



# SUPERLIFT<sup>®</sup>

## S U S P E N S I O N

### IFS RANGER AND BRONCO II 4WD 1983-1997 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 factory service manual should be on hand for reference.
- New shocks are required with this systems and are sold separately.
- An arrow on diagrams indicates which direction is toward the “front” of the vehicle.
- A foot-pound torque specification is given in parenthesis ( ) after each appropriate fastener.
- Do not add or fabricate any components to gain additional ride height.
- Prior to attaching components, be sure mating surfaces are free of grit, grease, undercoatings, etc.
- Front end realignment is necessary.
- Prior to drilling or cutting, check behind the surface being worked on for any wires, lines, or hoses.
- After drilling, file smooth any burrs and sharp edges or stress cracks may develop.
- Use the check-off box “☐” found at each step to help you keep your place. Two boxes “☐☐” 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>
55-01-1170 .....	axle pivot bracket, ..... driver side axle	(2) 7/16 x 1-1/4” bolt (4) 7/16” SAE flat washer (2) 7/16” stover nut
55-02-1100 .....	axle pivot bracket, .....	(4) 9/16” x 1-1/2” bolt

	passenger side axle	(8) 9/16" SAE flat washer (4) 9/16" stover nut
55-03-1100 .....	radius arm bracket,..... driver side	(7) 7/16" x 1-1/4" bolt (14) 7/16" thick washer (7) 7/16" stover nut
55-04-1100 .....	radius arm bracket,..... passenger side	(7) 7/16" x 1-1/4" bolt (14) 7/16" thick washer (7) 7/16" stover nut
55-06-1100 .....	(2) compression travel..... stop extension	(2) 5/16" x 3/4" bolt (2) 5/16" flat washer (2) 5/16" x 3/4" nyloc nut (2) 1/4" flat washer
0034.....	Superlift badge .....	alcohol wipe pad
00461 .....	decals, "Warning To Driver"	

## INSTALLATION PROCEDURE

### 1) PREPARE VEHICLE...

- Place a floor jack under the outer ends of both axle halves and evenly raise vehicle approximately 12". Place jack stands under frame rails approximately 4" behind radius arm brackets. Ease vehicle down onto stands, place transmission in low gear or "park", and chock rear tires. Continue down with jacks until there is only a slight load on the coil springs. Remove tires.
- Remove cotter-pin and nut attaching drag link to pitman arm and disconnect. Let linkage hang.

### 2) RADIUS ARM BRACKETS...

- The driver and passenger side radius arm brackets join together to form a crossmember. Loosen, don't remove, bolts connecting the brackets. Loosen bolts that attach the anti-sway bar to the brackets (if so equipped).
- Place a jack under center of crossmember and raise until it just touches crossmember; do not place a load on it.
- Remove the rivets and the two bolts that attach each radius arm bracket to frame. If a torch is used on the rivets, take care not to damage the brackets, rubber body mounts or any wires/hoses located inside the frame rail.

