner Hardware
Driver Side Shown

- Install a flange nut onto each of the four (4) fairing bolts.
- Using a 5mm Allen wrench and 13mm open end wrench tighten the hardware assemblies to **35 inch pounds**.

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 6 Vehicle Preparation

If your vehicle is equipped with a factory roof rack it will need to be removed before completing any further steps. You will NOT reuse any supplied hardware from a factory or aftermarket roof rack. Catalog the parts and keep for reinstallation when you are finished with the vehicle. A simple web search with your vehicle make and model should produce videos on how to complete this task.

In order to honor copyright rules and regulations we do not link to content that is not owned or maintained by anyone other than upTOP overland.

For vehicles NOT equipped with a factory roof rack option:

ALL 2010-Current Lexus GX460 trim levels come equipped with threaded inserts in the drip rails of the vehicle.

You can locate these areas by running your fingers down the drip rails and finding the soft or “spongy” areas under pieces of foam tape. Using a small razor blade carefully trim out the gasket material around those threaded inserts. It is possible with care to use the lip of the threaded insert as a guide to cut a near perfect hole.

THE FOAM TAPE MUST BE REMOVED from the threaded insert locations. If forced the foam tape will gum up the threads on the provided fasteners for attaching the roof rack to your vehicle and impede the silicon sealant from performing as intended.

BEFORE PROCEEDING TO STEP 7.....

- *Ensure the area around the vehicle is clear of obstruction (pets, power wheels, basketballs, small children, etc...) and that you can easily reach the driver and passenger side of the vehicle with a rack lifted over your head. If you are vertically challenged have readily accessible a step stool or ladder to assist getting the rack onto the vehicle.*
- *Fold the driver and passenger side mirrors into the vehicle (if capable) to free up some space and avoid damage while you are moving the rack assembly overhead.*
- *Place a moving blanket or other heavy, non-marring covering onto the roof of the vehicle so that you can sit the rack down once you have it upTOP ;) and reposition it into the final mounting location.*

STEP 7 Final Installation

GATHER THE FOLLOWING:

- 6mm Allen wrench
 - Silicone Sealant
 - Hardware Kit “Rack to Roof”
 - Hardware Kit “Spacers”
-
- Apply a generous amount of silicone sealant INTO and AROUND the factory threaded inserts
 - Make sure the sealant enters the threaded inserts for the roof rack attachment points.
-
- All of the spacers that go between your feet and the vehicle are the same length for the Lexus GX460. **THERE ARE NO SPACERS USED AT THE PRESSURE FOOT LOCATIONS.**
 - With the silicone sealant applied place one spacer over each of the threaded inserts in your roof. Twist them into position so that the spacer sits neatly into position. The silicone will help to keep the spacers aligned but may move when sitting the rack into place. Verify placement prior to attempting to insert any hardware.
 - **WITH THE ASSISTANCE OF ANOTHER PERSON CAREFULLY LIFT THE RACK ASSEMBLY UP ONTO THE ROOF OF THE VEHICLE AND REST THE FEET ONTO THE ROOF OF THE VEHICLE.**

