



TYGER ROOF RACK

TG-RR1T33668

BEFORE INSTALLATION

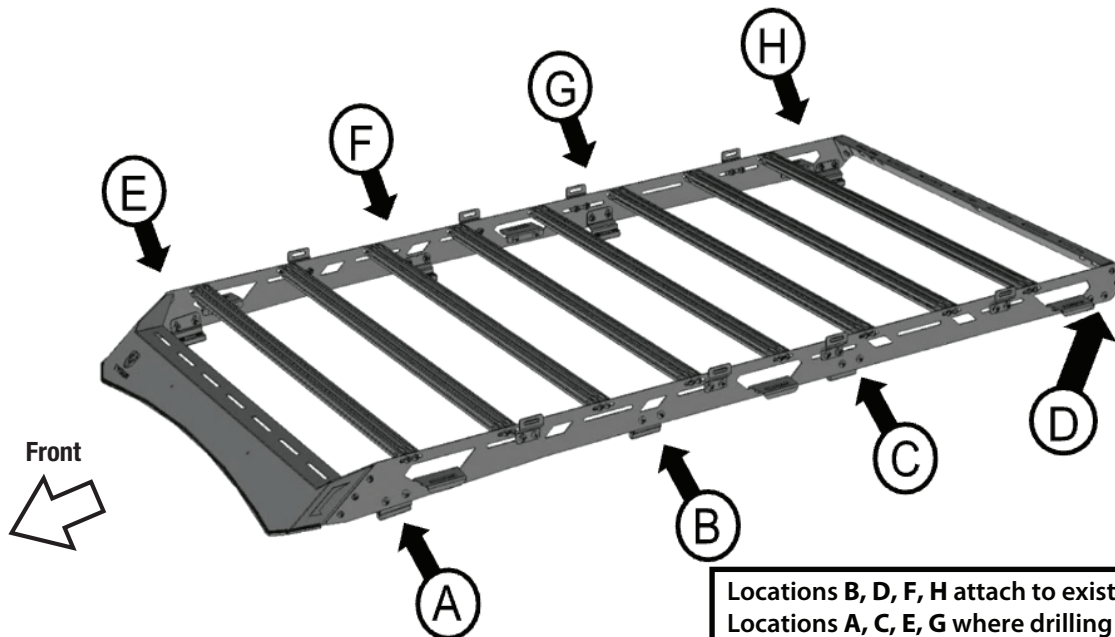
READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. REMOVE CONTENTS FROM BOX AND VERIFY ALL PARTS ARE PRESENT. FAILURE TO IDENTIFY DAMAGE BEFORE INSTALLATION COULD LEAD TO A REJECTION OF ANY CLAIM. IF MISSING PARTS OR ANY DAMAGE FOUND, PLEASE TAKE A PICTURE FOR THE CLAIM PURPOSE. TO FILE YOUR CLAIM, PLEASE VISIT: WWW.TYGERAUTO.COM/CONTACT

TORQUE VALUES

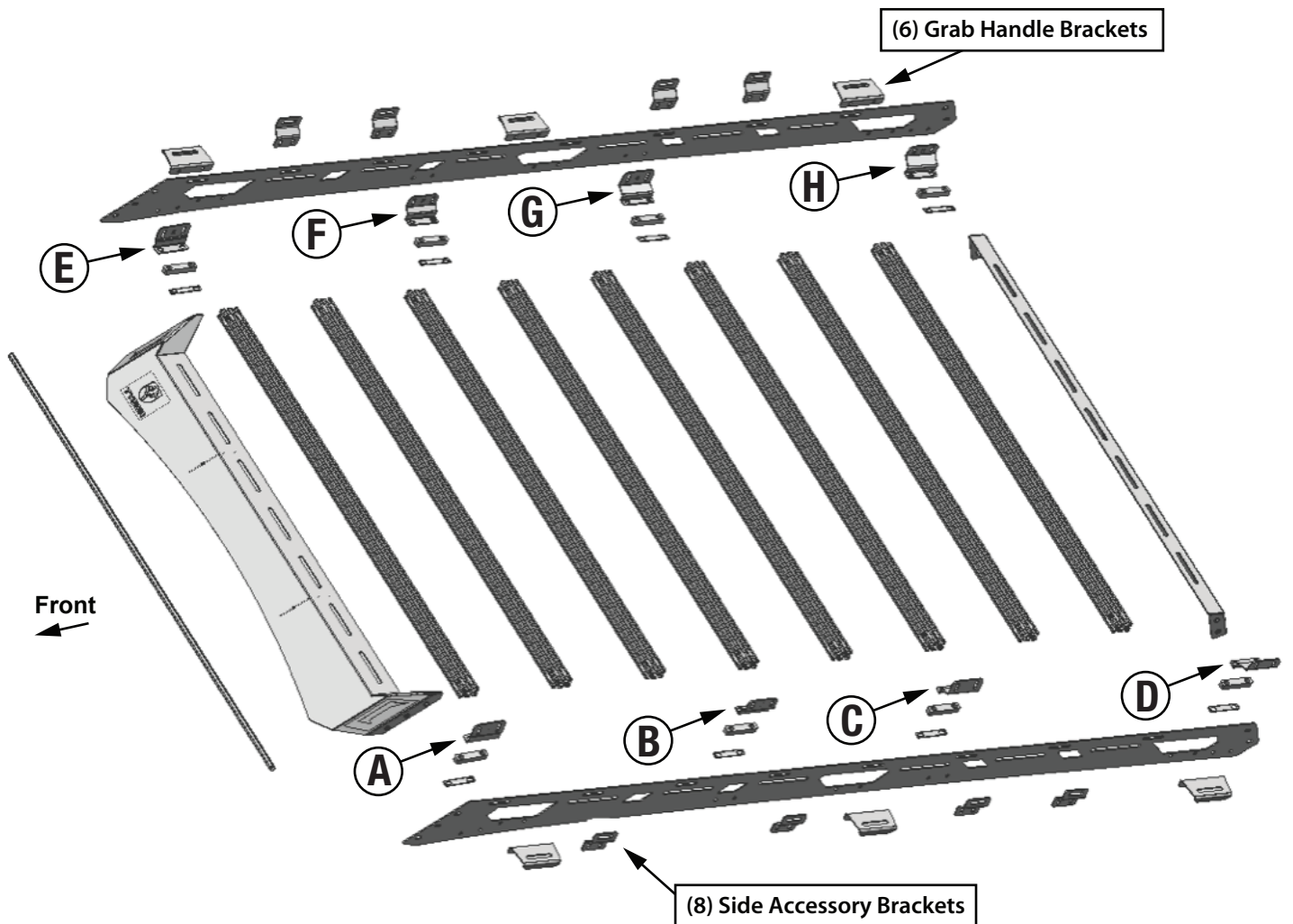
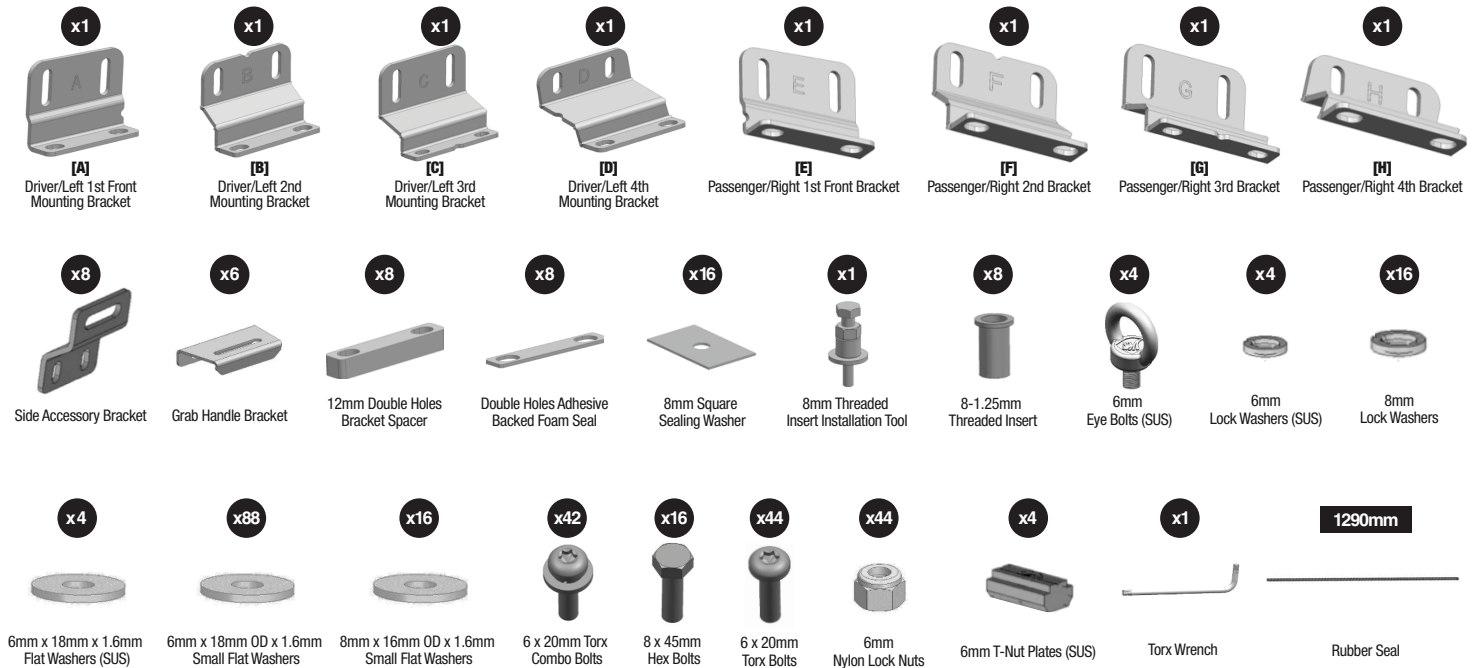
Fastener Size	Class 8.8 Torque (ft-lbs)	Class 10.9 Torque (ft-lbs)
6mm	6-7	6-7
8mm	15-16	22-23
10mm	31-32	44-45
12mm	54-55	78-79
14mm	87-88	125-126

