

# UPTOP BRAVO

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 roof rack designed for your platform requires competency with basic handle 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.

Use of this product requires precision drilling and the installation of threaded inserts into the roof of the vehicle. While task specific components are included with this kit additional tooling or equipment may be required to complete the installation. Familiarize yourself with the information contained in this guide and gather any additional supplies needed to complete the installation.

#### TOOLS REQUIRED

- 5/32 Allen wrench
- · 5mm Allen wrench
- · 13mm wrench
- · 1/2" wrench (2X)
- · 7/16" wrench
- · Cordless Drill
- · Tape Measure
- Drill Kit (Included)
- · Silicone Sealant
- VibraTITE VC-3 Threadlocker (Included)

There are no static/dynamic weight capacities set forth by Toyota for the 1st Generation Tacoma. Because this rack is a drill/insert mounted design weight capacity for a properly installed rack is as follows:

- Dynamic 125 Pounds
- · Static 200 Pounds

Exceeding the weight limitations can cause structural damage to the vehicle.

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.

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 <a href="mailto:support@uptopoverland.com">support@uptopoverland.com</a> 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.

## **NOTE:**

The feet included with the kit for the 1G Tacoma will mount to the load bars themselves and require threaded inserts to be slid into channels prior to bolting the load bars into the rack assembly. The threaded inserts DO NOT rotate into the slots and must be inserted from the end of an unmounted load bar. Orientation information will follow just be aware.



Figure 1 Load Bar Threaded Inserts

The FRONT and REAR load bar will require the insertion of three bank threaded inserts into the 1.0" (25.4mm) side of the load bars in order to make provisions for attaching the mounting feet. Shown here with BLUE line.

For the forward most load bar the inserts will be inserted in the channel facing the REAR of the rack.

For the rearward most load bar the inserts will be inserted in the channel facing the FRONT of the rack.

Each channel will receive two (2) threaded inserts. One for each foot that will attach to the load bar.

Your rack ships with four (4) load bars. The forward most load bar is referred to as load bar #1.

LOAD BAR	Location	Threaded Insert Qty	Position
1	Front of Rack	2	Rear Side
2	NA	NA	NA
3	NA	NA	NA
4	Rear of Rack	2	Front Side

# **MAJOR COMPONENT LIST**

PART #	Quantity	Description	
2003.2	1	Driver Side Plate	
2004.2	1	Passenger Side Plate	
2301	1	Driver Side Front Foot	
2302	1	Passenger Side Front Foot	
2303	1	Driver Side Rear Foot	
2304	1	Passenger Side Rear Foot	
2213/2215	1	Windscreen. Options Vary.	
LB45	4	45.00" Load Bar	

# Torque Specifications 1G Tacoma Bravo

Fastener Location	Required Torque	Thread Locker Required
Load Bar-All	75 Inch Pounds	No
Feet to Rack	75 Inch Pounds	Yes
Wind Screen	65 Inch Pounds	Yes
Armor to grooveTEK	NA	No
Pressure Foot	NA	No
Rack to Roof	75 Inch Pounds	SEALANT

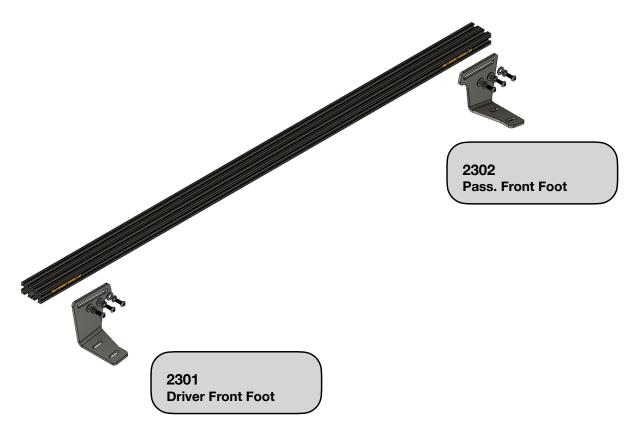


Figure 2
Foot Attachment
Front Feet (2301/2302) Shown

The feet are bent to account for the angle of the roof of your vehicle and when installed properly the top edge of each foot will sit even with the TOP of the load bar.

