**Superlift 8”, 10”, and 12” lift system**
**for 1969- 1987 ½-ton and ¾-ton pickup and**
**1969-1991 Blazer / Suburban 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:**

- **NOTE A – FRONT DRIVESHAFT MODIFICATION** On 1977 ½ and newer model equipped with the Saginaw type front driveshaft, some grinding will need to be done on the Constant Velocity (C.V.) joint cluster. This type shaft has round flange yokes on the transfer case end. Grind down the two casting tabs where the shaft tubing meets the C.V. cluster. Also, round off the corners on the C.V. cluster housing and any other points where the assembly may bind. Allow clearance for front-end extension travel. No grinding is needed on the front axle end of the shaft.
- **NOTE B – FRONT / REAR DRIVESHAFT LENGTH** Generally, with the 8” 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. For most vehicles, the minimum amount of allowable spline contact is 1 ¾” at full suspension extension travel. 10” and 12” lifts will require lengthened shafts.

  To determine the correct length, measure needed running length with the stub shaft (male end) centered in the slip yoke (female end). Incorrect length can lead to massive screwage. Also, be sure the driveshaft ends are “timed”, which means the yoke “ears” (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.
- Front end realignment is necessary.
- A foot-pound torque reading is given in parenthesis ( ) after each appropriate fastener.
- Do not fabricate any components to gain additional suspension height.
- Prior to drilling or cutting, check behind the surface being worked on for any wires, lines, or hoses that could be damaged.
- After drilling, file smooth any burrs and sharp edges.

- Prior to operating a torch or saw, protect any heat-sensitive components located in the immediate area by covering them with a water-saturated cloth. Most undercoating are flammable but can be extinguished using a water-filled spray bottle. Have a spray bottle and an ABC rated fire extinguisher on hand.
- 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.

## FRONT

**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 control arms. Ease the frame down onto the stands, place transmission in low gear or "park", and chock rear tires. Remove front tires.

**2) FRONT DRIVE SHAFT…**

❑ Remove shaft on 1977 ½ and newer vehicles equipped with a Saginaw type shaft.

**3) DRAG LINK REMOVAL…**

❑ Remove the cotter pin and nut from each end of the stock drag link. Use a "pickle fork" to dislodge the ends from the arms. Discard the stock link. A problem encountered on vehicles that have been driven with excessive link angle is deformation and elongation of the pitman arm / steering arm tapered holes. Inspect the pitman holes to be sure that they are not "egg-shaped". If not perfectly round and true, replace the arm. If not, link end failure may occur. Another problem, which occurs even on stock vehicles, is stress cracks in the frame rail where the steering sector attaches. If any of these problems exist, repair before proceeding.

**4) FRONT BRAKE HOSES…**

**NOTE:** If new longer hoses are being used, SEE SEPARATE INSTRUCTIONS. If stock rubber units are retained, they must be in good condition; check for chafed spots, cracks and dry rot.

❑❑ If stock hoses are retained, they will be re-routed from through the frame to below the frame. This procedure is performed after the lift springs are installed. 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 elminate 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.

**6) LOWERING THE FRONT ANTI-SWAY BAR…**

❑ Remove the bar-to-frame bolts and position the Superlift spacers per separate instructions. Now is a perfect installation opportunity for new bushings. Torque the furnished mounting bolts (58).

**7) FRONT SPRINGS CONTINUED…**

❑❑ Remove the spring shackle and stationary eye bolts and discard springs. Inspect the frame eye shackle bushings and replace if necessary.

❑❑ Thoroughly lubricate the furnished Poly spring eye bushings (Part #315) with a light, water resistant 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.

**NOTE:** 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 tie-bolts heads align and seat properly into the spring perch holes.

❑❑ Position U-bolt plates; install U-bolts, washers, and tighten the furnished locking nuts (150) using an "X" torque pattern.

**8) STEERING ARM / STUD REMOVAL – 8" LIFT…**

[DIAGRAM 1] **NOTE:** Corrective steering for 8" lift consists of new arm and drag link only; no steering block. The stock steering arm studs will be retained.

❑ Remove 3 nuts attaching arm-to-knuckle. With a hammer, strike arm to dislodge the tapered split locks. With the split locks removed, the arm can be removed.

❑ Remove studs with stud puller or use jam nut method.

