

## Superlift 4" & 6" <u>lift system</u> for 1980- 1996 ½ TON FORD, BRONCO 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:

- This Base Lift System contains no hardware for modifying or relocating the suspensions compression travel bump stops. Generally, bump stop modification is not required except for competition styled off-roading. For severe off-roading, extension travel limiting straps are recommended also.
- 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.
- 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 PROCEDURE

RADIUS ARM BRACKETS...

1)	PREPARE VEHICLE Place vehicle in neutral. Raise front of vehicle with a jack and secure a jack stand beneath each frame rail approximately 4" behind radius arm brackets. Ease the frame down onto the stands, place transmission in low gear or "park", and chock rear tires. Remove front tires.
	<b>NOTE:</b> If equipped with anti-sway bar, disconnect drop-links at the axle attaching points. Bar relocation is performed in a later step.
<b>2)</b>	FRONT DISASSEMBLY Remove cotter pin and nut attaching drag link to pitman arm. Dislodge drag link with a puller tool or a pickle fork and let linkage hang.
	<b>NOTE:</b> Replace the link if any stud looseness is detected or you can twist the stud in its socket with your fingers.
	Remove/discard stock radius arm brackets. If a torch is used to remove the rivets, take care not to damage any wiring/hoses routed inside the frame rails.
	Remove tires and shock absorbers.
	If longer Superlift brake hoses are being used, disconnect the stock rubber hoses where they connect to the metal lines at the frame rails. A piece of rubber tubing routed from the metal lines to a catch pan will eliminate a fluid mess. New hoses are installed in a later step. If the stock rubber units are retained, they must be in good condition; check for chafed spots, cracks and dry rot.
	Remove both axle eye pivot bolts. Detach pivot bracket for driver's side axle from crossmember. All factory mounting hardware will be reused.
3)	AXLE PIVOT BRACKETS Attach the axle pivot bracket for the driver's side axle using the factory mounting hardware (125-130). On newer models, drill 2 holes, at existing holes in Superlift bracket, through the crossmember lip (See Diagram 1 below). Install furnished 7/16" bolts, and locking nuts – flatwashers are not required.
	Bolt axle eye through appropriate hole (120-150); 6" lift-bottom hole, 4" lift-upper hole.
	Install Superlift axle pivot bracket for passenger side axle (see Diagram 2 below). Attach bracket to crossmember with furnished 9/16" x 1" bolts and stover type locknuts with flatwashers on both sides (115).
	<b>IMPORTANT:</b> Be sure that axle eye pivot holes are vertically aligned. Drill 2 holes through the crossmember and the Superlift bracket for the furnished 7/16" bolts, locknuts, and flatwashers. Bolt axle eye through appropriate hole (120-150).
	NOTE: We recommend skip-welding this bracket on 1980-92 models.

The new radius arm lowering brackets are installed with furnished 7/16" bolts, locknuts and flatwashers. The factory nylon radius arm bushing rings, which are mounted directly against

	replacement brackets design allows you to discard theses pieces, which are prone to fail.  On 1980 and some 1981 models, all but one bracket-to-frame hole must be drilled.
<b></b>	Match the rear hole of the Superlift bracket to the rear frame hole on bottom of rail (See Diagram below). Drill all other holes. Be wary of wiring/hoses routed inside of frame rails. Inspect radius arm bushings for cracks, dry rot and deformities. This is a perfect installation opportunity for new Polyurethane replacements.
	Tighten radius arm bushing nuts (80-120).
5) □□	<b>COIL SPRINGS</b> The jack positioned under the driver's side axle should be loaded only slightly. Remove the coil springs upper retaining clip then the lower retaining nut and washer. Install Superlift coil
	<b>NOTE:</b> When lowering the axles for spring installation, take care not to overextend the factory rubber brake hoses.
	Torque upper clip (13-18), lower nut (30-70). On vehicles factory-equipped with dual front shocks, keep the bottom of the coil pulled as far rearward as possible to gain clearance between coil and front shock.
	Repeat procedure on the passenger side.
6) □□	SHOCKS AND BRAKE LINES If Superlift extended length brake hoses are to be used, install now (see SEPARATE INSTRUCTIONS).
	Install shocks. Tighten upper stem type bushings until they swell slightly; lower nuts (40-60)
	<b>NOTE:</b> On vehicles factory equipped with dual front shocks, coil-to-front shock clearance is minimal, especially if large bodied shocks are used. For some applications, it is necessary to re-form the shocks lower mounting bracket to obtain sufficient clearance. With a torch, thoroughly heat the bracket over roughly a 3" span, starting approximately 1" from the mounting stud. Slip a leverage bar over the stud and bend the bracket forward 3/4" to 1".
7) 	ANTI-SWAY BAR 6" NOTE: On vehicles factory equipped with front anti-sway bar, install relocating hardware (purchased separately, see SEPARATE INSTRUCTIONS). This is a good opportunity to replace worn factory rubber bushings with new polyurethane bushings.
8) □	<b>PITMAN ARM</b> Install the drop pitman arm per separate instructions. Attach drag link-to-pitman arm nut (52-73) and install cotter pin.
RE	AR PROCEDURE

# 9) □ REAR DISASSEMBLY...

Use a floor jack positioned under the rear axle to raise the vehicle.

