



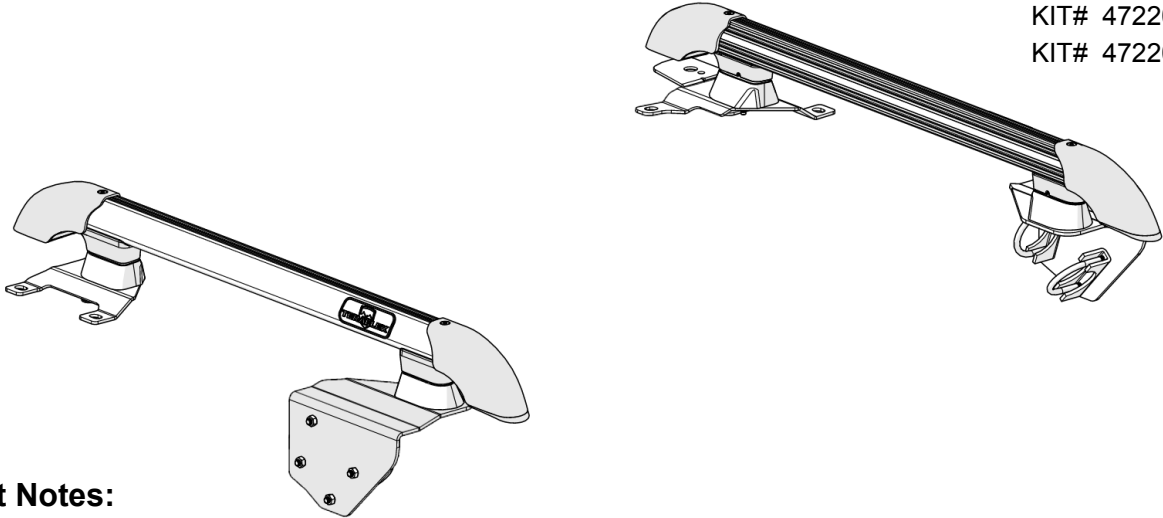
# JK Nebo Roof Rack Main Rail Kit

## Instructions

www.teraflex.com

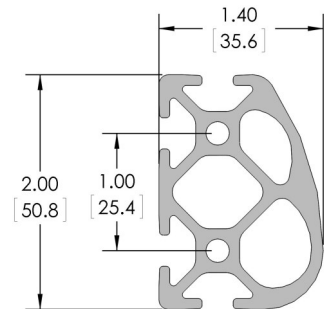
KIT# 4722020

KIT# 4722030



### Important Notes:

- **Patent Pending Design**
- **CAUTION: 2007-2010 Hardtops:** Before beginning installation, contact TeraFlex (801-288-2585) for different front lower feet, part numbers 722147 & 722148 (replaces 722141 and 722142)
- Prior to beginning this installation, read these instructions to familiarize yourself with the required steps and evaluate if you are experienced and capable to personally perform these modifications. A factory service and owners manual should be used in conjunction with these installation instructions.
- Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.
- Width between rails: 43" [1090mm]
- Length of rails between caps: 25" [635mm]
- Height added from crown of hardtop 2-3/8" [60.5mm]
- Load Rating: See section 1 for the owners manual for important notes to help safely load the rack.
  - 850 lbs [385 Kg] static
  - 200 lbs [90 Kg] dynamic.
- Weights:
  - Main rail kit 26 lbs [11.8 Kg]
  - 4 Slat kit: 20lbs [9.1 Kg]

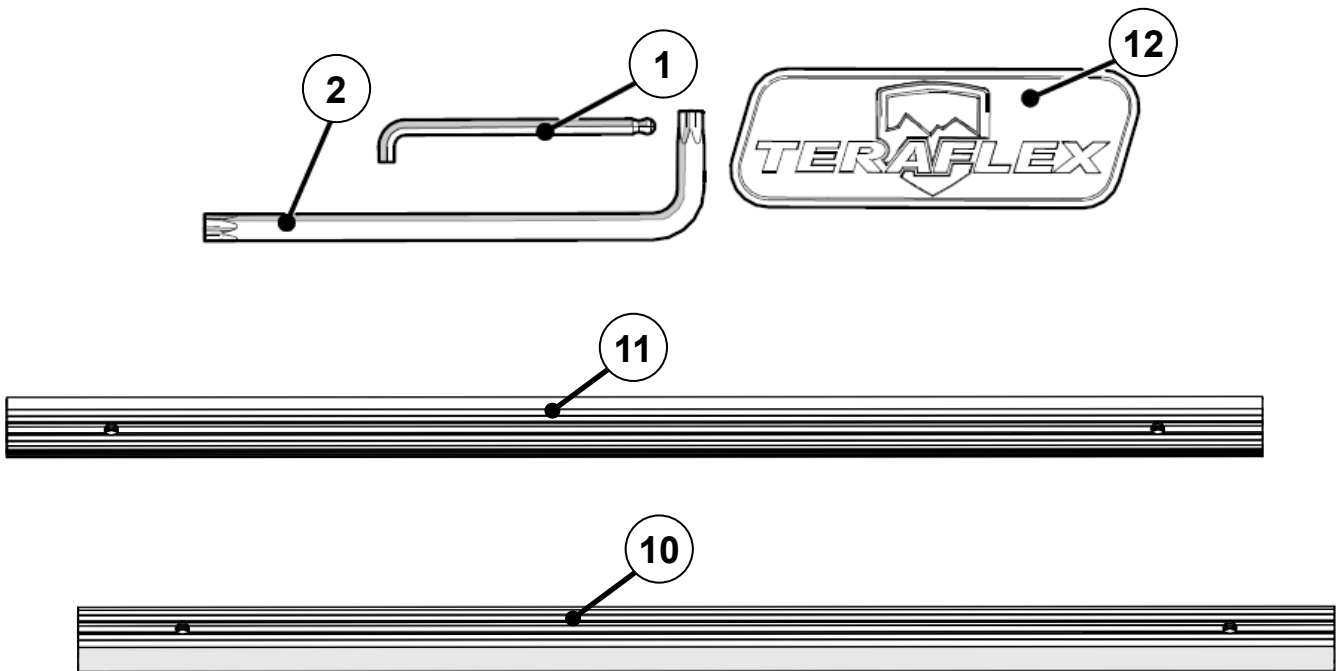


### Tools needed:

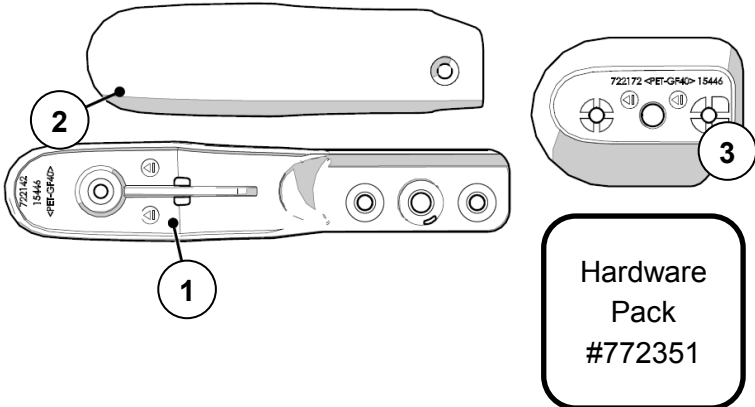
- This installation guide
- 12mm and 13mm Open End Wrench
- 10mm, 12mm and 13mm Sockets and Wrench
- X-ACTO Knife
- Ruler
- Drill
- An Extra Helper
- 1/4" and 11/32" Brad tip drill bits for fiberglass  
(A brad tipped bit can be purchased online or at just about any big box hardware store. A standard drill bit can be used but may cause more chips.)
- 3/4" Drill Bit (May Be Needed) (A step bit that goes up to at least 3/4" will work)



**TO WATCH THE INSTALL VIDEO GO TO:**  
<https://teraflex.com/videos>

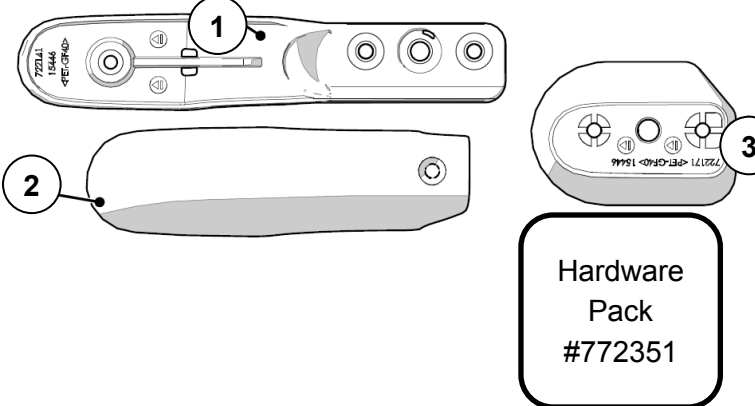


JK 2 Door Nebo Roof Rack Main Rail Kit # 4722020			
Item #	Part #	Description	QTY
1	392	4mm Stubby Hex L-Key Allen Wrench	1
2	393	T40 Torx L-Key Tool	2
-	600198	Warning Sticker Chromium	1
-	722198	JK 2DR Roof Rack Hole Templates	1
See pg. 3	772301	JK 2DR Roof Rack Driver Front Corner	1
See pg. 3	772302	JK 2DR Roof Rack Passenger Front Corner	1
See pg. 3	772303	JK 2DR Roof Rack Driver Rear Corner	1
See pg. 3	772304	JK 2DR Roof Rack Passenger Rear Corner	1
See pg. 5	772352	JK 2DR Roof Rack Bracket Components	1
10	772402-M	JK 2DR Roof Rack Extruded Main Rail Driver Side Black	1
11	772410-M	JK 2DR Roof Rack Extruded Main Rail Passenger Side Black	1
12	801	JK Roof Rack Badge	2



Passenger Front Corner # 772302			
ID	Part #	Description	QTY
1	722142	Front Passenger Upper Mount	1
2	722152	F/R - R/L End Cap	1
3	722172	F/R - R/L Lower Mount	1
-	772351	Hardware Pack (see pg. 4)	1

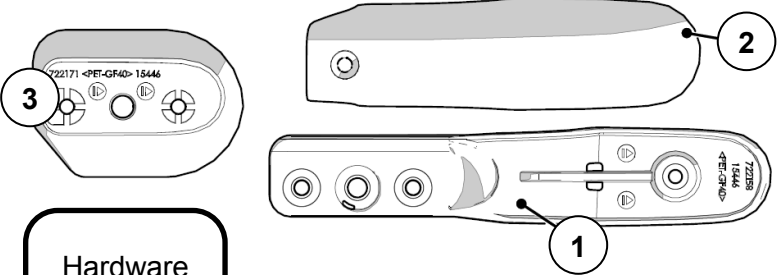
Hardware Pack  
#772351



Driver Side Front Corner # 772301			
ID	Part #	Description	QTY
1	722141	Front Driver Upper Mount	1
2	722151	F/L - R/R End Cap	1
3	722171	F/L - R/R Lower Mount	1
-	772351	Hardware Pack (see pg. 4)	1

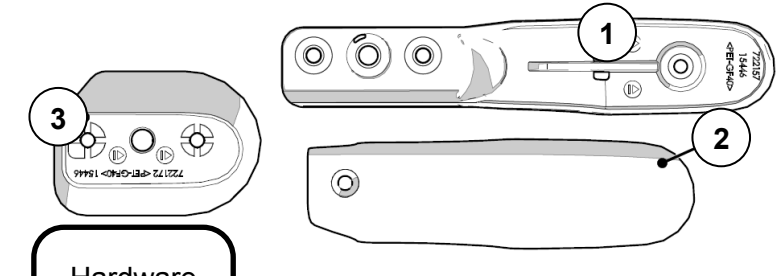
Hardware Pack  
#772351

Passenger Rear Corner # 772304			
ID	Part #	Description	QTY
1	722158	Rear Driver Upper Mount	1
2	722151	F/L - R/R End Cap	1
3	722171	F/L - R/R Lower Mount	1
-	772353	Hardware Pack (see pg. 4)	1

