This product was designed, manufactured, and tested in the Rocky Mountains of Colorado to ensure years of use in the harshest environments. Please adhere to the torque specifications located in this guide and use supplied thread locking compound where indicated.

This guide contains all the information you need to assemble and install your new TRUSS™ bed rack system.

A basic understanding regarding the use hand tools, small power tools, and measuring devices are required. If you are not comfortable completing any of the tasks outlined in this guide you are encouraged to seek professional installation.







### WEIGHT CAPACITY RESTRICTIONS

- Dynamic Weight: 300 Lb. / 136 kg
- Static Weight: 1100 Lb. / 498 kg

Failure to secure cargo loads can result in property damage, serious injury or death. Never operate the vehicle with unsecured cargo loads. It is the responsibility of the end user to verify with each use the proper operating condition of the product.

Periodically inspect product for wear. Replace worn parts as needed.



#### CUIDE USE

- Steps that take place in all TRUSS systems are outlined only once in this guide to avoid redundancy.
- Vehicle specific applications are outlined in sections identified on page 2.
- Provided torque specifications are applicable to all TRUSS variants.

### HARDWARE IDENTIFICATION

The chart below contains information about the individual bags included with your master hardware kit.

Additional bags can be added based on order selections.

9006 Master Hardware Kit 2023

The supplied hardware kits are bulk packed to expedite shipping. Some applications will have excess hardware with installation completed.



BAG ID	DESCRIPTION
9000.2	Armor to Leg Hardware
9000.4	Cross Bar to Leg Hardware (Lock washers no longer required)
9000.7	TRUSS to Cargo Track Hardware
9000.13	PEM Base Hardware
9000.20	sofTOPPER Leg Extension Hardware (Ships with sofTOPPER TRUSS only)
9000.21	sofTOPPER Base Hardware Pack (Ships with sofTOPPER TRUSS only)
9000.26	Diamondback Adjustable Armor Assembly Hardware (Diamondback only)

Your kit will include additional parts and hardware based on order preferences. Refer to sections of guide for TRUSS models for specific information on required parts, steps, and tools to complete your installation.

## TORQUE SPECIFICATIONS

The supplied torque specifications must be applied during final assembly of the TRUSS system.

Failure to verify proper torque on fasteners can result in structural damage to the TRUSS legs.

Periodically inspect all hardware and rest to specified ratings as needed.



Description	Inch Pound	nM	Tool Size
Cargo Base PEM Stud	125	14.2	1/2
Armor to Leg	188	19.1	3/16
Load Bar	77	7.0	5/32
Cargo Track Bolt	188	19.1	5mm/13mm
AFS Bolt On Hardware	188	19.1	5mm/13mm
DiamondBACK Base PEM Stud	125	14.2	13mm
ramBOX Base PEM Stud	125	14.2	13mm
ramBOX Cargo Track Hardware	188	19.1	5mm
ramBOX Upper Track Hardware	77	7.0	4mm
eX > Truss (All) Mating Hardware	77	7.0	5/32
reTRAX Truss Track Hardware	77	7.0	13mm
Ranger Base PEM Stud	125	14.2	13mm
Bed Cover Base Cargo Track	188	19.1	5mm
Bed Cover Riser PEM Stud	125	14.2	13mm
sofTOPPER Leg Assembly	188	19.1	5mm/13mm

## LOAD PLATE VARIANTS

The load plates (Armor) shipped with your TRUSS will vary based on your application.

There are five (5) different variants:

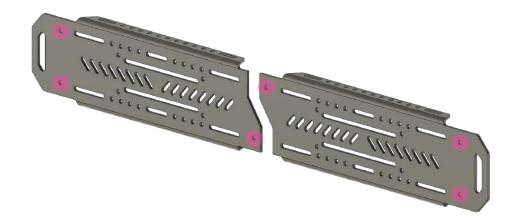
- · SB (Short Bed)
- · LB (Long Bed)
- · AFS (Adaptive Full Size)
- · SH (Short Height)
- · DB (DimaondBACK-Adjustable Length)

The plates are machined and CNC bent for increased rigidity.

While designed to allow easy installation of the most popular gear to your TRUSS system not all products are supported and will require additional parts/hardware NOT included with TRUSS kit.

### LOAD PANEL DATA

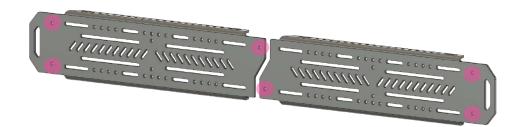
Product	Assembled Length (Assembled Side) Inch(mm)	maxTRAX Compatibility	Leg Compatability
SB Armor	50.75 ( <b>1290</b> )	Included	11,19,22,sofTOP
LB Armor	65.70 ( <b>1668</b> )	Included	11,19,22,sofTOP
AFS Armor	71.75 ( <b>1819</b> )	Included	11,19,22,sofTOP
SH Armor	46.5 ( <b>1181</b> )	No	6
DB Armor	Variable	No	11,19,22,sofTOP



# SB Short Bed Armor

One Side Shown

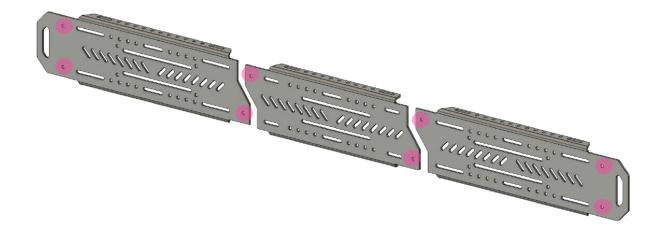
- · Four identical pieces supplied with kit.
- · Can be used on either side.
- · Anchor points shown in PINK.



# LB Long Bed Armor

One Side Shown

- · Four identical pieces supplied with kit.
- · Can be used on either side.
- · Anchor points shown in PINK.



## AFS Short Bed Armor

One Side Shown

- · Six Pieces Supplied with Kit.
- · Can be used on either side.
- · Mid Sections noticeably different.
- · Anchor points shown in PINK.



## SH Short Height

One Side Shown

- · Four Pieces Supplied with Kit.
- · Can be used on either side.
- Proprietary to the 6" TRUSS Leg.
- Will NOT align to mounting holes on 11, 19, 22, or sofTOPPER Legs.
- The maxTRAX<sup>™</sup> mounting plates are NOT compatible with this variant and are NOT included.
- · Anchor points shown in PINK.



## DB DiamondBACK™ Adjustable Length

One Set of Load Panel Shown

- Eight Pieces (4X Each) Supplied with Kit.
- · Can be used on either side.
- Adjustable length set by user to align with anchor cleat locations on DiamondBACK™ covers.
- · Requires additional assembly to set required length of armor (9000.26).
- The maxTRAX<sup>™</sup> mounting plates are NOT compatible with this variant and are NOT included.
- Assembly information included in DiamondBACK Section.
- Anchor points shown in PINK.
- · Assembly points shown in ORANGE.

DiamondBACK armor requires the use of a tape measure to determine assembly length. Details are covered in the DiamondBACK armor section.

#### **LEG VARIANTS**

The legs included with your TRUSS are the weight bearing component of the system and are available in the following heights:

- · 6"/150mm
- · 11"/280mm
- · 19"/480mm
- · 22"/555mm
- sofTOPPER (Adjustable Height)

Depending on your application you might be required to attach mating feet to the lower leg assembly for compatibility with your vehicle. Mating feet are application specific and are determined by the information on your original order.

The shipping team will determine the proper mating system required (if any) and it will be included in your kit.

### LEG DATA

PRODUCT	MATING FEET REQUIRED	MATING FOOT TYPE
reTRAX/Pace Edwards	NO	NA
AFS reTRAX/Pace Edwards	NO	NA
Cargo Track Attachment	YES	Cargo Base PEM
AFS Cargo Track Attachment	YES	Cargo Base PEM
AFS Drill	YES	Cargo Base PEM
DiamondBACK	YES	DiamondBACK Base PEM
Ford Ranger™	YES	Ranger Base PEM
*IIIIIII* Gladiator	YES	Cargo Base PEM
sofTOPPER	YES	Proprietary System
ramBOX	YES	ramBOX Base PEM
bedCOVER TRUSS*	YES	Proprietary System

<sup>\*</sup>Not all bed cover products are compatible with bedCOVER TRUSS. Contact technical support for more details.

\*\*Peripheral parts i.e. Diamond Back Bed Covers, reTRAX/Pace Edwards bed covers, Soft Topper soft camper shells,
BesTOP soft camper shells are separate products sold and serviced by outside companies and are **NOT** included
with the purchase of your TRUSS system from upTOP. (Crazy we have to mention that but, yeah. People ask.)

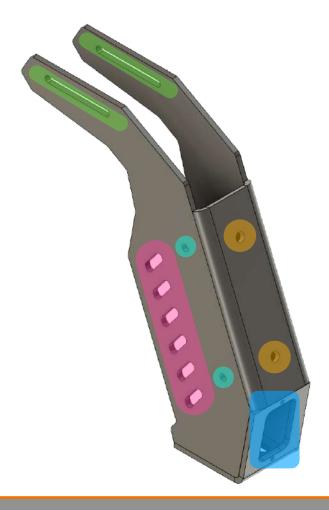


## TRUSS 6

- The 6 Inch (150mm) Leg is reTRAX compatible as it ships.
- · Requires additional parts (included with order) for other applications.

## **ANATOMY**

- The area(s) highlighted in GREEN are where your load bars will attach.
- The area highlighted in PINK is machined for the Perfect Bungee™ product.
   The circles highlighted in ORANGE are where your armor will attach.



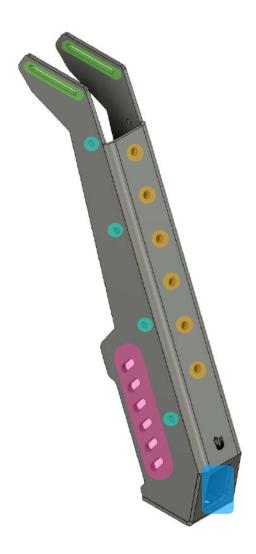
## TRUSS II

- The 11 Inch (280mm) Leg is reTRAX compatible as it ships.
- · Requires additional parts (included with order) for other applications.