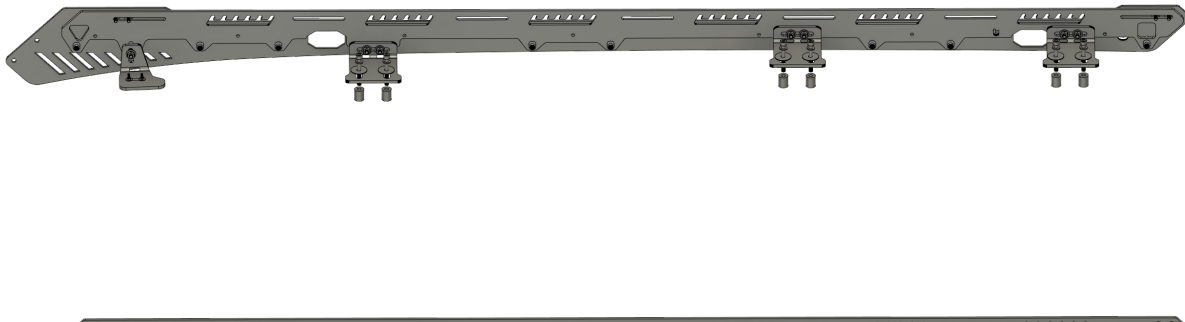


Figure 14
Alpha Lexus GX460 Spacer Placement
Passenger Side Shown

- *The spacer length will be the same for ALL BOLT LOCATIONS.*

STEP 8 (cont) Final Installation

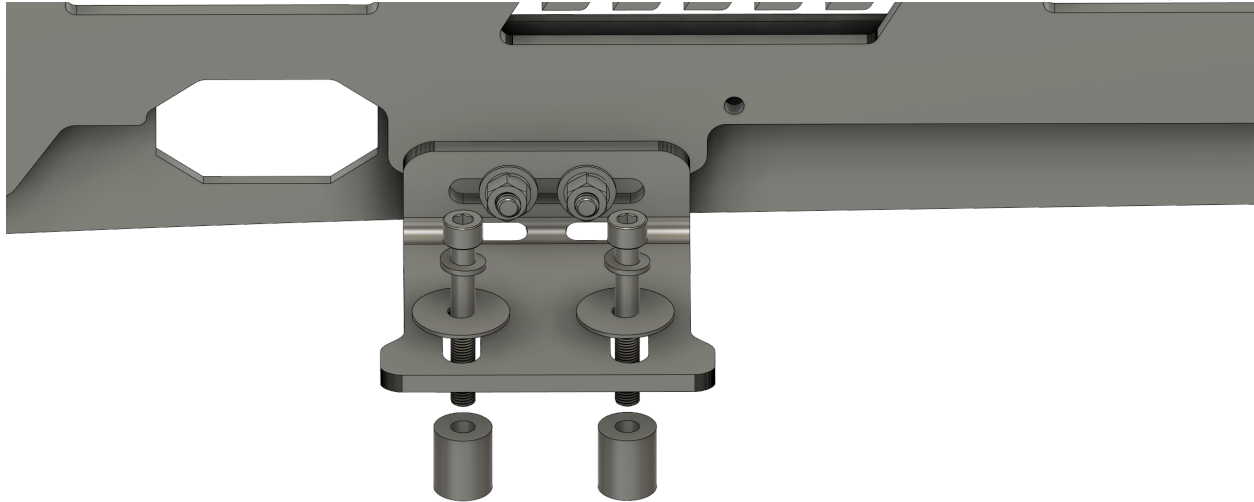


Figure 15
Alpha Lexus GX460
Passenger Side Shown

- 55mm Bolt m8x1.25
- 8mm Lock Washer
- 8mm x 30mm Fender Washer
- Use the adjustability of the mounting feet to line up with the factory bolt locations.
- Start each hardware assembly (ALL 12 LOCATIONS) before tightening any one area fully.
- Hand tighten with a 6mm Allen wrench. DO NOT FULLY TIGHTEN the hardware. Leave it loose to allow for adjustment.
- Align the rack on the vehicle and make sure it is square.
- Ensure that the front fairing has at least .375" (3/8") of clearance from the vehicle at the center of the windshield area.
- Fully tighten each rack to roof bolt with a 6mm Allen wrench to **45 Inch Pounds**.
- Once all twelve (12) locations are tightened to specification use two (2) 1/2" wrenches to tighten all of the bolts that attach the feet to the grooveTEK to **35 Inch Pounds**.
- Adjust load bars to desired locations and torque to **21 inch pounds**.
- Complete any electrical wiring and verify circuit operation.
- Align light bar (if equipped) in front fairing.

TECH TIP

The factory installed inserts can be stubborn. If you encounter more than a little resistance when tightening the hardware **STOP** and try to clear the threads. This can be accomplished by either using a tap or a hardened bolt.

THREAD PITCH IS M8x1.25

DO NOT FORCE THE FASTENERS. The stainless steel hardware is more than adequate for securing the rack to your vehicle but they may shear or seize when forced into damaged threads.

NEVER, EVER use power tools to insert the hardware that came with your upTOP rack system.

OPTIONAL Fairing Lighting Tutorial

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.

- *Align the light bar so that the lenses are unobstructed by the openings in your fairing.*
- *Aim the light bar so as to eliminate hood glare.*

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 MDT 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.**

