TORKLIFT INTERNATIONAL

OVER 35 YEARS OF INNOVATION, QUALITY, SAFETY.

TRUE FRAME MOUNTED CAMPER TIE DOWNS

IMPORTANT OWNER-OPERATOR INSTALLATION INSTRUCTIONS

C4201

Warnings

Truck Bed and Camper Protection

Torklift **does not** recommend installing your camper on top of a plastic bed liner (or other compressible material such as foam). These materials can act as a spring, causing increased vertical truck camper movement independent of the vehicle. Plastic bed liners can slide on the truck bed surface, and the truck camper can slide on top of the bed liner. Using a plastic bed liner or similar compressible material will void your warranty and may additionally cause truck bed and/or camper damage.

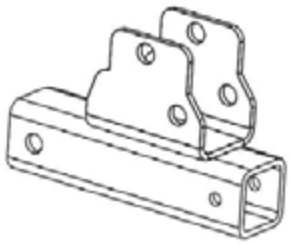
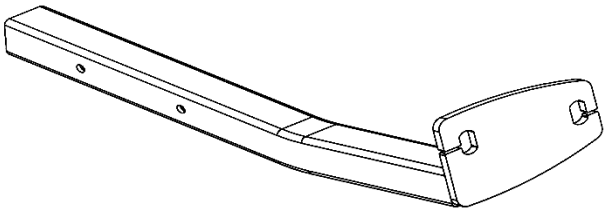
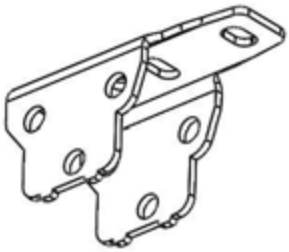
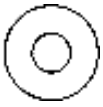
Minor movement or settling can occur in some incidental harsh driving conditions (on or off-road). A rubber bed mat is recommended to protect the truck bed and camper, but is not a requirement to maintain the Torklift legendary lifetime warranty.

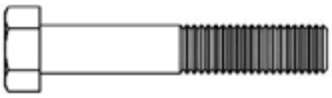
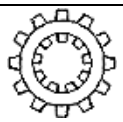
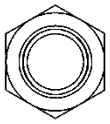
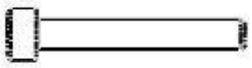
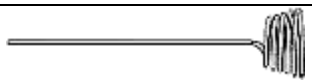
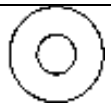
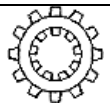
Suspension

To significantly reduce body roll, sag and sway Torklift strongly recommends the StableLoad. Torklift International StableLoads improve safety, handling, and to help level your truck.

If your truck is additionally equipped with suspension air bags Torklift cautions against over pressurization as this may lead to unsafe vehicle handling characteristics. We have found that airbags used in conjunction with StableLoads have allowed operators to lower air bag pressure by 50% or more. Only pressurize suspension air bags enough to level the truck.

C4201 PARTS INVENTORY

Qty.		Description
2		Tie Down Receiver
2		Tie Down Frame Plate
2		Tie Down Bent Insert
2 ---- 2		Long Support Strap ---------- Short Support Strap
2		Upper Channel
2		3/8" USS Flat Washer
4		1/2"-13 x 2" Hex Bolt

Qty.		Description
6		1/2"-13 x 3" Hex Bolt
8		1/2" Star Washer
4		1/2" Lock Washer
6		1/2"-13 Nylock Nut
4		1/2"-13 Hex Nut
2		3/8"-16 x 1-1/4" Hex Bolt
2		3/8" Lock Washer
2		1/4" Pin
2		3/8"-16 Hex Nut
1		1/2" Bolt Fisher
1		3/8" Bolt Fisher
10		1/2" USS Flat Washer
2		3/8" Star Washer

INSTALLATION INSTRUCTIONS:

Step 1.

Align the **Tie Down Frame Plate** against the outer side of the truck frame directly under the forward most bolt holding the truck bed to the frame. Check the backside of the frame for clearance around the fuel lines, brake lines, and wire harnesses. Adjust the position of the **Tie Down Frame Plate** as necessary (vertical direction only). Mark the locations of the top two holes into the frame, and then drill them to 17/32". *****On some short bed applications, the **Tie Down Frame Plate** will need to partially overlap the spring hanger bracket. Use one **1/2" USS Flat Washer** between the **Tie down Frame Plate** and the frame to take up the gap. This will happen on the other side as well.