#### **ANATOMY**

- · The area(s) highlighted in GREEN are where your load bars will attach.

- The area highlighted in PINK is machined for the Perfect Bungee™ product.
   The circles highlighted in ORANGE are where your armor will attach.
   The area highlighted in BLUE is how you access inside the leg to attach mating feet. It's also machined for a Baja Designs™ rock light.
- The holes highlighted in TEAL are anchor points for hiding wiring. Yeah. We thought of that too.

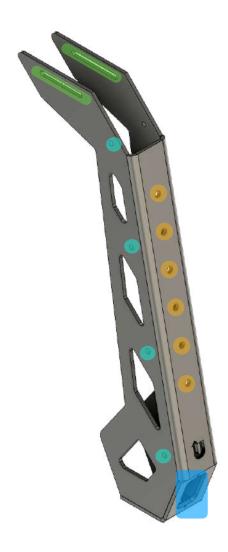


## **TRUSS 190**

- The 19 Inch (480mm) Leg is reTRAX compatible as it ships.
- · Requires additional parts (included with order) for other applications.

#### **ANATOMY**

- · The area(s) highlighted in GREEN are where your load bars will attach.
- The area highlighted in PINK is machined for the Perfect Bungee™ product.
   The circles highlighted in ORANGE are where your armor will attach. You can use any position that works for you. Additional sets of armor (sold separately) can be stacked for increased mounting surface area.
- The area highlighted in BLUE is how you access inside the leg to attach mating feet. It's also machined for a Baja Designs™ rock light.
- The holes highlighted in TEAL are anchor points for hiding wiring.



### TRUSS 220

- The 22 Inch (555mm) Leg is reTRAX compatible as it ships.
- · Requires additional parts (included with order) for other applications.

### **ANATOMY**

- The area(s) highlighted in GREEN are where your load bars will attach.
- The circles highlighted in **ORANGE** are where your armor will attach. You can use any position that works for you. Additional sets of armor (sold separately) can be stacked for increased mounting surface area.
- The area highlighted in BLUE is how you access inside the leg to attach mating feet. It's also machined for a Baja Designs™ rock light.
- The holes highlighted in TEAL are anchor points for hiding wiring.

The 22" leg angle matches the angle of the cab on Jeep Gladiator™ perfectly. In other applications it might protrude slightly when viewing the vehicle from the front or rear.



#### TRUSS SOFTOPPER

- Designed for compatibility with BesTOP™ and Softopper™ brand products.
- · Includes proprietary mating feet (not shown) that are application specific.

#### **ANATOMY**

- The area(s) highlighted in GREEN are where your load bars will attach.
- The area highlighted in PINK is machined for the Perfect Bungee™ product.
- The circles highlighted in **ORANGE** are where your armor will attach. You can use any position that works for you. Additional sets of armor (sold separately) can be stacked for increased mounting surface area.
- The area highlighted in **BLUE** is how you access inside the leg to attach mating feet. It's also machined for a Baja Designs™ rock light.
- The holes highlighted in RED are how you dial in the desired height and mate the upper leg with the lower leg.

The 22" leg angle matches the angle of the cab on Jeep Gladiator™ perfectly. In other applications it might protrude slightly when viewing the vehicle from the front or rear.

The sofTOPPER TRUSS has a minimum height of 22.50" and a maximum height of 27.00" and is adjustable in .500" increments.

#### LOAD BARS

The load bars included with your TRUSS kit span the bed of your truck and distribute the cargo load evenly to the vehicle for maximum weight capacity.

The length of the load bar will vary based on your make and model. The proper length load bar is selected from your order information and packed with your shipment.

You will need to assemble each of the load bars as shown in the following illustrations.

Depending on the product you ordered it will come with the following:

- Three (3) Load Bars (6 Leg systems)
- Four (4) Load Bars (8 leg systems)

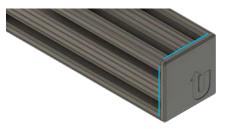


- · Align the end cap to one end of the load bar.
- Push into position until the back of the cap is flush with the edge of the load bar.
- Repeat the process AT ONE END on all of your load bars. It doesn't matter which end. Just pick one and push.

#### NOTE

You can apply a dab of silicone to the posts on the end cap for a more secure fit.

- A properly inserted cap should fit flush as shown in BLUE.
- If you have trouble you can tamp it in place with a mallet. It's made of plastic. Be gentle.





- At the opposite end of the load bar install two (2) threaded inserts into the TOP slot on BOTH sides of the load bar.
- Align the cap and install to keep the threaded inserts in the load bars.
- Repeat the process with your remaining load bars.



- The threaded inserts will slide freely from one end of the load bar to the other end by hand so you can align them to the slots in the truss legs when you get to that step.
- Sit the load bars to the side and gather your TRUSS legs.



IF YOU ARE INSTALLING A reTRAX/Pace Edwards TRUSS system you can skip this section and proceed to the next step.

For all truss systems other than reTRAX/ Pace Edwards it is necessary to install the proper base system to your legs so that you have the required mating surfaces to anchor the TRUSS system to your truck bed.

## The various applications are shown in this section in the following order:

- Cargo Base Variant (Including AFS Drill applications and Jeep Gladiator)
- SofTOPPER Variant
- DiamondBACK™ Variant
- Ford Ranger<sup>™</sup> Variant
- Dodge ramBOX™
- bedCOVER Variant

### TOOLS REQUIRED

- · 13mm wrench (Ratcheting preferred) and/or
- Ratchet with 13mm socket
- 5/32 Allen wrench (sofTOPPER Only)
- 7/16 wrench (sofTOPPER Only)
- · Ratchet with 6" Extension and 7/16 Socket (sofTOPPER only)

## HARDWARE REQUIRED

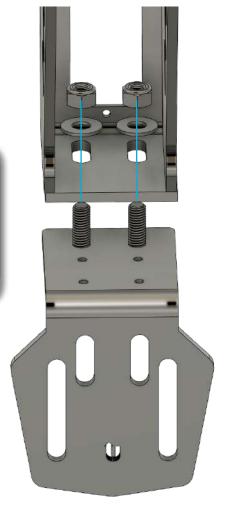
- 9000.13
- 9000.21 (sofTOPPER only)

## CARGO BASE VARIANT

- · Cargo Rail
- AFS Drill Applications
- Jeep Gladiator
- · Colorado/Canyon/Bison

- Align the slots in the bottom of your TRUSS leg to the studs on the cargo track base.
- Install the hardware as shown and start by hand.
- · Repeat the process on all of your TRUSS legs.

### **NOTE**





- Use a 13mm wrench or a ratchet with 13mm socket to tighten the hardware.
- The placement within the slot isn't important at this time and can be adjusted later if needed.
- Just make sure all of your legs/bases are aligned the same (even) within the slot.
- · Repeat the process for all of your legs.

### sofTOPPER Variant

- SofTop/BesTOP equipped vehicles.
- Base Variant Explanation



- The bases with the vertical slots shown here in PINK will be attached to four (4) of your legs.
- These legs will be placed at the front and rear of the TRUSS and attach to your bed rails.

- The flat bottom bases at the right will attach to the two (2) remaining legs.
- Flat bottom bases go in the middle of the TRUSS assembly to allow room for the folding mechanism of your soft topper to articulate.



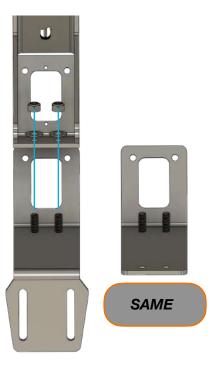
## sofTOPPER Variant

- SofTop/BesTOP equipped vehicles.
- Hardware Attachment

- Align the holes in the bottom of your TRUSS leg to the studs on the cargo track base.
- · Install the hardware as shown and start by hand.
- · Repeat the process on all of your TRUSS legs.

#### NOTE

We are in transition to locking flange nuts. Your kit might not include flat washers. If not present, ignore.







- Use a 13mm wrench or a ratchet with 13mm socket to tighten the hardware.
- · Repeat the process for all of your legs.

#### **NOTE**

- The remaining holes shown in PINK are for the hardware located in BAG ID 9000.21
- Install two bolts and two nuts into each leg base and tighten with a 4mm Allen wrench and 10mm wrench.
- Repeat the process to install the hardware into your remaining legs.

## DiamondBACK™ Variant

- DiamondBACK Bed Cover Equipped Vehicles
- Hardware Attachment

 Place the DiamondBACK base so that the mounting slot shown here in PINK matches the image at the right.





- Align the slots in the bottom of your TRUSS leg to the studs on the cargo track base.
- Install the hardware as shown and start by hand.
- Repeat the process on all of your TRUSS legs.

# NOTE

- Use a 13mm wrench or a ratchet with 13mm socket to tighten the hardware.
- The placement within the slot isn't important at this time and can be adjusted later if needed.
- Just make sure all of your legs/bases are aligned the same (even) within the slot.
- · Repeat the process for all of your legs.

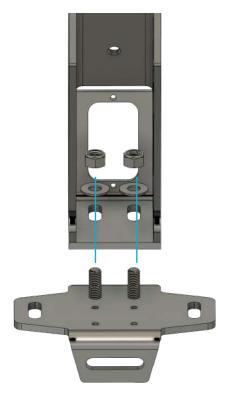


# Ford Ranger™ Variant

- Hardware Attachment
- Drilling Required

- Align the slots in the bottom of your TRUSS leg to the studs on the cargo track base.
- · Install the hardware as shown and start by hand.
- · Repeat the process on all of your TRUSS legs.

