

OVER 35 YEARS OF INNOVATION, QUALITY, SAFETY.

TRUE FRAME MOUNTED CAMPER TIE DOWNS

IMPORTANT OWNER-OPERATOR INSTALLATION INSTRUCTIONS

D4105



REVISED vers7: JL 8/6/15

TECH SUPPORT (800) 246-8132

AFTER INSTALL, PLEASE GIVE

THIS BOOKLET TO YOUR CUSTOMER

Warnings

Truck Bed and Camper Protection

Torklift <u>does not</u> 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 <u>void your warranty</u> and may additionally cause truck bed and/or camper damage.

Minor movement or settling can occur in some incidental harsh driving conditions (on or offroad). 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. More information can be found at (www.Torklift.com/stableload).

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.

NOTE:

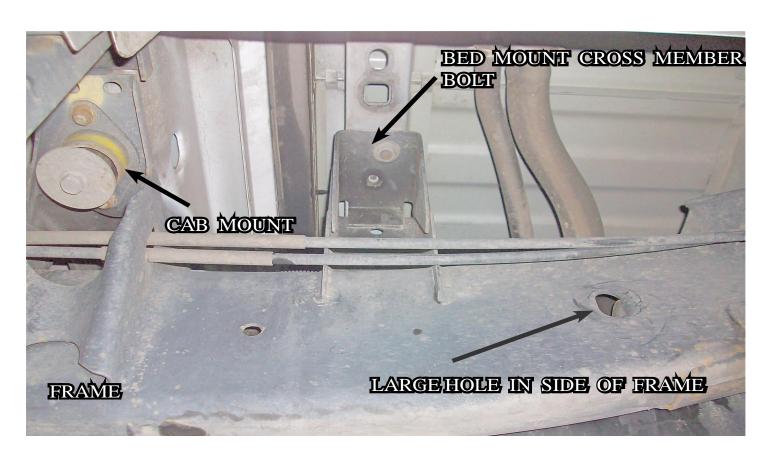
If your vehicle is equipped with a factory fuel tank skid plate, which is included with the "Off Road Group" or "Protection Group" packages, it will be necessary to drill the skid plate bracket in order to mount the tie downs. This is only necessary if your skid plate attaches to the outboard portion of the truck frame covering the forward factory frame holes. To do this, remove the two factory bolts holding the skid plate bracket to the side of the frame. Note the location of the factory hole behind the skid plate bracket and mark the skid plate bracket accordingly. Drill the skid bracket out to 17/32" with a drill bit and install the two factory bolts in the skid plate. The factory hole in the frame will now be accessible. Place a 1"(2cm) x 2"(5cm) plate washer to be used as a shim on to each of the newly installed tie down bolts further on in the installation. The shims will move the tie down frame plate out slightly to clear the skid plate-mounting bracket. Photos are on following page.

You may now continue on to the installation instructions on page 3.

D4105 PARTS INVENTORY

2 - FRAME UNITS	4	- ½" LOCKWASHERS
2 - UPPER SUPPORT STRAPS	6	- ½" LOCKING NUTS
2 - TIE DOWN RECEIVER	4	- ½" NUTS
2 - UPPER SUPPORT CHANNEL	2	- 3/8" X 1-1/4" HEX BOLTS
2 - BENT TIE DOWN INSERTS	4	- 3/8" FLAT WASHERS
4 - ½" X 2" HEX BOLTS	2	- 3/8" LOCK WASHERS
6 - ½" X 3" HEX BOLTS	2	- 3/8" NUTS
4 - 1"(2cm) X 2"(5cm) PLATE WASHERS	2	- ¼" PINS
2 - 1"(2cm) X 3"(8cm) PLATE WASHERS	6	- ½" STAR WASHERS
6 - ½" FLAT WASHERS	1	- ½" & 3/8" BOLT FISHER
2 -3/8" LOWER FRAME BRACKET	2	-1/2"-13 X 3-1/2" HEX BOLT GRADE 8

Driver's side view of the Cab mount and bed mount area. This is going to be the area the tie down will install. Notice the two holes in the side of the frame and the bolt for the bed cross member.