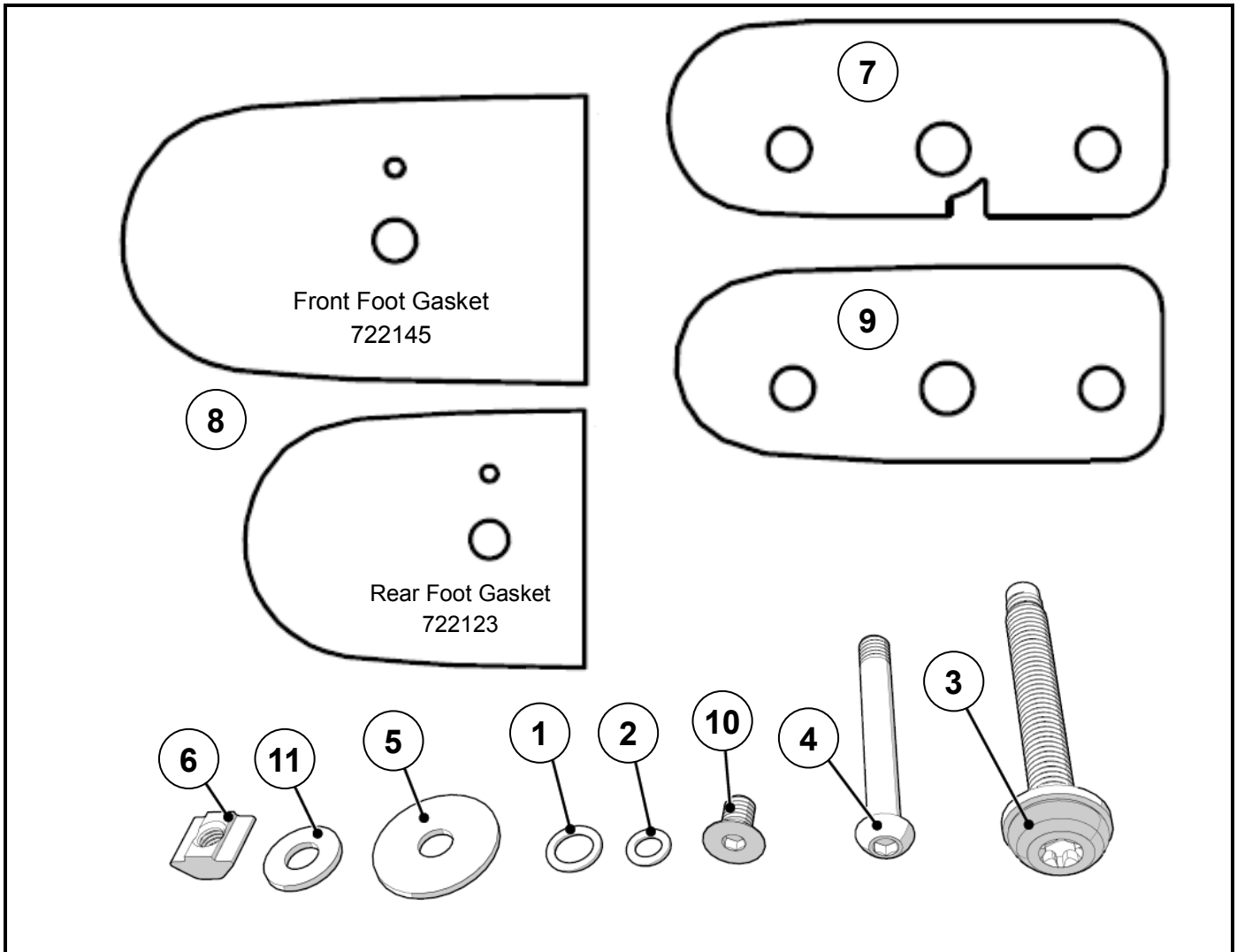


Hardware Pack  
#772353

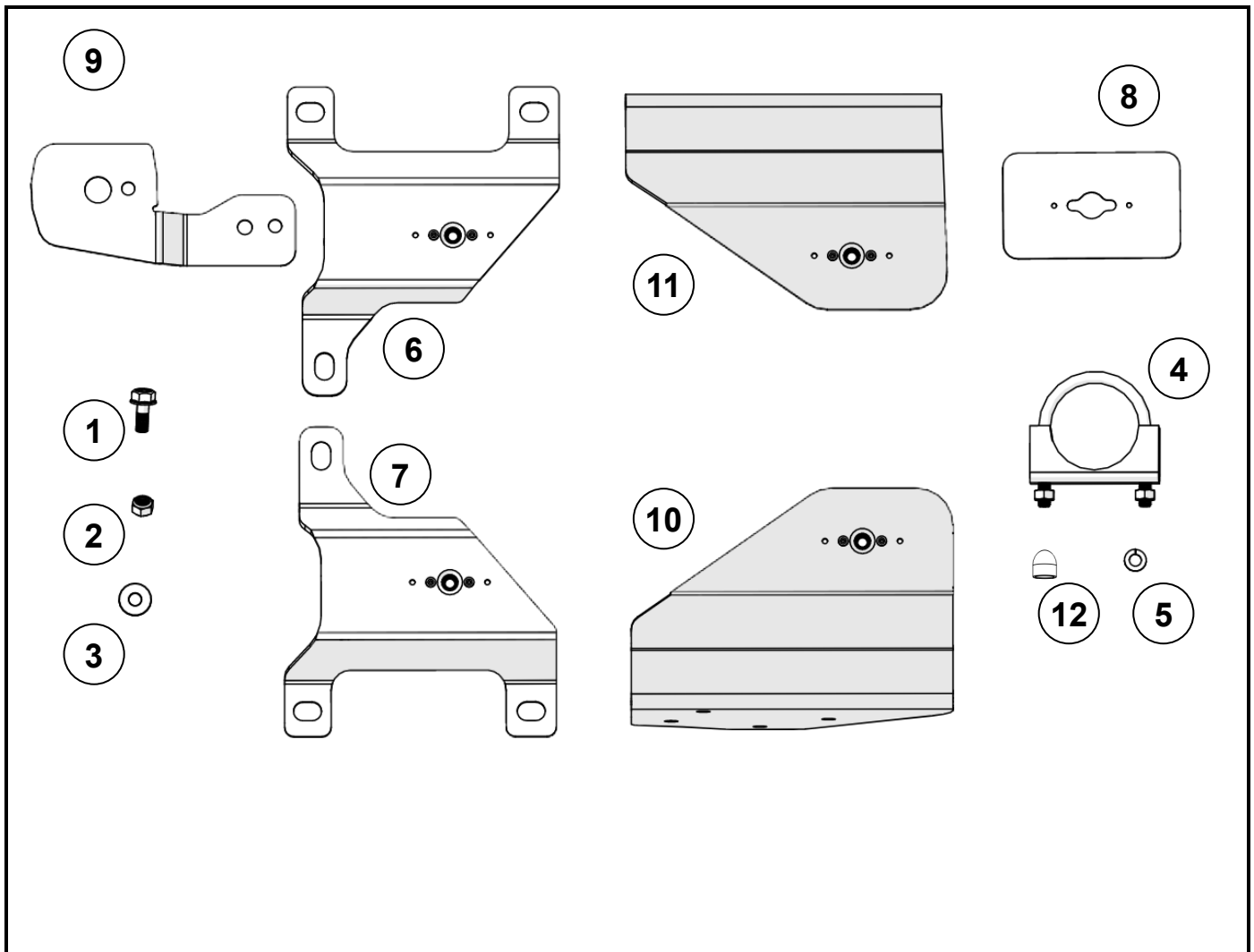
Driver Rear Corner # 772303			
ID	Part #	Description	QTY
1	722157	Rear Driver Upper Mount	1
2	722152	F/R - R/L End Cap	1
3	722172	F/R - R/L Lower Mount	1
-	772353	Hardware Pack (see pg. 4)	1



Hardware Pack  
#772353



Roof Rack Corners Hardware Pack (4 Total)			
Item #	Part Number	Description	QTY per pack
1	2035	O-Ring 5/16" I.D. x 7/16" OD x 1/16" Cross Section Buna-N AS568-011	2
2	2036	O-Ring 7/32" I.D. x 11/32" OD x 1/16" Cross Section Buna-N AS568-009	4
3	220	Bolt M8 x 1.25 x 55mm Long Torx Head with MAThread Radiused Dog Point	1
4	225	Bolt M6 x 1.0 x 50mm Long Shoulder Button Head Socket Cap Screw	3
5	459	Washer 1/4" Flat SAE Type B Zinc Plated .281" ID x 1.000" OD x 0.051"-0.079" Thick	1
6	651390	M6 x 1.0 P T-Nut for 10 Series Extrusions	3
7	722143	JK Roof Rack Front Foot Rear Gasket	1
8	722145 / 722123	JK Roof Rack Front / Rear Cap Gasket	1
9	722173	JK Roof Rack Front Under Roof Support Gasket	1
10	729	Bolt M6 x 1.0 x 10mm Long Flat Head Socket Cap Screw Stainless	1
11	730	Washer 1/4" SAE Flat Armor Coated 0.281" ID x 0.625" OD x 0.055"-0.065" Thick	4



Roof Rack Bracket Components # 772352

Item #	Part #	Description	QTY
1	164	Bolt M8 x 1.25 P x 20mm Long Flanged Hex Head Zinc Plated Grade 10.9	3
2	169	Nut M8 x 1.25 pitch Nylock Hex zinc	1
3	23	Washer 5/16" Flat Black Coated for JK Spare Tire Carrier	4
4	17161	Roof Rack Roll Bar Clamp, 2.25" Exhaust	4
5	256	Lock Washer 5/16" Zinc Plated	8
6	772230	JK Roof Rack Front Passenger Side Bracket	1
7	772231	JK Roof Rack Front Driver Side Bracket	1
8	772218	JK Roof Rack Shim	5
9	772238	JK Satellite Antenna Relocation Bracket for JK Roof Rack	1
10	772272	Roof Rack, JK 2-Door, Rear Passenger Side Bracket, Powder Coated	1
11	772273	Roof Rack, JK 2-Door, Rear Driver Side Bracket, Powder Coated	1
12	851	Push-On Round Cap, Vinyl, 1/4" I.D. x 5/16" O.D. x 1/2" Inside Height	8

### HARD TOP REMOVAL

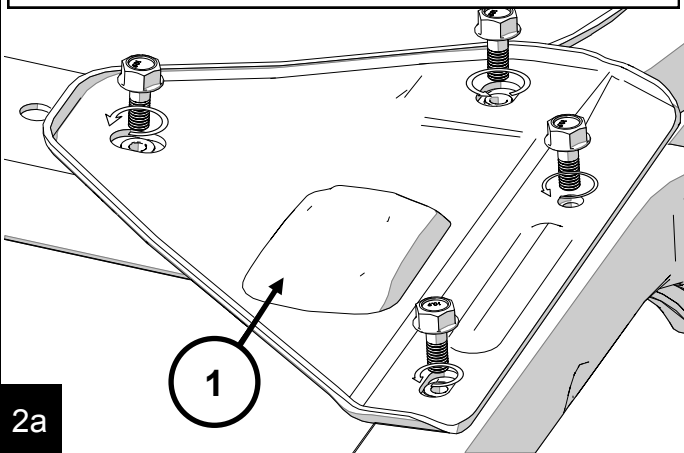
Use the factory supplied owners manual to remove the freedom panels, and then the hard top from the vehicle

### NOTE TO INSTALLER:

Please be sure that the end user receives the instructions and owners manual after installation.

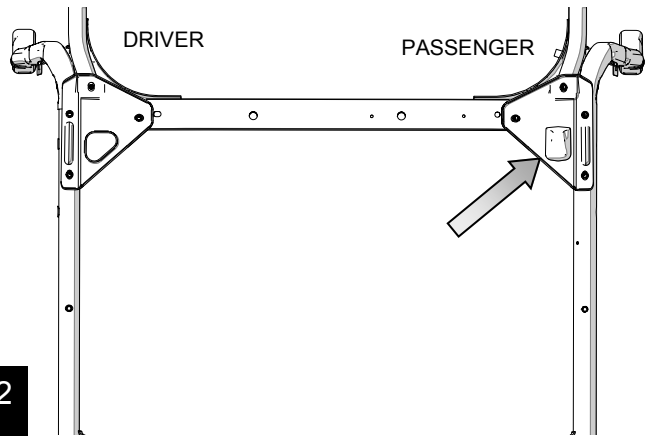
1

Unzip the sport bar cover at the cross bar behind the passenger seat. Using a 13mm, remove the 4 fasteners to remove the base plate with the antenna (1) attached.



