

#### Superlift 4" and 6" <u>lift system</u> for 1969-1988 1/2-, 3/4-Ton Pickup, 1969-1991 Blazer / Suburban with Solid Front Axle and Leaf Springs 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:

- A foot pound torque reading is given after each appropriate fastener.
- On 6" lifts, it may be necessary to modify or reroute exhaust on vehicles equipped with single exhaust due to clearance problems between pipes and front driveshaft caused by increased shaft angle.
- **NOTE** "**A**" On 1977-1/2 and newer models equipped with the Saginaw type front driveshaft, some grinding will need to be done on the Constant Velocity (C.V.) joint cluster. Also, round off the corners on the C.V. cluster housing and any other points that may cause the assembly to bind. Allow clearance for front-end extension travel. No grinding is needed on the front axle end of the shaft. Refer to step 8.
- NOTE "B" Generally, with this much lift, driveshaft length is adequate. If a stub shaft has ever been replaced, which results in losing some tube length, the shaft may be short. To determine the correct length, check the running length with the stub shaft (male end) centered in the slip yoke (female end). For most vehicles, the minimum amount of allowable spline contact is 1-3/4 " at full suspension extension travel. Incorrect length can lead to massive screwage. Also, be sure the driveshaft ends are "timed", which means the yoke "oars" (the heaviest points at each end) are positioned so that they are in line with each other. An untimed shaft will vibrate similar to an unbalanced shaft. Refer to step 8.

## FRONT PROCEDURE

## 1) PREPARE VEHICLE...

Put transmission in neutral. Position a floor Jack under front axle and raise vehicle. Place jack stands under the frame rails, a few inches behind the front springs' rear shackles. Ease down the jack until frame is resting on stands. Keep a slight load on the lack. Put vehicle in gear or park, set emergency brake, and chock rear wheels to prevent any possibility of movement.

#### 2) FRONT DRIVESHAFT...

Remove shaft on 1977-1/2 and newer vehicles equipped with a Saginaw type shaft. See notes "A" and "B".

#### 3) TIRES AND SHOCK ABSORBERS...

- Remove front tires and shock absorbers. Save all shock hardware for reuse.
- Remove steering arm; some type of corrective part (noted below) must be installed to relieve drag link angle. See separate instructions for installation of the appropriate steering correction component.

4" Lift	PREFERRED CORRECTIVE PART(S) 4" steering arm	CAN USE 3" steering block	MUST AT LEAST USE 2" steering block
6" Lift	4" steering arm with 2" drop, adj. drag link	4" steering arm	3" steering block

**NOTE:** If new, longer hoses are being used, see the instructions provided with the brake hoses now. Generally, with 4" of lift, factory hose length is adequate. If stock rubber units are retained, they must be in good condition; check for chafed spots, cracks and dry rot.

## 4) BRAKE LINES...

□ With the 6" lift, brake hoses will be re-routed from through the frame to below the frame. This procedure is performed after the lift springs are installed. When lowering the front axle, take care not to overextend the rubber hoses or go ahead and disconnect the hoses where they connect to the metal lines at the frame rails (frame brackets on 1979 and newer models). A piece of rubber tubing routed from the metal lines to a catch pan will eliminate a fluid mess.

## 5) FRONT SPRINGS...

Remove and discard the spring-to-axle U-bolts and nuts. Lower the jack / axle to allow spring removal. Do not overextend the axle vent hose; it may need rerouting or replacing.

**D** Remove the spring shackle and stationery eye bolts and discard springs.

**NOTE:** Due to age and prolonged exposure to the elements, the factory spring hardware may be damaged and / or excessively pitted by rust. If damage is visible, replace all hardware with quality Grade 8 fasteners of the same diameter and length prior to continuing.

- □□ Thoroughly lubricate the furnished Poly spring eye bushings with silicone grease and install in spring eyes. Push in the bushings' steel wear sleeves 9/16" ID front, 7/16" ID rear.
- □□ Install springs, but do not torque mounting bolts yet.

**6" NOTE:** On 1973 and newer models, the thick end of the degree shims (attached to bottom of springs) should be facing forward.

- □□ Clean the spring-to-axle mating points. Raise jack / axle up to the springs. Be sure the center bolt heads align and seat properly into the spring perch holes.
- □□ Position U-bolt plates and install new U-bolts and flat washers, and tighten the furnished locking nuts (112) using an "X" torque pattern.

#### 6) FRONT BRAKE HOSES...

**NOTE:** Continued from step 4 - If Superlift extended length, stainless steel or rubber brake hoses are being used, complete installation as per separate instructions.