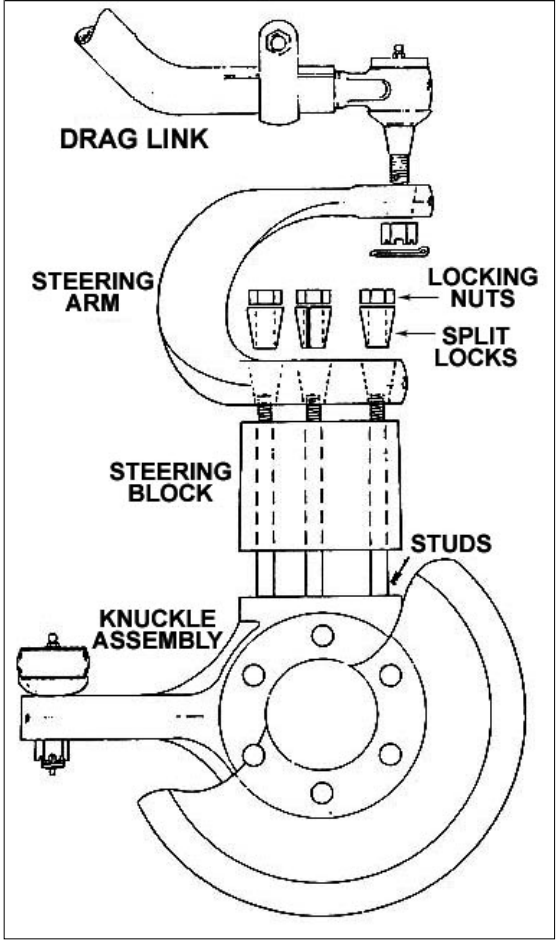
**9) STEERING ARM, BLOCK (Part #3434) INSTALLATION…**

❑ [DIAGRAM 1] Be sure all mating surfaces are clean and free of nicks / burrs. Apply a liberal amount of the furnished Fel-Pro Pro-Loc II to the stud-to-knuckle threads.

❑ Install and torque studs (160). Position Superlift steering block and arm.

❑ Install stock split locks and torque furnished 9/16" locking nuts (110).

**DIAGRAM 1**



**10) "DROPPED" DRAG LINK INSTALLATION…**

❑ [DIAGRAM 1] The turning radius stop bolts are located on the front axle knuckles. Adjust both stop bolts all of the way in.

❑ Turn the steering wheel all the way to the right. Then turn the wheel full left, counting the number of rotations. Turn the wheel back to the right ½ the number of total rotations.

❑ The pitman arm / steering sector should be centered and the steering wheel crossbars should be positioned properly. Scribe a line on pitman arm and sector to note its centered position.

❑❑ The front tires need to be pointing straight ahead. One method of checking is: Position a straight edge, such as a level, horizontally and against the top of the brake rotor. Measure from the straight edge overhand to a stationary parallel point likle the leaf spring. Even up this measurement from in front of the rotor compared to behind the rotor and the tires will be pointing straight forward.

❑❑ Raise the jacks so the full weight of the truck is on the suspension and the frame is barely off of the jack stands. Position the drop link in place (do not bolt it up) and adjust the length accordingly, without moving either the pitmn arm or knuckles.

**IMPORTANT:** Adjust each end evenly; the more thread contact the better.
DO NOT EXCEED THESE SPECS:

- Minimum Thread Contact (check thru clamp slot in tube) – 1.20"
- Maximum Thread Exposure – 1.061"
- Reference – Overall Thread Length – 2.261"

❑❑ Prior to installing, be sure the end studs and their mating holes are clean and free of grit. Bolt up the link. Torque slotted nuts (65) and install cotter pins.

**IMPORTANT:** If the "finished product" link angle exceeds 1 ½" check for end stud over-extension as follows: Each ends' maximum in service pivot capability is 16 degrees in any direction. This reading is taken at the body and pivot stud center. To achieve the greatest possible angle, have the truck frame resting on jack stands with the front axle hanging at full extension travel. With an angle gauge, check angles with the steering wheel turned full lock in both directions. ANGLE READING MUST NOT EXCEED 16 DEGREES.

❑❑ Before tightening the tube clamps, be sure the tube body is positioned properly, not rotated. Center the clamps over the slots and torque Nyloc nuts (41).

❑❑ Grease the drag link ends.

**11) FRONT BRAKE HOSES…**

❑❑ If Superlift extended length, braided stainless steel hoses are being used, complete installation as per SEPARATE INSTRUCTIONS.

❑❑ If not, bolt the furnished L-brackets (Part #30) to the bottom of the frame rails using the furnished 3/8" x 1" bolts and lock nuts. Some models already have a suitable frame hole;

others will need drilling. Carefully re-bend the metal factory brake lines so they connect with the rubber hoses through the L-brackets.

❑❑ The brake hose system will be bled after rear hose length is also corrected.

**12) INSTALL SHOCKS…**

❑❑ Install shock to vehicle. Torque upper and lower bolts (65). Cycle suspension through full travel cycle and check for adequate clearance between shock, bump stop, and brake hose.

