

## Superlift 2" lift system for 2003 and Newer Dodge 3/4-ton and 1-ton Ram 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 link arms and bushings, anti-sway bars and bushings, tie rod ends, 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:

- Front end realignment is necessary.
- An arrow on diagrams indicates which direction is toward the front of the vehicle.
- A foot-pound torque reading is given in parenthesis () after each appropriate fastener.
- Do not fabricate any components to gain additional suspension height.
- Paint or undercoat all exposed metal surfaces.
- 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.
- 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. Unless otherwise noted, always start with the driver 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 (Qty if more than one)	NEW ATTACHING HARDWARE (Qty if more than one)
01-242	coil spring, driver side	
02-242	coil spring, passenger side	
01-4620	poly compression travel stop	
88500	(2) shock absorber, front <b>Optional</b> *	(2) shock boot, yellow (2) hardware pack and cable tie
85150	(2) shock absorber, rear optional*	(2) shock boot, yellow (2) hardware pack and cable tie

\*(Note: Shock boot, if desired, purchased separately)

0034.....alcohol wipe pad

00461 .....decal, "Warning To Driver"

## FRONT DISASSEMBLY

## 1) PREPARE VEHICLE...

Place vehicle in neutral. Raise front of vehicle with a jack and secure a jack stand beneath each frame rail, behind the lower trailing arms. Ease the frame down onto the stands, place transmission in low gear or "park", and chock rear tires. Position the jack so that it supports, but does not raise, the front axle. Remove front tires.

### 2) ANTI-SWAY BAR LINKS...

Disconnect the anti-sway bar links from the anti-sway bar. Save the links and all hardware for re-use.

### 3) SHOCKS...

Remove the lower shock bolt, followed by the bolts attaching the shock tower to the upper coil bucket. Remove the shock from the tower, but save all hardware for re-use.

### 4) TRACK BAR...

Disconnect the track bar from its upper mounting point on the frame and rest it on the axle. It may be helpful to loosen the lower track bar bolt to relax the lower bushing. Save all hardware for re-use.

## 5) DRAG LINK...

Remove the cotter pin and castellated nut from the drag link where it attaches to the pitman arm. Using the appropriate tool, separate the drag link from the pitman arm.

#### 6) BRAKE HOSES...

On each side, remove the brackets securing the brake hoses to the rear of the link arm bracket on the axle. Save the hardware and bracketry for re-use.

## 7) COIL SPRINGS...

**D** Ease down the jack supporting the front axle enough to facilitate removing the springs.

#### 8) COMPRESSION TRAVEL STOPS...

**D** Remove and discard the factory compression travel stops.

## FRONT ASSEMBLY

## 9) COMPRESSION TRAVEL STOP EXTENSIONS...

□□ On each side, press a #01-4620 compression travel stop in the factory compression stop cups. Be sure the lip of the cup is fully engaged in the recess of each compression travel stop.

#### PAGE 3 OF 6

## 10) COIL SPRINGS...

□ Lower the front axle enough to facilitate the installation of the coil springs. Position the coil springs (#01-242 driver side and #02-242 passenger side) on the coil buckets, then raise the front axle enough to seat and hold them in place.

**NOTE:** The coil springs are side-specific and must be installed correctly in order to gain even suspension lift. For reference, the #01-242 driver side coil spring is 19-3/4" tall and the #02-242 passenger side is 19-1/2" tall.

## 11) SHOCK ABSORBERS...

**NOTE:** Replacement shock absorbers are optional and purchased separately. If the factory shock absorbers are being reused, install per the procedure found below, or follow the procedure found in the factory service manual.

- □□ Install the bushings, sleeves, shock boots, and stickers on the #88500 shock absorbers.
- □□ Position the shocks inside the coil springs with the stem end of the shock facing upward. Secure the bottom end of the shock using factory hardware and tighten (89).
- Position a washer and bushing on the shock stem and then reattach the shock tower to the upper coil seat using the factory hardware (55). Install the remaining bushing and washer on the shock stem and tighten until the bushings swell slightly.

## 12) BRAKE HOSE BRACKETS...

Reattach the factory brake hose brackets to their factory location on the axle trailing link brackets using the factory hardware and tighten (7-1/2).

## 13) ANTI-SWAY BAR LINKS...

Reattach the anti-sway bar to the factory links using the factory hardware and tighten until the bushings swell slightly.

## 14) TRACK BAR...

**NOTE:** It may be easier to reattach the track bar once the vehicle is on the ground with the suspension supporting the weight of the vehicle.

□ Raise the track bar and reinstall it in the factory mounting hole on the frame using the factory hardware. Tighten (150).

## 15) DRAG LINK...

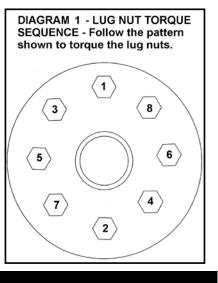
Reattach the drag link to the pitman arm using the factory nut and the supplied cotter pin. Tighten (65).

## **REAR PROCEDURE**

## 16) REAR SHOCK ABSORBERS...

**NOTE:** Replacement shock absorbers are optional and purchased separately. If replacement shocks have been purchased, install now per the procedure found below. If replacement shocks have not been purchased, proceed to step 17.

- **D** Remove and discard the factory shock absorbers.
- □□ Assemble the bushings, sleeves, shock boots, and decals on the #85150 rear shocks.
- □□ Install the shock absorbers using the factory hardware. On the lower mounts, position 9/16" USS washers between the mount and the shock bushing, so that the bushing is sandwiched by the washers and shock mount. Tighten the upper and lower mounts (100).