Apply the included VC3 thread compound to the exposed threads of each fastener and allow to air dry 25-30 minutes. Compound will not be wet to the touch when cured but will remain gummy.

Loosely attach the feet to the FRONT load bar as pictured.

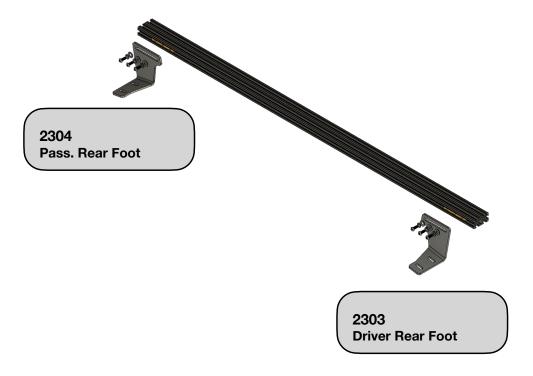


Figure 3
Foot Attachment
Rear Feet (2303/2304) Shown

The feet are bent to account for the angle of the roof of your vehicle and when installed properly the top edge of each foot will sit even with the TOP of the load bar.

Apply the included VC3 thread compound to the exposed threads of each fastener and allow to air dry 25-30 minutes. Compound will not be wet to the touch when cured but will remain gummy.

Loosely attach the feet to the REAR load bar as pictured.

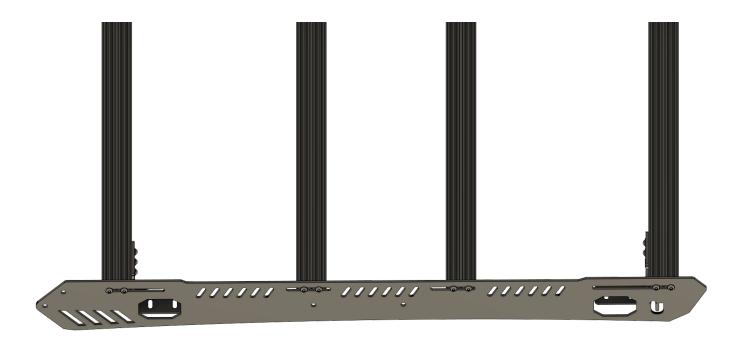


Figure 4

Side Attachment Driver Side 2003.2 Shown 5/32" Allen wrench

Using the hardware supplied labeled "Load Bars" loosely install the hardware for all four (4) load bars.

The FRONT and REAR load bar need to be pushed into the positions shown above.

The remaining middle load bars can be placed anywhere in their adjustment slot.

Repeat the process with the left over hardware and the 2004.2 Passenger side.

#### WINDSCREEN

#### **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.

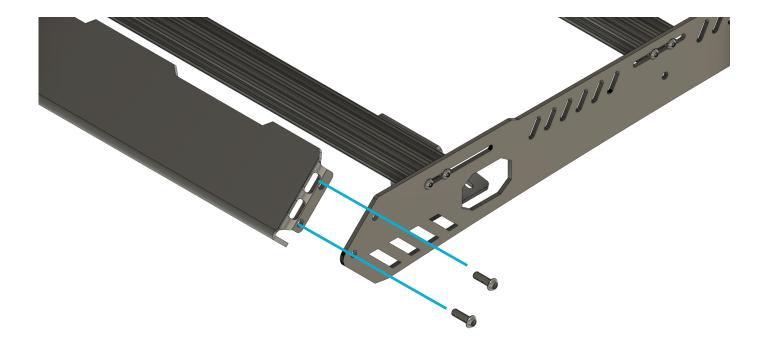
If tech support fields a phone call about wind noise or vibration and the culprit is found to be a windscreen cut for a light with no light installed into it you will owe that technician a six pack.

The windscreen 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. Please access our lighting installation guide on our website under the instructions tab for comprehensive information about light installation.

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.

\*If your fairing is cut for a specific light bar you will also been 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.



# Figure 5

Wind Screen-Outside Driver Side 2003.2 Shown 5mm Allen wrench 13mm wrench

Using the hardware supplied labeled "Wind Screen" align the holes at the front of the 2003.2 Driver Side plate with the holes on the bent flange fo the windscreen.

Slide the hardware through both sets of holes.

Repeat the process on the passenger side to get the wind screen aligned with the 2004.2 passenger plate.