- x1** Front Cross Panel
- x1** Rubber Seal (1290mm)
- x8** Crossbars
- x1** Rear Cross Panel
- x2** Side Panels (left/right)
- x1** Driver/Left 1st Front Mounting Bracket [A]
- x1** Driver/Left 2nd Mounting Bracket [B]
- x1** Driver/Left 3rd Mounting Bracket [C]
- x1** Driver/Left 4th Rear Mounting Bracket [D]
- x1** Passenger/Right 1th Front Mounting Bracket [E]
- x1** Passenger/Right 2nd Mounting Bracket [F]
- x1** Passenger/Right 3rd Mounting Bracket [G]
- x1** Passenger/Right 4th Rear Mounting Bracket [H]
- x8** 12mm Double Hole Bracket Spacers
- x8** Double Hole Adhesive Backed Foam Seals
- x8** Side Accessory Brackets
- x6** Grab Handle Brackets
- x16** 8mm Square Sealing Washers
- x1** 8mm Threaded Insert Installation Tool
- x8** 8-1.25mm Threaded Inserts
- x4** 6mm Eye Bolts - Stainless Steel (SUS)
- x4** 6mm x 18mm x 1.6mm Flat Washers - Stainless Steel (SUS)
- x4** 6mm Lock Washers - Stainless Steel (SUS)
- x4** 6mm T-Nut Plates - Stainless Steel (SUS)
- x16** 8-1.25mm x 45mm Hex Bolts
- x16** 8mm x 16mm OD x 1.6mm Small Flat Washers
- x16** 8mm Lock Washers
- x42** 6mm x 20mm Torx Combo Bolts
- x44** 6-1.0mm x 20mm Torx Bolts
- x88** 6mm x 18mm OD x 1.6mm Small Flat Washers
- x44** 6mm Nylon Lock Nuts
- x1** Torx Wrench

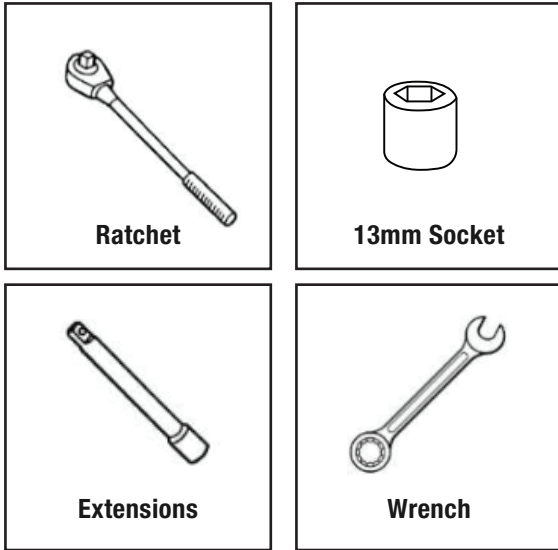
Parts List



Locations B, D, F, H attach to existing threaded holes
 Locations A, C, E, G where drilling is optional

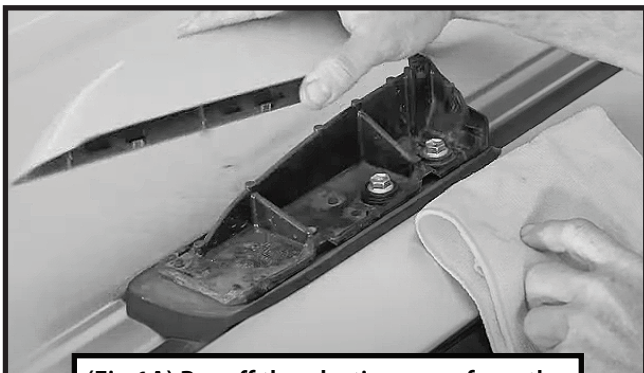


TOOLS REQUIRED

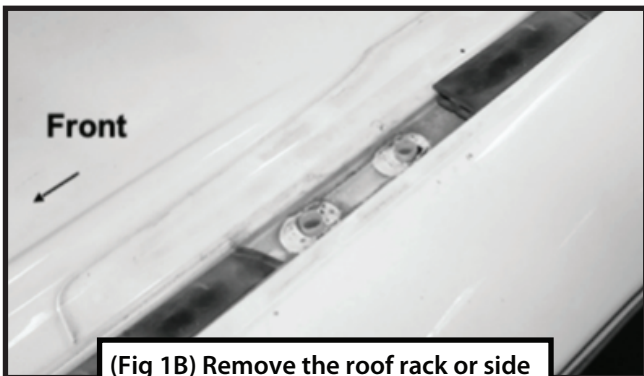


STEP 1 REMOVE FACTORY ROOF RAILS

Follow (Fig 1) to remove the factory roof rack side rails.



(Fig 1A) Pry off the plastic covers from the ends of the factory roof rack side rails, and remove the hex bolts attaching.