# FINAL PROCEDURES

## 17) TIRES / WHEELS...

□ [DIAGRAM 1] Tighten the 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.

## 18) 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.

## **19) ALIGNMENT AND CENTERING THE STEERING WHEEL...**

**NOTE:** The vehicle must be aligned vehicle to factory specifications by a certified alignment professional. If the lower link arm cam bolts have not been moved from the original settings, then caster and camber are close enough to drive the vehicle safely and slowly to an alignment facility after performing the following steps.

■ Be sure the steering wheel is unlocked. Position the passenger side front tire so that it is pointed straight ahead. You may want to use a long straightedge (such as a piece of pipe or string) positioned against the front and rear passenger side tires for reference. Loosen the adjuster sleeve on the drag link (the link that runs from the passenger side knuckle to the pitman arm) and rotate the sleeve until the steering wheel is straight, or "centered," then tighten the sleeve clamps (45).

- To reach an initial toe setting, measure at a consistent point near the center of the tread on the front and rear of the tires. Note the difference in measurement from front to rear. Loosen the clamps on the tie rod adjustment sleeve (the link that runs from the drag link to the driver side knuckle) and make adjustments as necessary until the front measurement is 1/10<sup>th</sup> of an inch shorter than the rear. Tighten the adjuster clamps (45).
- Drive the vehicle safely and slowly to a facility that can perform a professional alignment.

## 20) 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.

## 21) HEADLIGHTS...

Readjust headlights to proper setting.

## 22) SUPERLIFT NAME BADGE AND WARNING DECAL...

The system includes one 2" x 5" name badge (#0034). Additional and / or larger badges are available from Superlift or a Superlift dealer. We suggest putting the badges on the front fenders, tailgate, or rear window. The badge mounts by means of factory applied, double-backed tape. Follow these instructions to ensure that badge sticks properly:

- □ Clean designated area with warm, soapy water. Rinse and wipe dry with a soft, lint free towel.
- □ Thoroughly prep the area with the furnished alcohol wipe pad and wipe dry with a soft, lint free towel. Do not touch the surface again with your hands; they transfer body oils.
- Remove mounting tape backing, line up badge, and press in place. Do not touch mounting tape or allow tape to get dirty.
- Press firmly on the badge face and hold a few seconds to seat mounting tape. A superior adhesive bond forms over time. We recommend allowing 24 hours of cure time before washing and waxing. The emblem itself can be cleaned with any glass cleaner.
- Install the WARNING TO DRIVER decal on the inside of the windshield, or on the dash, within driver's view. Refer to the "NOTICE TO DEALER AND VEHICLE OWNER" section below.

## IMPORTANT PRODUCT USE INFORMATION

As a general rule, the taller a vehicle is, the easier it will roll over. Offset, as much as possible, what is lost in roll over resistance by increasing tire track width. In other words, go "wide" as you go "tall". Many sportsmen remove their mud tires after winter / hunting season and install ones more appropriate for street driving; always use as wide a tire and wheel combination as possible to enhance vehicle stability.

We strongly recommend, because of roll over 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 performances and capabilities are decreased when significantly larger / heavier tires and wheels are used. Take this into consideration while driving.

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

Most states have some type of law limiting vehicle height. The amount of lift allowed, and how the lift may be achieved, varies greatly. Several states offer exemptions for farm or commercially registered vehicles. It is the owner's responsibility to check state and local laws to ensure that their vehicle will be in compliance.

Superlift makes no claims regarding lifting devices and excludes any and all implied claims. Superlift will not be responsible for any altered product or any improper installation or use of our products.

We will be happy to answer any questions concerning the design, function, and correct use of our products.

#### **IMPORTANT MAINTENANCE INFORMATION**

It is the ultimate buyer's responsibility to have all bolts / nuts checked for tightness after the first 100 miles and then every 1000 miles. The steering, suspension and driveline systems, along with wheel alignment should be inspected by a qualified professional mechanic at least every 3000 miles.

#### NOTICE TO DEALER AND VEHICLE OWNER

Any vehicle equipped with a Superlift lifting device must have the enclosed "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash, within driver's view. The "Warning to Driver" decal is to act as a constant safety reminder for whoever may be operating the vehicle. The WARRANTY IS VOID unless this decal is in place. **INSTALLING DEALER**... It is your responsibility to install warning decal and forward these installation instructions to the vehicle owner for review of warnings, product use and maintenance information. Replacement warning decals are available free upon request. These instructions are to be kept with the vehicle registration papers and owners manual for the service life of the vehicle.

#### SUPERLIFT LIMITED LIFETIME WARRANTY

Suspension products bearing the Superlift (LKI Ent.) name are warranted for as long as the original purchaser owns the vehicle that the LKI product was originally installed on. This warranty is non-transferable. Warranty covers only the product, no labor, time loss, or freight incurred. Any product that has been abused, altered, incorrectly installed, or used in competition is not covered. Product finish, spring bushings, Polyurethane products, and normal wear is not covered. The LKI product is subject to replacement or repair. No other warranties are expressed or implied. An authorized Superlift dealer must inspect the part in question and confirm that the "Warning to Driver" decal is properly displayed. A copy of the sales invoice is required for warranty consideration.

#### SUPERLIFT SUSPENSION SYSTEMS

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