

OVER 35 YEARS OF INNOVATION, QUALITY, SAFETY.

TRUE FRAME MOUNTED CAMPER TIE DOWNS

IMPORTANT OWNER-OPERATOR INSTALLATION INSTRUCTIONS

D4100



REVISED vers5 BY: 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.

D4100 PARTS INVENTORY

2 - FRAME PLATES 4 - 3/8" FLAT WASHERS 1 - 1/2" & 3/8" BOLT FISHER

2 - SUPPORT STRAPS 8 - 1/2" STAR WASHERS 2 - 3/8" LOCK WASHERS

2 - TIE DOWN RECEIVERS 8 - 1/2" FLAT WASHERS 2 - 3/8" NUTS 2 - UPPER CHANNELS 4 - 1/2" LOCK WASHERS 2 - 1/4" PIN

2 - BENT INSERTS 6 - 1/2" LOCKING NUTS

4 - 1/2" X 2" HEX BOLTS 4 - 1/2" NUTS

6 - 1/2" X 3" HEX BOLTS 2 - 3/8" X 1 1/4" HEX BOLTS

1 - 3/8" E-BRAKE TUBING 4 - ZIP TIES

INSTALLATION INSTRUCTIONS:

1. Locate and inventory all parts to become familiar with all brackets.

- 2. Find drivers side front frame plate. Hold the bracket up to the side of the frame at the front of the box, until both of the factory holes in the side of the frame line up with the holes in the frame plate. (NOTE: on the 96 and some early 97 model year trucks one of the holes in the side of the frame may be missing and will need to be drilled out to 17/32".). Both of these holes will need to have 1/2" x 2" hex bolts with star and flat washers (see pg. 6 for correct assembly) fished into them with supplied bolt fisher. HINT: Before fishing driver's front bolts, cut the factory plastic fuel brake line/wire harnesses retainer clips protruding through the frame on the driver's side and pushes them in (refer to pg. 4). This will allow you to use a pair of screwdrivers to walk the lines down out of the way. Place the first screwdriver through the small holes in the side of the frame just above the lines & wire harness, push the screwdriver handle up, this will push the lines down. Use the other screwdriver in a different hole, and repeat the process until the lines are down out of the way. Fish the bolts in and pull the screwdrivers out. (Make sure the bolts are perpendicular to the frame before tightening). When fishing these bolt, put the coiled end of the bolt fisher into one of the holes and bring it out towards front of frame, between tank & frame. Insert the threaded end of the bolt onto the fisher and slowly remove the fisher, pulling the threaded end back through the desired hole (see our bolt fishing guide). Hint: Do not force the bolt by pulling hard, or jerking on the fisher, as this will likely damage the fisher, and/or drop the bolt in to the frame. After both bolt plates are fished into the frame plate, install flat washer, lock washer, and nut onto these bolts and tighten hand tight. Warning: make sure all wire harnesses, brake, and fuel lines are clear when tightening. Damage may occur. HINT: If you do drop a bolt into the frame, use a flat piece of metal or wood with a blunt end as a pry bar. Slide it between the tank and the frame. Have another person pull on the pry bar slowly, just enough to get the bolt out (the factory tank is resilient enough to give without cracking). Put your fingers between the tank and the frame and remove the bolt. You should be able to get the bolt out, using this method.
- 3. Locate the tie down receiver and attach to the frame plate using a 1/2" x 3" bolt and locking nut. Hand tighten.
- **4.** Identify the upper channel. Looking up at the bottom of the truck box (**refer to pg. 5**) remove the factory bolt that attaches the box to the frame tower. Install the upper channel and reinstall factory bolt. Now drill out the remaining 7/16" hole and fish the 1 1/4" x 3/8" hex bolt and flat washer in through the end of the box channel with the supplied bolt fisher. Install a flat washer, lock washer, and nut. Tighten hand tight. Make sure to keep upper support channel parallel with the truck bed cross member.
- 5. Find one bent insert and 1/4" pin and put the bent insert into the receiver using the first hole in the insert. Install 1/4" pin.
- 6. Locate the support strap and two 1/2" x 3" hex bolts and two locking nuts. 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 after market accessory (see pg. 8 for correct strap angle information). *NOTE: The included tie down inserts come with 2 predrilled pinhole locations. When hooking up your camper, either hole may be used providing there is a MINIMUM of 2" clearance between the chain/turnbuckle attaching assembly and the truck bed wall.

IMPORTANT: Tighten all fasteners until there is no slack or play between any component. 1/2" fasteners to 60 ft. lbs.(81nm) Now tighten 3/8" fasteners to 35 ft. lbs.(47nm)

7. Double-check that all hex bolts are tight and that there is 1" of clearance on the bent insert and box lip. Repeat steps 2 through 6 on passenger side. (Relocate factory ground strap on bottom of truck bed for upper channel, passenger side only)

E-BRAKE ADDENDUM



Depending on the year of your vehicle the emergency brake line will be positioned either above or below the tie down receiver. To prevent any possible emergency brake line damage we have provided you with 1-3/8 tubing to wrap around your brake line and 4-zip ties to secure the tubing.

ILLUSTRATED DIAGRAMS

DRIVERS SIDE FRONT



ILLUSTRATED DIAGRAMS

DRIVERS SIDE FRONT





MAINTAIN 1" CLEARANCE FROM LIP OF BED



PROPER BOLT ASSEMBLY

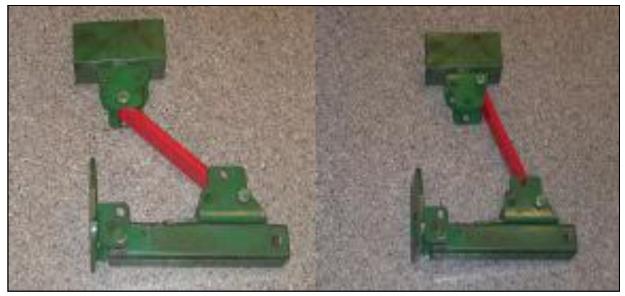
The star washers have been supplied to keep the bolt from spinning while tightening the nut to proper specifications.

The star washers are only required on fastener applications where the head of the bolt CANNOT 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.

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.

INSTRUCTIONS FOR MAINTENANCE OF POLISHED STAINLESS STEEL PRODUCTS



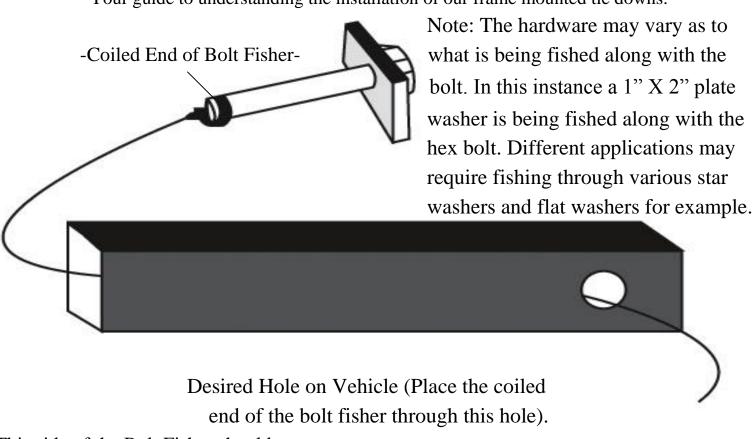
Torklift utilizes quality grade 304 stainless steel in this product.

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

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 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 2×4 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.



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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:	MAKE:	
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: _____