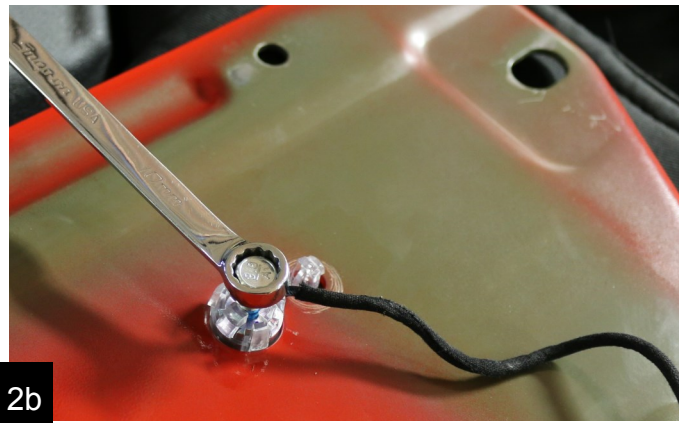
2a

### REMOVE SATELLITE ANTENNA FOR RELOCATION



2

Using a 10mm wrench, remove the antenna mounting bolt and standoff spacer. Press in the lock tabs on the antenna and push the antenna out of the base plate.



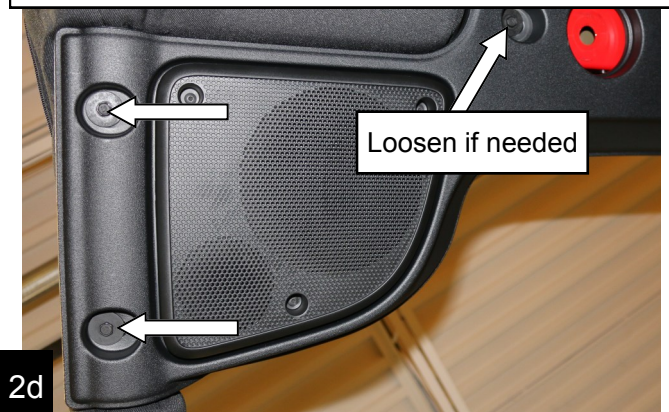
2b

Locate the antenna connector along the passenger side B-pillar, then disconnect the connector



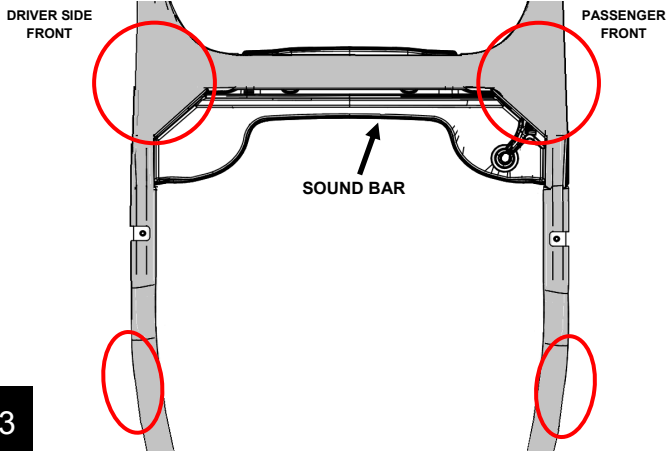
2c

Using a 10mm socket, loosen the two screws on the passenger side of the speaker pod, gently pull down so the antenna connector can be removed. After the connector is removed, tighten the two screws to 90 in-lbs (10 Nm).



2d

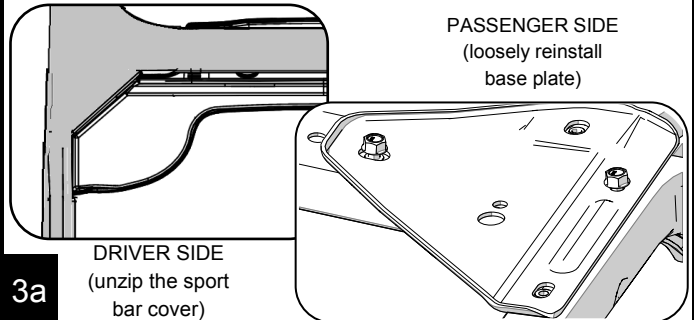
### PREP SPORT BAR COVER FOR BRACKETS



3

### FRONT BRACKETS

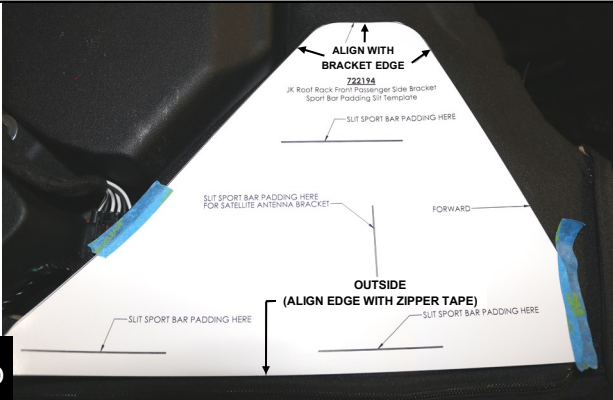
On the driver side unzip the sport bar cover behind the seat (*just as the passenger side was done*). For the passenger side temporarily reinstall the passenger side base plate using 2 of the OE fasteners, as shown. **TIP:** Place cardboard under the cover and over the plates to avoid scratching them. Zip up the driver and passenger side covers completely.



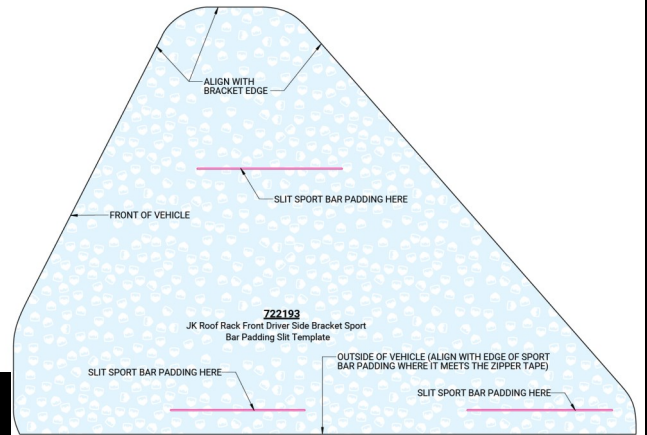
3a

Align the outside edge of the front passenger template (722194) to the edge of the zipper tape. The other edges will align with the base plate under the cover. Slit the cover in the 4 locations marked on the template.

Repeat for the driver side, cutting the cover where indicated. Unzip the cover and discard the cardboard, leave the cover unzipped.



3b

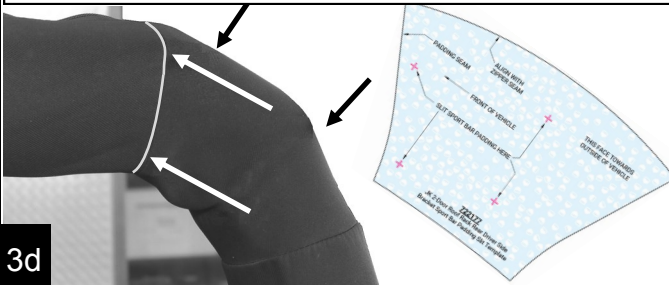


3c

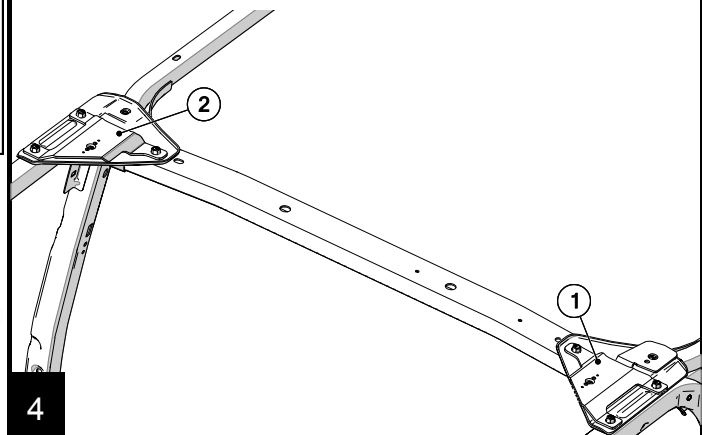
### REAR BRACKETS

For the rear brackets, locate the seam that is just before the downward bend of the sport bar. Align the front edge of the rear driver side template to the seam and the top edge to the zipper tape seam. Slit the cover in the 4 locations marked on the template. **NOTE:** The foam under this section of cover will be trimmed out so don't worry about poking holes into it. Repeat for the passenger side.

### INSTALLATION OF ANTENNA BRACKET AND FRONT SUPPORT BRACKETS.



3d

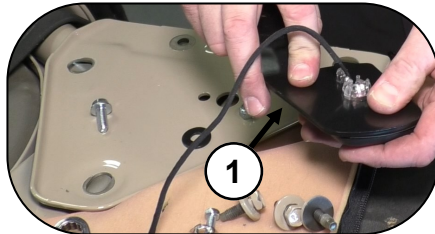
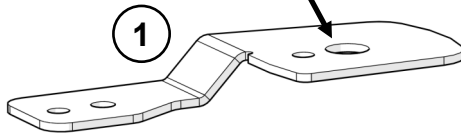


4

**ANTENNA BRACKET**

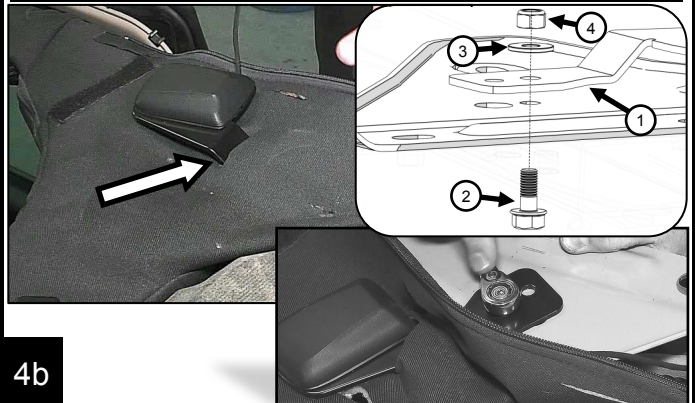
Remove the base plate again as outlined in step 2a. Install antenna with the OE bolt onto the new #7722388 satellite antenna bracket (1).

install antenna here



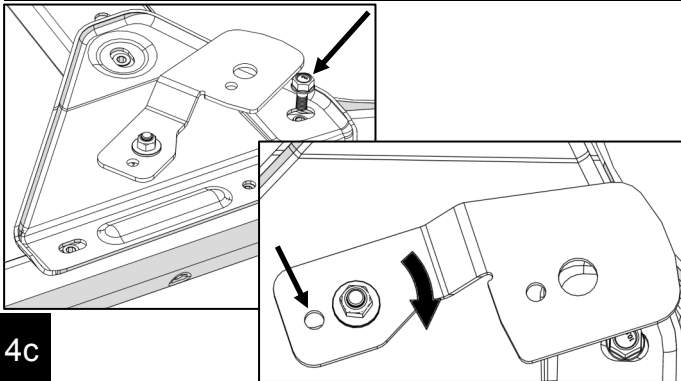
4a

Slip the antenna bracket through the slit in the cover. Mount the antenna bracket (1) to the base plate with the new #164 8mm bolt (2), #23 washer (3), and #169 nut (4). **Snug bolt but do not tighten.**



4b

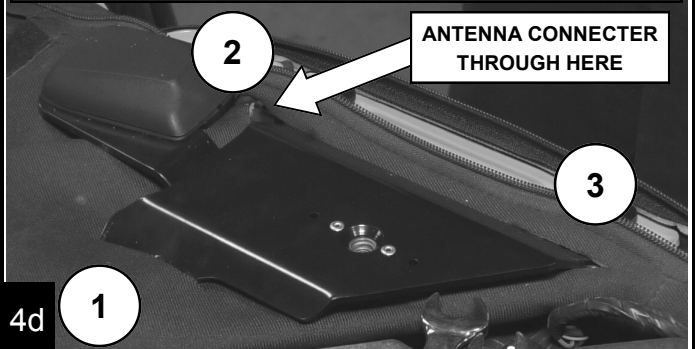
Apply thread lock to an OE M8 bolt (1) and install it through the base plate. **Do not tighten bolt.** Rotate the satellite bracket until the second holes line up in the satellite bracket and the base plate and tighten antenna bracket bolt to 14 ft-lbs (19 Nm).