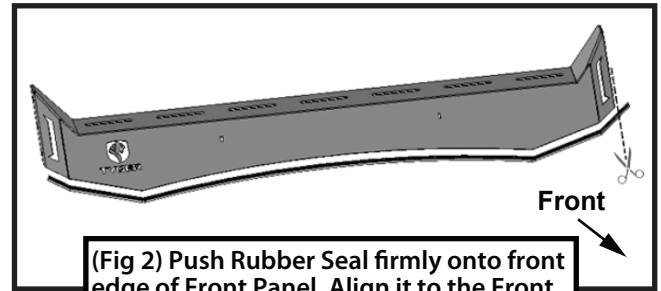
(Fig 1B) Remove the roof rack or side rails as equipped. Clean the channels.

STEP 2 RACK FRAME ASSEMBLY

Hardware Bag for Frame and Aluminum Bars is needed.

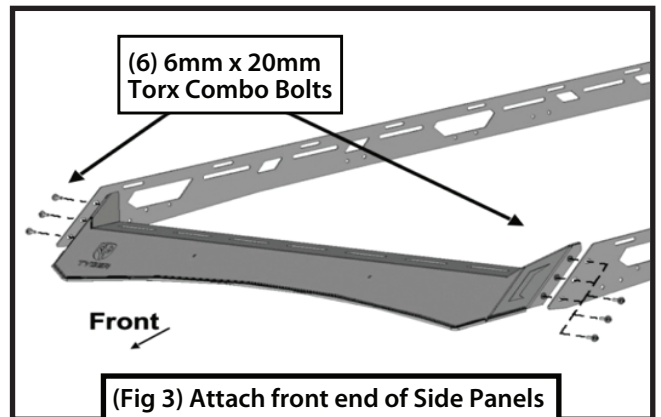
Follow (Fig 2 - 5) to install the Rack Frame. DO NOT fully tighten hardware yet.

Paintable Inserts: If you plan on painting the accent color plates, jump to **STEP 10** and continue.

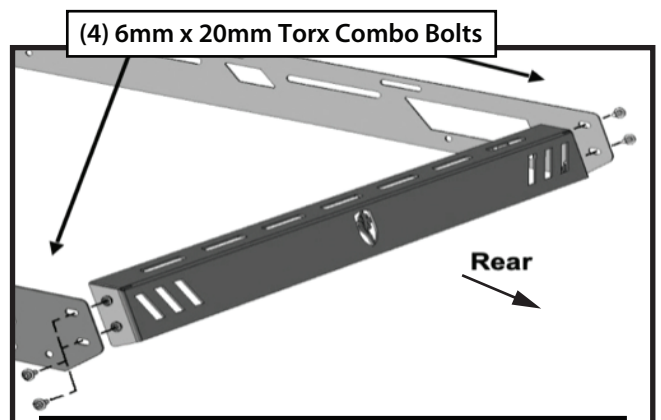


(Fig 2) Push Rubber Seal firmly onto front edge of Front Panel. Align it to the Front Cross Plate and trim any excess.

IMPORTANT: Rubber Seal must be installed before rack assembly placed on the vehicle. And ensure insert is tightly screwed with no gap against wind fairing.



(Fig 3) Attach front end of Side Panels to outside of Front Panel.



(Fig 4) Attach Side Panels to outside of Rear Panel

IMPORTANT: Follow the torque specs on **PAGE 1** to properly install the hardware to prevent looseness and vibration. All 6mm hardware should be torqued to approximately 7ft-lb.

STEP 3 ATTACHING MOUNTING BRACKETS (2 OPTIONS)

! Decide on which installation options to follow the corresponding step:

OPTION A:

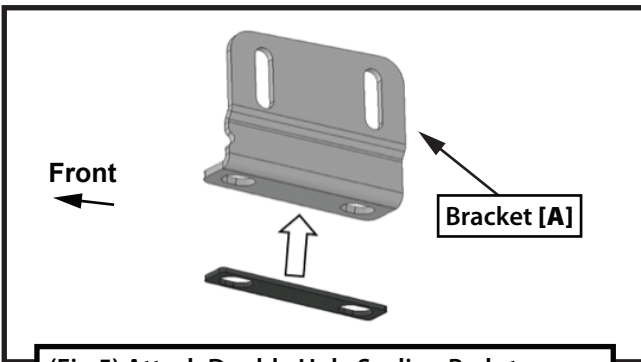
No Drilling ->400lb Static Load Rating (continue to STEP 3A)

OPTION B:

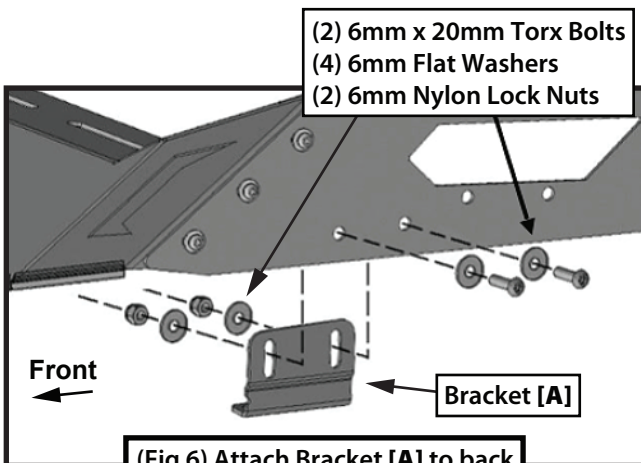
Drilling into 4 locations ->600lb Static Load Rating (Jump to STEP 3B).

NOTE: Mounting Brackets A to H have different designs so match them correctly for STEP 3.

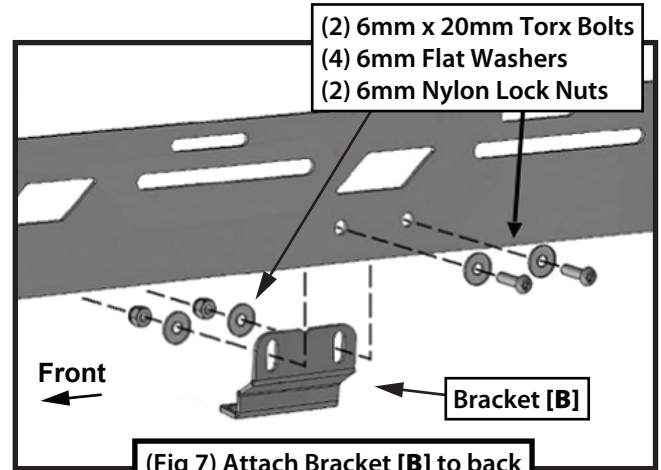
STEP 3A ATTACHING MOUNTING BRACKETS OPTION A - NO DRILLING



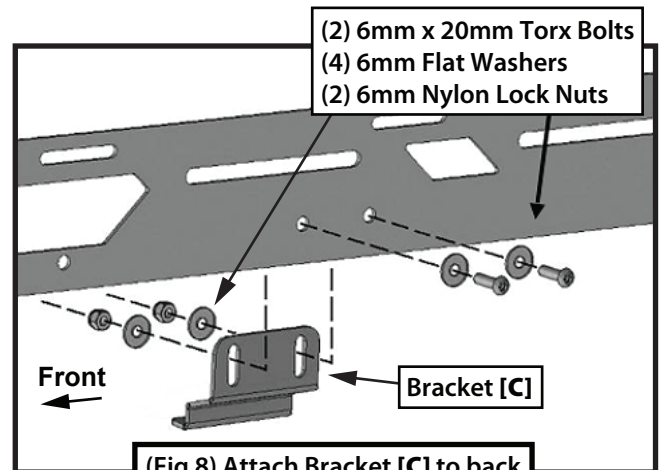
(Fig 5) Attach Double Hole Sealing Pads to Brackets [A], [C], [E], and [G] to prevent damage to the vehicle. (Only for non-drilling **OPTION A**)