### **NOTE**



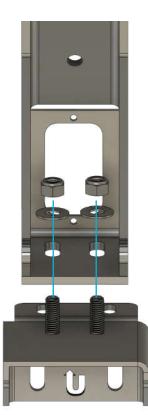


- Use a 13mm wrench or a ratchet with 13mm socket to tighten the hardware.
- The placement within the slot isn't important at this time and can be adjusted later if needed.
- Just make sure all of your legs/bases are aligned the same (even) within the slot.
- · Repeat the process for all of your legs.

### ramB0X™ Variant

- ramBOX Equipped Vehicles
- Hardware Attachment





- Align the slots in the bottom of your TRUSS leg to the studs on the cargo track base.
- · Install the hardware as shown and start by hand.
- Repeat the process on all of your TRUSS legs. **NOTE**

- Use a 13mm wrench or a ratchet with 13mm socket to tighten the hardware.
- The placement within the slot isn't important at this time and can be adjusted later if needed.
- Just make sure all of your legs/bases are aligned the same (even) within the slot.
- · Repeat the process for all of your legs.



### ARMOR ATTACHMENT

The assembly method and hardware are identical for the following variants:

- Short Bed (Includes sofTOPPER)
- · AFS
- · Long Bed
- Short Height

Refer to page 5-13 for detailed alignment information.

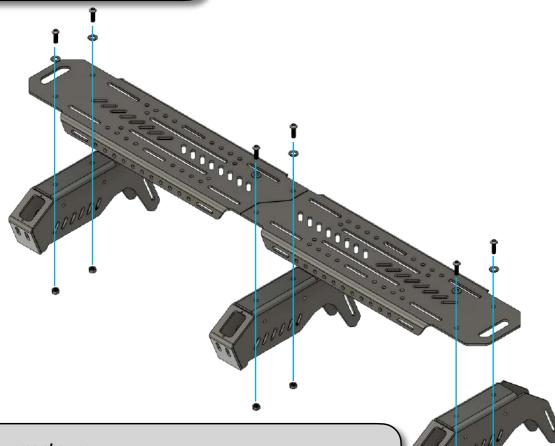
## TOOLS REQUIRED

- 1/2 wrench (Ratcheting preferred) and/or
- Ratchet with 1/2 socket
- 6" Extension
- · 3/16 Allen wrench

## HARDWARE REQUIRED

- 9000.2 (All models)
- 9000.26 (Additional/provided with DiamondBACK only)

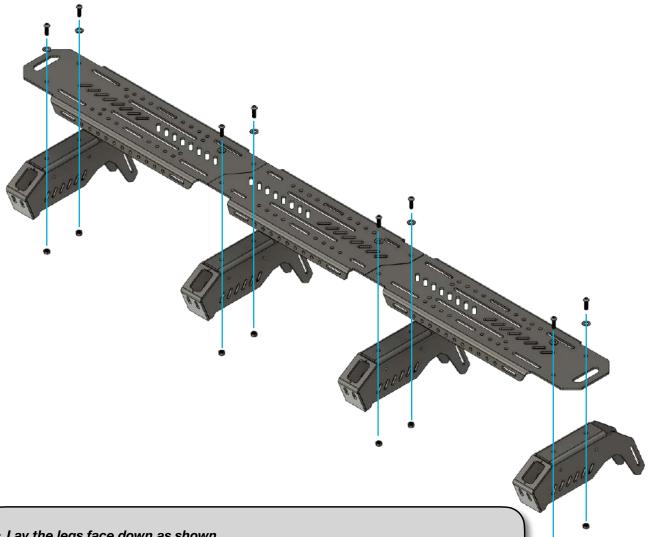
- SB Short Bed
- AFS SB Short Bed AFS
- · LB Long Bed
- · SH Short Height
- Jeep Gladiator™
- Ford Ranger™
- ramBOX™
- · Colorado/Canyon/Bison



- · Lay the legs face down as shown.
- · Align the anchor points in the armor to the machined holes in your legs.
- · 6" and 11" Legs are fixed position/non-adjustable.
- sofTOPPER, 19" and 22" have multiple holes to allow you to place the armor where you see fit. There is no wrong answer.
- · Install the hardware as shown.
- Use the 3/16 Allen wrench and ratchet/1/2 socket to tighten the armor into place.
- · Repeat the process for the other side of your TRUSS.
- · Proceed to TRUSS Installation for your application.

#### NOTE

- AFS Long Bed
- · Hardware Bag 9000.2



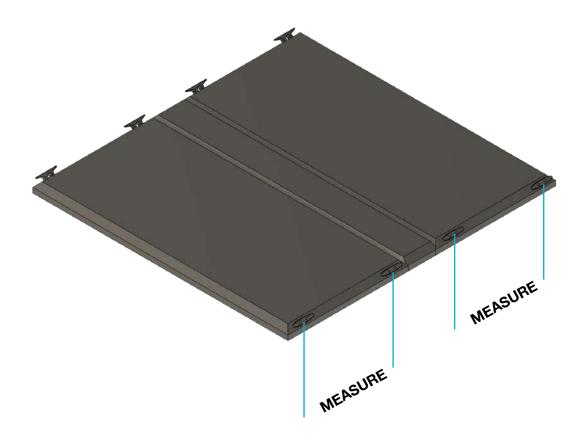
- · Lay the legs face down as shown.
- · Align the anchor points in the armor to the machined holes in your legs.
- 6" and 11" Legs are fixed position/non-adjustable.
- 19" and 22" have multiple holes to allow you to place the armor where you see fit. There is no wrong answer.
- · Install the hardware as shown.
- Use the 3/16 Allen wrench and ratchet/1/2 socket to tighten the armor into
- · Repeat the process for the other side of your TRUSS.
- · Proceed to AFS Installation/AFS.

## NOTE

DiamondBACK™

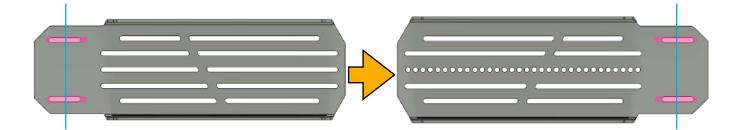


You need to take precise measurements in this step to get the information required to assemble your armor panels before attaching them to your legs.



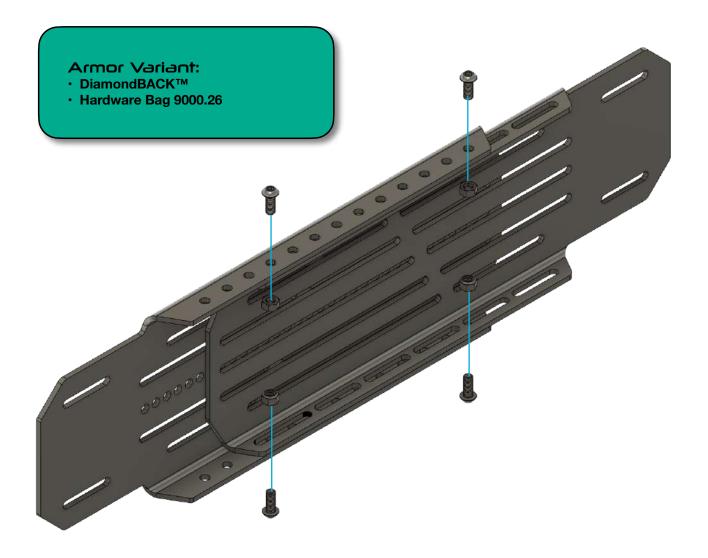
- Some DiamondBACK™ covers have different spacing on the front and back hinge panels.
- Measure and record the distance from center to center of the anchor cleat on the front section:
- Measure and record the distance from center to center of the anchor cleat on the rear section:\_\_\_\_\_

DiamondBACK™



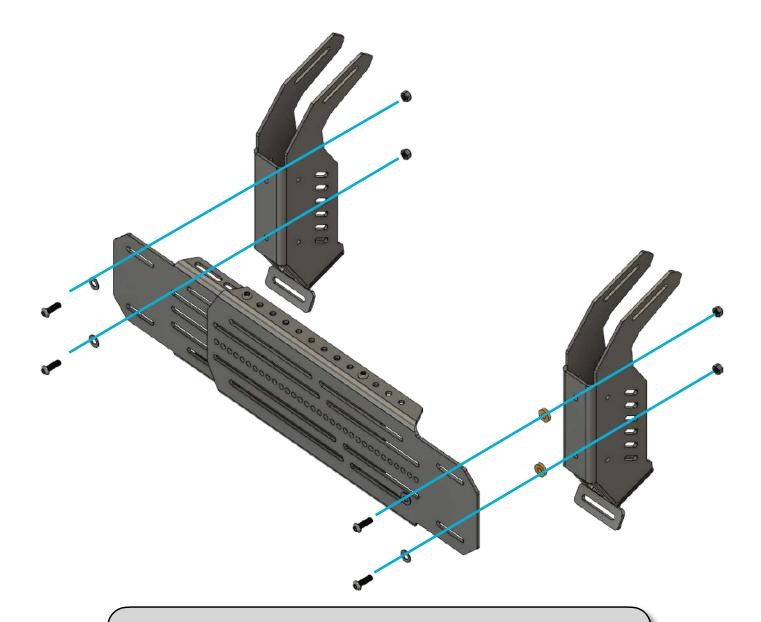
- Slide the pieces together as shown until the CENTER of the slots shown in PINK match the numbers recorded for cleat measurements.
- With the parts pushed together you will notice areas where the SLOTS and HOLES align with each other. This is where you will install the mating hardware to assemble your armor to the correct length. The alignment will be obvious across the top and bottom of the panel where it is bent.





- · Align and install the hardware as shown.
- Hardware positions will vary based on application. Try to keep them as far apart as possible for maximum panel rigidity.
- Use a 3/16 Allen wrench and 1/2 wrench to tighten into place.

- DiamondBACK™
- Hardware Bag 9000.2



- · Align and install the hardware as shown.
- · Use the 3/16 Allen wrench and ratchet/1/2 socket to tighten the armor into
- Place the provided offset spacers shown here in ORANGE as shown.
  Repeat the process to assemble the rest of your armor/legs.
- · Proceed to TRUSS Installation/DiamondBACK.