## Figure 6

Wind Screen-Inside Driver Side 2003.2 Shown 5mm Allen wrench 13mm wrench

Reach inside the wind screen area and install a flange nut onto the exposed stud from each bolt.

Repeat the process on the passenger side.

If you have the 2213 Universal Wind Screen Option please refer to lighting guide located on website for mating and aligning lights bar into wind screen.



Figure 7
Assembled Rack

With the rack fully assembled you can proceed to the next steps to use the rack as an alignment template for positioning the threaded inserts that allow you to mount the roof rack to the vehicle.

# Rack Alignment-Drill Application

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

# 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 truck. This will help to prevent accidental damage to the painted surfaces of the truck while making measurements.

- Fold the driver and passenger side mirror in on the truck (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 if as flat (Parallel to the ground) as possible and push it up into the air over your head.
- Walk the rack onto the truck FROM THE FRONT OF THE VEHICLE.
- GENTLY place the rack on the roof of the truck. The position at present isn't critical as the
  moving blanket/barrier will allow for calculated movements without damaging the exterior of
  the truck.
- 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 truck.
- Center the rack on the truck (Driver to Passenger Side) Take measurements to verify.
- Your load bars are 45.00" wide. You can mark them 22.50" at center at the front and back load bar to give indicators.
- Check the front 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 truck and the fairing AT THE DEAD CENTER. It helps to use the rear view mirror mount as reference for center of the truck. 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 truck. Take care not to scratch the paint.
- If EVERYTHING checks out you can now take a sharpie marker and mark the eight (8) slot locations in the feet in relation to the drip rails on the truck. IT IS CRITICAL TO MARK THE CENTER OF SLOT. The feet have adjustability (left to right) to account for small errors in this step.
- Verify the marker transferred to each location.
- Remove the roof rack and carefully sit on the ground.

#### 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 trucks 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 truck on the actual truck 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.

Your kit includes the drill bit required for the provided rivNUT/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.

BE CAREFUL! The airbag curtains of the vehicle are danger close to the roof of the truck. 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 ROOF 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.

Using the provided stop collar on the 9mm drill bit will prevent you from going through the headliner of the truck and causing damage. Collars are not provided for smaller pilot bits so EXTREME CARE must be taken to do this properly.

## 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.

Drill each of the eight (8) holes and clean away the debris.

Your kit includes a simple bolt/washer set up for installing the included threaded inserts.

A special tool is available (Amazon) for this process if you choose to order one but is NOT REQUIRED to complete this installation in the field. Links are provided below to videos that explain the process in depth:

RivNUT: <a href="https://www.youtube.com/watch?v=qhzVDvnN\_yM">https://www.youtube.com/watch?v=qhzVDvnN\_yM</a>

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

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

The plusNUT (also called a cross nut) fasteners will be used in the holes that you drilled for the feet. Familiarize yourself with the installation process. We have provided extra plusNUTS incase you make an error. Just go slow and fully tighten the inserts into place.

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.

This rack is designed as a direct set meaning there are no additional spacers used to sit between the roof and the rack feet. This maximizes the surface area across the roof of the truck and eliminates stress points that could cause cracking of the sheet metal.

You need to apply sealant directly to the roof of the vehicle around each plusNUT area to ensure the truck roof stays waterproof. Using too much sealant can cause bleed to protrude from the edges around the feet.

Depending on the sealant you choose to use the excess can be wiped with a damp cloth and removed to create a tight seal around the foot and the roof of the vehicle. We use an exterior grade RTV based silicone and the clean up, if required, is easy.

- Apply the sealant to the areas around the plusNUTS you installed forming a puddle around each area. Be sure that the sealant gets into the threaded area. This is important for a good seal.
- · Lift the rack back onto the vehicle and align the feet to the plusNUT area.
- · Gather the hardware in the bag labeled "Rack to Roof".
- BY HAND start all of the hardware into each of the eight (8) plusNUTS.
- Use a tape measure to verify that the rack is square on the vehicle and complete the installation of the fasteners.
- Reference the torque chart on page 3 and verify all fasteners in the rack assembly are in specification.
- · Complete any additional wiring (optional).
- Verify that the hardware used to attach the feet to the load bars is torqued to 77-80 INCH pounds.

# 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.