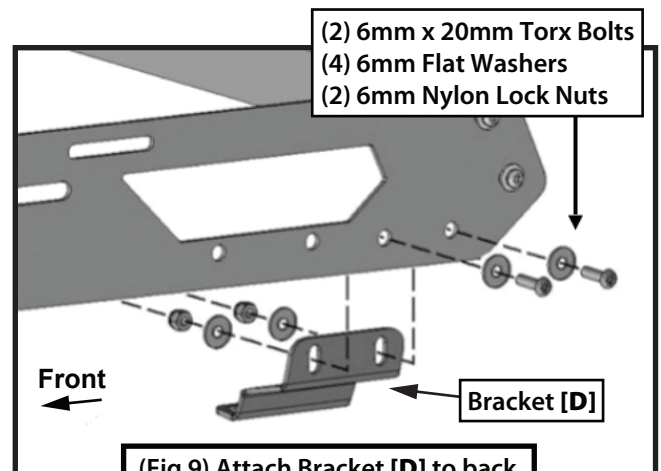
(Fig 6) Attach Bracket [A] to back of the A mounting location.



(Fig 7) Attach Bracket [B] to back of the B mounting location.



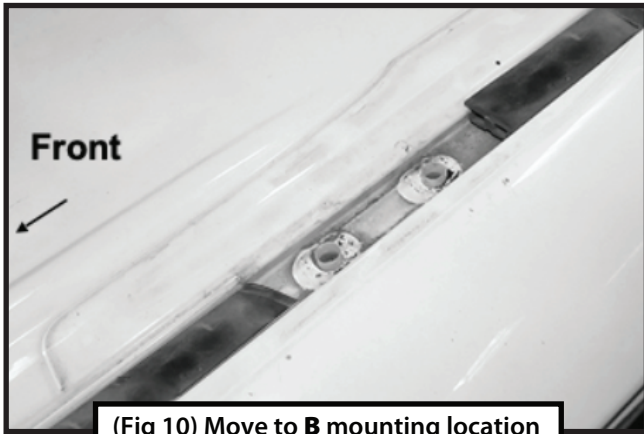
(Fig 8) Attach Bracket [C] to back of the C mounting location.



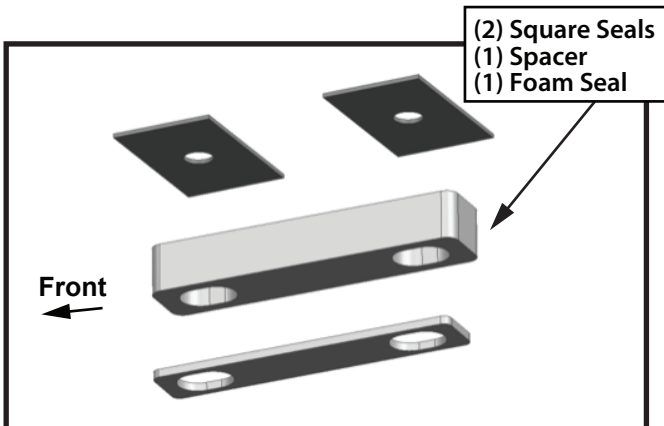
(Fig 9) Attach Bracket [D] to back of the D mounting location.

• Repeat (Fig 5-9) to attach Mounting Brackets [E], [F], [G], [H].

(STEP 3A)

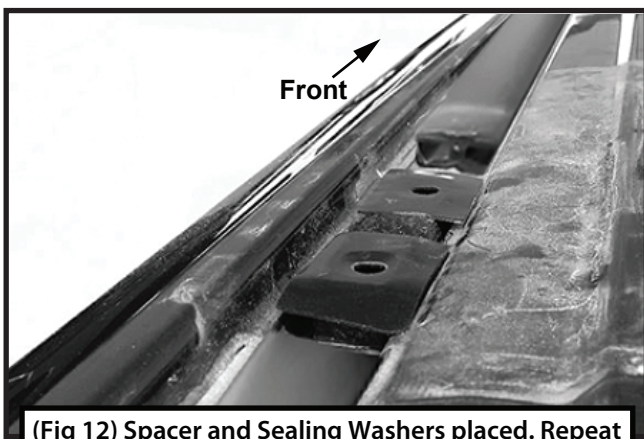


(Fig 10) Move to **B** mounting location with factory installed threaded holes on the top of the vehicle.

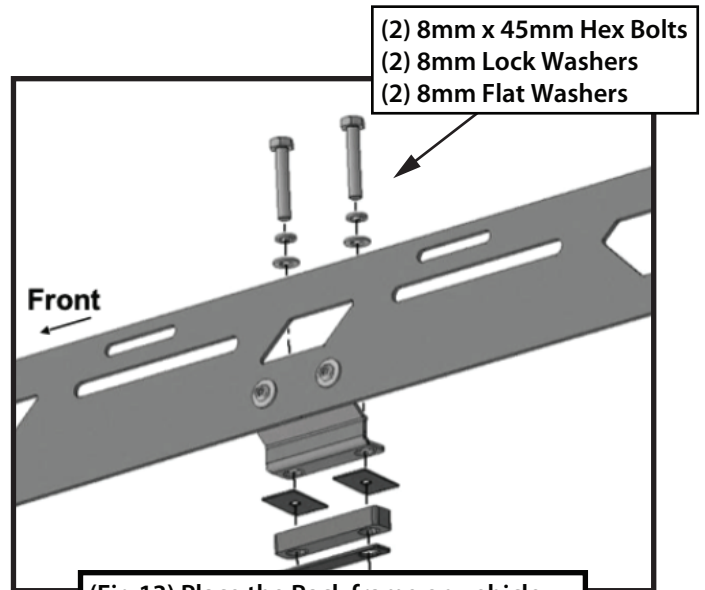


- (2) Square Seals
- (1) Spacer
- (1) Foam Seal

(Fig 11) Stick the Foam Seal to Spacer, and place it with Square Sealing Washers over the threaded holes on **B** mounting location.
TIP: Apply a bead of silicone sealant (not included) around the threaded holes in the mounting locations before installing the Spacers and Seals.



(Fig 12) Spacer and Sealing Washers placed. Repeat the step to **D**, **F**, and **H** mounting locations.



- (2) 8mm x 45mm Hex Bolts
- (2) 8mm Lock Washers
- (2) 8mm Flat Washers

(Fig 13) Place the Rack frame on vehicle. Attach Mounting Brackets **[B]**, **[D]**, **[F]** and **[H]** to Spacers and threaded holes in the roof accordingly.
TIP: Apply sealant to the threads on the mounting hardware.

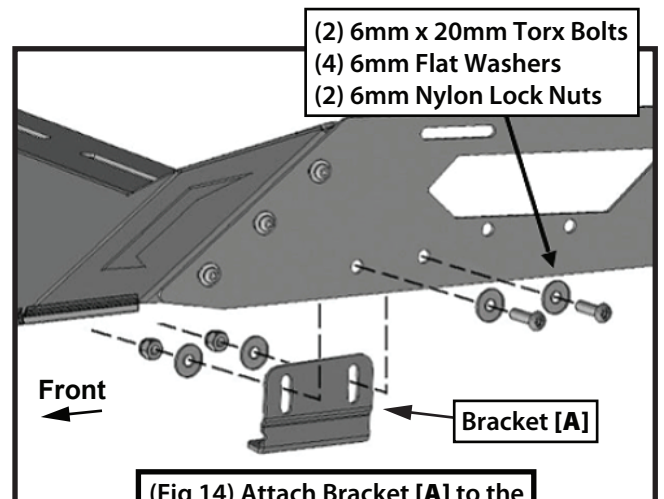
- Align the outer Rack frame to the vehicle and tighten the rear panel hardware and the Mounting Brackets to Side Panel hardware. **DO NOT** fully tighten the 8mm hardware attaching the Rack to the vehicle.
- Proceed to **STEP 4**.