### TRUSS TO VEHICLE

This section illustrates the task of mating your TRUSS sides to your vehicle. These are application specific steps and are in the following order:

- Cargo Rail Variant
- AFS Drill Variant
- reTRAX™ Variant
- Ford™ Ranger
- DiamondBACK™ Variant
- sofTOPPER Variant
- · Colorado/Canyon/Bison Variant
- ramBOX™ Variant
- BedCOVER Variant

## TOOLS REQUIRED

- · 5mm Allen wrench
- 13mm wrench
- Cordless Drill (AFS Only)
- Drill Bit (AFS only)
- · Tape Measure
- · Marker (AFS Only)

### HARDWARE REQUIRED

 Specific hardware will be covered at the onset of each variant throughout this guide.

### CARGO RAIL VARIANT

- Requires no drilling or modification of factory installed components.
- · Direct bolt for Toyota/Jeep.

- Only applicable to vehicles with a factory installed anchor channel INSIDE the bed rails.
- · DOES NOT cover AFS Drill applications.

## HARDWARE REQUIRED

- 9000.7
- · 3205ST Studded Cargo Insert (1 per leg)

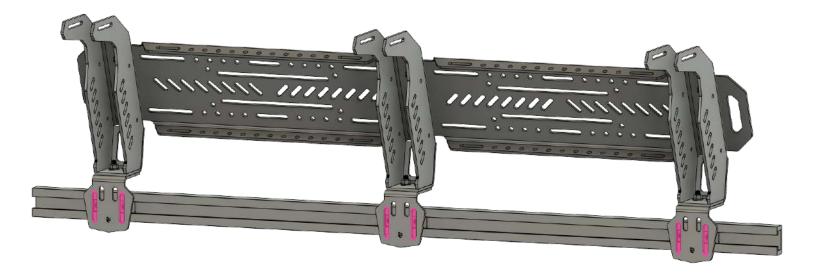
· Remove any modular factory tie down points

prior to installing threaded inserts.

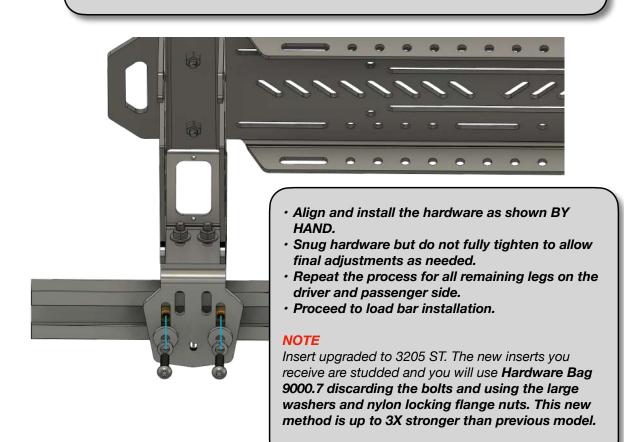
2022 and beyond products DO NOT require or include the TRUSS washer system.







- · Place one side of truss on bed side and center it.
- · Align threaded inserts to vertical slots in leg. Shown here in PINK.



#### AFS Drill Variant

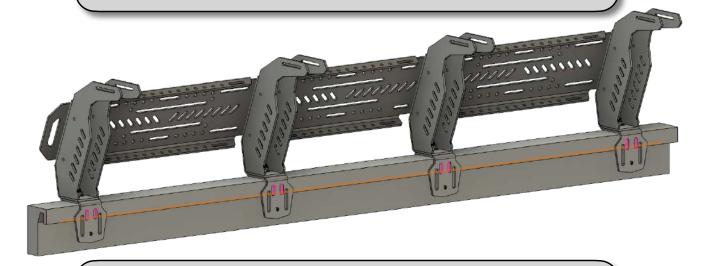
AFS (Adaptive Full Size) TRUSS systems can be installed on virtually any truck. This section covers the drilling application for trucks without cargo rails or one of the available bed cover fitment options.

- · The Long Bed version is shown for reference.
- · Short bed installation would be the same method.

#### HARDWARE REQUIRED

- 9000.7
- · Drill Bit 23/64 Provided with kit.

2022 and beyond products DO NOT require or include the TRUSS washer system.



- · Place one side of truss on bed side and center it.
- Check the area behind the lip shown here in **ORANGE** for hand clearance to install the rear hardware assortment. You need to be able to get your hands up inside to install washers/nuts and have enough access to use a wrench.
- Although you can use any of the vertical slots in the base of the leg most AFS
  fitments require the use of the inner vertical slots shown here in PINK in order
  to have enough surface area to properly clamp the bases to the walls of the
  truck bed.
- Once you've verified room to work mark the slot locations that need to be drilled and REMOVE THE TRUSS side from the vehicle.
- Record a measurement of the distance from the first hole location marked nearest the cab of the truck:
- Repeat the process on the opposite side of the vehicle using the above number as a reference to locate the opposing side of the TRUSS so that it is even with the first side.

## AFS Drill Variant



- Always use proper safety equipment when using power tools.
- · Chips from drilling can be hot.
- Refer to power tool user guide for safety recommendations.

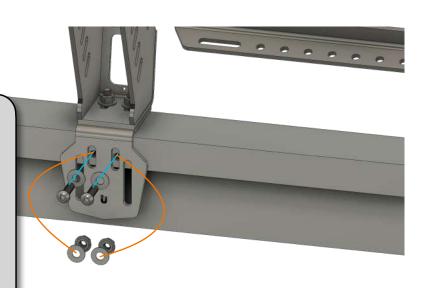


- Use a cordless drill and the supplied drill bit to drill all of your hole locations on both sides of the bed rails.
- Clean away any burrs left over and place the assembled TRUSS sides back onto the vehicle.
- Position the slots in the bases back over the holes locations.

- · Align the hardware to the drill holes as shown.
- · The bolt/washers go through the front.
- Reach inside the bed rail and install the additional washer/nut to the studs.
- · Repeat the process on all legs.
- Use a 5mm Allen wrench/13mm wrench to tighten the hardware into place.
- · Proceed to load bar installation.

#### NOTE

We are transitioning to locking flange nuts. Your kit may or not include them during the transition.





- Only applicable to vehicles equipped with a reTRAX™ or Pace Edwards™ bed cover.
- · See website for complete list of compatible products.

#### HARDWARE REQUIRED

- 9000.13
- 4075 Dual Studded Inserts



#### **UPDATE**

Kits shipping in 2023 will contain the 4075 dual threaded inserts shown at left. Each leg requires (1) 4075 so instead of installing the six small inserts pictured below install one 4075 for each leg on each side of your bed cover.

See update above for current hardware.

- Each leg in your TRUSS kit will require one 4075 dual threaded insert. Disregard the individual inserts shown in yellow as these are discontinued.
- Install the required amount into each side of your bed cover into the extrusion channels as shown above.





You'll need a tape measure for this step to get the TRUSS centered on your bed cover.



#### NOTE

Use hardware bag 9000.13 to complete this step. Bag 9000.13 contains washers and nuts that will connect to the updated 4075 dual threaded studs included with your TRUSS kit. **You WILL NOT have bolts for this step.** 

- Measure the bed and center one side of the TRUSS into position.
- Slide the 4075 parts in the channel to align under each TRUSS leg.
- Place the legs aligning the slots to your stude and install the washers/nuts and tighten with a 13mm wrench.
- Repeat the process on the opposite side of the vehicle verifying that it is equal distance and even with the opposing side.
- · Proceed to Load Bar Installation.



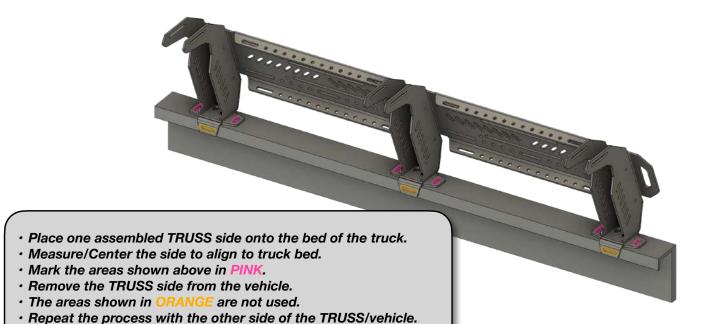
- Always use proper safety equipment when using power tools.
- · Chips from drilling can be hot.
- Refer to power tool user guide for safety recommendations.

The Ford ™ Ranger requires drilling into the TOP plate of your bed side to sufficiently anchor the TRUSS system and support cargo loads.

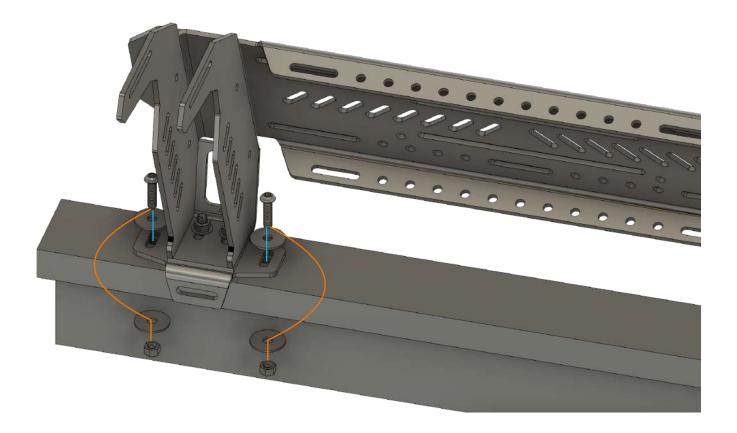
# HARDWARE REQUIRED

• Use a cordless drill and the supplied drill bit to make the holes

- 9000.7
- · Drill Bit (Provided with kit)



for mounting.