4c

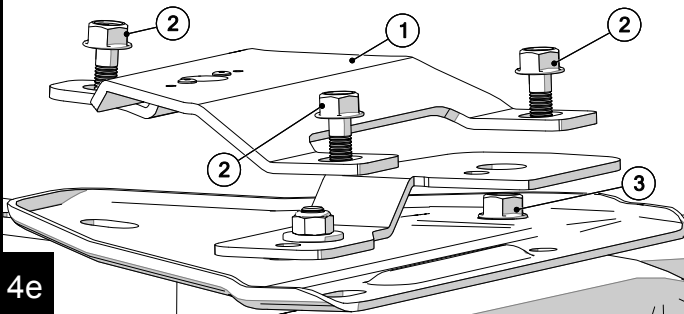
**SUPPORT BRACKETS**

Slip the three tabs of the #772230 front passenger support bracket through the cover. It is easiest to slip the inside tab first then the two outer tabs one at a time. Route the antenna connector through the cover where the front outer(2) part of the bracket goes through the cover.



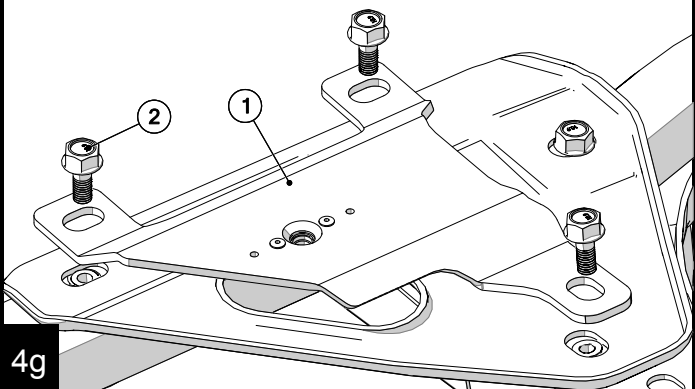
4d

Install the #772230 bracket (1) to the OEM base plate using the OEM M8 hardware (2). **(APPLY THREAD LOCK TO BOLTS)** Use a 13mm to tighten bolt (3) under the antenna bracket to 14 ft-lbs (19 Nm). Leave the other three M8 bolts (2) loose so the support bracket can be shifted easily. *Cover omitted on drawings for clarity.*



4e

On the driver front side remove the three rear most base plate bolts. Slip the tabs of the #772231 Front Drivers Side Bracket (1) through the slit in the cover, as shown in 4d, then repeat step 4e for the support bracket. **(APPLY THREAD LOCK TO BOLTS)** Leave the bracket loose so it can be shifted easily.

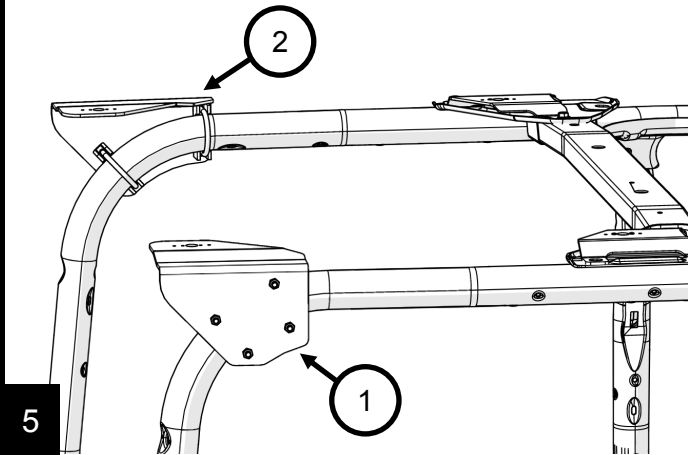


4g



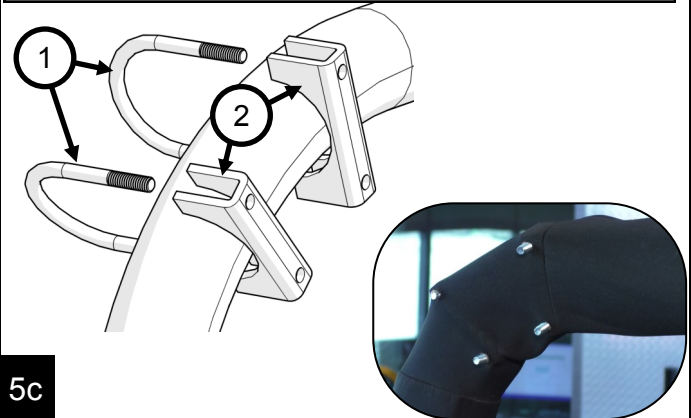
### INSTALLATION OF REAR SUPPORT BRACKETS

Unzip the covers from the driver and passenger side sport bar at the rear of the Jeep. *Seat belt does not need to be removed.*



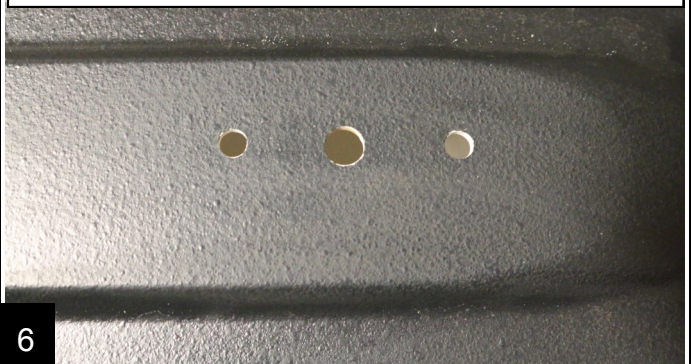
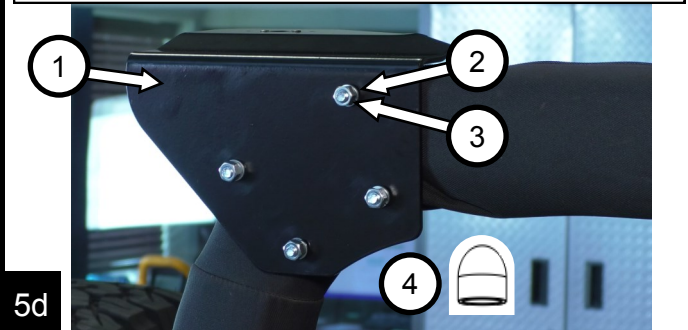
Remove the driver and passenger foam pads from the sports bar and make a mark that is 4 1/4" from the back using the mold seam as a guild. Using a utility knife cut the foam pad.

Position the #17161 U-bolts (1) and clamp brackets (2) around the sport bar. Pull the cover over the clamp bracket assembly pushing the U-bolts through the cover. Zip up the cover to hold the clamp bracket assembly in place.

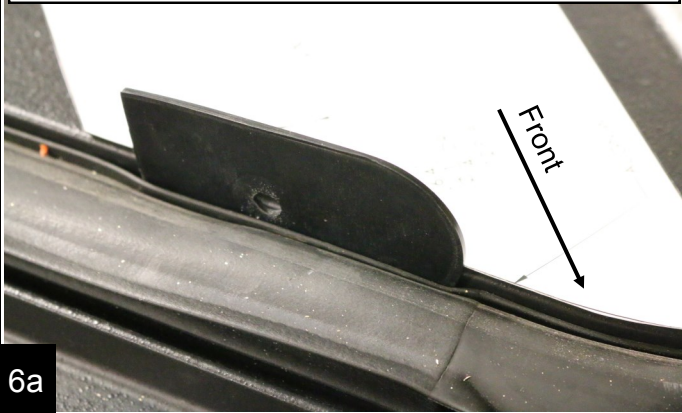


Position the #772272 Rear Passenger Bracket (1) over the protruding U-bolt ends and install the provided 5/16" Slit Washers (2) and Nuts (3) and make nuts finger tight, as shown. So the U-bolts don't scratch up your hard-top install #851 Push-On Caps (4) over each U-bolt end now. Repeat for the #772273 Rear Driver Side Bracket.

**DRILLING THE HARD TOP**  
**CAUTION** 2007-2010 hardtops: Obtain the #722147 and #722148 front feet from TeraFlex before drilling.

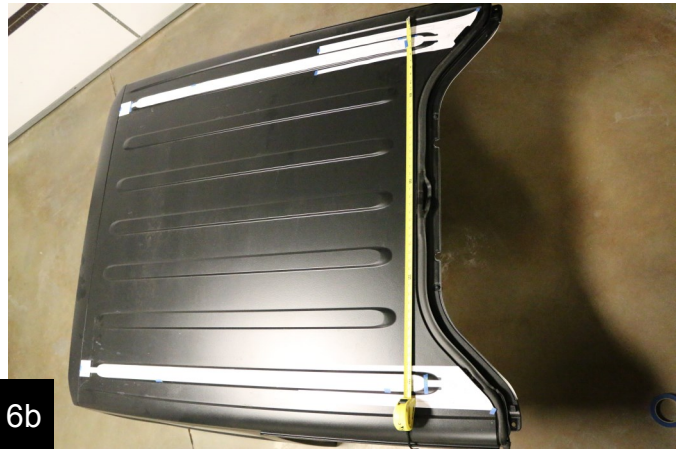


Cut out the templates, then slip roof rack foot gasket between the front hardtop seal and the edge of the hardtop. Use the gasket as an edge to align the front of the template to the edge of hard top.



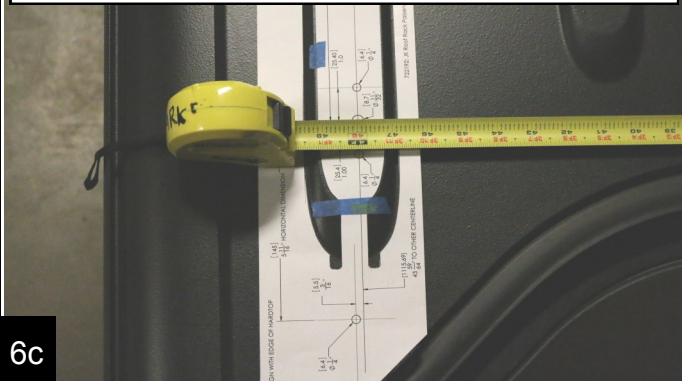
6a

Center templates on outside rib as shown. Hold templates with a small length of painters tape.



6b

Adjust templates so they are both centered on the rib and measure 43-15/16" [111.6cm] from centerline to centerline. Measure across hard top at both the front and the rear 11/32" [8.7mm] marked holes on the template. When the measurement is correct secure template with painters tape.



6c

**NOTE:** For the cleanest cut in fiberglass we recommend brad tipped bits. A brad tipped bit can be purchased online or at just about any big box hardware store. If care is taken, a multi-purpose bit may be used, be sure to use light pressure to reduce chipping.

**NOTE:** The holes will be completely covered with the gaskets and brackets when the install is complete.



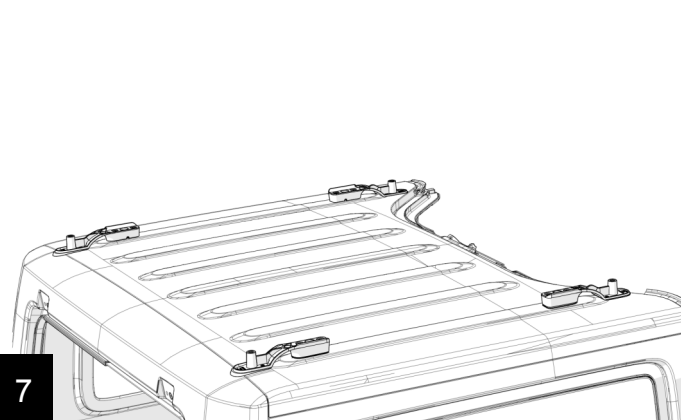
6d

Double check that templates are centered and measurements are correct. Center punch all 16 holes. Using an 11/32" brad tip bit and very light pressure, drill the 4 larger holes. Then drill the smaller holes with 1/4" brad tip bit. Double check all holes are drilled, then remove template.



6e

## Upper and Lower Mount Installation



7

**For steps 7a and 7b refer to exploded view below.**

Starting on the front driver side corner, have ready the #722141 Upper and #722171 Lower Mounts with accompanying hardware pack. Prepare two #225 Bolts(4) with a #730 Washer(11) and #2036 O-ring(2). Insert prepared #225 Bolts into the Lower Mount (see exploded view). Place the #722173 Lower Mount Hard-top Gasket(9) on top of the Lower Mount matching up the orientation.

From beneath the hard-top insert the two #225 bolts(9) through the two small holes you drilled earlier. The round end of the spacer aligns with the round end of the rib on the hard-top (see exploded view).