### 3) SPREADING THE RADIUS ARMS...

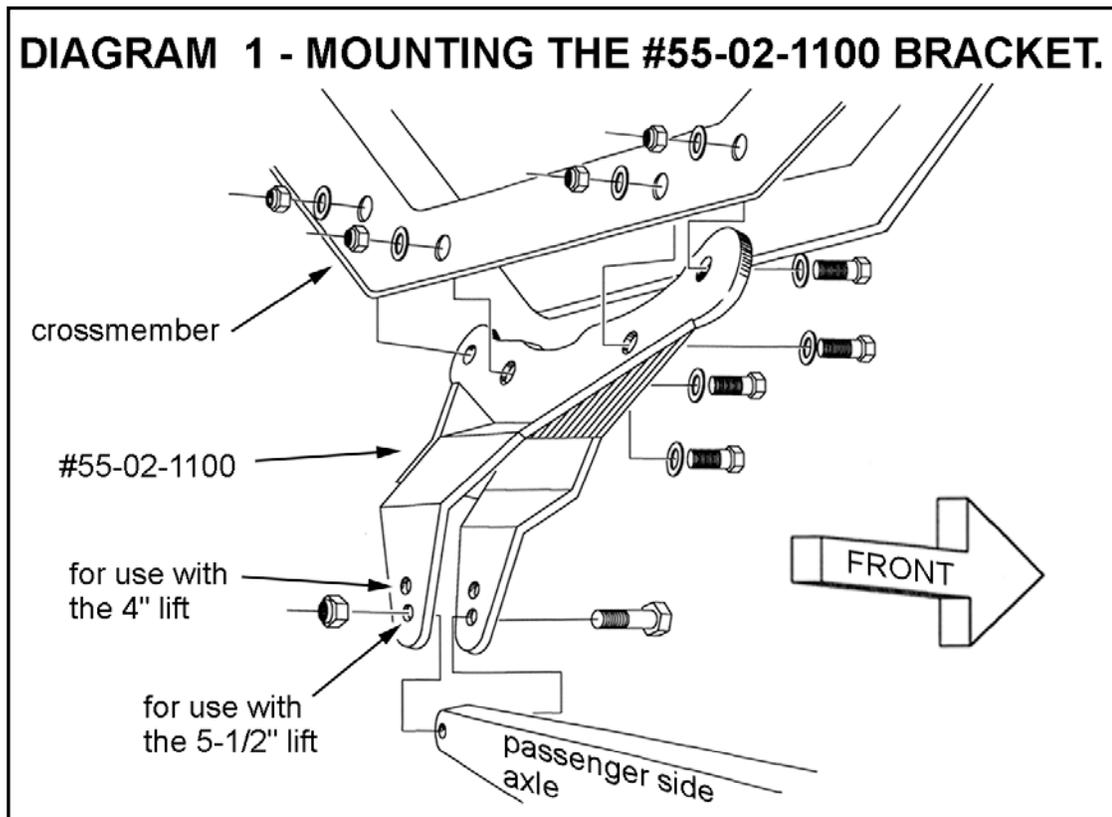
- Position a Porta-Power from inside-to-inside of radius arms and spread approximately 1/2". The holes connecting the radius arm brackets are already elongated. If a Porta-Power isn't available, use a small hydraulic jack positioned horizontally with a cut-to-length 2" x 4". Lower the radius arm assembly approximately 6".

**NOTE:** If longer front brake hoses are being used, disconnect the factory hoses now. If not,

take care not to overextend or load the stock rubber hoses.

#### 4) PASSENGER SIDE AXLE...

- Remove the shock absorber; shock removal is much easier if you also loosen the lower bracket. The stock upper shock grommet can be re-used.
- Remove the axle eye pivot bolt/nut and lower axle enough to allow installation of the drop bracket.
- [DIAGRAM 1] Position the passenger side axle pivot bracket (#55-02-1100) on the frame per DIAGRAM 1. Install the four supplied 9/16" x 1-1/2" bolts, flat washers, and nyloc nuts and tighten (115).



- Install and torque the factory axle eye pivot bolt (120-150).

**NOTE:** As indicated in Diagram 1, there are two possible holes to install the axle pivot bolt. For 4" suspension systems, use the upper bolt hole. For the 5-1/2" suspension system, use the lower hole.

- Remove the coil spring's lower retaining nut and washer. Lower the jack and remove the coil.
- Install the Superlift coil. Because of the Superlift coil's increased wire size, the coil spring retaining "prongs", stamped into the spring tower, may need to be bent out of the way. Before tightening the lower retaining nut, put a slight load on the jack so as not to pull the coil out of its upper seat.



- Reinstall and torque factory axle eye pivot bolt (120-150).

**NOTE:** As indicated in Diagram 3, there are two possible holes to install the axle pivot bolt. For 4" suspension systems, use the upper bolt hole. For the 5-1/2" suspension system, use the lower hole.