- · Align the hardware to the drill holes as shown.
- · The bolt/washers go through the top.
- · Reach under the bed rail and install the additional washer/nut to the studs.
- · Repeat the process on all legs.
- Use a 5mm Allen wrench and ratchet/13mm socket to tighten the hardware into place.
- · Repeat the process on all remaining legs.
- · Proceed to Load Bar Installation.
- We are in transition to provide locking flange nuts to be used on the bolts included with 9000.7

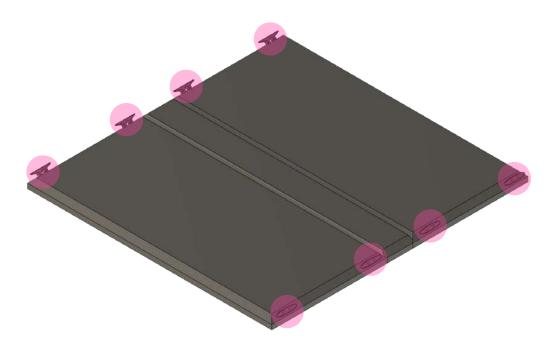
- Only applicable to vehicles equipped with a DiamondBACK™ bed cover.
- · See website for complete list of compatible products.

This product is intended for use on DiamondBACK products with factory installed anchor cleats and as such you are expected to repurpose the hardware that secures the anchor cleats to the cover to attach the bases of your DiamondBACK TRUSS.

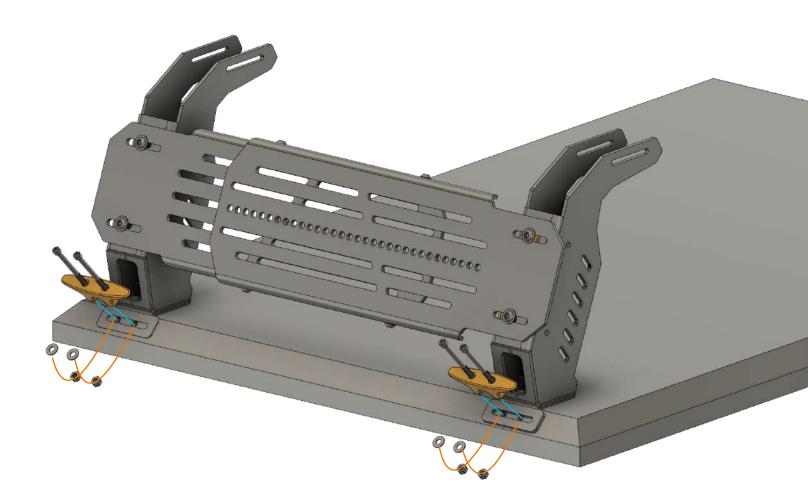
In the event your product DOES NOT have the anchor cleats you will have to measure, mark, and drill your bed cover in order to mount the DiamondBACK TRUSS and you will require the following hardware:

# HARDWARE REQUIRED

• 9000.7



- · Remove and retain the hardware for the anchor cleats shown here in PINK.
- If not equipped you will need to determine the size that would best fit your
   DiamondBACK™ cover, assemble your TRUSS armor to that effective size and use the
   assembled TRUSS sections to locate, align and mark locations to drill the bed cover for
   mounting.



- Using the original hardware from your anchor cleats place an assembled TRUSS section in place over the holes as shown.
- · Re-install the cleats/hardware into place and tighten.
- Repeat the process for the remaining TRUSS sections around your bed cover.
- · Proceed to Load Bar Installation.

#### sofTOPPER Variant

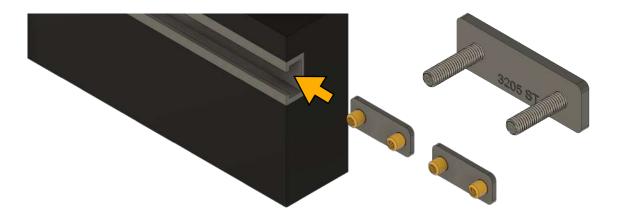
- Only applicable to vehicles with a factory installed anchor channel INSIDE the bed rails.
- Interfaces directly with sofTOP™ or BesTOP™ products. Required for proper installation. Soft shell camper topper is NOT INCLUDED with your kit.

#### HARDWARE REQUIRED

- · 9000. 7
- · 9000.20
- 3205ST Studded Cargo Insert /4 total (6 with Jeeps). Only the outer most legs attach to the cargo rails. On the Jeep Gladiator all legs will attach to rail.



- The sofTOPPER TRUSS was designed for mid size trucks.
   Full operation of soft topper mechanism requires removal of middle leg set load bar and leg extensions.
- Due to vehicle variations there is no implied guarantee that your soft topper mechanism will articulate for all vehicle fitments.



#### NOTE

The 3205 ST (pictured above) is a new product improvement that replaces the original 3205 RV used in this illustration. Install the 3205 ST parts into your cargo rails. Use the large washers and nuts from Hardware Bag 9000.7 and discard the bolts as they will not be used.

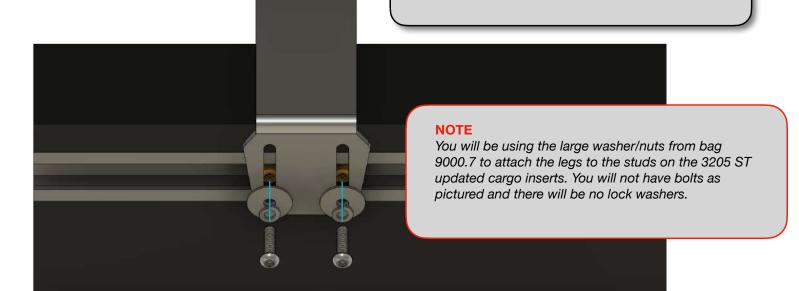
- Begin by installing two (2) threaded cargo rail inserts on both sides of the truck. You will need to temporarily remove the soft shell framework hardware but the topper can remain on the vehicle.
- If you have additional anchor cleats installed in your cargo rails you will need to remove them at this time. If permissible they can be reinstalled after the TRUSS installation is complete.

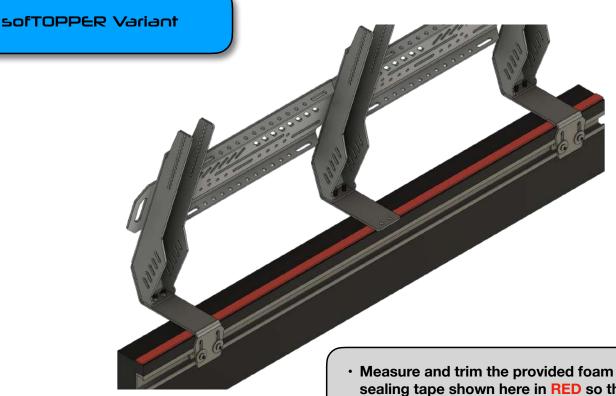
# sofTOPPER Variant

- Only the FRONT and REAR leg will attach to the cargo rails.
- The middle leg will be held in place with the reinstallation of the soft shell operating hardware.



- · Align and install the hardware.
- Use a 13mm wrench to tighten the hardware.
- Repeat the process on the other side of the vehicle.

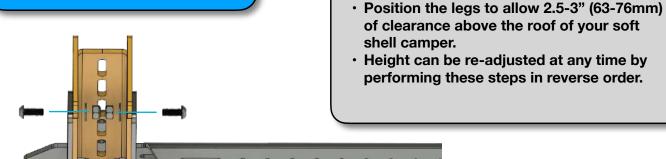


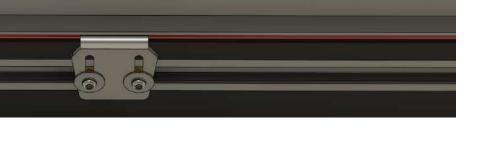


- Measure and trim the provided foam sealing tape shown here in RED so that it rests in between the feet of the TRUSS as shown.
- Position and install the lower rail of your soft-shell back to the vehicle.
- Tighten the hardware for the soft-shell into place.
- Repeat the process on the other side of the vehicle.

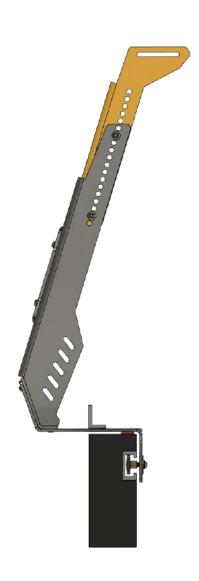








- Adjust the leg extensions shown here in YELLOW for the proper clearance.
- Align the machined holes in the leg extension to the holes in the side of your TRUSS legs.
- · Insert the hardware as shown above.
- Each leg extension MUST be anchored at all times with four (4) sets of hardware. DO NOT operate a vehicle under load with less than the required amount of hardware.
- · Ensure that all legs are adjusted to the same height.
- Use a 5mm Allen wrench and 13mm wrench to tighten the hardware.
- Proceed to load bar installation.



#### Colorado/Canyon/Bison



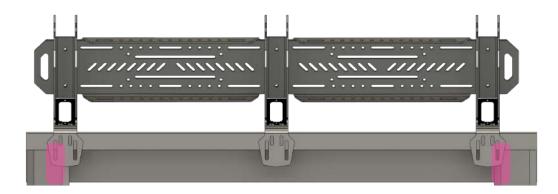
- Always use proper safety equipment when using power tools.
- · Chips from drilling can be hot.
- Refer to power tool user guide for safety recommendations.

This section covers the drilling application for the Chevy Colorado, GMC ™ Canyon as well as the Bison. You will be required to measure, mark and drill the bed rails to facilitate mounting of your TRUSS system.

### HARDWARE REQUIRED

- · 9000.7
- · UT 11008 Flip Conversion Kit
- · Drill Bit (Provided with with kit)

2022 and beyond products DO NOT require or include the TRUSS washer system.