STEP 3B ATTACHING MOUNTING BRACKETS
OPTION B - DRILLING REQUIRED

OPTION B: Drilling Required. Follow (Fig 14-28) to install Driver/Left Mounting Brackets.

NOTE: Option B increases the static load capacity to 600 lb.

Hardware Bag Vehicle Installation is needed. Snug but **DO NOT** fully tighten hardware.

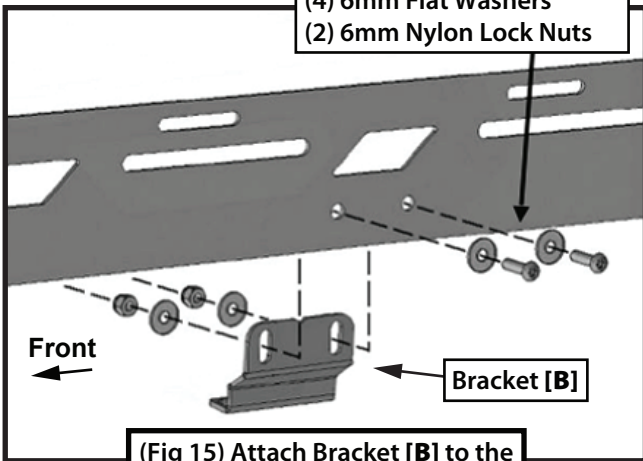


- (2) 6mm x 20mm Torx Bolts
- (4) 6mm Flat Washers
- (2) 6mm Nylon Lock Nuts

(Fig 14) Attach Bracket **[A]** to the back of **A** mounting location.

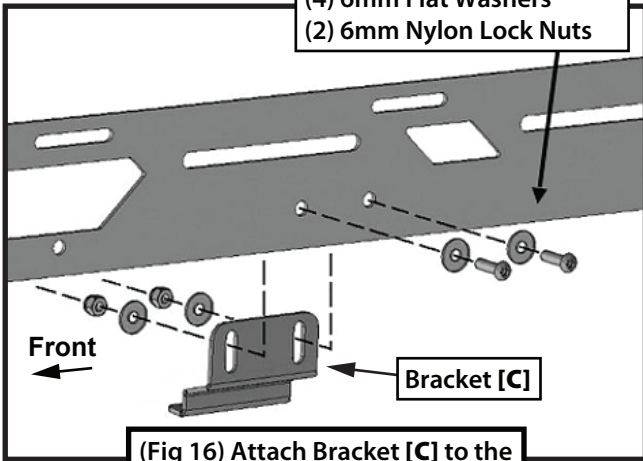
(STEP 3B)

- (2) 6mm x 20mm Torx Bolts
- (4) 6mm Flat Washers
- (2) 6mm Nylon Lock Nuts



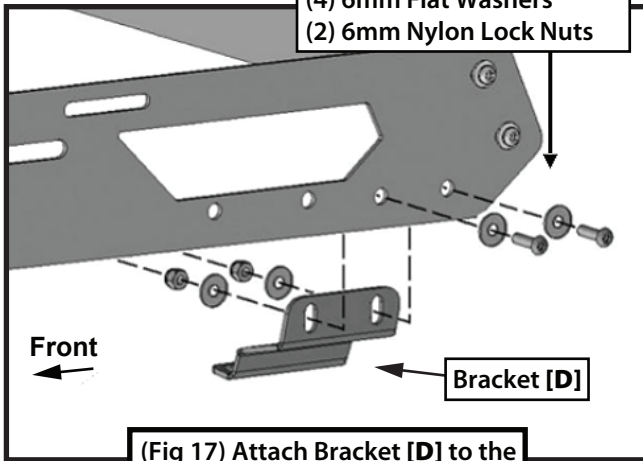
(Fig 15) Attach Bracket [B] to the back of B mounting location.

- (2) 6mm x 20mm Torx Bolts
- (4) 6mm Flat Washers
- (2) 6mm Nylon Lock Nuts



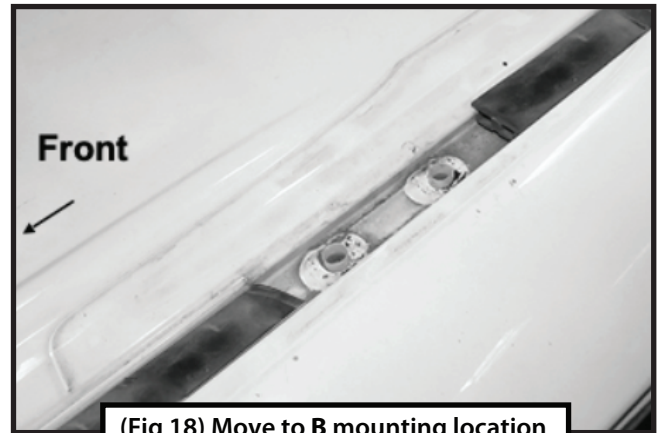
(Fig 16) Attach Bracket [C] to the back of C mounting location.

- (2) 6mm x 20mm Torx Bolts
- (4) 6mm Flat Washers
- (2) 6mm Nylon Lock Nuts



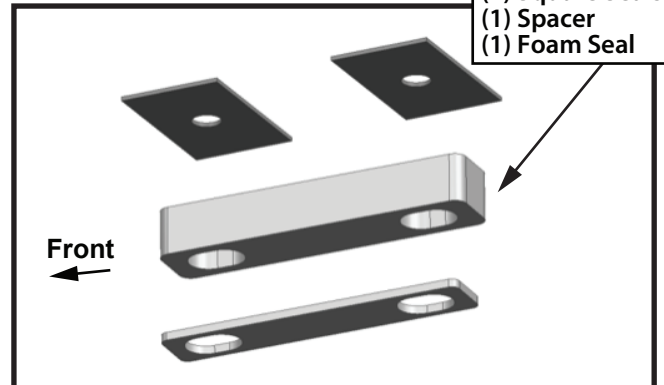
(Fig 17) Attach Bracket [D] to the back of D mounting location.

- Repeat (Fig 14-17) to attach Mounting Brackets [E], [F], [G] and [H].



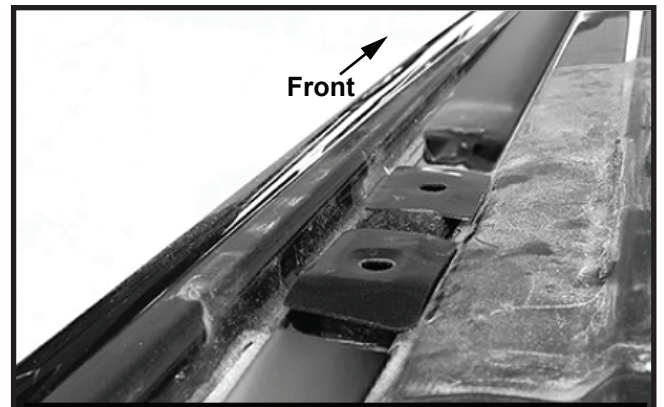
(Fig 18) Move to B mounting location with factory installed threaded holes on the top of the vehicle.