7a

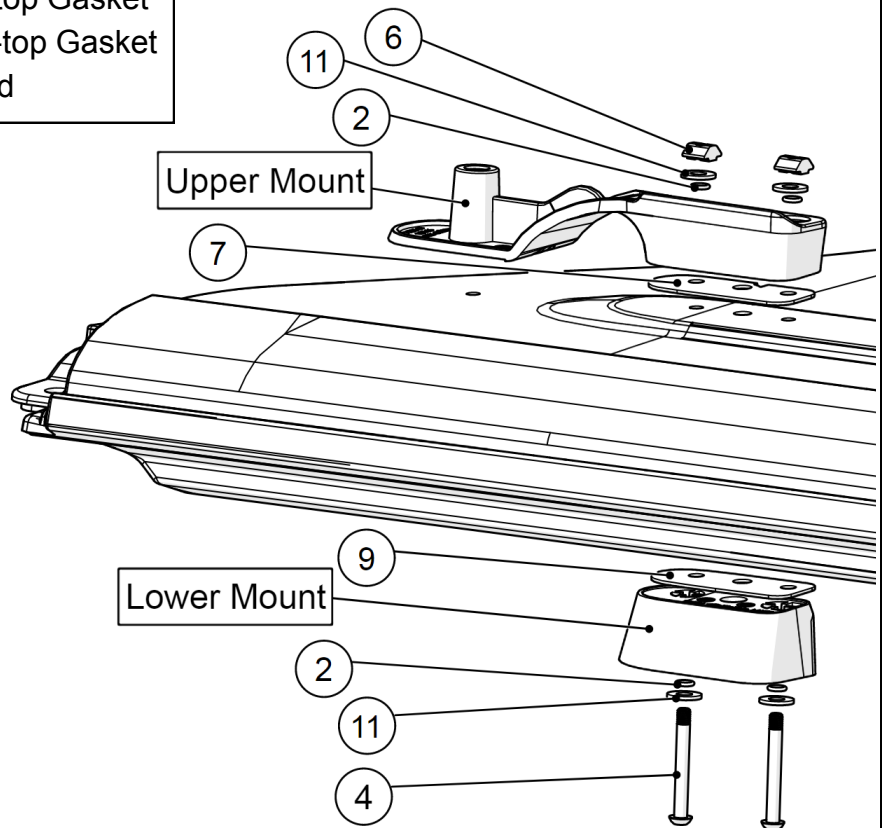
On top install the #722143 Upper Mount Hard-top Gasket(7) over the #225 bolts with the notch going towards the center. **NOTE:** The notch in the gasket will corresponds to a cutout in the Upper Mount. This is for the purposes of water drainage. Install Upper Mount over gasket (see exploded view).

Onto each #225 Bolt install a #2036 O-ring(2) followed by a #730 Washer and #651390 T-nut(6) (see exploded view). **NOTE:** Only thread the T-nut on a few threads, just enough to keep the whole thing together, it will get tightened down later.

Repeat steps for remaining three corners. Remember to install the gaskets in between the mounts and the hard-top and that the O-rings get installed in the right positions. Gaskets and O-rings work together to create a water tight seal in the hard-top.

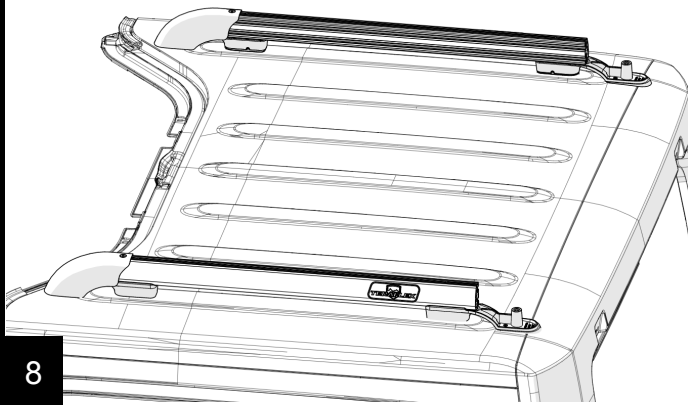
7b

- (2) #2036 O-Ring 7/32" I.D.
- (4) #225 Bolt M6 Button Head Socket Cap
- (6) #651390 T-Nut M6
- (7) #722143 Upper Mount Hard-top Gasket
- (9) #722173 Lower Mount Hard-top Gasket
- (11) #730 Washer 1/4" Flat Coated



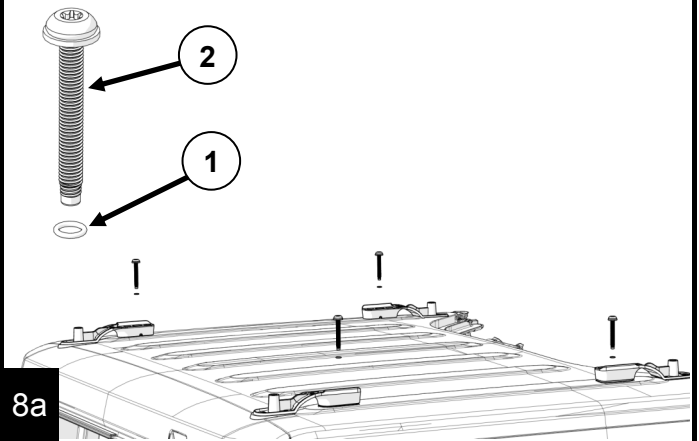
**INSTALL THE MAIN RAILS**

Use the following steps to install the main rail and front caps.



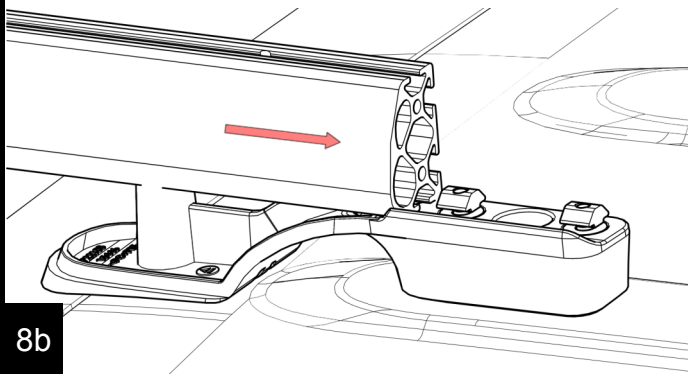
8

Slide one of the #2035 O-rings (1) onto each of the four #220 M8 mounting bolts(2). Insert each of the bolts into the through hole of the rail supports as shown.



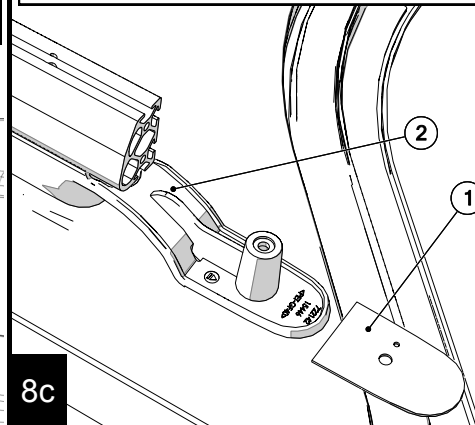
8a

Ensure that the rail t-nuts (1) are loose. Install the passenger side rail by starting at the rear and sliding the rail forward as the T-nuts slide in the lower track. Stop sliding it forward when the front rail through hole is centered on the now captured #220 M8 torx bolts. Repeat for driver side.



8b

Slip the #722145 front upper gasket (1) under the front of the #722142 front foot (2). Orient the small hole to the center of the vehicle as shown. Center the larger hole with the front boss. Repeat for other side, orient the small hole to the center of the vehicle



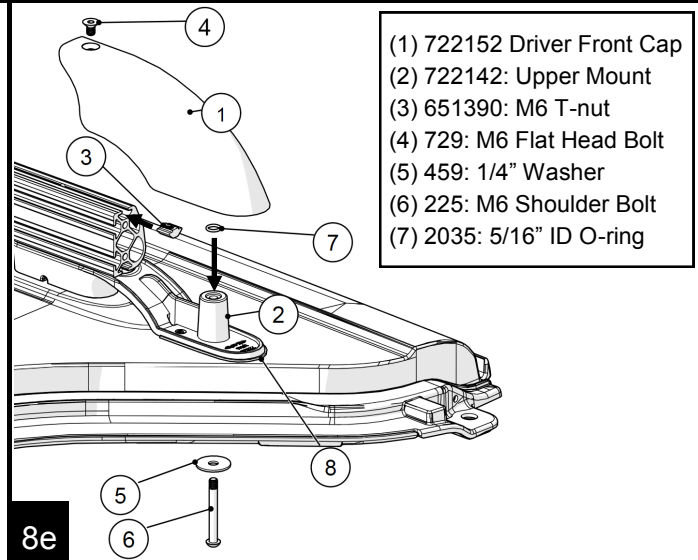
8c

On the driver front mount(2) insert a #2035 O-ring (7) into the cavity. Next insert a M6 t-nut (3) into the top slot of the main rail. Position the #772151 cap(1) onto the rear foot and install on a #729 M6 Flat Head Bolt(4) into the top hole of the cap and into the T-nut.

**TIP: Use a small flat bladed screw driver to help position the T-nut.**

Thread a #225 M6 bolt(6) with a #459 washer(5) through the rear most hole in the hard top and into the cap(1), see exploded view in 8a.

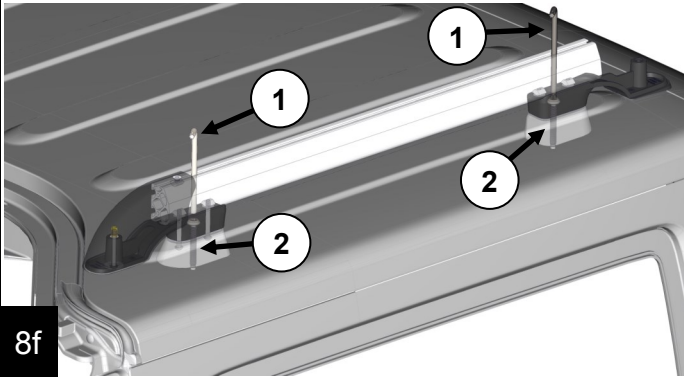
8d



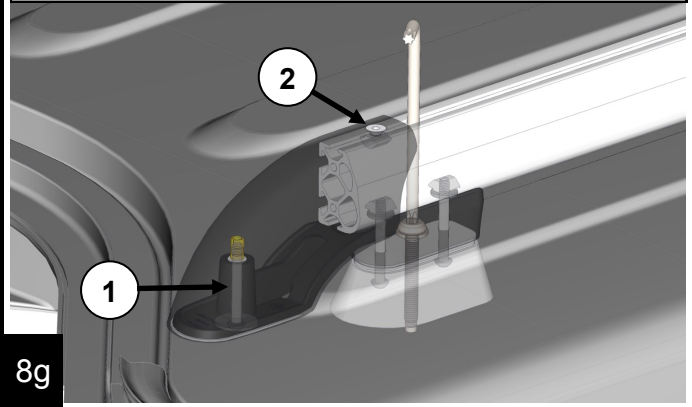
- (1) 722152 Driver Front Cap
- (2) 722142: Upper Mount
- (3) 651390: M6 T-nut
- (4) 729: M6 Flat Head Bolt
- (5) 459: 1/4" Washer
- (6) 225: M6 Shoulder Bolt
- (7) 2035: 5/16" ID O-ring

8e

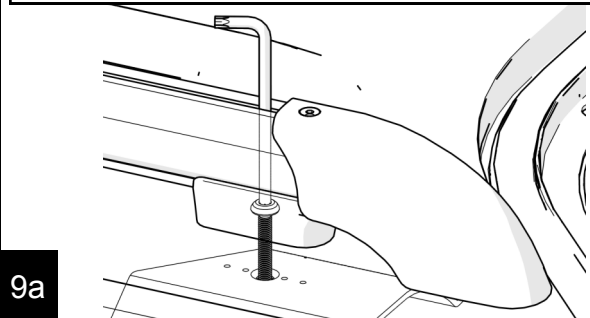
Insert the two #393 torx tools (1) into the main rail's front and rear access holes. Move the rail so that each wrench is centered in the hole and can be inserted into the #220 M8 mounting bolts (2) below.