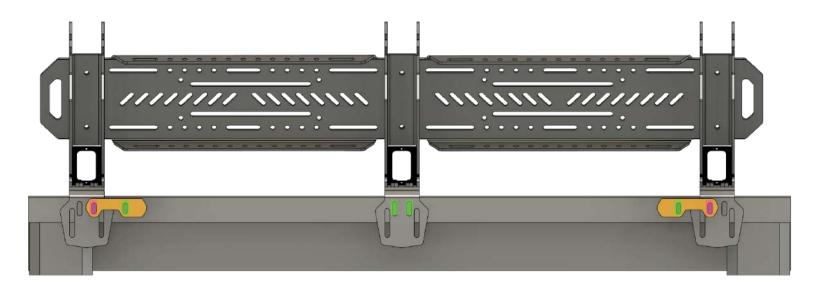


- Construction of the truck bed for this application would have interference at the outside edges of the bed shown here in PINK that would prevent access to the rear of the hardware sets to complete installation.
- The TRUSS for the Colorado, Canyon, and Bison trucks includes the UT 1008 flip kit to offset the drilling locations and allow you to anchor the TRUSS to the bed sides in locations you can access with tools.

Colorado/Canyon/Bison

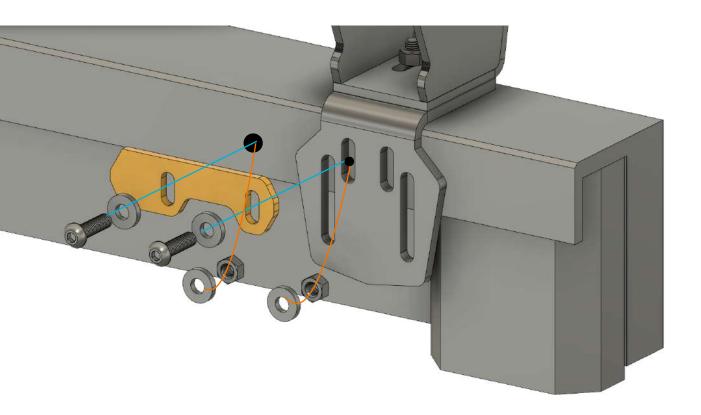


You'll need a tape measure for this step to make sure the driver and passenger side are aligned to one another.



- · Sit one side of the TRUSS assembly onto the bed side of the vehicle as shown above.
- Place the flip kit brackets so that they overlap the shorter slots to the inside edges of the bases of the truss shown here in PINK.
- · The center leg will have enough clearance without the need for a flip bracket.
- · Mark the two (2) PINK locations.
- · Mark the four (4) remaining locations shown here in GREEN.
- · Remove the flip brackets and TRUSS from the bed side.
- Use a cordless drill and the included drill bit to make the holes for the TRUSS to attach to the truck. AIM FOR THE CENTER OF THE SLOT YOU MARKED.
- · Repeat the alignment procedures above on the opposing side of the vehicle.
- · Verify that the marks
- Drill the holes on the opposing side of the vehicle. AIM FOR THE CENTER OF THE SLOTS YOU MARKED.

# Colorado/Canyon/Bison



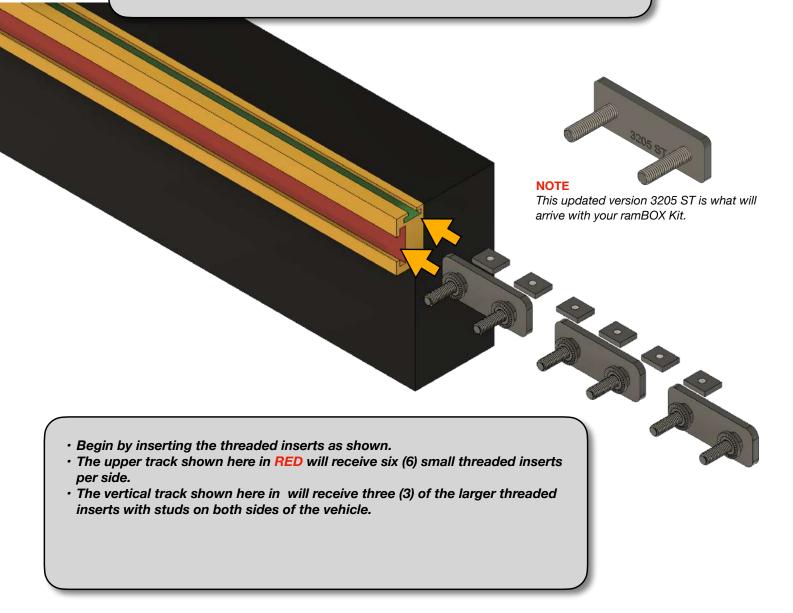
- · Sit one side of the TRUSS back on the vehicle bed side.
- · Position the flip brackets as shown on previous page.
- · Align and install the hardware as shown.
- The center leg will NOT have a flip bracket.
- Use a 5mm Allen wrench and 13mm wrench to tighten the hardware.
- · Repeat the process on the opposing side of the vehicle.
- · Proceed to load bar installation.

# ramB0X™ Variant

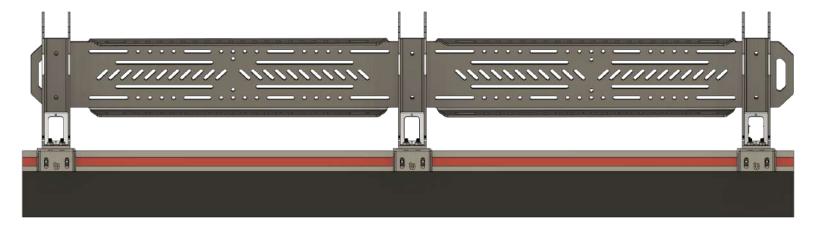
- Only applicable to Ram<sup>™</sup> trucks equipped with the ramBOX storage system built into the truck bed.
- · 6", 11", and 19" leg variants allow full use of ramBOX storage areas.
- 22" legs may cause interference on certain models causing contact with the molded plastic top of the ramBOX lids.

# HARDWARE REQUIRED

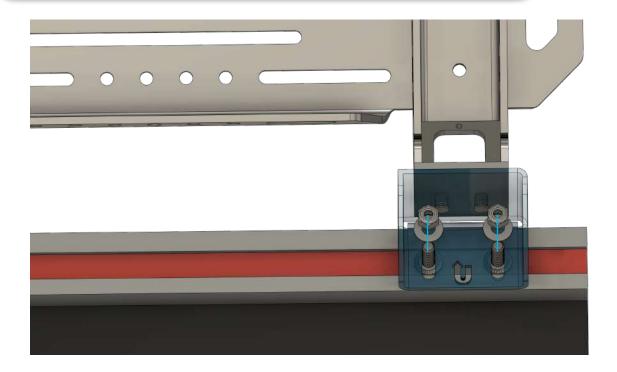
- · Unmarked bag containing small square inserts and hardware.
- 9000.7 (Retain washers and Nylon lock nuts. Discard bolts)
- · 3248 Ram ™ Track Inserts Quantity 6

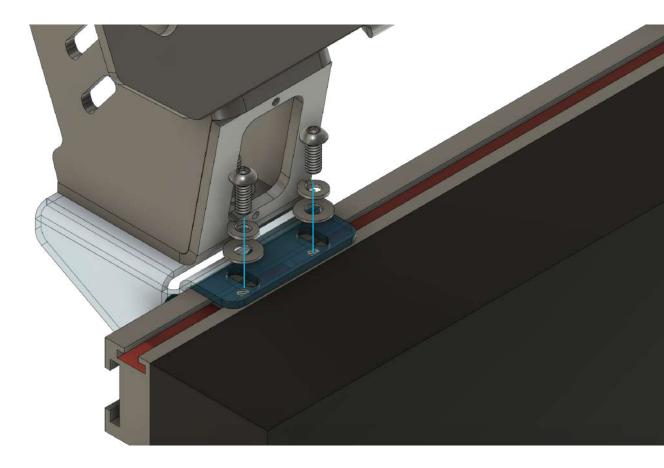


ramB0X™ Variant



- · Sit one side of the TRUSS onto the bed side of the truck.
- Align the vertical slots inside the bases over the studs protruding from the inserts.
- · Install a washer/lock nut from bag ID 9000.7 onto each of the exposed studs.
- Use a 13mm wrench or ratchet/13mm socket.
- Leave the hardware loose enough the TRUSS can be shifted side to side to align.
- · Repeat the process on the opposing side of the truck.





- · Align the smaller threaded inserts under each base as shown.
- Use hardware from bag containing small threaded inserts and install hardware to secure each base to the top rail of your ramBOX.™
- Repeat the process on the opposing side of the vehicle.
  Proceed to load bar installation.

#### bedCOVER Variant



- Operation of folding bed covers will NOT be possible with this system installed.
- Not all bed covers are compatible with this system. Contact technical support for up to date information on verified compatibility.

The bedCOVER mating variant is designed to allow the installation of a TRUSS system over an existing flat factory style bed cover.

- Some applications require a cargo rail extension kit (UT 11049) to offset the TRUSS mounting system around factory installed bed cover installation points. These are included with bedCOVER mating kits as needed according to order information and will NOT be present in all applications.
- You will need to remove the bed cover temporarily to install components for the bedCOVER mating system.

#### **NOTE**

This is a discontinued product with a new release version scheduled for release in 2024. Pages 51-55 are left in this guide revision as reference material only and hardware information, illustrations, and tool requirements may be outdated or obsolete as of January 2023.