Step 2.

Place one **1/2" Star Washer** onto a **1/2"-13 x 2" Hex bolt**, followed by one **1/2" USS Flat Washer**, and one more **1/2" Star Washer**. Insert the coiled end of the **1/2" Bolt Fisher** into one of the holes, and guide it out the bottom of the frame. Attach the coiled end of the **1/2" Bolt Fisher** to the **1/2"-13 x 2" Hex bolt** and washer assembly. With the hex bolt and washers attached to the bolt fisher, Pull the bolt fisher back through the frame and out through one of the previously drilled holes. Leave the **1/2" Bolt Fisher** attached. **See figure 2.1**

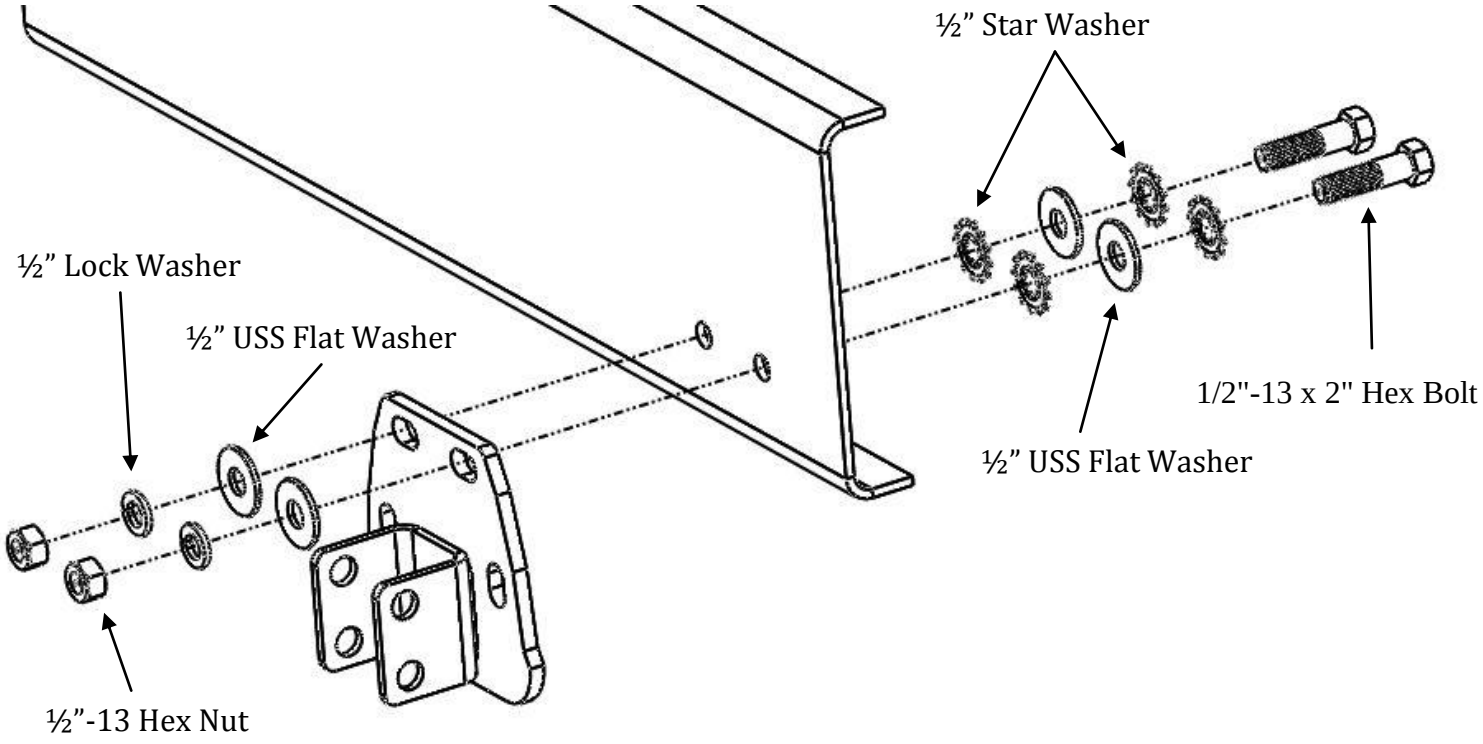


Figure 2.1

Step 3.