	Place jackstands under the framerails a few inches in front of the forward hanger for the rear springs.
П	Eace the look down until the frame is recting

Ease the jack down until the frame is resting on the stands but keep a slight load on the jack.

jaioit

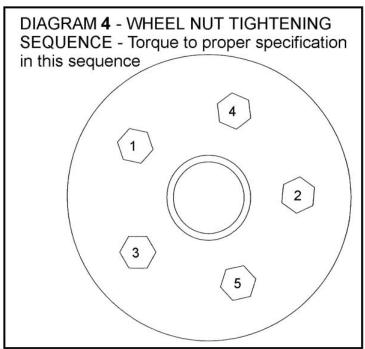
☐ Chock the front tires to prevent the possibility of vehicle movement.

□□ Remove the tires, U-bolts, and shocks.

## 10) REAR ASSEMBLY...

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 inbetween 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.

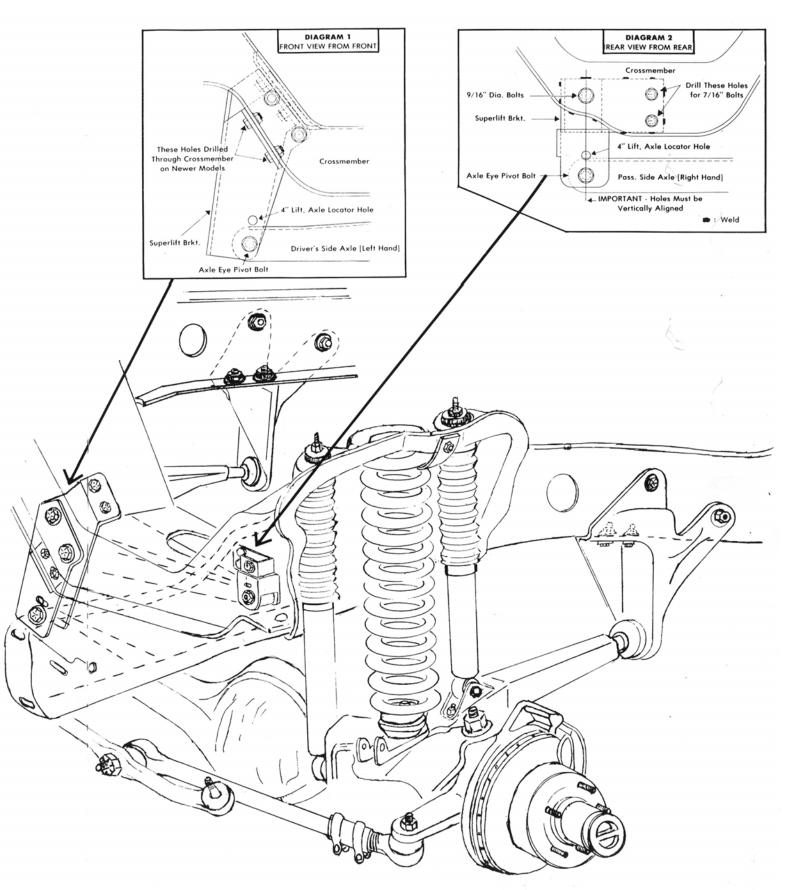
### SUPERLIFT U-BOLT TORQUE GUIDE

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

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

**NOTE:** If Add-A-Leafs are being used in conjunction with the lift blocks see SEPARATE INSTRUCTIONS.

	Install new shocks and tires.				
11)	TIRES / WHEELS [Diagram 4] Tighten the lug nuts to factory specifications.				
	<b>WARNING:</b> 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.				
	<b>WARNING:</b> 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.				
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) □□	<b>FINAL CLEARANCE and TORQUE CHECK</b> 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)	<b>SUPERLIFT NAME BADGE AND WARNING DECAL</b> 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.

1	7	Δ	۱LI	GI	NΝ	ſΕ	N	Т.	_	

Toe-in must be reset. Caster angle was kept intact by the radius arm lowering brackets, and is non-adjustable. Set camber angle at 3/40 to 10 degree positive with preferably the driver side 1/80 to 1/40 more positive than the passenger side. The extra driver side caster improves drivability, especially on high-crowned driving surfaces. When the springs settle (after 100 miles or so) caster will read the preferred 1/40 to 1/20 positive.

#### 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.