

# Superlift<sup>®</sup> Level-It System for 1999- 06 General Motors 1500, 2WD & 4WD

# INSTALLATION INSTRUCTIONS

# INTRODUCTION

Installation requires a professional mechanic. Prior to beginning, inspect the vehicles steering, driveline, and brake systems, paying close attention to the suspension control arms and bushings, anti-sway bars and bushings, steering linkage, ball joints and wheel bearings. Also check the steering sector-to-frame and all suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition; repair or replace all worn parts.

Read instructions several times before starting. Be sure you have all needed parts and know where they install. Read each step completely as you go.

NOTES:

- Prior to beginning the installation, check all parts and hardware in the box with the
  parts list below. If you find a packaging error, contact Superlift<sup>®</sup> directly. Do not
  contact the dealer where the system was originally purchased. You will need the
  control number from each box when calling; this number is located at the bottom of
  the part number label and to the right of the bar code.
- Front end re-alignment is necessary.
- A foot-pound torque reading is given in parenthesis () after each appropriate fastener.
- Do not install additional components or modify this system to gain additional suspension height.
- Prior to attaching components, be sure all mating surfaces are free of grit, grease, undercoating, etc.
- A factory service manual should be on hand for reference.
- Speedometer recalibration is recommended if a taller tire is used.
- Use the check-off box "□" found at each step to help you keep your place. Two "□□" denotes that one check-off box is for the driver side and one is for the passenger side.

**PARTS LIST** ... The part number is stamped into each part or printed on an adhesive label. Identify each part and place the appropriate mounting hardware with it.

PART NO	<b>DESCRIPTION</b> (Qty if more than one)	NEW ATTACHING HARDWARE (Qty if more than one)
01-40008	. (2) torsion key	(2) 12mm torsion key bolt
00461	. decal, "Warning To Driver"	
00421	. decal, Superlift <sup>®</sup> die-cut	

## DISASSEMBLY

## 1) PREPARE VEHICLE...

□ Place the vehicle in neutral. Raise the front of vehicle with a jack and secure a jack stand beneath each frame rail, behind the lower control arms. Ease the frame down onto the stands, place transmission in low gear or "park", and chock rear tires. Remove the front tires.

□ An eccentric cam bolt assembly attaches each leg of the upper control to the frame; the cam bolts are also used for front end alignment. Loosen (do not remove) the cam bolts. Prior to loosening, mark the cam washers' orientation in relation to the control arm, for later reference.

## 2) UNLOADING THE TORSION BARS... Perform this step one side at a time.

WARNING: Be extremely careful when

loading and unloading the torsion bars; there is a tremendous amount of nergy stored in them. Keep your hands and body clear of the adjuster arm ssembly and the puller tool in case anything

slips

or breaks.

**WARNING:** Because of the extreme loads generated by the torsion bars, a standard two-jaw puller tool tends to

bend

the "lips" of the crossmember (which it uses for attachment), and may pop out of

place. Use a C-clamp type puller designed for this application.

DIAGRAM - TORSION BAR UNLOAD

□□ [SEE DIAGRAM – TORSION BAR UNLOAD] Load the torsion bar then remove the adjusting bolt and nut block. Unload the bar.

□□ Prior to removing the key from the bar, scribe an alignment mark on the bar and factory torsion key to note how they are indexed in relation to each other.

Slide the torsion bar forward enough (into the lower control arm) to remove the torsion key.

## ASSEMBLY

**3) NEW TORSION KEYS...** [SEE DIAGRAM - KEY INDEXING] Perform this step one side at a time.

Determining proper key-to-bar indexing - Position one of the factory torsion keys on a flat

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surface (work bench or floor), with the scribe mark, made in step 2, facing up. Position a Superlift<sup>®</sup> key on top of the factory key. Align the "flats" of the hex holes so that the opposite

ends of both keys remain as close to each other as possible. Now scribe a mark, as shown, on the Superlift<sup>®</sup> key.

□□ Position the new torsion key inside the crossmember then mate the bar-to-key. Make sure the bar and key are properly indexed by aligning the scribe marks.

□□ Coat the adjusting bolt with an anti-seize type lubricant. Load the torsion bar. Insert the factory nut block into the crossmember. Install the supplied adjusting bolt; leave about half of the bolts threads visible below the nut block. Unload the tool. Final ride height adjustments are made once the vehicle is on the floor.

**4) D TIRES / WHEELS...** [SEE DIAGRAM] Tighten lug nuts (140) in the sequence shown.

**WARNING:** When the tires / wheels are installed, always check for and remove any corrosion, dirt, or foreign material on the wheel mounting surface, or anything that contacts the wheel mounting surface (hub, rotor, etc.). Installing wheels without the proper metal-to-metal contact at the wheel mounting surfaces can cause the lug nuts to loosen and the wheel to come off while the vehicle is in motion.

**WARNING:** Retighten lug nuts at 500 miles after any wheel change, or anytime the lug nuts are loosened. Failure to do so could cause wheels to come off while vehicle is in motion.

5) DD INITIAL CLEARANCE CHECK... With the vehicle still on jack stands, and the suspension "hanging" at full extension travel, cycle steering lock-to-lock and check all components for proper operation and clearances. Pay special attention to the clearance between the tires / wheels and brake hoses, wiring, etc.

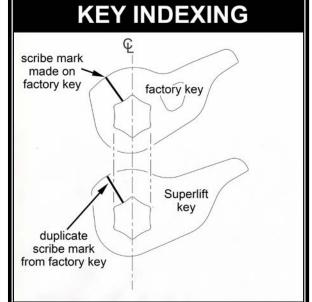
Lower vehicle to the floor. The suspension is now supporting vehicle weight.