With the #393 torx tool centering the main rail access holes over the #220 M8 mounting bolts tighten the #729 M6 shoulder screw (1) and #225 M6 flat socket head (2) installed in step 8d & 8e. Repeat steps 8d to 8g for the other side.



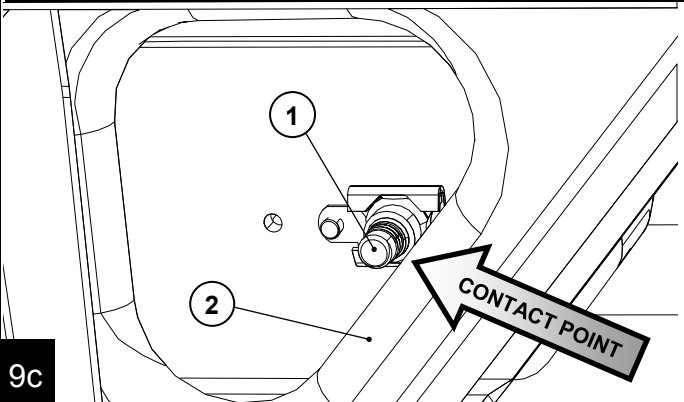
**ALIGNING THE HARD TOP BRACKETS**  
With a helper, set the hard top back on the vehicle. Take your time with this step as the correct alignment will make reinstalling the hard top easier. Brackets may need to be repositioned to get #220 mountings to start into brackets. Start each of the four bolts, but do not tighten.



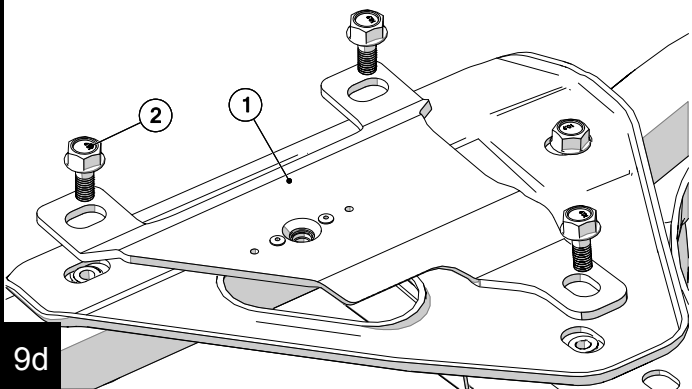
**MEASURE FOR SHIMS**  
Due to assembly variations from the factory, a 1/16" shim may need to be used between the spacer and the support bracket. Measure each connection point and make note of any gap greater than 1/16" [1.5 mm]. Each of the four connection points greater than 1/16" will need a 1/16" shim. Shims are stackable if more than one is required.



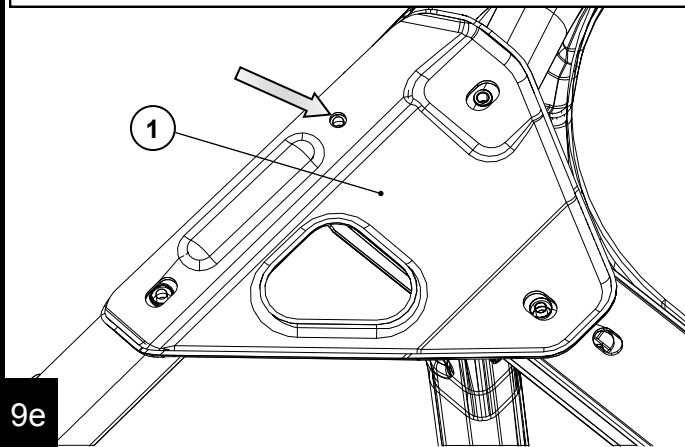
**NOTE:** If mounting bolt (1) contacts the OEM lower bracket (2) the hard top will need to be removed to modify the OEM bracket. If there is no contact with bolt skip forward to step 9f.



Remove the four 220 M8 mounting bolts and remove the top. Then remove the #772231 driver side bracket (1) by reversing the steps followed in step 4g.



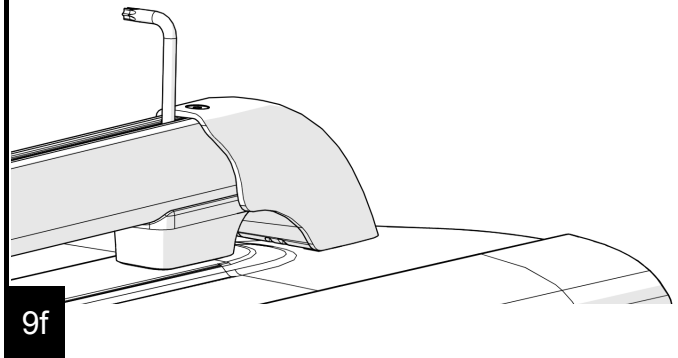
Pull the OEM lower plate (1) off the Jeep and drill out the hole (shown below) to 3/4 in. (19mm). Now reinstall the OEM bracket and repeat step 4g and steps 9a to 9b.



9e

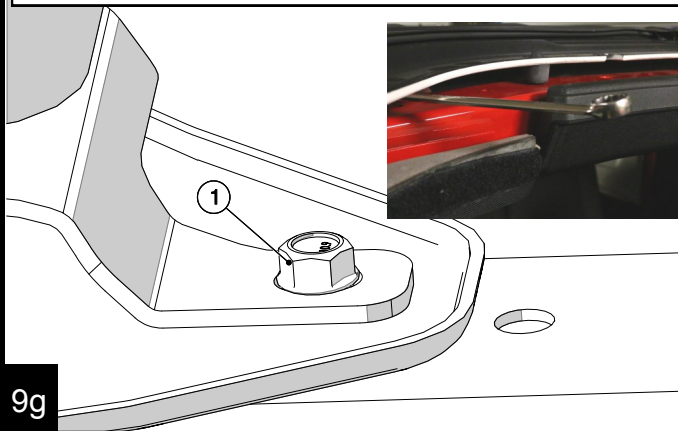
#### POSITIONING THE MOUNTING BRACKETS

If mounting bolts are clear of OEM lower plate then snug the bolts using the supplied 393 T-40 torx wrench. This will position the mounting brackets for tightening. **NOTE:** Be careful not to over tighten any support that has a gap measured in step 9b.



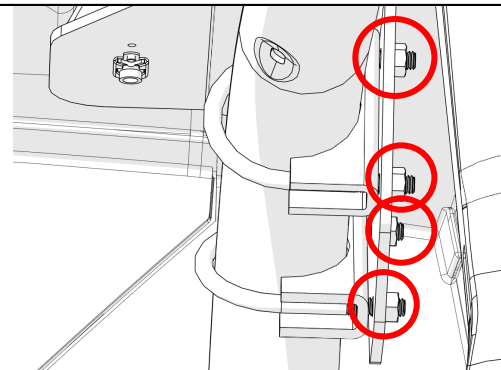
9f

Slide a 13mm open end wrench under the front of the hard top to lightly snug up the (1) OE M8 inner front bolt for both the driver and passenger front mounting brackets.



9g

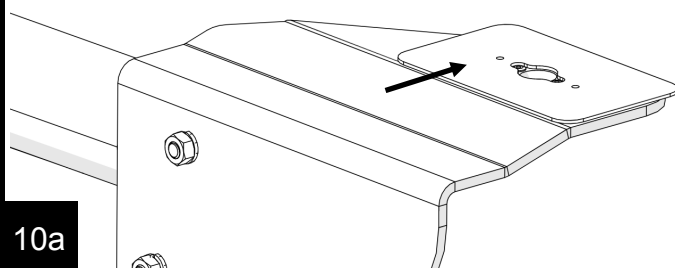
Snug down the 2 rear bracket clamps for both the passenger and driver rear brackets to keep the bracket from shifting. Remove the four #220 M8 torx bolts installed in 8e. **NOTE:** Cover omitted on drawings for clarity.



9h

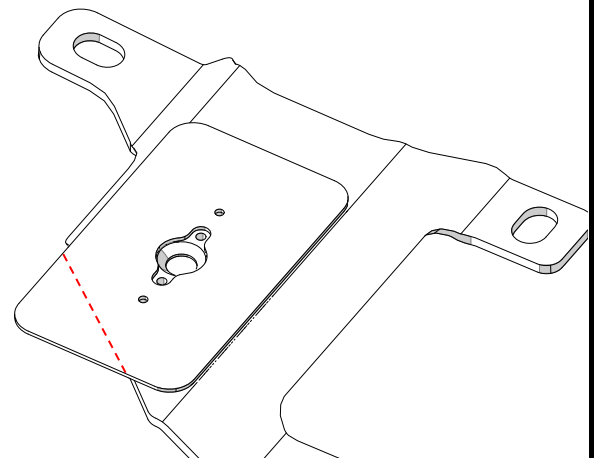
#### REMOVE HARD TOP AND INSTALL SHIMS

Carefully remove the hard top so the support brackets do not shift positions. If there are any gaps greater than 1/16" [1.5mm], use shims to provide a better fit. With the measurements from step 8a, determine number of shims required for each location with a gap. Center hole in shim with floating nut as shown.



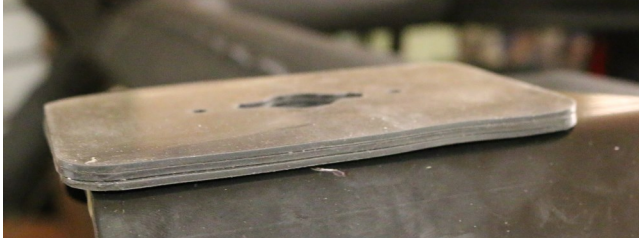
10a

If using shims in the front, trim the back edge of the front shims with an X-ACTO Knife so it does not overhang.



10b

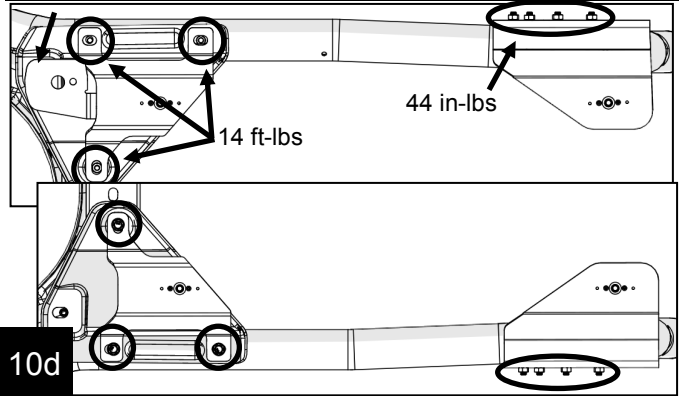
Peel of the backing, then adhere the shim to the bracket. Add additional shims as required. If Desired, two 1/8" rivets can be used to provide a more secure connection for the shims.



10c

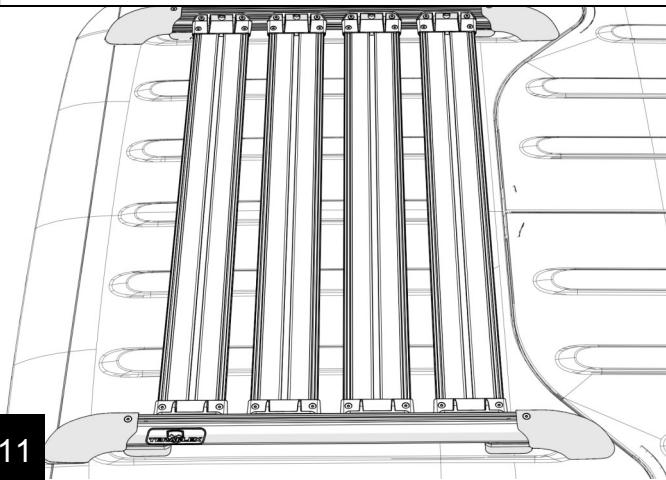
**TORQUE SUPPORT BRACKETS**

Tighten the 3 M8 bolts on both front brackets to 14 ft-lbs [19 Nm] and the four U-bolts on the rear brackets to 44 in-lbs [5Nm]. Also check the bolt under the satellite antenna bracket to be sure it is tight.