Slide the non-coiled end of the **1/2" Bolt Fisher** through the corresponding hole in the **Tie Down Frame Plate**, and then slide the **Tie Down Frame Plate** over the **1/2"-13 x 2" Hex bolt**. If one hole of the **Tie Down Frame Plate** Is on top of the spring hanger bracket, install a **1/2" USS Flat Washer** between the opposite hole and the frame. When installed, the Tie Down Frame Plate should sit flush against the frame. Just like in Step 1.

Carefully remove the coiled end of the **1/2" Bolt Fisher** from the end of the **1/2"-13 x 2" Hex Bolt**, and loosely secure the bolt with one **1/2" USS Flat Wa**sher, one **1/2" Lock Washer**, and one **1/2"-13 Hex Nut**. Repeat this process for the second hole, and then torque the **1/2"-13 Hex Nuts** to 80 ft-lbs (108 nm).

Step 4.

Align the **Tie Down Receiver** with the desired hole in the **Tie Down Frame Plate**, and secure it with one **1/2"-13 x 3" Hex Bolt** and one **1/2"-13 Nylock Nut**. Tighten the nut until the receiver snug, but movable. **See figure 4.1**

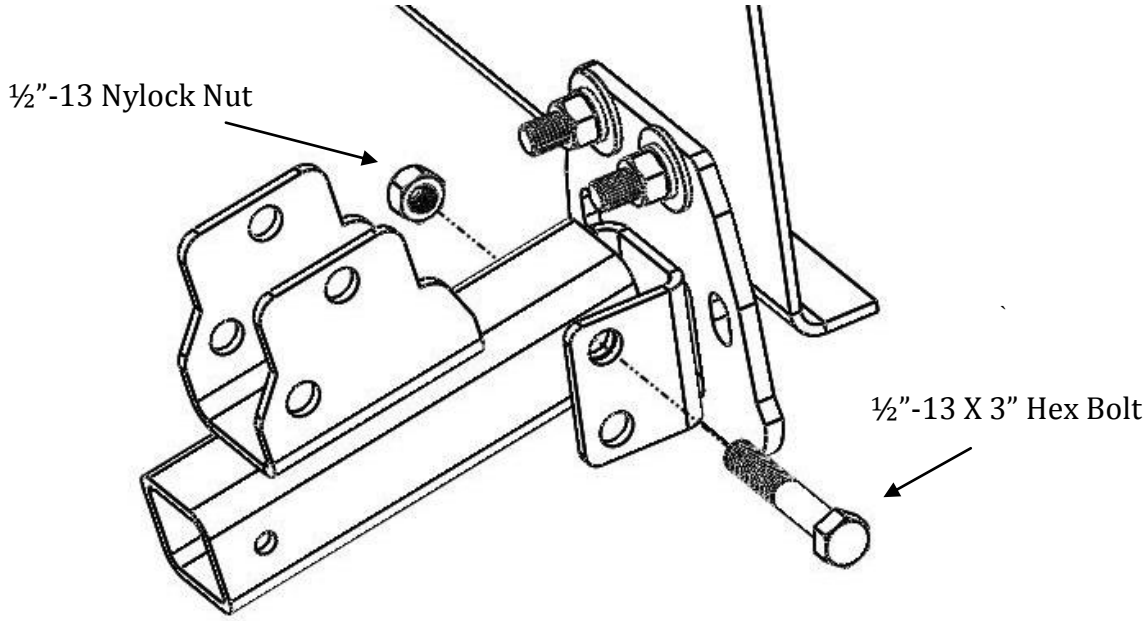


Figure 4.1

Step 5.

Remove the forward most bolt holding the truck box to the frame. Using the factory bolt, install the **Upper Channel** into the same hole. While keeping the **Upper Channel** parallel to the truck bed support rail, torque the bolt to 50 ft-lbs (67 nm). Using the hole at the opposite end of the **Upper Channel** as a guide, drill a 7/16" hole into the bed support rail. **See figure 5.1**