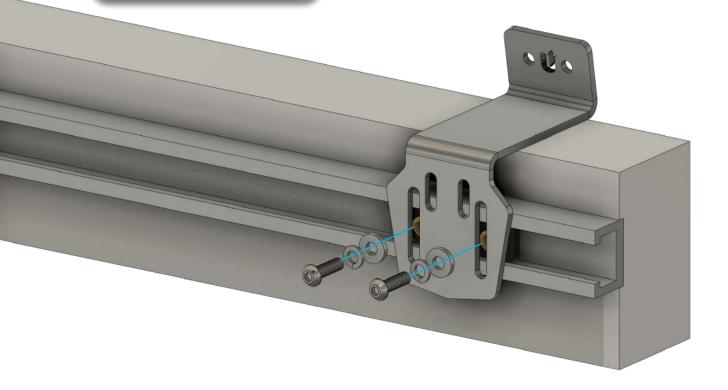
## HARDWARE REQUIRED

- 9000.02
- 9000.22
- · UT 11049 (Application Dependent)



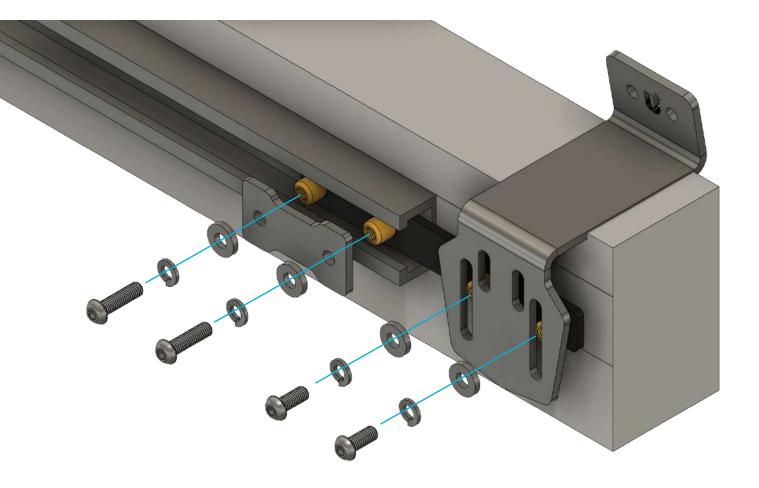
- Begin by installing three (3) threaded cargo slides into the rails on each side of your truck.
- Anchor cleats must be removed prior to installation. They can be re-installed if permissible after TRUSS is mounted.

# bedCOVER Variant STANDARD



- Align a rail flange as shown above to each of the threaded inserts. There should be three (3) per side.
- · Install the hardware from Bag 9000.6 in the order shown.
- Leave the hardware loose enough that the rail flanges can easily be moved around to facilitate alignment.
- · Repeat the process for the remaining rail flanges.
- If your kit includes the rail extensions you will only install two (2) of the smaller threaded inserts into each cargo rail. Details are shown on the next page for the rail extension kit.

# bedCOVER Variant REAR EXTENDED



- The UT 11049 rail extension kit (if required) installs at the REAR of the bed (the tailgate end) and serves to make the cargo rail long enough to offset around bed cover mounting hardware that would otherwise interfere with proper attachment of the TRUSS to your vehicle.
- The MIDDLE and FRONT attachment points are identical to the image shown on page 52.
- The image above pertains ONLY TO THE REAR attachment point.
- · Insert the longer threaded insert into the REAR of the cargo rail as shown.
- · Align and install the hardware with a 5mm Allen wrench.

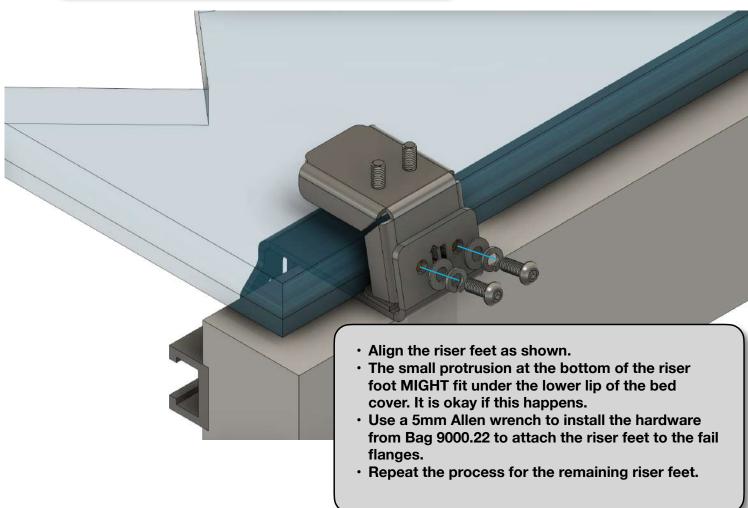
# HARDWARE REQUIRED

· UT 11049

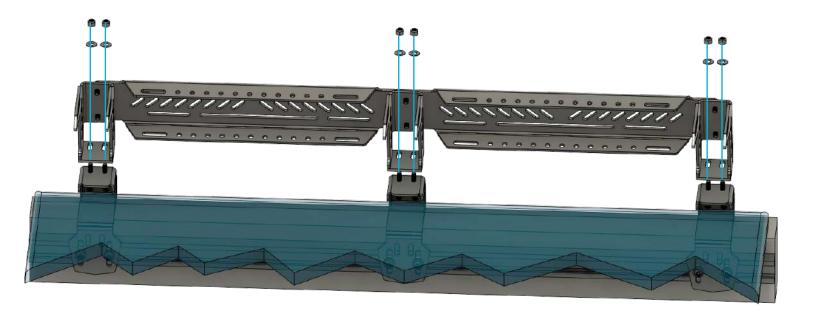
# bedCOVER Variant



- · Re-Install the bed cover.
- Verify that the rail flanges to not interfere with bed cover mounting hardware.
- Modification to method or location of bed cover mounting hardware may be required for proper fitment.



# bedCOVER Variant



- Use your assembled TRUSS leg/armor to position the riser feet to the proper spacing. This will vary based on bed length.
- Align the slots in the base of your TRUSS legs to the studs on the top of your riser feet.
- · Align and install the hardware from Bag 9000.13 with a 5mm Allen wrench.
- · Repeat the process on the opposing side of the vehicle.
- Verify that the driver and passenger side assemblies are parallel with one another. Misalignment can make load bar installation difficult.

Operation of the bed cover will not be possible with the riser feet installed. Folding bed cover geometry is not compatible with stationary objects positioned above them.

· Proceed to load bar installation.

#### LOAD BAR INSTALLATION

Load bar assembly is the same for all current models of TRUSS bed rack systems. Use only provided thread compound.

 Assemble load bars (Page 14-15) prior to installation of load bars to TRUSS legs.

#### TOOLS REQUIRED

- 5/32 Allen wrench
- 7/16 wrench (Hex Bolt Only)

#### HARDWARE REQUIRED

• 9000.4

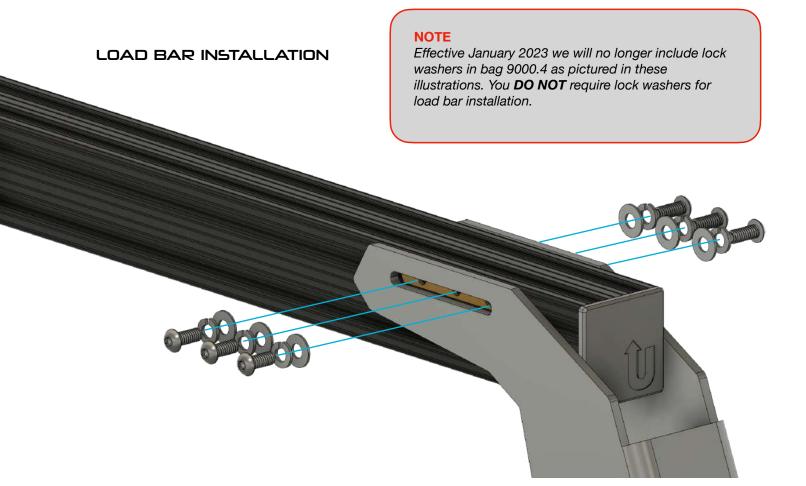
#### NOTE

There are ongoing hardware updates regarding this step of your installation. Bag 9000.4 could contain button head bolts (pictured) or hex bolts.



- Apply the supplied thread compound to ALL bolts provided in load bar hardware bags.
- · Apply to lower 5-6 threads as shown.
- Allow product to air dry for 30 minutes prior to installation.
- **DO NOT** install hardware with uncured compound.





- Each slot will receive three (3) sets of hardware as shown.
- · Each load bar end will be attached on BOTH sides to the leg.
- · Align and install the hardware as shown by hand.
- · Adjust the load bar so that is even (protruding edge) on both sides of the vehicle.
- Use a 5/32 Allen wrench to tighten the hardware.
- · Repeat the process on all remaining load bars.

#### **NOTE**

We are constantly improving our products and methods for installation. We are in a transition to hex bolts that are used to connect your load bars to your TRUSS legs. While we deplete on hand inventory there is a chance that you will receive button head bolts (pictured). If your kit contains button head bolts you will use a 5/32 Allen wrench, for hex bolts you will use a 7/16 wrench. Both bolts require the VC3 thread locker to be applied and neither application requires or will include lock washers as of January 2023. Thanks for your patience and understanding while we implement these changes and consume on hand inventory.

#### FINAL ASSEMBLY

Make final adjustments to and verify all hardware is installed for your TRUSS system.

Complete the checklist below to verify all hardware is torqued according to specifications.



· Refer to Torque Specification Chart on Page 3

Location	Completed
BASE TO LEG HARDWARE	
ARMOR TO LEG HARDWARE	
BASE TO TRUCK HARDWARE	
LOAD BAR HARDWARE	

#### ACCESSORIES

The remainder of this guide pertains to TRUSS compatible accessories that are not included with TRUSS systems but are available for purchase directly through upTOP™ or through our authorized dealer network.

- ETM (eX-> TRUSS Mating)
- ITM (Inner Truss Mount)
- UTM (Under TRUSS Mount)
- TRUSStrax (Recovery Board Brackets)
- Rock Lights

#### €TM

# **eX Roof Rack to TRUSS bed Rack Connection**

For up to date instructions on mating an optional eX roof rack to your TRUSS bed rack please refer to our website or click the link provided below for access to the most current documentation regarding this process.

Effective 2023 we have completely redesigned the ETM mating system to offer more flexibility in leveling an eX rack to a roof rack mounted on the cab of your vehicle.