INSTALLATION INSTRUCTIONS:

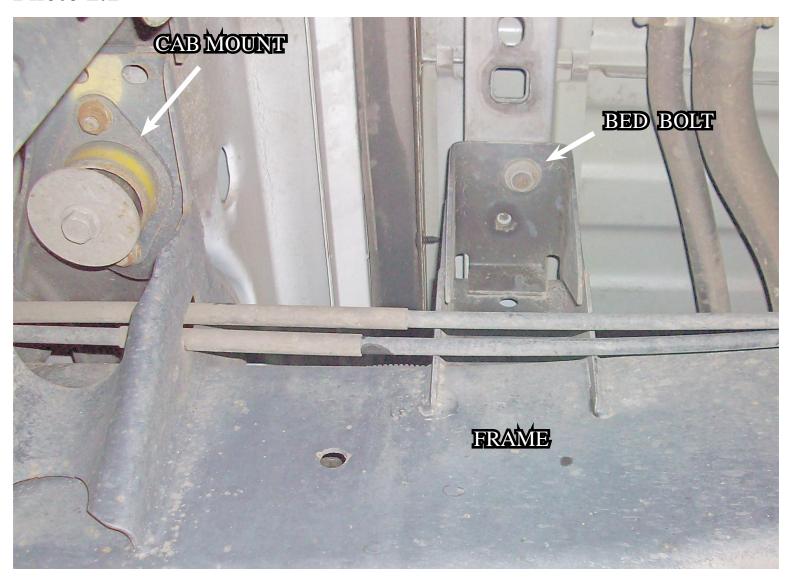
Step 1-

Locate and inventory all parts and become familiar with all brackets. Chock the vehicle tires and set Emergency Brake before attempting any part of this install.

Step 2-

Remove the factory upper bed bolt (Photo 2.1)

Photo 2.1



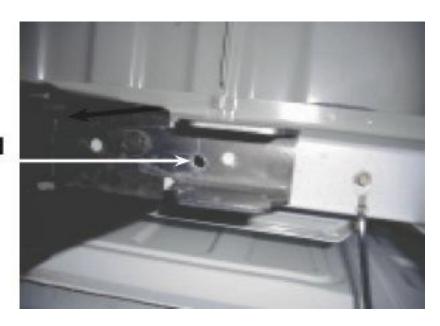
Step 3-

Fish the 3/8" x 1-1/4" bolt with a 3/8" flat washer into the small hole in the trucks upper bed cross member. Now, install the tie down support channel. (See photo B, page 4). Next, reinstall the factory bed bolt back into the hole. Install a 3/8" flat washer, lock washer and nut onto the 3/8" hex bolt. Do not tighten at this time. Make sure to keep the tie down upper support channel parallel with the truck bed cross member.

(Photo 3.1)

Photo 3.1

3/8" hex bolt will need to be installed in the factory hole shown.



Step 4-

Now hold the tie down receiver bracket against the side of the vehicle frame at the front of the truck box, until the factory hole on the side of the vehicle frame line up with the hole in the rear of the tie down receiver.