**13) FRONT DRIVESHAFT INSTALLATION (If applicable)…**

❑ Ease down the jack so that the front suspension is at full suspension travel; in other words "hanging". Check C.V. cluster housing for clearance as per NOTE 'A'. Check shaft length per NOTE 'B'. Install shaft; torque front axle and C.V. yoke bolts to 204 inch pounds.

**14) INSTALL TIRES…**

❑❑ With suspension unloaded and "hanging", cycle steering lock-to-lock, while manually spinning the tires, and inspect steering, suspension, and driveline, for proper operation and adequate clearance / lengths. Pay close attention to brake and axle vent hoses.

❑❑ Remove jack stands and lower vehicle to the floor. Torque shackle bolts (50) and stationary eye bolts (90).

## REAR

**1) 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 rear springs front hangers. Ease the jack down until the frame is resting on the stands. Keep a slight load on the jack. Chock the front tires to prevent any possibility of movement.

**2) REAR BRAKE HOSE…**

❑❑ If the factory rubber hose is to be replaced, pinch it closed with locking pliers and disconnect at the bottom. If being retained, instead disconnect the upper end of the hose where it attaches to the metal line. Hose replacement or relocation will be completed later.

**3) EMERGENCY BRAKE CABLE LOWERING KIT…**

❑❑ Part #31 is needed on lifts of 9" and more on vehicles that have one cable routed through both the rear springs front hangers. See separate instructions.

❑❑ Some models have both cables routed through the driver's side hanger only. Relocation is not needed but the cables may need to be taken out of the bracket so the axle can be lowered enough to allow for spring / block installation. If so, remove the rubber grommett in hanger and slot the bracket enough for cable removal. Return to stock location when lift installation is complete.

**4) ADD-A-LEAFS…**

❑❑ Remove tires, U-bolts and shocks. Lower the axle by easing down the jack. Do not overextend the axle vent hose; it may need rerouting or replacing.

**NOTE:** 8” Lift Only – Add-A-Leaf installation can be performed with the leaf springs on the vehicle. You may want to remove springs depending on what tools are available and fuel tank location.

❑❑ Start on either side. The spring leafs are held together by a tie-bolt, which also serves as the axle locator pin, and by “wraps”, which are approximately ¼” thick steel straps riveted to one of the leafs. With a C-clamp closely positioned, heat (if desired) and bend the wraps out of the way.

❑❑ Reposition the C-clamp next to the tie-bolt. Be careful when removing C-clamp since the spring pack is “loaded” and will spring apart when released. Place the Superlift leaf directly under the main leaf, which is the longest one with the eyes / bushings.

❑❑ Stack the remaining stock leafs in the proper pyramid order. Do not try to compress the leafs together with the center-bolt; this may strip the bolt / nut threads.

❑❑ After tightening, trim off excess bolt. Place a C-clamp beside each wrap, prior to re-forming, to ensure total pack compression. If heat is used on the wraps, allow them to cool naturally and thoroughly before removing clamps.

❑❑ Repeat procedure on other side.

**5) REAR SPRING INSTALLATION…**

**NOTE:** 10” and 12” Lift Only – Remove rear driveshaft. See Note ‘B’.

❑❑ Remove tires, U-bolts and shocks. Lower the axle by easing down the jack. Do not overextend the axle vent hose; it may need rerouting or replacing.

**NOTE:** The spring perches, where the leaf springs or blocks seat on the axle, are prone to collapse or warp, especially toward the ends. If not flat, replate the perches with ¼” thick steel plate (or something similar) or replace perches completely.

❑❑ Remove stock springs. Thoroughly lubricate the furnished Poly bushings (Part #316) with a light, water resistant grease and install in spring eyes. Push in the bushings’ steel wear sleeves.

❑❑ Install springs but do not torque bolts yet.

❑❑ Position the Superlift blocks, with the tall end of the taper facing rearward, in between the leaf springs and perches. All contact points must be clean.

❑❑ Raise the axle up to the blocks / springs; be sure the center-bolts and block pins align with their respective holes. Position U-bolt plates and torque U-bolts (150) using and “X” torque pattern; reuse old flatwashers.

**6) INSTALL SHOCKS…**

**NOTE:** 10” and 12” Lifts Only – With most shocks, due to length, it is necessary to redrill the upper shock stud-to-frame mounting hole as low as posible in the frame rail.

**7) REAR BRAKE HOSE (continued from step 2)…**

❑❑ If relocator bracket is being used, (Part # 30): The furnished relocating bracket is simply a 1” wide by 4” long, thin metal strip with a hole at each end. Attach one end of the Superlift bracket to the stock upper bracket with the furnished 5/16” x ¾” bolt and lock nut. The metal line must be carefully re-bent downward to connect with the rubber hose through the Superlift brackets bottom hole.