**ETM 2023 CURRENT INSTALLATION GUIDE** 

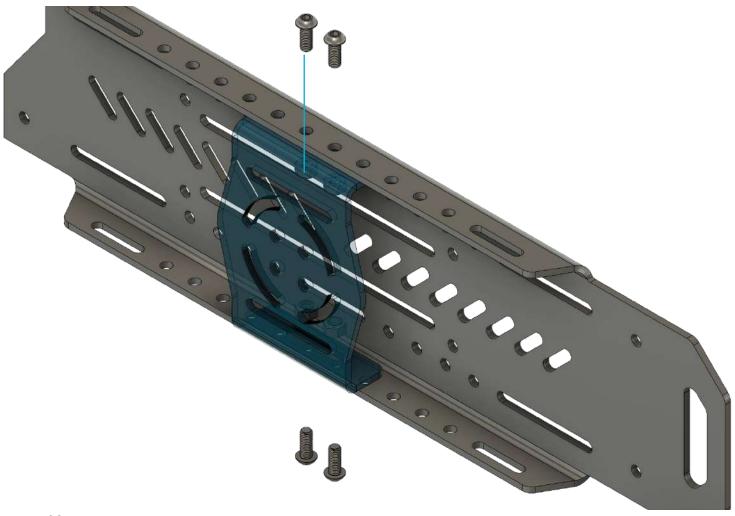
# ITM Inner TRUSS Mount

The ITM (Inner TRUSS Mount) is designed to allow the attachment of gear to the INSIDE of your TRUSS armor plates to provide more surface area for gear.

- The ITM is machined for direct bolt fitment of RotoPAX™ mount products.
- The additional holes/slots can be used to attach anything you see fit up to 50 Lbs./22.5 kg

# TOOLS REQUIRED

- · 3/16 Allen wrench
- · 1/2 wrench

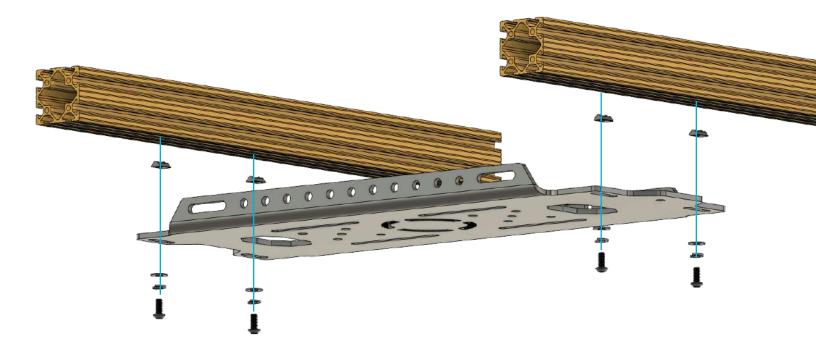


# UTM Under TRUSS Mount

The UTM (Uner TRUSS Mount) is designed to allow the attachment of gear to the underside the load bars on your TRUSS armor plates to provide more surface area for gear.

- The UTM is machined for direct bolt fitment of RotoPAX<sup>™</sup> mount products and features knock-outs allowing the addition of our optional scenePOD for angled lighting solutions for the bed of the truck.
- The additional holes/slots can be used to attach anything you see fit up to 50 Lbs./22.5 kg

TOOLS REQUIRED



- The extrusion nuts provided with the UTM are designed to "roll" into the slots on your load bars without the need to take them apart.
- Determine the location under your TRUSS and align/install the hardware as shown with a 4mm Allen wrench.
- UTM panels can be nested together end to end to run the length of your TRUSS short bed TRUSS system.
- Long bed product expected Q2 2022.

# TRUSStrax Traction Board Mounts

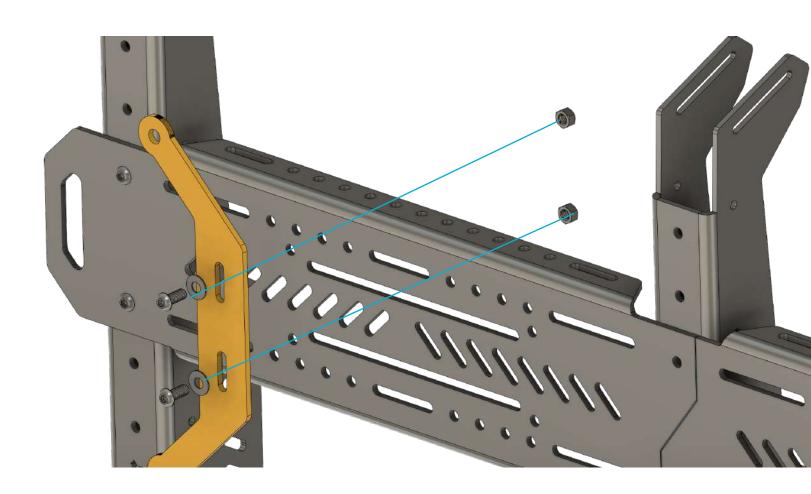
TRUSStrax are designed as a through-bolt solution for attaching recovery boards to the side of your TRUSS bed rack.

• The spacing machined into the armor is designed for use with maxTRAX<sup>™</sup> brand recovery boards. Modification can be completed by end user to use with additional brands.

# TOOLS REQUIRED

- 5mm Allen wrench
- · 13mm wrench

Due to continued product improvement your traction mounts may look different than the product in the illustrations provided Installation method and hardware will apply.

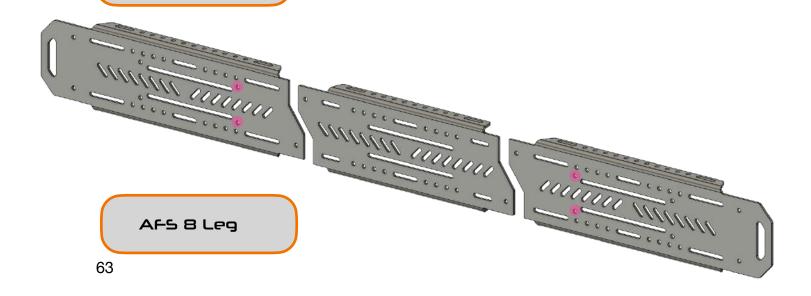


# TRUSStrax (CONT)





LB Long Bed



# Baja Designs™ Rock Lights

- TRUSS 11", 19", sofTOPPER and 22" legs are designed for Baja Designs™ Rock Lights to mount into the bottom of the leg with no additional pod/mount required.
- Use the hardware provided with your rock lights, align with the hole and install the hardware as shown with a 3mm Allen wrench.





- Maintain your upTOP product in the same manner you maintain your vehicle. Powder coat finish uses a chemical compound to maintain UV stability. Do not wax.
- Surface damage and general cosmetic wear are understood to be a byproduct of intended use of this product and are not covered under any warranty.
- Periodically inspect product for damage.
- Replace worn or damaged parts with expediency.
- Images provided in this material are nondimensional drawings for the purpose of illustration. Design and specifications are subject to change without notice.
- Always consult support for the most up to date information on upTOP products.
- Do not use this product in a manner inconsistent with its design intention.
- Do not modify the product without consent from manufacturer.
- End user assumes all responsibility for the assembly, installation, and operation of this product.
- Excessive speeds over rough terrain can exceed dynamic weight loads causing structural fatigue and/or failure of aluminum and steel components. Use your best judgement and common sense before committing to full send with an overloaded product.
- Component damage or failure due to negligence will void all claim to warranty.
   Any failed component must be returned to upTOP HQ with a properly submitted RMA request. Any product received without authorized RMA request will be refused and returned to sender.
- Leave. No. Trace. Our planet is fragile and it's the only one we have. Stay on trails and designated routes. DO NOT LITTER. Be a decent human. Protect our culture, wild lands and ecosystems.



2023©

#### **GENERAL INFORMATION**

#### **Product Care**

Your bed rack is produced with aluminum, stainless steel, mild steel, urethane, and polyethylene plastic. You should wash and maintain the roof rack in the same manner that you maintain the exterior of your vehicle avoiding harsh chemicals and abrasive cleaners to protect the finish.

Powder coated finishes are designed to be durable but are not indestructible. Normal use of the roof rack can result in wear and tear to the finish of the roof rack. Damage to surfaces and components due to normal use are not subject to warranty replacement.

Aluminum parts do not rust or corrode. The stainless steel used in our products does not rust or corrode. Mild steel components can develop surface rust in worn areas that is easily remedied with a bit of touch up paint. Clean the affected area, allow to dry, and apply an automotive grade touch up to the areas to prevent corrosion in those areas. Scuffs, scratches, and chipped parts not reported upon product arrival, and after the product is installed to the vehicle are not subject to warranty replacement.

Hardware corrosion due to environmental factors such as close proximity to salt water are not eligible for warranty replacement. If you live in these areas you should familiarize yourself with steps that can be taken to limit corrosion in these environments. Open request we will provide specific details allowing you to source replacement hardware yourself or we can assist you in placing an order directly with us for replacement hardware that is compatible with your product.

## **Shipping Damage**

Our packaging is certified for use at designated weights by all major carriers. If your package is damaged upon delivery you can choose to refuse the package OR you can accept the package noting the damage to the parcel. Refused shipments will be accepted, inspected and shipped back to the address on file. Any additional shipping charges incurred from refused shipments are the responsibility of the recipient. Open and inspect the contents as quickly as possible and report any shipping damage via email to <a href="mailto-support@uptopoverland.com">support@uptopoverland.com</a> using your order number as reference and include as many images as you can to support the claim. We will work with you to remedy the damage either through assistance in filing a damage claim with the carrier or replacing damaged parts at the sole discretion of upTOP Overland.

## **General Maintenance**

It is the responsibility of the end user to inspect and maintain the product at regular intervals to ensure that the product is safe to use. Repair or replace worn or damaged parts as needed. Replacement parts can be sourced by contacting <a href="mailto:support@uptopoverland.com">support@uptopoverland.com</a>. Please include your original order number to expedite the process.

# upTOP overland™ 2278 Manatt Court Castle Rock, CO 80104 720.730.6381

www.uptopoverland.com

Thanks for supporting an American product from an American business.

We work hard to produce our products with components sourced from local manufacturers and suppliers whenever possible.