- (2) Square Seals
- (1) Spacer
- (1) Foam Seal



(Fig 19) Stick the Foam Seal to Spacer, and place it with Square Sealing Washers over the threaded holes on B mounting location.

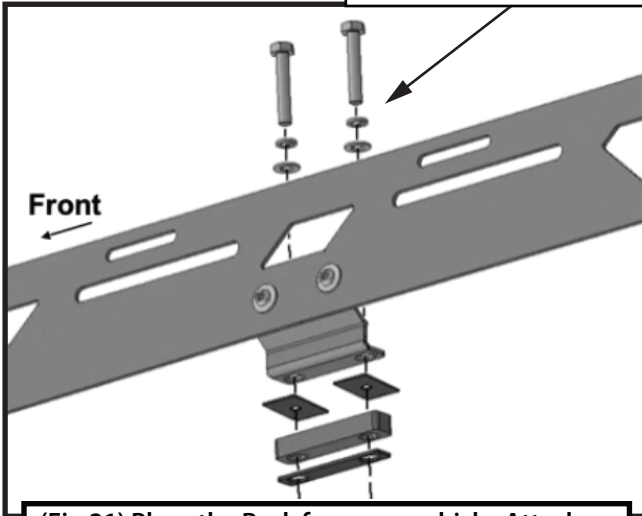
TIP: Apply a bead of silicone sealant (not included) around the threaded holes in the mounting locations before installing the Spacers and Seals.



(Fig 20) Spacers and Sealing Washers placed. Repeat the step to D, F, and H mounting locations.

(STEP 3B)

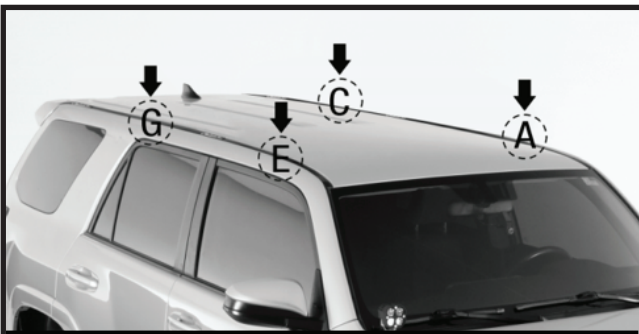
- (2) 8mm x 45mm Hex Bolts
- (2) 8mm Lock Washers
- (2) 8mm Flat Washers



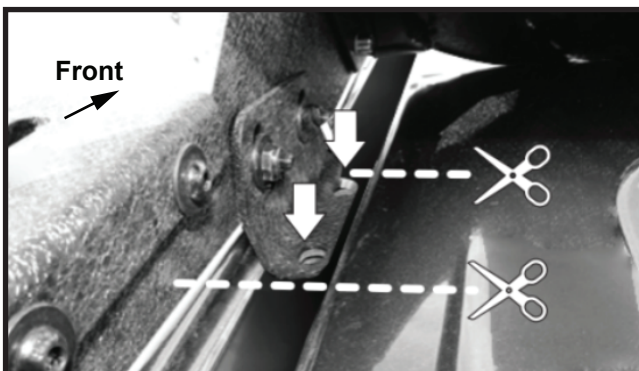
(Fig 21) Place the Rack frame on vehicle. Attach Mounting Brackets [B], [D], [F] and [H] to Spacers and threaded holes in the roof accordingly.

TIP: Apply sealant to the threads on the mounting hardware.

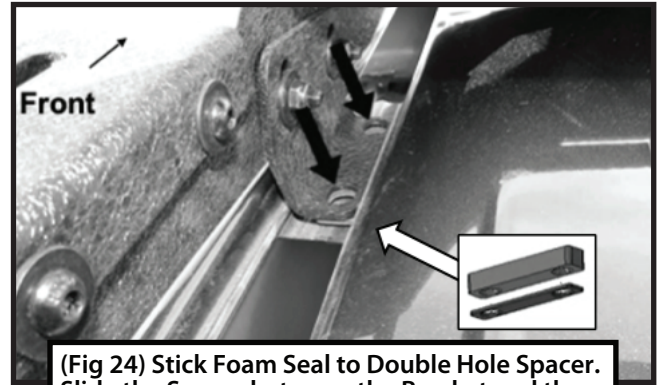
DO NOT fully tighten hardware at this time - this step is only to confirm rack position before drilling



(Fig 22) Locate the drilling areas on the roof surface.

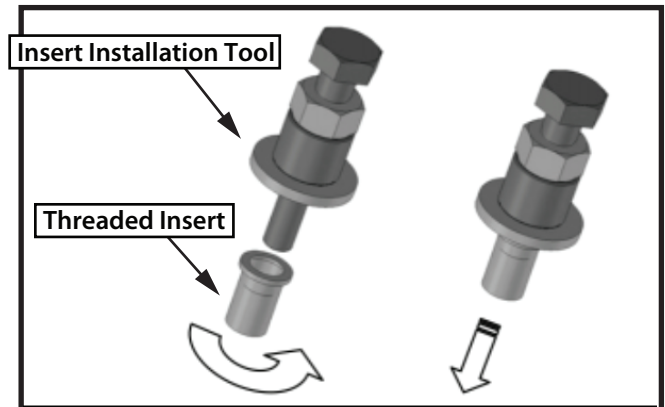


(Fig 23) Mark the weather strip along both edges on A, C, E and G mounting locations. Then remove the rack and trim off the weather strip between the marks. Next, apply masking tape to these locations to protect paint finish, and reinstall the rack on the vehicle.

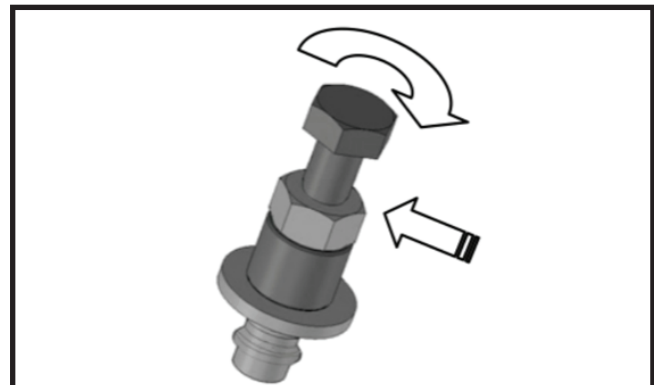


(Fig 24) Stick Foam Seal to Double Hole Spacer. Slide the Spacer between the Bracket and the channel on the vehicle. Line up the Bracket and Spacer. Trace the Bracket holes onto the roof channel (black arrows). Do it for A, C, E and G mounting locations.

- Temporarily remove the outer Rack and (4) Spacers from the drill locations.
- Use a 7/16" drill bit to drill the marked locations. **VERY IMPORTANT:** Use a drill stop to prevent damage to headliner. Drill bit must be sharp and in good condition.