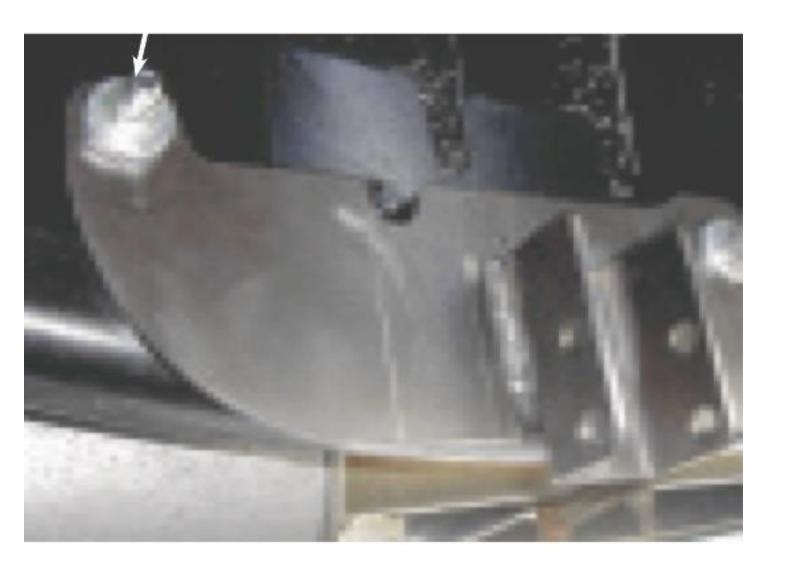
Step 5-

Locate the hole on the tie down receiver toward the rear of the vehicle. Place the 1/2" X 2" hex bolt with a 1/2" star washer followed by a 1"(2cm) X 3"(8cm) plate washer through the large hole in the vehicle frame. Now pull assembly out of the same hole you placed it into using the bolt fisher. Bring the bolt through into the tie down receiver. (**Photo 6.1**) (See our bolt-fishing guide).

Step 6-

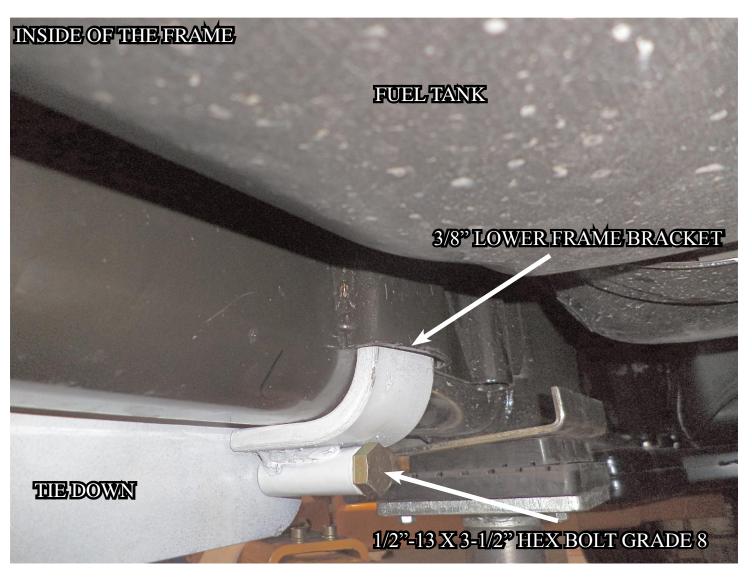
Locate the hole on the tie down receiver toward the rear of the vehicle. Place the 1/2" X 2" hex bolt with a 1/2" star washer followed by a 1"(2cm) X 3"(8cm) plate washer through the large hole in the vehicle frame. Now pull assembly out of the same hole you placed it into using the bolt fisher. Bring the bolt through into the tie down receiver. (**Photo 6.1**) (See our bolt-fishing guide).

Photo 6.1 Small 1/2" Factory Hole Use 1/2" Flat Washers & Star Washers on this Hole



Step 7-

On the inside and below the Cab Mount on the frame, take the 3/8" Lower Frame Bracket and attach it on the inside of the frame. There is a pocket on the lower inside of the frame that the 3/8" Lower Frame Bracket will slide up and into. Place one 1/2"-13 x 3-1/2" hex bolt through the 3/8" Lower Frame Bracket and through the Tie Down. Then place two 1/2" flat washers, a 1/2" lock washer, and a 1/2" nut onto both front and rear receiver bolts and firmly tighten the receiver to the vehicle frame. This will be tightened to 60 ft-lbs.(81nm)



Step 8-

Tighten the tie down receiver with the factory bed bolt 80 ft-lbs.(108nm) to bed cross member.

Step 9-

Now place two 1/2" flat washers, a 1/2" lock washer, and a 1/2" nut onto both front and rear receiver bolts and firmly tighten the receiver to the vehicle frame. This will be tightened to 60 ft-lbs. (81nm)

Step 10-

Install the tie down receiver with welded on channel onto the frame plate using the 1/2" x 3" hex bolts and 1/2" lock nuts. Next install the support strap with the 1/2" x 3" hex bolts and 1/2" lock nuts (**photo 10.1**).