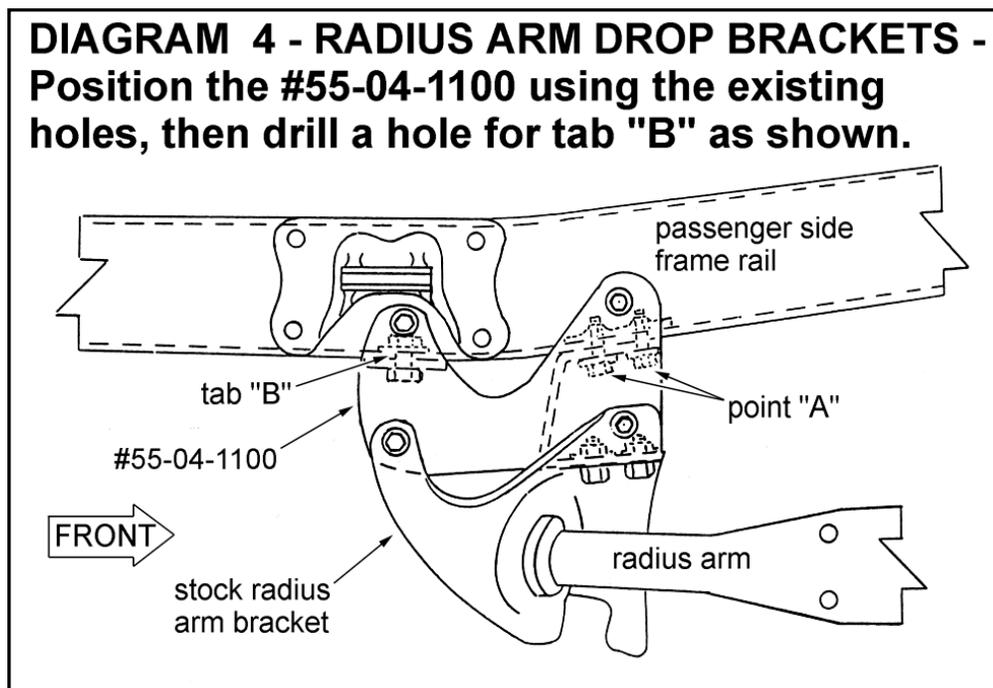
- Remove the coil spring's lower retaining nut and washer. Lower the jack and remove the coil.
- Install the Superlift coil. Because of the Superlift coil's increased wire size, the coil spring retaining "prongs", stamped into the spring tower, may need to be bent out of the way. Before tightening the lower retaining nut, put a slight load on the jack so as not to pull the coil out of its upper seat.

**NOTE:** As the coil is installed, keep the bottom of the coil pulled towards the outside as far as possible. If coil center is too far inward, the upper portion of the coil may rub the spring tower.

- [DIAGRAM 2] Install the coil spring upper retaining clip (also called a "J" clip), supplied in the coil spring box) per DIAGRAM 2. Tighten to factory specs.
- Install the new shock absorber (sold separately) using the factory hardware. Torque the bottom bolt (42-72), and tighten the upper stem only until the bushing swells slightly.

## 6) RADIUS ARM LOWERING BRACKETS...

- [DIAGRAM 4] Position the radius arm lowering brackets (55-03-1100 driver side and 55-04-1100 passenger side) in between frame and stock brackets as per DIAGRAM 4. Start, but don't tighten, all of the 7/16" x 1-1/4" bolts, thick washers, and stover nuts (all nuts should be toward the center of the vehicle). Install the factory bolts at Point 'A' and torque first (58). Be sure Tab 'B' is flush against frame, then drill holes for 7/16" bolts and tighten (58). Torque the remaining 7/16" bolts (58) and remaining crossmember and anti-sway bar bolts (35/50).



**7) PITMAN ARM...**

- If the recommended “dropped” pitman arm is being used, install now as per SEPARATE INSTRUCTIONS.
- Torque drag link-to-pitman arm nut (52-74) and install cotter pin.

**8) SWAY BAR...**

- Reinstall the sway bar using all factory hardware and torque to factory specifications.

**NOTE:** A separate component box (#2018 for Bronco IIs and #1018 for Rangers) is needed for relocating the sway bar on some models. This component box is sold separately and includes separate instructions.

**9) COMPRESSION TRAVEL STOPS...**

- Unbolt the stock compression travel stops from the frame. Retain all factory hardware.
- Install the compression travel stop extensions (#55-06-1100) using the supplied 5/16” x 3/4” bolt, flat washers, and nyloc nuts. Tighten (13).
- Install the stock compression travel stops on the “06” brackets using the factory hardware. The supplied 1/4” flat washers should be installed between the stops and the “06” brackets.
- If necessary, reinstall the tires, remove the jack stands and lower the vehicle to floor. The lug nuts will be fully torqued in a later step.

**9) REAR LIFT...**

**NOTE:** There are three options for lifting the rear: blocks, a block and add-a-leaf combination, or replacement rear springs. The rear springs are installed per separate instructions. The following procedure covers the installation of blocks and a block and add-a-leaf combination.

- Raise the rear of the 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. Remove the tires, U-bolts and shocks.
- Lower the axle housing by easing down the jack. Do not overextend the brake and axle vent hoses. The vent hose 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. Without a perfectly flat mounting surface, the block may fail or “roll” out from under the vehicle. If not flat, replat the perches with ¼” thick steel plate (or something similar) or replace perches completely.

- If the optional add-a-leaves will be used, installation can be performed with the springs on the vehicle. Depending on what tools are available and fuel tank location, you may want to remove the springs. The following will take you through the installation as if the springs are left on.