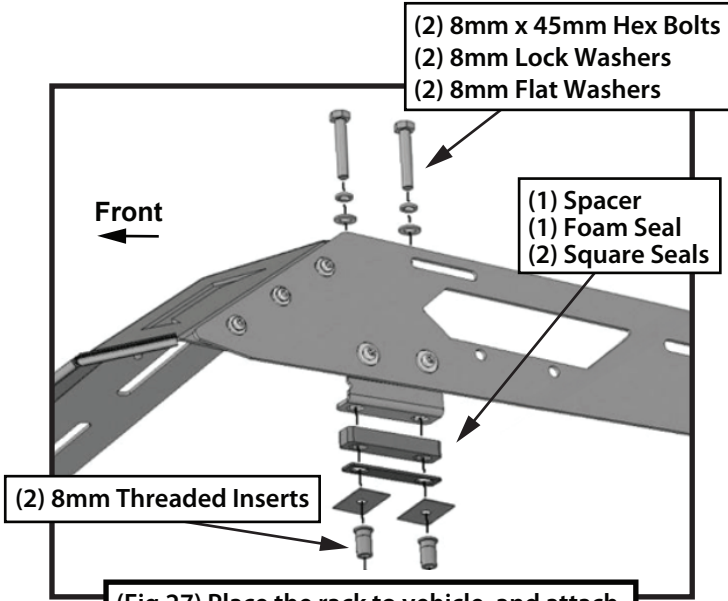


(Fig 25) Screw the Threaded Insert onto the threaded end of the Insert Tool. Firmly hold the Tool and push the Insert into one of the previously drilled holes. Lightly tap the Tool and Insert into the hole with a small hammer if necessary.

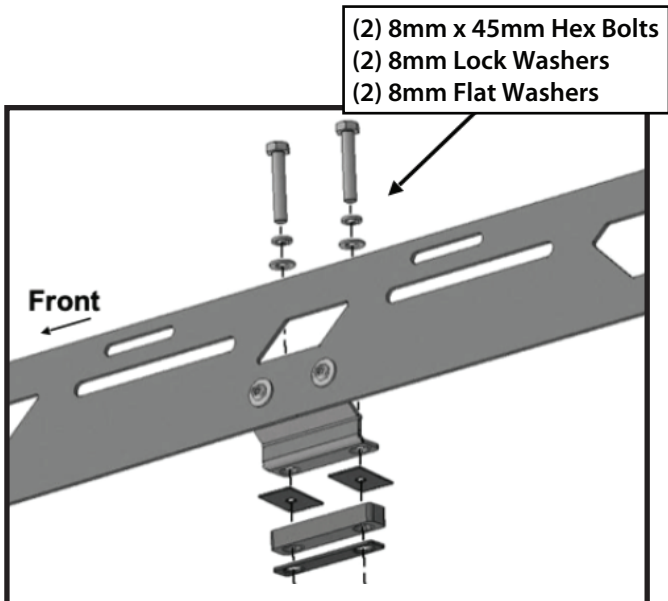


(Fig 26) Firmly hold the hex nut on the Insert Tool in place with a wrench and turn the hex bolt clockwise to tighten the bolt and expand the Insert in the hole. Once Insert is fully compressed and expanded, remove the Tool from the Insert. Install the remaining Threaded Inserts to the drilled holes. **WARNING:** DO NOT over tighten Insert, or damage Insert may result.

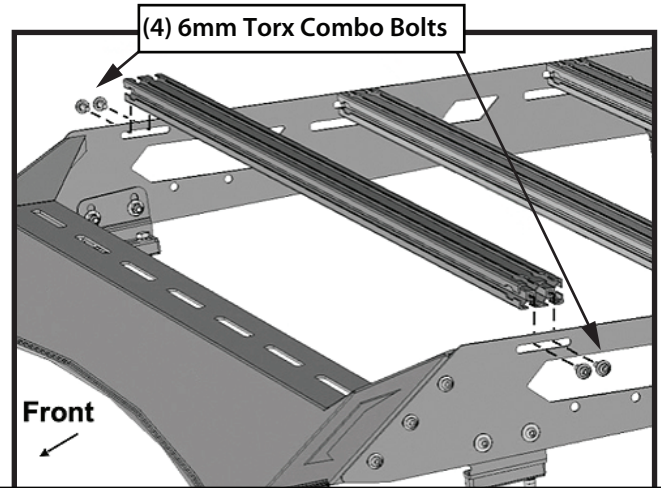
(STEP 3B)



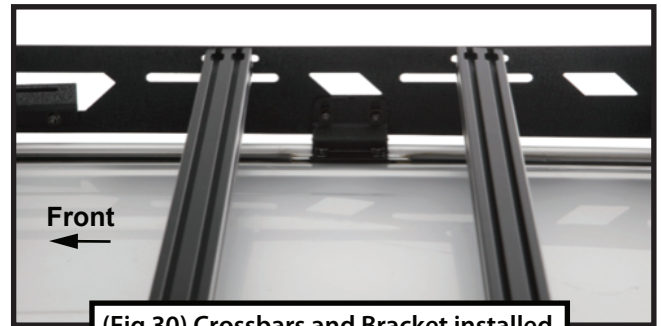
(Fig 27) Place the rack to vehicle, and attach Mounting Brackets [A], [C], [E] and [G] to Threaded Inserts.
TIP: Apply silicone sealant (not included) to all mounting locations and around hex bolts



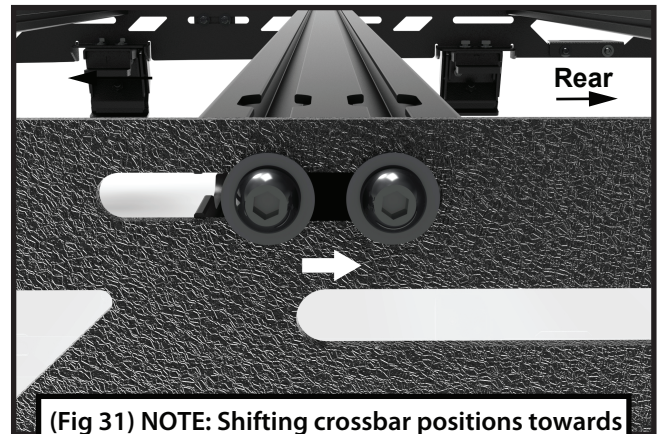
(Fig 28) Attach Brackets [B], [D], [F] and [H] to the Spacers and threaded holes in the roof.
TIP: Apply silicone sealant (not included) to all mounting locations and around hex bolts.
DO NOT fully tighten hardware at this time.



(Fig 29) Attach the Crossbars to the desired locations on the Side Panels. **NOTE:** (8) Crossbars are included. Location and quantity installed are up to the installer.



(Fig 30) Crossbars and Bracket installed.



(Fig 31) **NOTE:** Shifting crossbar positions towards the rear end of the bolt slots may reduce noises.

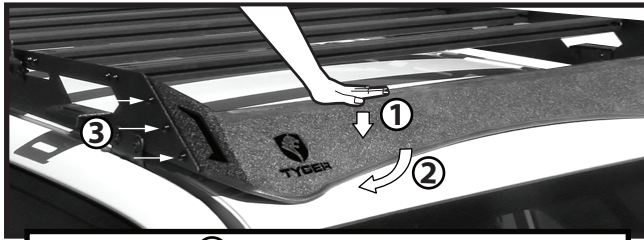
STEP 4 INSTALLING CROSSBARS

Follow (Fig 29-31) to install the Crossbars.

 **Hardware Bag for Frame and Aluminum Bars is needed.**

STEP 5 ADJUSTING THE RACK

Level and adjust the Roof Rack so it sits straight and is aligned squarely with vehicle roof. Tighten all Hardware **EXCEPT THE FRONT CROSS PLATE**. Then follow (Fig 32) to adjust the fit.

