



SUPERLIFT®

S U S P E N S I O N

Superlift® Level-It System for
1999 and newer General Motors 1500HD / 2500 / 2500HD,
2003 and newer H2

INSTALLATION INSTRUCTIONS

INTRODUCTION

Installation requires a professional mechanic. Prior to beginning, inspect the vehicles steering, driveline, and brake systems, paying close attention to the control arms and bushings, anti-sway bars and bushings, steering linkage, pitman arm, 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® 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 realignment is necessary.
- A foot-pound torque reading is given in parenthesis () after each appropriate fastener.
- Do not install any 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	DESCRIPTION <small>(Qty.- if more than one)</small>	NEW ATTACHING HARDWARE <small>(Qty.- if more than one)</small>
01-40010	(2) torsion key	(2) 12mm torsion key bolt
55-03-40010	(2) shock bracket	

- 00461..... decal, "Warning To Driver"
- 00421..... decal, Superlift[®] die-cut

DISASSEMBLY

NOTE: Save all factory components and hardware for re-use.

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.

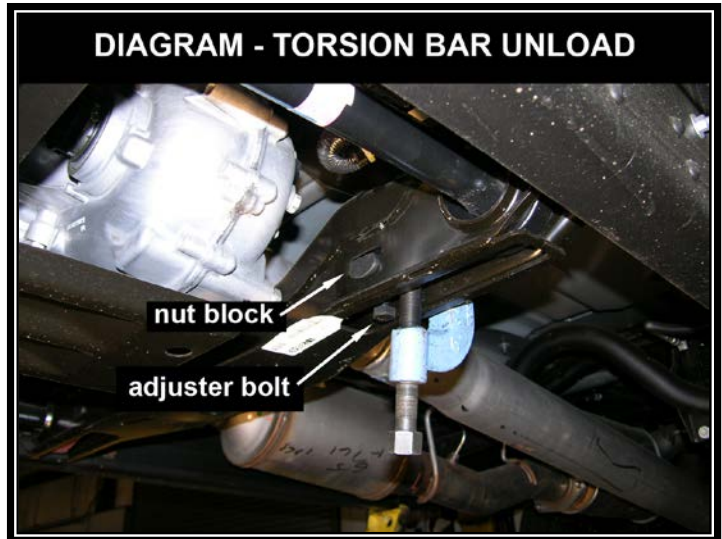
2) SHOCK ABSORBERS, CONTROL ARMS... Perform this step one side at a time.

- Detach the lower end of the shock absorber from the lower control arm.
- Remove the shock-to-lower control arm mount bracket; it is secured by two bolts.
- 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.

3) 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 energy stored in them. Keep your hands and body clear of the adjuster arm assembly 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.



□□ [SEE PHOTO - 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 into the lower control arm enough to remove the torsion key.

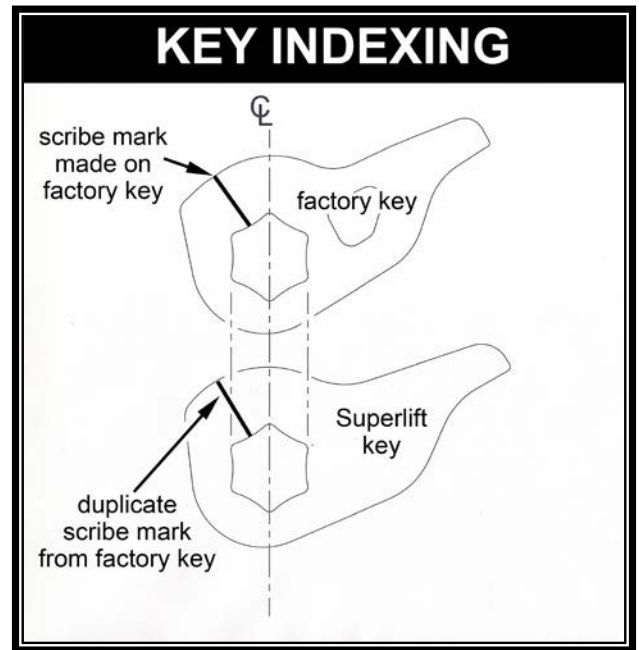
ASSEMBLY

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

☐☐ Determining proper key-to-bar indexing - Position one of the factory torsion keys on a flat surface (work bench or floor), with the scribe mark, made in step 2, facing up. Position a Superlift 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 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.



5) SHOCK SPACER PLATE... Perform this step one side at a time.

[SEE DIAGRAM – LOWER SHOCK MOUNT]

☐☐ Position one of the supplied shock brackets (#55-03-40010) in the factory location, as shown. Attach using the factory hardware (23).

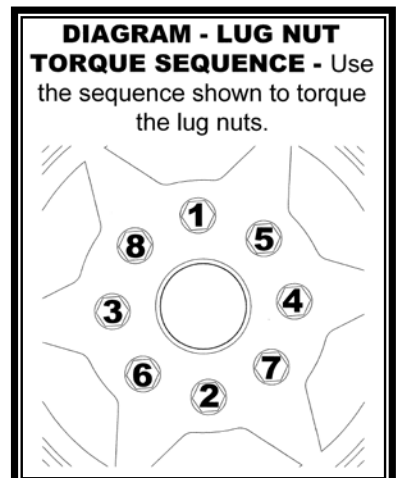
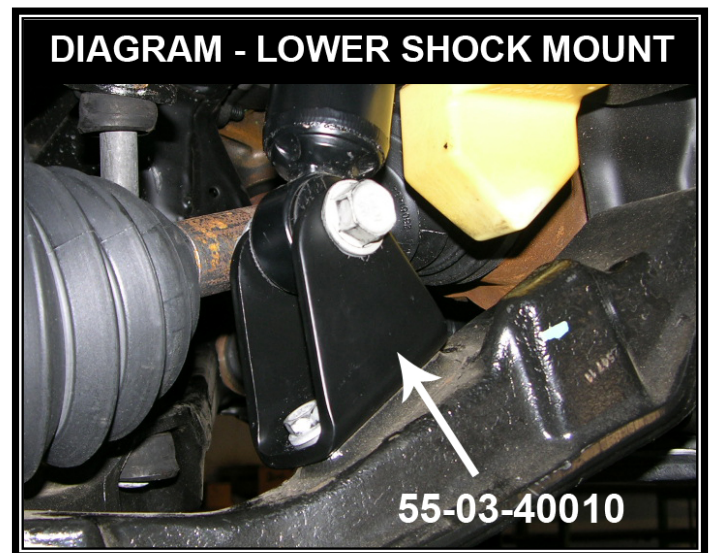
☐☐ Attach the shock’s lower end to the shock bracket (59).

6) ☐☐ TIRES / WHEELS... [SEE DIAGRAM]
Tighten lug nuts (145) 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.

7) ☐☐ 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.

8) UPPER CONTROL ARM BOLTS... Lower vehicle to the floor. The suspension is now supporting vehicle weight. Prior to tightening the upper control arms eccentric cam bolts, realign the cams using the scribe marks made in step 2 during disassembly (150).

9) 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 must not 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.

10) 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.

11) HEADLIGHTS... Readjust headlights to proper setting.

12) SUPERLIFT 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.

13) 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 - _____