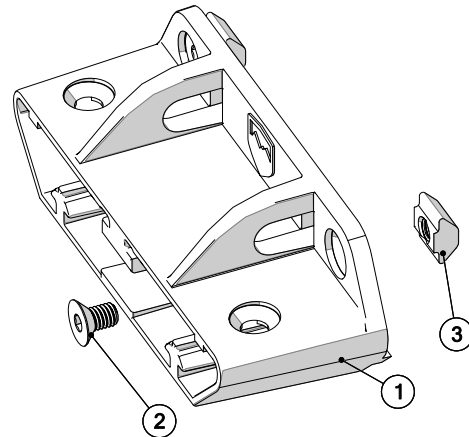
10d

**INSTALL THE SLAT KIT (OPTIONAL ACCESSORY)  
IF NOT INSTALLING SLAT KIT SKIP TO STEP 12**



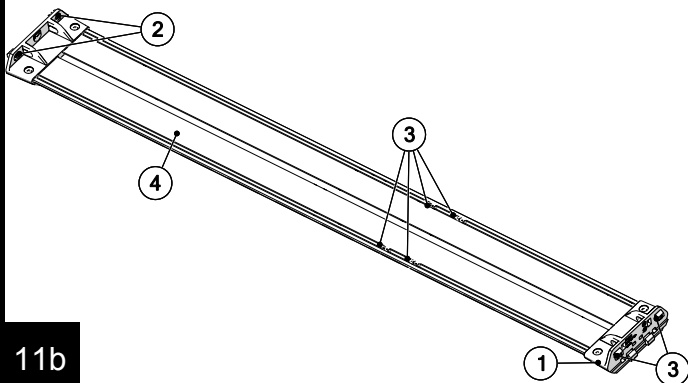
11

Install two of the #729 M6 flat screws (2) and two of the #651390 M6 t-nuts (3) loosely in the locations shown on all eight of the #772310 mounting brackets (1).



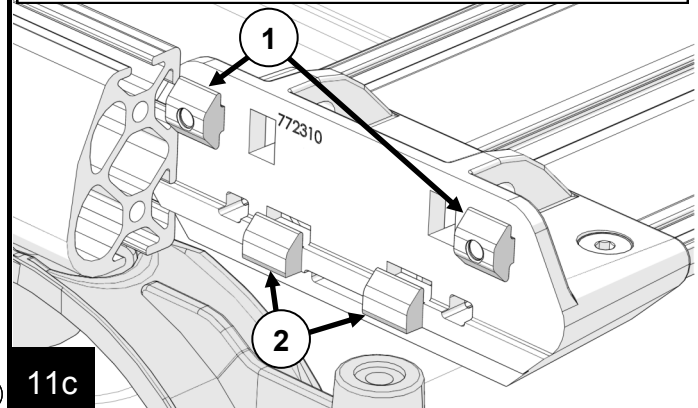
11a

Press on one of the #772310 brackets (1) from the previous step on to a #772300 slat (4). Slide two #651390 t-nuts (3) into each of the two outer tracks, then press another #772310 bracket (1) on the other end. Repeat for all 4 slats.



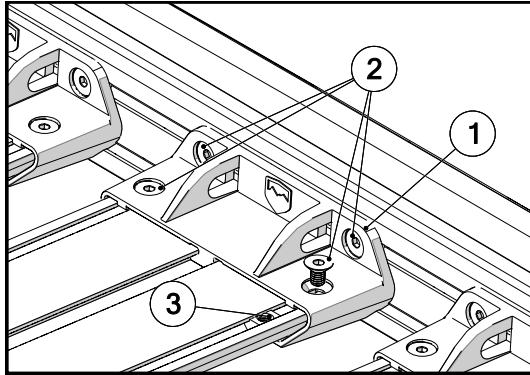
11b

Slide a slat assembly from the previous step into the main rails. Be sure to line up the #651390 t-nut (1) to the upper slot. The tabs (2) on the #772310 bracket will line up with the lower slot. Slide slat forward and repeat for each slat.



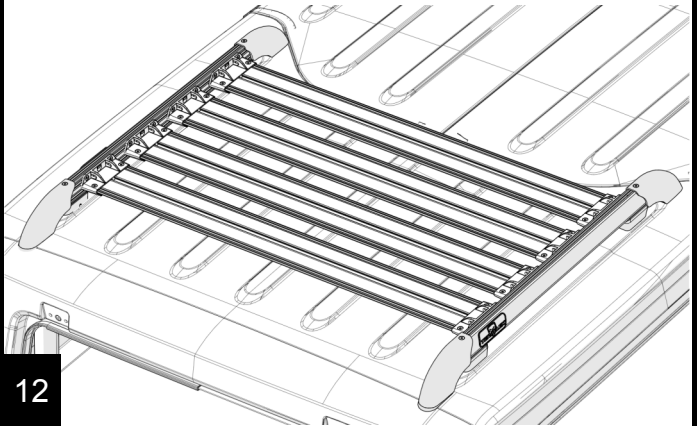
11c

Position the slats along the main rail as desired, keeping the slat perpendicular to the rails. When in position, slide a t-nut (3) under the bracket (1) and thread a M6 flat cap screw (2) into the nut. Repeat for all lower holes. Tighten all upper/lower M6 flat cap screws (2) to 105 in-lbs [12 Nm].



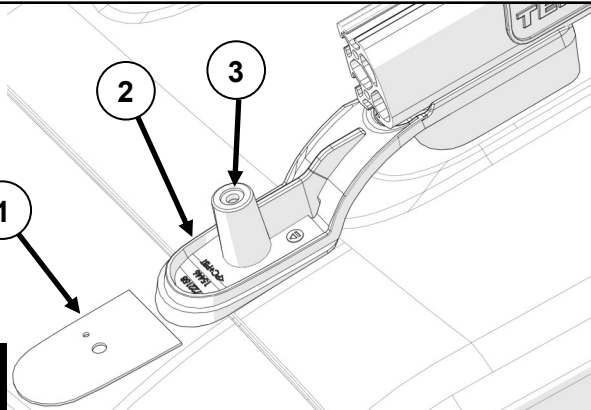
11d

### INSTALL REAR RAIL CAPS



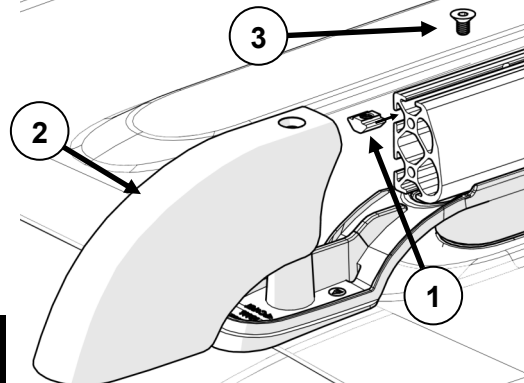
12

Slip the #722123 rear foot gasket (1) under the #722158 passenger rear foot (2). Orient the small hole to the center of the vehicle as shown. Center the larger hole with the rear boss. Insert the #2035 O-ring (3) into the cavity



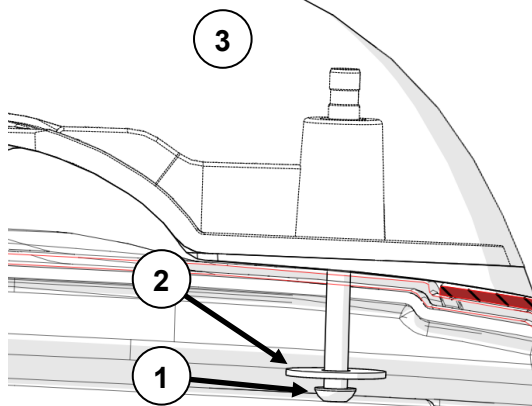
12a

On the passenger side insert a M6 t-nut (1) into the top slot of the main rail. Position the #772151 cap (2) onto the rear foot and install on a #729 M6 flat socket screw (3) into the top hole of the cap and into the T-nut. **TIP: Use a small flat bladed screw driver to help position the T-nut.**



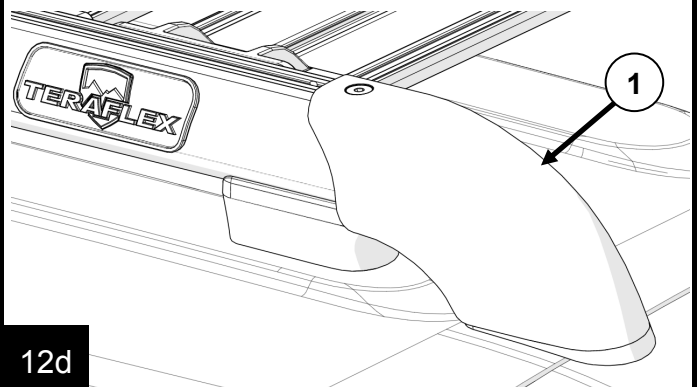
12b

Thread the #225 M6 bolt (1) with a #459 washer (2) through the rear most hole in the hard top and into the cap (3), see section view below.



12c

Repeat for driver side using the #722152 cap (1) with the same hardware.



12d



## User Manual and Hints

### Load Rating:

**Static Load:** The design of the rack transfers the loads to the sport bar, allowing for a evenly distributed static load of 850 lbs [385 kg]. An example of a static load would be a stationary vehicle with a rooftop tent filled with occupants.

**Dynamic Load:** We recommend a maximum load of 200 lbs [90 kg] for the roof rack for safe operation of the vehicle. The weight should be evenly distributed and secured appropriately.

The customer should experiment with the load at reduced speeds to determine if it is safe to carry as there are many different lift heights, spring rates, track width, etc. The roof rack does not increase the total carrying capacity for the vehicle, be sure the load inside and out does not exceed the vehicle load capacity

1

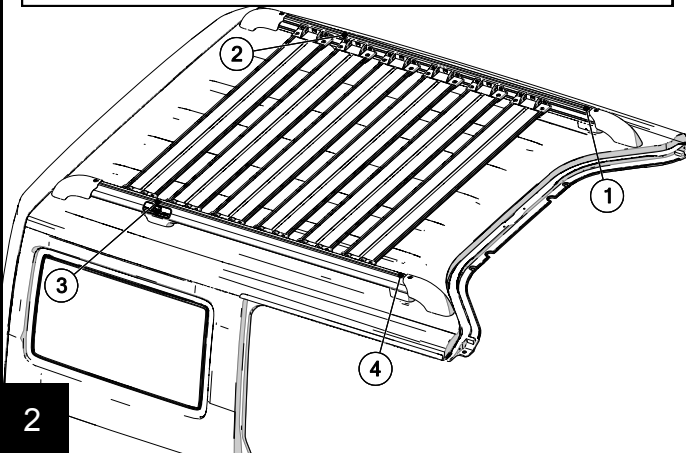
The load carried on the roof rack will make the vehicle's center of gravity higher. Avoid high speeds and abrupt maneuvers, including sharp turns or sudden start or stops. If driving at high speeds, rough road, or long distances, occasionally stop and check that everything is tightly secured.

Long loads like surfboards or wood panels that extend past windshield will be subjected to strong wind forces. They should be secured both in the front and the rear.

Use extreme caution when carrying items with a large flat surface area as wind forces due to natural forces or passing trucks, can add a sudden upward lift on the load

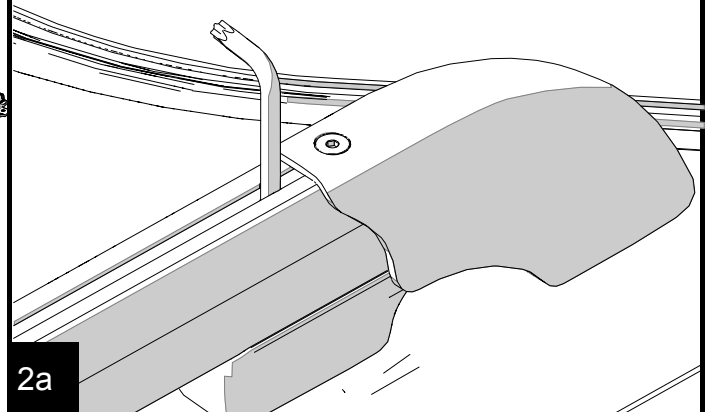
1a

## Standard procedure for removing the hard top with the roof rack installed



2

Use the supplied #393 Torx wrench, completely loosen the 4 M8 bolts in the 4 location shown in step 12 by using the four access hole in the main rail.



2a

Follow the owners manual procedures for the rest of the OEM hardware. With a helper, pull the top straight up to free the bolts, then remove the top.

Reinstallation is the reverse, with a helper, replace the top by setting it straight down. Start threading each of the four M8 bolts using the supplied #393 torx wrench as shown in step 12a. If the bolt is not starting, lift the top straight up and set back down to center the bolt. Tighten the 4 M8 torx bolts to 14 ft-lbs [19 Nm] , then follow the owners manual for the OEM hardware.