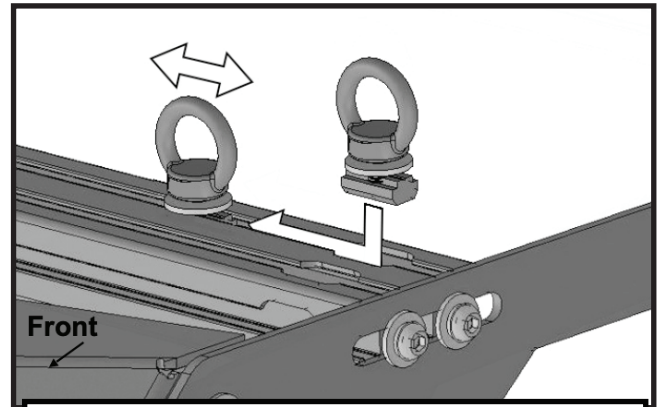


(Fig 32) While ① Keeping pressure on the Front Cross Plate against the vehicle roof and ② Pushing it down and inward against vehicle roof so the Rubber Seal is compressed against the roof, ③ Tighten Front Cross Plate hardware.

For **OPTION A** Installations (No Drilling), Lower the Mounting Brackets [A], [C], [E] and [G] so they are flush and tight against the rubber weather proofing strip and tighten the Brackets hardware.

IMPORTANT:

1. Follow the Torque spec on **Page 1** to properly install the hardware to prevent looseness and vibration. All 6mm hardware should be torqued to approximately **7 ft-lbs**.
2. The Front Cross Plate with installed Rubber Seal must be in contact and pressed against the vehicle roof to mitigate wind noise and vibration during vehicle operation.

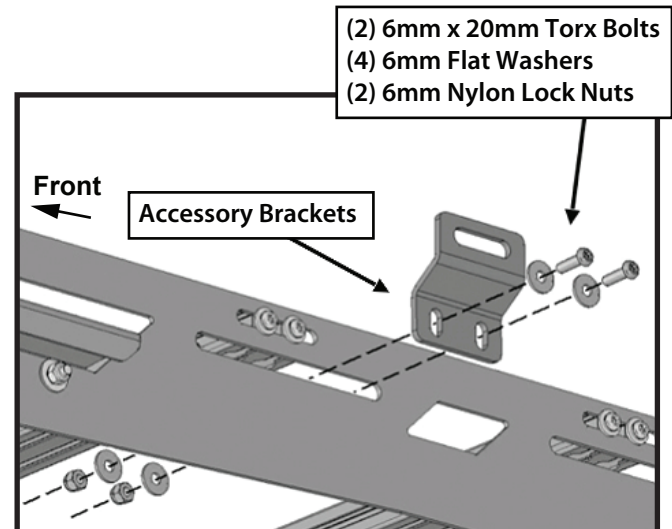


(Fig 34) Insert T-Nut on Eye Bolt assembly into the channels via the ends of each Crossbar. Slide the assembly into desired location and fully tighten Eye Bolt clockwise to lock in position. Channels are included on each side of the crossbars.

STEP 7 OTHER ACCESSORIES (OPTIONAL)

(8) Accessory Brackets and (6) Grab Handle Brackets installations are optional. If needed, follow (Fig 35 -36).

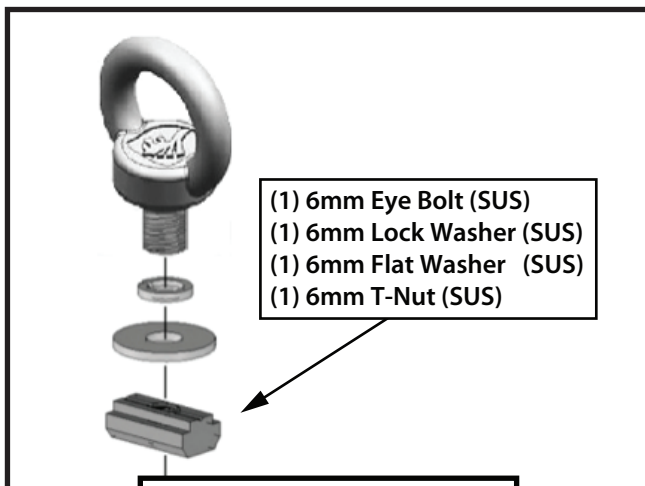
Hardware Bag for Handle and Side Accessory brackets is needed.



(Fig 35) Attach (8) Accessory Brackets to the multiple long narrow slots outside of the Side Panels as desired.

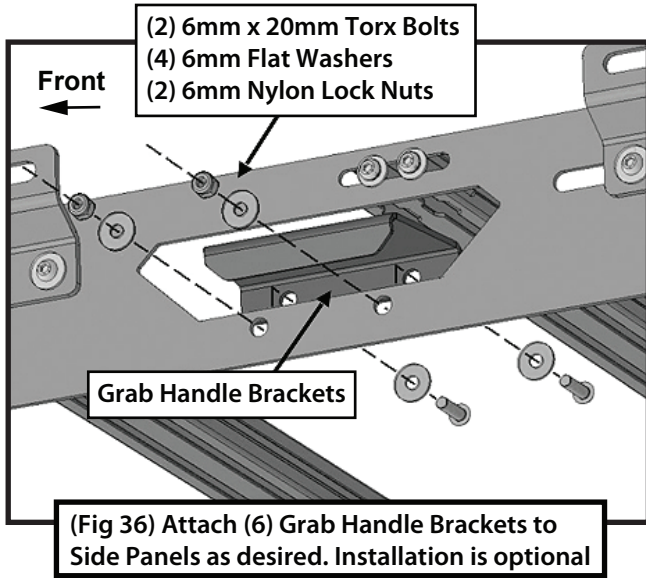
STEP 6 EYE BOLTS (OPTIONAL)

4 Eye Bolt sets are included and installation is optional. If needed, follow (fig 33 – 34).



- (1) 6mm Eye Bolt (SUS)
- (1) 6mm Lock Washer (SUS)
- (1) 6mm Flat Washer (SUS)
- (1) 6mm T-Nut (SUS)

(Fig 33) Stainless Steel Eye Bolt assembly. Leave Eye Bolt loose.



STEP 8 COMPLETE INSTALLATION

Do periodic inspections to the installation to make sure that all hardware is secure and tight



STEP 9 ⚠️ CHECK ALIGNMENT

Check the alignment of the Rack to the vehicle and adjust as necessary and fully tighten all hardware.

ATTENTION: After traveling initial **50-100 miles** with the rack installed, go back to examine the fit and each attachment points of the rack. Readjust and refasten the hardware as needed according to the torque spec.

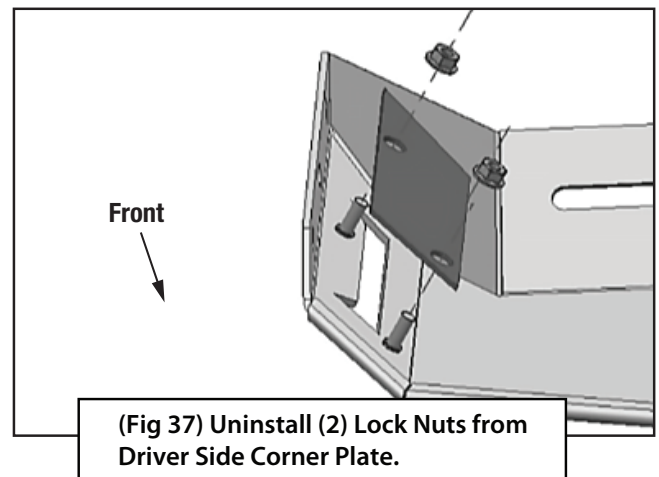
STEP 10 PAINTABLE INSERTS

(2) Corner Accent Plates and (1) Tyger Logo Background Plate are double-sided in black and red. To flip them or re-paint them to match your vehicle, follow (Fig 37-38) to remove and reattach.

For painting, use automotive paint and paint adhesive for best result.

Do periodic inspections to the installation to make sure that all hardware is secured and tight.

Driver/Left Side Installation Pictured



Passenger/Right Side Installation Pictured