❑❑ If longer braided stainless steel hose (Part #3093) is being used (furnished with 10” and 12” lifts): thoroughly clean all mating surfaces. For the upper end hose-to-bracket attaching hardware, a one-way push-on washer is furnished to replace the stock clip.

**8) BLEEDING THE BRAKE SYSTEM…**

**NOTE:** Do not get brake fluid on any painted surfaces.

❑ Fill the master cylinder with an approved brake fluid.

❑ After “pumping up” the brake pedal, hold pressure on the pedal and open the bleeder nut to purge air out of the system. Continue pumping / bleeding process until you get fluid only, no air, out of the bleeder nut. Bleed each wheel and make sure master cylinder is full of fluid after each bleeding process.

❑ With all air out of the system, the brake pedal should not “pump up” or have excess down-travel.

❑ After bleeding, double check all fittings for leakage.

## FINAL PROCEDURES

**1) TURNING RADIUS STOPS ADJUSTMENT…**

❑❑ The turning radius stop bolts are located on the front axle knuckles. In full-lock turning situations these stops limit turning before the tires make contact with the leaf springs or the steering sector itself is “bottomed out”.

❑❑ Adjust each stop bolt to where it limits turning at least ½” before tire-to-spring contact or end of sector radius does. The amount of adjustment may differ slightly from side to side and, with wider tires, longer grade 8 bolts may be required. Tire-to-spring contact may cause tire damage and, in extreme cases, increase the possibility of vehicle roll over. If the steering sector receives a blow (rut, curb, etc.) while at full lock, sector damage and / or failure may occur.

**2) LOWERING THE TRANSFER CASE…**

**NOTE:** Lowering the transfer case to relieve rear driveshaft angle is required on 1980 and newer models equipped with the Model 209 transfer case (TFC). It is identified by having an aluminum housing and a slip-in-rear output yoke.

- ❑ Lowering is achieved by repositioning the TFC crossmember sleeves, already on the crossmember bolts, from their stock location to in between the frame and crossmember.

- ❑ On vehicles equipped with a Model 203 or 205 TFC, try this same procedure if a rear driveline vibration exists.

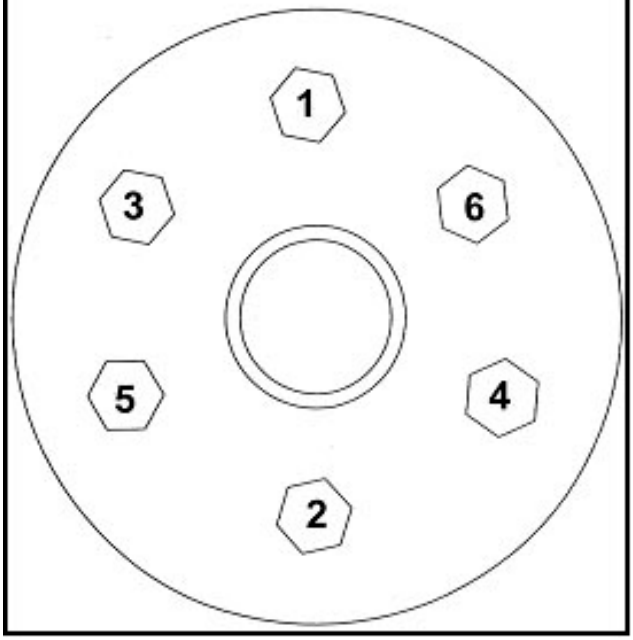
**3) TIRES / WHEELS...**

- ❑ [DIAGRAM 2] Tighten the lug nuts (85 lb-ft) 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.

**DIAGRAM 2 - LUG NUT TORQUE SEQUENCE - Use the sequence shown to torque the lug nuts.**




**4) 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.

**5) Activate four wheel drive system and check front hubs for engagement**

**6) HEADLIGHTS...**

- ❑ Readjust headlights to proper setting.

**7) Install "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.

**8) ALIGNMENT...**

Realign vehicle to factory specifications. Record the ride height measurement at time of alignment. If, in the future the torsion bars settle excessively, alignment can be restored by adjusting-up the bars to their original ride height.

# Limited Lifetime Warranty / Warnings

Your Superlift® product is covered by the Limited Warranty explained below that gives you specific legal rights. This limited warranty is the only warranty Superlift® makes in connection with your product purchase. Superlift® 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® 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® Suspension Systems ("Superlift®").

**What is not covered?** Your Superlift® Limited Warranty does not cover products, parts or vehicles Superlift® 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® 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® 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® nor your independent Superlift® 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.