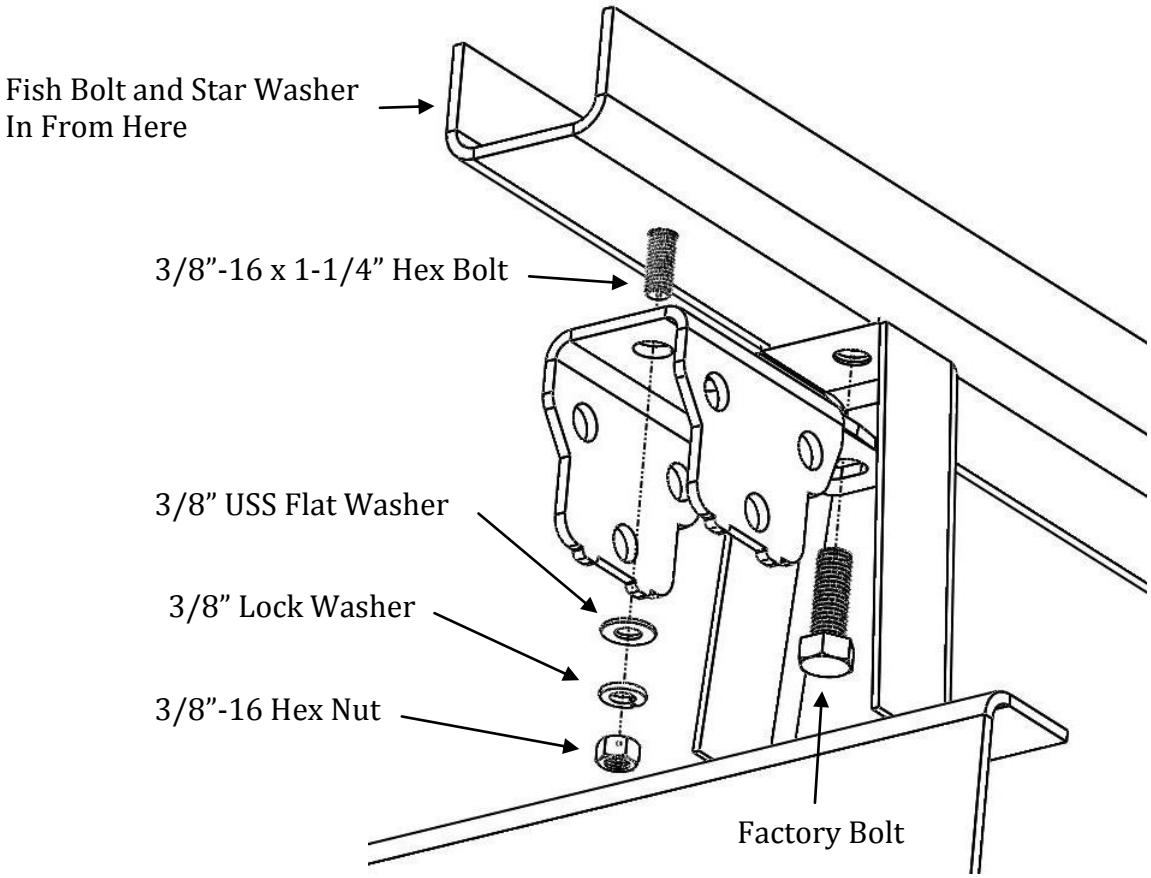


Figure 5.1

Step 6.

Place the coiled end of the **3/8" Bolt Fisher** through the drilled hole, and push it out the end of the bed support rail. Place one **3/8" Star Washer** onto the end of the **3/8"-16 x 1-1/4" Hex Bolt**, and then attach the bolt to the coiled end of the **3/8" Bolt Fisher**. Pull the **3/8" Bolt Fisher** with bolt back through the bed support rail and out of the drilled 3/8" Hole. Carefully remove the bolt fisher from the bolt and secure the bolt with one **3/8" USS Flat Washer**, one **3/8" Lock Washer**, and one **3/8"-16 Hex Nut**. Torque to 35 ft-lbs (47nm)

Step 7.

Insert the **Tie Down Insert** into the **Tie Down Receiver**. The Turnbuckle Attachment Plate on the **Tie Down insert** should be offset above and forward of the Insert Tube. The **Tie Down Insert** has two positions, either one can be used as long as the turn buckle between the tie down and camper has at least 2" of clearance from the truck body. Use the **1/4" Pin** to secure the **Tie Down Insert** to the **Tie Down Receiver**.

With the Insert Installed into the receiver, angle the **Tie Down Receiver** so that there is a minimum vertical clearance of 1" (2.5 cm) between the Insert/Receiver and Truck bed/Running board.

Step 8.