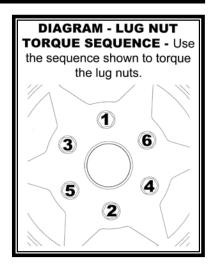
6) **UPPER CONTROL ARM BOLTS...** Prior to tightening the upper control arms eccentric cam bolts, realign the cams using the scribe marks made during disassembly (140).

# 7) ADJUSTING FRONT RIDE HEIGHT ...

□ With the vehicle on a level surface, manually bounce the front of the vehicle to normalize (settle) the torsion bars.

□□ Ride height is controlled via the torsion bar adjusting bolts. Increase height by tightening the bolts; decrease height by loosening the bolts.





**CAUTION:** Do not exceed maximum ride height - Suspension extension travel is limited by the rear leg of the upper control arm making contact with a factory metal frame bracket. As lift height increases, the distance between these two points decreases. Distance between the rear leg and the bracket <u>must not</u> be less than 5/8". If extension travel is reduced further, ride quality will suffer, and the upper ball joints will be subjected to increased loads.

Verify that ride height is equal side-to-side. It is not unusual for one adjusting bolt to require more adjustment than the other.

8) **I** FINAL CLEARANCE and TORQUE CHECK... With vehicle on floor, cycle steering lock-to-lock and inspect the tires / wheels, and the steering, suspension, and brake systems for proper operation, tightness, and adequate clearance.

9) **HEADLIGHTS...** Readjust headlights to proper setting.

**10)** SUPERLIFT<sup>®</sup> WARNING DECAL... Install the WARNING TO DRIVER decal on the inside of the windshield, or on the dash, within driver's view. Review the "IMPORTANT PRODUCT USE AND SAFETY INFORMATION / WARNINGS" text found at the end of this Instructions sheet.

**12) ALIGNMENT...** Realign vehicle to factory specifications. Below, record the ride height measurement at time of alignment. If, in the future misalignment occurs due to the torsion bars settling excessively, alignment can be restored by adjusting-up the bars to their original ride height.

Ride Height -

Measurement points - \_\_\_\_\_

# Limited Lifetime Warranty / Warnings

Your Superlift<sup>®</sup> product is covered by the Limited Warranty explained below that gives you specific legal rights. This limited warranty is the only warranty Superlift<sup>®</sup> makes in connection with your product purchase. Superlift<sup>®</sup> neither assumes nor authorizes any retailer or other person or entity to assume for it any other obligation or liability in connection with this product or limited warranty.

**What is covered?** Subject to the terms below, Superlift<sup>®</sup> will repair or replace its products found defective in materials or workmanship for so long as the original purchaser owns the vehicle on which the product was originally installed. Your warrantor is LKI Enterprises, Inc. d/b/a Superlift<sup>®</sup> Suspension Systems ("Superlift<sup>®</sup>").

**What is not covered.** Your Superlift<sup>®</sup> Limited Warranty does not cover products, parts or vehicles Superlift<sup>®</sup> determines to have been damaged by or subjected to:

- Alteration, modification or failure to maintain.
- Normal wear and tear (bushings, tie-rod ends, etc.). Scratches or defects in product finishes (powder coating, plating, etc.),
- Damage to or resulting from vehicle's electronic stability system, related components or other

vehicle systems.

- Racing or other vehicle competitions or contests. Accidents, impact by rocks, trees, obstacles or other aspects of the environment.
- Theft, vandalism or other intentional damage.

**Remedy Limited to Repair / Replacement.** The exclusive remedy provided hereunder shall, upon Superlift's inspection and at Superlift's option, be either repair or replacement of product or parts covered under this Limited Warranty. Customers requesting warranty consideration should contact Superlift® by phone (1-800-551-4955) to obtain a Returned Goods Authorization number. All removal, shipping and installation costs are customer's responsibility.

If a replacement part is needed before the Superlift<sup>®</sup> part in question can be returned, you must first purchase the replacement part. Then, if the part in question is deemed warrantable, you will be credited / refunded.

## Other Limitations - Exclusion of Damages - Your Rights Under State Law

- Neither Superlift<sup>®</sup> nor your independent Superlift<sup>®</sup> dealer are responsible for any time loss, rental costs, or for any incidental, consequential or other damages you may have.
- This Limited Warranty gives you specific rights. You may also have other rights that vary from state to state. For example, while all implied warranties are disclaimed herein, any implied warranty required by law is limited to the terms of our Limited Lifetime Warranty as described above. Some states do not allow limitations of how long an implied warranty lasts and / or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you.

### Important Product Use and Safety Information / Warnings

As a general rule, the taller a vehicle is, the easier it will roll over. Offset, as much as possible, what is lost in rollover resistance by increasing tire track width. In other words, go "wide" as you go "tall". Many sportsmen remove their mud tires after hunting season and install ones more appropriate for street driving; always use as wide a tire and wheel combination as feasible to enhance vehicle stability. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll bar and cage system. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capabilities are decreased when significantly larger / heavier tires and wheels are used. Take this into consideration while driving. Also, changing axle gear ratios or using tires that are taller or shorter than factory height will cause an erroneous speedometer reading. On vehicles equipped with an electronic speedometer, the speed signal impacts other important functions as well. Speedometer recalibration for both mechanical and electronic types is highly recommended.

Do not add, alter, or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the Superlift<sup>®</sup> product purchased. Mixing component brands is not recommended.

## SUPERLIFT SUSPENSION SYSTEMS

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