□□ For 6" lift only - Bolt the supplied L-brackets to the bottom of the frame rails using the supplied 3/8" x 1" bolts and lock nuts. Some models already have a suitable frame hole; others will need drilling. Carefully re-route the factory metal brake lines so they connect with the rubber hoses through the L-brackets.

**IMPORTANT NOTE:** The brake system must be bled after rear hose length is also corrected.

#### 7) SHOCKS...

Install shocks using the factory hardware; torque upper / lower shock bolts (65).

#### 8) FRONT DRIVESHAFT INSTALLATION (If Applicable)...

- Ease down the jack so that the front suspension is at full extension travel; in other words "hanging". Check C.V. cluster housing for clearance as per note "A". Check shaft length per note "B".
- □ Install shaft using factory hardware (204 in/lb).

#### 9) CLEARANCE CHECK...

- Install tires with the suspension unloaded and "hanging". Cycle steering lock-to-lock while manually spinning the tires, and inspect steering, suspension, driveline, for proper operation and adequate clearances / lengths. Pay close attention to brake and axle vent hoses.
- Remove jack stands and lower vehicle to floor.
- **D** Torque shackle bolts (51) and stationary eye bolts (90).

#### **REAR PROCEDURE**

#### 10) PREPARE VEHICLE...

Raise rear of vehicle with a floor jack positioned under the rear axle. Place jack stands under the frame rails, a few inches in front of the springs front hangers. Ease the jack down until the frame is resting on the stands. Keep a slight load on the jack. Chock front tires to prevent any possibility of movement.

#### 11) BRAKE LINE...

**NOTE ON 6" LIFT:** If a new, longer hose is being used, see separate instructions. If the relocating bracket is used, disconnect the factory rubber hose on the upper end where it connects with the metal line. The furnished relocating bracket is simply a 1" x 4" long, thin

metal strip with a hole at each end. Attach one end of the Superlift bracket to the factory mount with the furnished 5/16" x 3/4" bolt and lock nut. The metal line must be carefully rebent downward to connect with the rubber hose through the bracket's bottom hole.

Bleed the air from the brake system and refill master cylinder. Double check all fittings for leakage.

#### 12) REAR BLOCK KIT...

- Remove the tires, U-bolts, and shocks.
- Lower the axle by carefully easing down the jack. **Do not overextend the brake lines and axle vent hoses**.

**NOTE:** The spring perches are prone to collapse or warp where the leaf springs or blocks seat on the axle, especially towards the ends. Without a perfectly flat mounting surface, the block may fail and "roll" out off of the perches. Very bad things happen when this occurs. If the perches are not flat, fix them by welding on a piece of ¼" plate (or something similar) or replace the perches completely.

- □□ Make sure the top of the spring perches and the bottom of the springs are clean and free of any debris. Position the Superlift blocks in between the leaf springs and the spring perches. Notice that the top of the blocks are tapered; place the tall end of the taper facing rearward.
- □□ Install the supplied U-bolts and plates, then toque the bolts in an "X" pattern to the following specifications.

## SUPERLIFT U-BOLT TORQUE GUIDE

#### NOTE: Torque specifications apply to Superlift U-bolts only

DESCRIPTION	PLATED (Ib-ft)	PLAIN FINISH (Ib-ft)
1/2" dia., up to 13" long	57	92
9/16" dia., up to 13 1⁄2"	long 82	131
9/16 dia., 13 ½" and lo	nger 106	185
5/8" dia., up to 14 ½" lo	ong 112	181
5/8" dia., 14 ½" and lo	nger 145	256

□□ Install shocks, torque bottom bolts (75 ft-lbs.), tighten upper mounts only until bushings swell slightly. Install tires and lower vehicle to floor.

#### 14) TIRES / WHEELS...

Tighten the lug nuts in the appropriate sequence to factory specifications.

**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.

#### FINAL PROCEDURES

#### 15) CLEARANCE CHECK...

□ With vehicle on the floor, cycle steering lock-to-lock and inspect steering, suspension and driveline systems for proper operation, tightness, and adequate clearances. Recheck brake hoses / fittings for leakage. Be sure all hoses are adequately long.

#### 16) TORQUE CHECK...

- Double-check all fasteners for proper torque and tightness.
- 17) Activate four wheel drive system and check front hubs for engagement

#### 18) HEADLIGHTS...

Readjust headlights to proper setting.

#### 19) 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.

#### 20) ALIGNMENT...

Caster / camber angles nor toe-in setting have been significantly altered by the suspension lift. We do suggest that those specifications are checked to ensure proper handling and tire wear.

# 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 (powdercoating, 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<sup>®</sup> by phone 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 product purchased. Mixing component brands is not recommended.