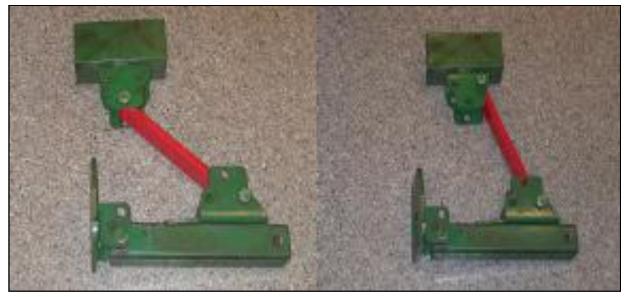
Place insert with 1/4" pin into receiver portion of tie down assembly. Choose the appropriate holes in the upper and lower channel to give at least 1" clearance between the bent insert and the lip of the box or aftermarket accessory.

Photo 10.1



ADJUSTABLE TIE DOWN INFORMATION

PHOTO A PHOTO B



IMPORTANT

The adjustable tie downs are designed for use on trucks with running boards or steps extending onto the truck bed.

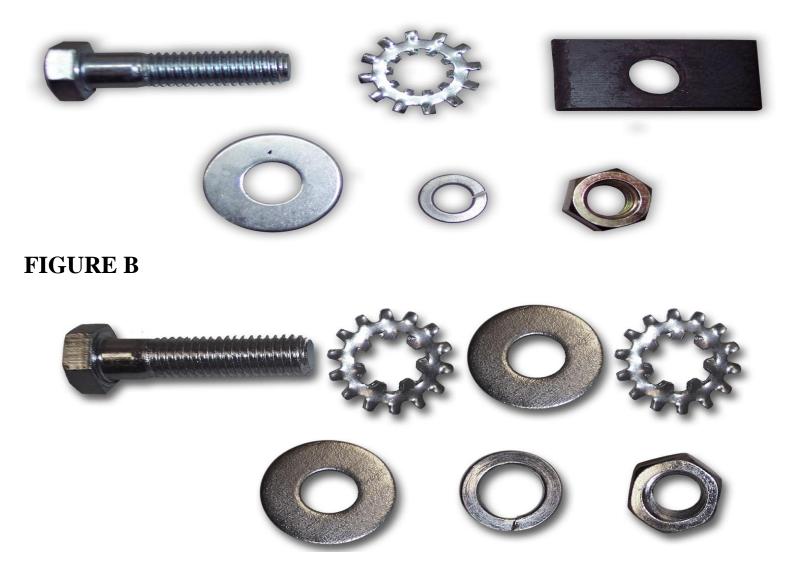
When using the adjustable kit on trucks without steps or boards on the truck bed, it is very important that the support strap is \underline{NOT} installed at a steep angle as in \underline{photo} A. See \underline{photo} B for approximate correct angle.

If the correct angle cannot be obtained, it may be necessary to purchase a shorter support strap or install the tie down at a lower, less desirable height in relation to the truck bed.

Incorrect installation of the support strap at the wrong angle may result in tie down failure.

PROPER BOLT ASSEMBLY

FIGURE A

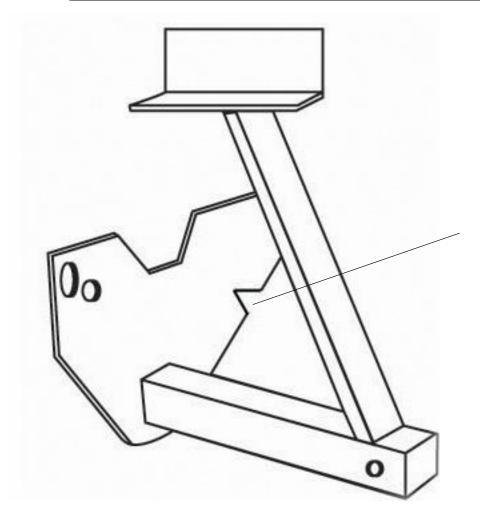


The star washers have been supplied to keep the bolt from spinning while tightening the nut to proper specifications.