2b

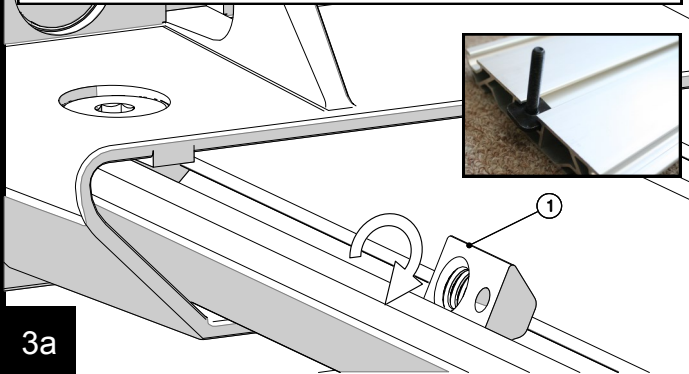
## Mounting Accessories

The TeraFlex Slat kits can also be used to carry cargo or mount existing aftermarket carriers. The slats are available in the single kits #4722051 or #4722061 (Silver/Black), or can be purchased in a set of 4 in the kits #4722052 or #4722062 (Silver/Black). There is room for a total of 5 slats to be mounted, but be aware that each slat will add 4.8 lbs (2.2kg).



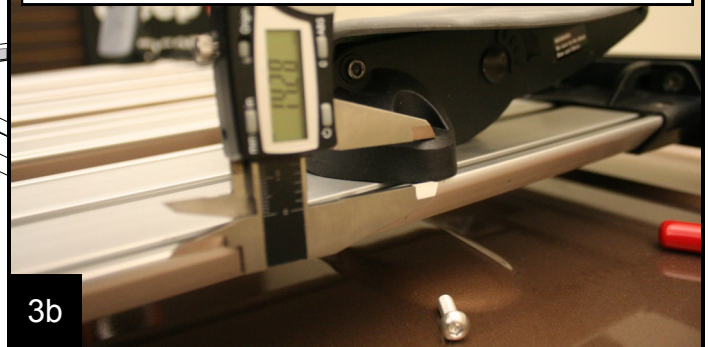
3

For convenience in mounting accessories into an assembled rack, use a #651380 (1) roll in t-nut. It can be rolled in and out of the smaller t-slot instead of being slide in from an open end. A 10 pack can be purchased as part #4651380. The larger center slot is for Thule's large headed t-nuts.



3a

To determine the length of the M6 x 1.0 pitch screw you need to mount an accessory, measure the thickness of the mounting foot and add 7.5 mm for thread engagement in the t-nut. Round up the nearest available screw size and use washers under the screw head if too long to keep the screw from bottoming out in the t-slot.



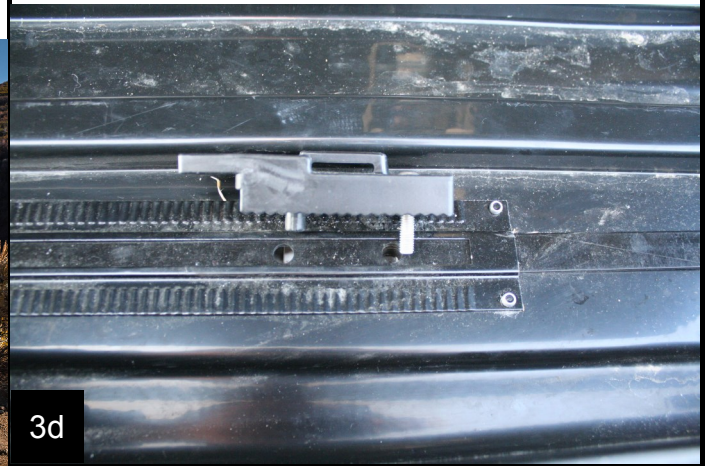
3b

Two slats can be used to mount a cargo box. The slats will keep the box lower than using load bars, helping to reduce wind noise. This vehicle has the Thule Sonic Alpine 633s box mounted with 4 M6 x 1.0 x 30mm long stainless socket head cap screws. The Thule Xadapt 10 kit replaces the standard AcuTight clamps allowing the bolted connection.



3c

Internal view of the Thule Xadapt10 being installed in the sonic box with a M6 x 1.0 x 30mm long screw.



3d

The vehicle below uses two Thule 594XT bike racks mounted directly to the slats to keep the profile low. The front uses a spacer (or washer) for bolt head clearance and the rear uses Thule Xadapt2 with a M6 x 1.0 x10mm long bolt and washer .



3e

This photo shows the front of the Thule 594XT bike rack mounted with a 1/4" spacer and 4 M6 x 1.0 x 15mm long stainless cap screws



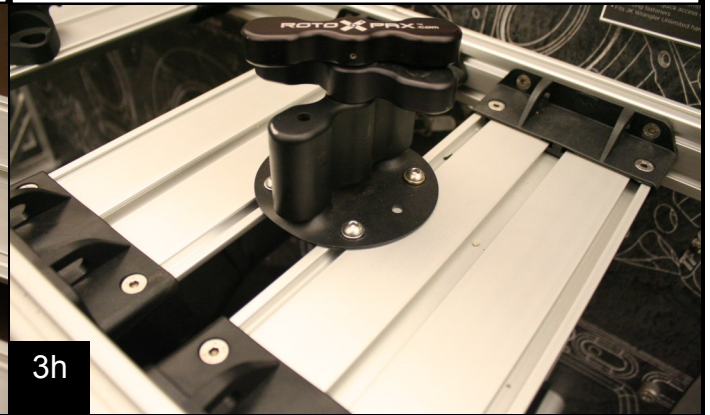
3f

This photo shows the Thule 594XT bike rack mounted in the rear with the Thule Xadapt2 mounted between two slats for correct spacing. Two M16 x 1.0 x 12mm long stainless screws with a M6 washer are used to fasten it to the slat.



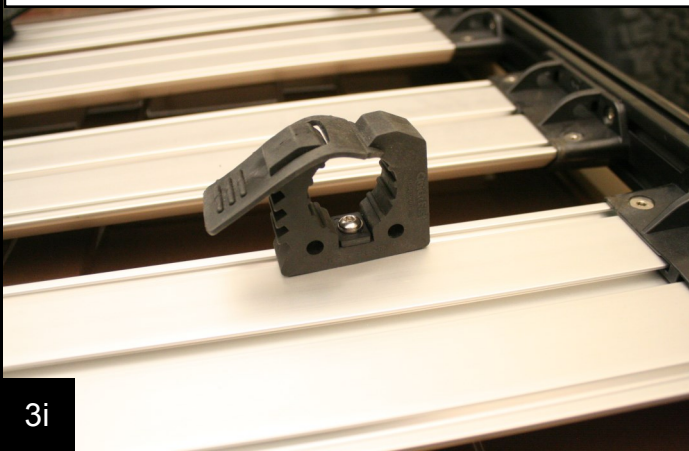
3g

If the bolt spacing for an accessory mount does not match the spacing in the slat, the gap between two slats can be adjusted for the correct spacing. Below is a Rotopax accessory mounted between 2 slats.



3h

Below is a Quick Fist mount installed with a M6 x1.0 x 22mm long bolt with a washer under the head to avoid bottoming out.



3i

This Tepui Roof top tent is set up with tent support bars running across the vehicle. The tent is laid directly on the roof rack rails and bolted with the Tepui hardware, except for using M8 x1.25 x 70mm long hex bolts for the taller rails.



3j

The molded in hook holes are meant to secure light loads. Do not use a ratchet strap as over tightening will cause damage.



3k

Many aftermarket crossbars/ load bars will fit around the main rail, allowing various carriers to be mounted. Shown is a Thule AreroBlade with the 450R Rapid Crossroad Foot Pack. Thule SquareBars can be mounted with the 450 Crossroad Foot.



3l

## PRODUCT INFORMATION

### MAINTENANCE INFORMATION:

It is the buyer's responsibility to have all suspension, drivetrain, steering, and other components checked for proper tightness and torque after the first 100 miles and every 3000 miles after that.

### NOTICE TO INSTALLER:

The enclosed "Warning to Driver" sticker must be installed in the vehicle in driver's view. This sticker is to act as a constant safety reminder when operating the vehicle. It is your responsibility as the equipment installer to install the provided sticker and to forward the product instructions to the vehicle's owner for review. If a "Warning to Driver" sticker or product installation guide were not included in the kit, FREE replacement stickers and instructions are available by request. It is the installer's duty to ensure a safe and controllable vehicle after the modifications have been performed.

### WARNING:

Neither the seller nor the manufacturer will be liable for any loss, damage, or injury directly or indirectly arising from the use of or inability to determine the use of these products. Before using, the user shall determine the suitability of the products for its intended use, and the user shall assume all responsibility and risk in connection therewith.

### WARNING TO DRIVER:

This vehicle has been modified to enhance off road performance and has unique handling characteristics. Use in harsh environments can cause extreme stress on the components. Vehicle should be inspected after being off road to make sure that all the components are in working order and safe to travel on the highway. All fasteners should be checked so that they are at the correct torque specifications as the vibration and stresses from off roading may cause critical fasteners to work loose. Extra care should be taken to inspect the critical components, steering, and brake systems. During each oil change components such as arms, tie rod ends, etc should be greased and checked for excessive wear. Any worn components should be replaced. When returning to the pavement always set or restore tire air pressure to the factory recommendation and connect or engage any disabled sway bar mechanisms. Because of the higher center of gravity and larger tires, this vehicle handles and reacts differently than many passenger cars, both on and off road. You must drive it safely! Extreme care should be taken to prevent vehicle rollover or loss of control, which can result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers. Generally, braking performance and capabilities are decreased when significantly larger/heavier tires are used, especially when used in combination with transfer case low-range reduction kits. Take this into consideration while driving. Do not add, alter or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the TeraFlex product purchased. Mixing component brand is not recommended. TeraFlex Inc. will not be responsible for any altered product or any improper installation or use of our products. We will be happy to answer any questions concerning the design, function, and correct use of our products. It is ultimately the buyer's responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then every 3000 miles. Wheel alignment, steering system, suspension and drive line systems must be inspected by a qualified professional mechanic at least every 3000 miles.

### TERAFLEX PRODUCT WARRANTY:

TeraFlex Inc. warrants TeraFlex Suspension products to the original retail purchaser to be free of defects in material and workmanship for as long as the original purchaser owns the vehicle on which products were originally installed.

Failure to complete regular maintenance (grease every 3000 miles) on TeraFlex FlexArms will void this warranty. All other conditions of the standard TeraFlex product warranty apply.

All TeraLow products are covered by the TeraFlex two (2) year warranty to be free of defects in material and workmanship for two years from date purchased.

TeraFlex axles are covered by a 12-month warranty to be free of defects in materials and workmanship.

This warranty does not cover or include product finish, improperly installed or applied products, improperly maintained products, products or components used for racing or competition or damage due to abuse or neglect, products that fail due to the use of larger tire and wheel combinations.

All returns must be accompanied by an original invoice. It is the customer's responsibility to remove the product from the vehicle. Shipping charges are the responsibility of the customer. TeraFlex Inc. will pay the return freight if the product meets the terms of warranty.

This warranty is for the replacement or repair of defective TeraFlex products only and does not include freight charges, labor charges for removal of or installation of TeraFlex or related products or components, costs incurred due to down time of the vehicle, or lost profits due to vehicle down time.

A returned goods authorization number (RGA#) must accompany any returned products. For more information please contact a TeraFlex customer service representative.

### COPYRIGHT

©Copyright 2014. All rights reserved, TeraFlex Inc. Reproduction of this catalog and/or any of its contents without written permission is strictly prohibited.

TeraFlex® is a registered trademark of TeraFlex Inc. All trade names and logos including but not limited to TeraFlex, FlexArms, RockGuard, Monster, and LCG are protected by law and duplication of trade names and/or logos are strictly prohibited.

TeraFlex Inc. reserves the right to update, discontinue, redesign, modify finish, part number or component build parts if deemed necessary without written notice.

TeraFlex Inc., and any associated dealers are not responsible for misprints or typographical errors that may have inadvertently been made within this instruction sheet.

Jeep® and the Jeep® grill are registered trademarks of Fiat Chrysler Automobiles N.V., and have no affiliation with TeraFlex Inc.

**TERAFLEX**, Inc.  
5680 West Dannon Way  
West Jordan, Utah 84081  
Phone/801.713.3314  
Fax/801.713.2313  
[www.teraflex.com](http://www.teraflex.com)