Two different length **Support Straps** are included in the kit. Either one can be used. Multiple holes are available for mounting the **Support Strap** in the **Tie Down Receiver** and **Upper Channel**. Choose the holes that most closely match the angle the **Tie Down Receiver** is set at. Attach the Tie Down **Support Strap** with one **1/2"-13 x 3" Hex Bolt** and one **1/2"-13 Hex Nut** on each side. Torque the nuts to 60 ft-lbs (81 nm).

This Tie Down is designed to fit trucks with running boards that extend past the truck cab. If the tie down is being installed on a truck without running boards that extend past the cab, it is very important that the **Support Straps** are not installed at a steep angle. Installation of the **Support Strap** at too steep of an angle may result in tie down failure. **See photo 8.1** for reference.

Incorrect **Correct**

Photo 8.1

TIEDOWN INSERT INSTALLATION INSTRUCTIONS

On one end of each of your tie down inserts is a triangular plate referred to by Torklift as a bullet plate. In most cases, the tie down inserts should be installed with the shorter side of the bullet plate facing away from each other (The shorter side of the front insert should point to the front of the truck and the shorter side of the rear insert should point towards the rear of the truck). Once installed, attach the TorkLift directional stickers to the face of the bullet plate on the insert as a reminder.

DRIVERS SIDE FRONT

DRIVERS SIDE REAR

IMPORTANT NOTE: Your tie down inserts are designed to have clearance inside of the receiver. This is to account for road debris, as well as aid in installation and removal. Some rattle may be expected if the inserts are left installed while not under load from the camper.

RECOMMENDED TRUCK CAMPER INSTALLATION INSTRUCTIONS

When securing any heavy load (especially a camper) in your truck bed, your front tie down points should pull the load forward as much as possible. Some camper anchor points may differ with different manufacturers, as well as the camper jack mounting locations. Your Torklift tie down inserts has offset triangular brackets to increase the angle of pull. These are designed to be used in the front facing forward, and the rear facing rearward but can be used in either front or rear. These recommendations are to be considered and followed as a basic rule of thumb. Obviously there will be some applications where this may not be possible. At a minimum, if opposite pull of both front and rear tie downs cannot be achieved for whatever reason, you should have at least a forward pull at the front or rear location.

If your camper does not come with Rubber Bumpers on the front lower portion of the camper, installing Rubber Bumpers (Torklift has Rubber Bumpers available Part A7001) or using a block of wood such as a 2 x 4 in the bed, will prevent the camper from damaging the front bulk head of the truck bed.

Minor movement (or settling) can occur in some incidental harsh driving conditions (on or off road). A rubber bed mat is not a requirement to maintain the lifetime warranty on a Torklift system, but a strong recommendation simply as a safety precaution to protect the truck bed, the bottom of the camper and to give the camper additional support.

TORKLIFT DOES NOT RECOMMEND: Installing your truck camper in your truck on top of a drop in plastic bed liner!!! The drop in plastic bed liners can slide on top of the truck bed surface, and the camper can slide on top of the slick surface of the bed liner. The liner can also act as a spring causing a trampoline effect increasing vertical truck camper movement, independent of the vehicle, possibly resulting in truck bed, and camper damage!

INSTRUCTIONS FOR FINISH MAINTENANCE OF TORKLIFT PRODUCTS

POWDER COATED STEEL:

To keep your Torklift products looking good follow these guidelines. All steel powder coated Torklift products are sandblasted for maximum adhesion and use a high quality industrial urethane based powder coat. Due to the extreme, harsh, undercar environment that your Torklift products live in, (consistently sprayed with corrosive road chemicals such as salt, and road debris), Torklift does not warranty the power coated finish.

To minimize corrosion from these factors on powder coated steel products, Torklift recommends regularly cleaning and inspecting the powder-coated surface and touching up any affected areas with enamel or urethane based aerosol paint product. If there are any areas of surface rust, there are also aerosol spray rust converters available on the market that can be used as a preparation to touch-up paint application. These finish maintenance products are available at any automotive parts supplier.

POLISHED STAINLESS STEEL:

Torklift utilizes quality grade 304 stainless steel in our stainless steel polished products. 304 stainless steel is well known for its anti-corrosive properties. However, in some environments such as coastal regions or when coming in contact with some road chemicals, corrosion may occur.

For a quick clean simply use WD40 and a cloth rag. We also recommend occasional polishing of our polished stainless products to maintain their attractive finish. Use an approved stainless steel chrome or aluminum mag wheel polish cleaning product, which can be purchased from any automotive parts supplier.