Again, the star washers are only required on fastener applications where the head of the bolt CAN NOT be accessed (inside a boxed frame etc.) with a wrench to hold the bolt from spinning while tightening the nut by hand.

Note: The upper row as shown in the photo including the hex bolt, star washers, and flat washer is the assembly from the inside of the vehicle frame, the lower row which includes the flat washer, lock washer, and nut will be used to tighten the assembly from the outside of the frame.

ATTENTION - PLEASE NOTE!!!



The notch in the plate, denotes which end of the plate needs to go toward the rear of the truck.

Plate Design May Vary

In an attempt to make the installation of our tie downs easier, we have cut a small triangular notch on the edge of our frame plates.

NOTE: THE DIAGRAM ABOVE DOES NOT REPRESENT ANY ACTUAL TORKLIFT TIE DOWN FRAME PLATE.

INSTRUCTIONS FOR MAINTENANCE OF POLISHED STAINLESS STEEL PRODUCTS



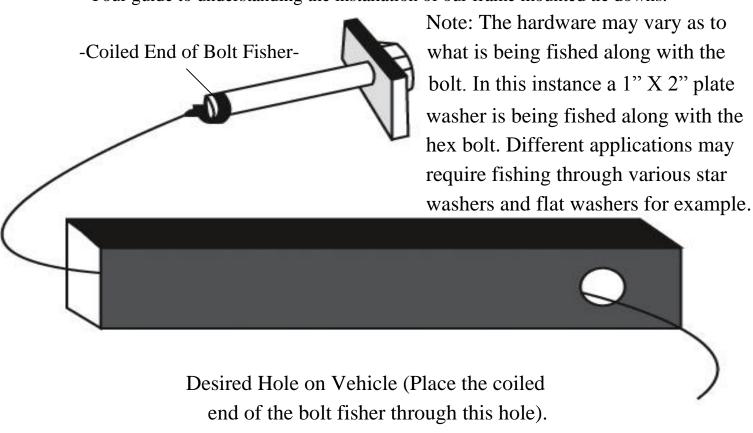
Torklift utilizes quality grade 304 stainless steel in this product.

304 stainless steel is well known for its anti corrosive properties, however in some environments such as coastal regions or when in contact with some road chemicals, corrosion may occur.

We recommend occasional polishing of our product to maintain its attractive finish. Use an approved stainless steel cleaning/polishing product, which can be purchased from any automotive supplier.

TORKLIFT'S BOLT FISHING GUIDE

Your guide to understanding the installation of our frame mounted tie downs.



This side of the Bolt Fisher should come out of a hole where the required hardware (for example 1" X 2" plate washer) can pass

through.

This bottom example shows the bolt when it's completely fished through the

This bottom example shows the bolt when it's completely fished through the vehicle. You may find it easier to keep the bolt fisher attached until you get the tie down receiver in place so that the bolt doesn't fall into the vehicle frame.

WARNING: PULLING TOO HARD ON THE BOLT FISHER CAN RESULT IN LOST FASTENERS, OR BROKEN BOLT FISHER.

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. Your tie down inserts should be installed with the shorter side of the bullet plate facing away from each other, i.e.. 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

DRIVERS SIDE FRONT

bullet plate on the insert as a reminder.

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 2×4 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.

<u>TORKLIFT DOES NOT RECOMMEND:</u> 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.