- Start on either side. Most models are equipped with riveted on, steel straps (approximately ¼” thick) to hold the leaf plates together. These straps re-form easily if heated and can be re-used. Position two C-clamps (one for each strap) close to the straps near the ends of the spring, then bend or remove the wraps (bend clips or straps).
- Carefully reposition the clamp next to the center-bolt one at a time and remove the bolt. Be careful when removing C-clamps since the leafs are “loaded” and will “spring” apart when released.
- Place the Superlift add-a-leaf directly underneath 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 length. Place a C-clamp beside each wrap, prior to re-forming, to ensure total pack compression. If heat is used on the strap type wraps, allow them to cool naturally and thoroughly before removing clamps.
- Repeat this procedure on the other side.

**10) REAR BLOCK KIT...**

**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**

<b>DESCRIPTION</b>	<b>PLATED (lb-ft)</b>	<b>PLAIN FINISH (lb-ft)</b>
½” dia., up to 13” long	57	92
9/16” dia., up to 13 ½” long	82	131
9/16 dia., 13 ½” and longer	106	185
5/8” dia., up to 14 ½” long	112	181
5/8” dia., 14 ½” and longer	145	256

- Install new shocks, torque bottom bolts (40-64 lbs.), tighten upper mounts only until bushings swell slightly.

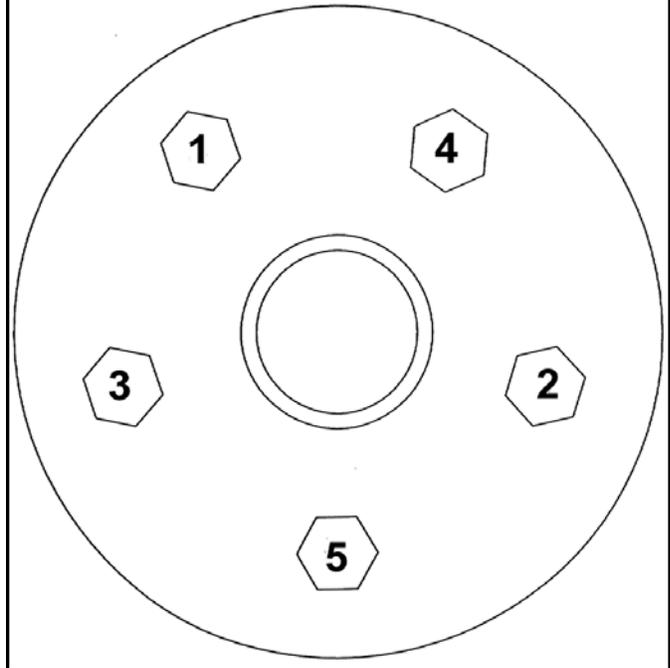
### 11) TIRES / WHEELS...

- [DIAGRAM 5] Tighten the lug nuts to factory specs 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 5 - LUG NUT TORQUE SEQUENCE- Follow the pattern shown to torque the lug nuts.**



### 12) 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.

### 13) 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.

### 14) Activate four wheel drive system and check front hubs for engagement

### 15) HEADLIGHTS...

- Readjust headlights to proper setting.

### 16) 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.

#### 17) **ALIGNMENT...**

Realign the vehicle to the following specifications.

- Keeping the tires pointing straight ahead, pull the vehicle forward and rearward (approximately 15-25 ft.) a few times; this will "seat" the front axle/steering assembly.

**TOE-IN:** .132" a temporary setting may be required before driving to the alignment shop.

**CAMBER:** Initial Driver's Side – 7/8° to 5/8° Positive  
Initial Passenger's Side – 5/8° to 1/2° Positive

**NOTE:** With spring settling, you can expect to lose approximately 1/4° of camber which will ultimately give you an ideal reading.

**CASTER:** 4° Positive is preferred with roughly a 3° +/- tolerance. Caster is non-adjustable and preset by the radius arm lowering brackets included in the Base Kit.

**NOTE:** If Superlift adjustable eccentric camber/caster alignment bushings are being used, you may have some leftover camber angle that must be converted to caster. Normally it is best to increase positive caster.

#### **MAXIMUM SIDE-TO-SIDE VARIATIONS:**

Caster, 1 1/2°  
Camber, 23/32°

## 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 (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® 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.

### SUPERLIFT SUSPENSION SYSTEMS

300 Huey Lenard Loop Rd.  
West Monroe, Louisiana 71292  
Phone: (318) 397-3000  
Sales / Tech: 1-800-551-4955  
FAX: (318) 397-3040  
www.superlift.com