Torklift International Limited Lifetime Warranty Information

322 Railroad Ave North, Kent, WA 98032

Torklift will require proof of purchase to register, with pictures of any defective product before issuing a replacement. Torklift will not register any product without proof of purchase, which can be faxed, scanned, emailed, or mailed to the information provided below. Torklift warrants it's hitches, custom hitch receivers, frame mounted tie downs, turnbuckles, and accessories (excluding wire harnesses which carry a 90 day warranty) from date of purchase against defects in material and workmanship under normal use and service for the ownership life of the original consumer purchaser. ALL COMMERCIAL APPLICATIONS ARE WARRANTED FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION/SERVICE. Torklift will replace FREE OF CHARGE any part, which proves defective in material or workmanship when presented to Torklift, TRANSPORTATION CHARGES PREPAID by purchaser, at the address above. THIS WARRANTY IS LIMITED TO DEFECTIVE PARTS REPLACEMENT ONLY. LABOR CHARGES AND/OR DAMAGE INCURRED IN INSTALLATION OR REPLACEMENT, AS WELL AS INCIDENTAL AND CONSEQUENTIAL DAMAGES CONNECTED THEREWITH ARE EXCLUDED. This warranty does not include the finish or paint on our products. Rusting, cracking or peeling of the finish is also excluded. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Any damage to Torklift products as a result of misuse, abuse, neglect, accident, improper installation or any use violation of instructions furnished by Torklift or WHEN USED IN ANY COMMERCIAL APPLICATION WILL VOID THE WARRANTY. This warranty gives you specific legal rights, and you may also have rights, which vary from state to state. With warranty service, you may be able to go to a small claims court, a state court or a federal district court.



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322 Railroad Ave North, Kent, WA 98032 Phone (800) 246-8132 Fax (253) 854-8003

or visit our website: www.TorkLift.com

Dear Valued Customer,

Thank you for making TorkLift your choice for truck, camper packages and accessories for your vehicle. By choosing TorkLift products, you have chosen a company that has been serving the RV industry for nearly 40 years and whose name has become synonymous with strength, quality and advanced design and installation. Please take a few moments of your time to complete the Product Registration Warranty Card on the next page. When registering your newly purchased TorkLift products, you can be assured that your contact information is secure and that you and your product are getting the attention and respect that you deserve.

Thank you again for choosing TorkLift quality products.

Register for your lifetime warranty and receive a free Torklift International gift.

To Fax: Send copies of the questionnaire, warranty card and receipt to 253-854-8003

To E-mail: Send copies of the questionnaire, warranty card and receipt to warranty@torklift.com

To Mail: Send to Torklift International 322 Railroad Ave North, Kent, WA 98032



Frame Mounted Tie Downs

Leading the camper tie down industry in strength, quality, advanced design and installation. TorkLift TRUE frame mounted tie downs are far superior to all tie down systems available.

The TorkLift system is unique in its design and is patented. Four independent tie down points (with no belly or crossbar) working much like your receiver type trailer hitch as the inserts are removable allowing the system to be virtually undetectable when not in use.

They are designed for each make and model to fit tight to the frame so as not to compromise ground clearance. TorkLift tie downs are not universal 'one size fits all' therefore all the problems with correct fit for each particular application have been eliminated.

Original SuperHitch & SuperHitch Magnum

High strength extended hitch system engineered for safely towing all types of trailers behind your truck and camper. With a max towing capacity of 14,000 lbs.(6350kg) with an extension*, (17,000 lbs.(7711kg) to 20,000 lbs.(9071kg) without*) the Original SuperHitch and SuperHitch Magnum are rated the strongest in the industry.



CONTACT YOUR LOCAL DEALER FOR MORE DETAILS

*Weight capacity varies depending on the SuperHitch and SuperTruss extension setup.



OVER 35 YEARS OF INNOVATION, QUALITY, SAFETY.

OFFICIAL WARRANTY REGISTRATION CARD

PLEASE FILL OUT THIS FORM COMPLETELY AND RETURN TO TORKLIFT WITHIN 30 DAYS OF PURCHASE ACCOMPANIED BY A COPY OF YOUR ORIGINAL RECEIPT

		TODAY'S DATE:	
L. PART(S) PUR	CHASED		
		PART#:	
PART#:		PART#:	
		TION	
CITY:	ST/	ATE: ZIP / POSTAL CODE:	
PHONE: ()	<u>-</u>	EMAIL:	
3. TRUCK INFOR	MATION		
YEAR:	MAK	Œ:	
MODEL:	BED LENGTH:		
4. CAMPER INFO	RMATIO	ON CONTRACTOR OF THE PROPERTY	
YEAR:	_ MAKE:	MODEL:	
5. DEALER INFO	RMATIO	N	
PURCHASED FROM:	·		
		TATE: ZIP / POSTAL:	
INSTALLED BY:	OWNER	ABOVE DEALER ANOTHER DEALER	

IF ANOTHER DEALER, WHO: _____