



SUPERLIFT SUSPENSION
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**Superlift Part No. 4507 - 5" Lift System for
 1998 and NEWER DODGE RAM
 FULL SIZE 1/2 TON 4WD**

INSTALLATION INSTRUCTIONS

INTRODUCTION

Installation requires a professional mechanic. Prior to beginning, carefully inspect the vehicle's steering, driveline, and brake systems, paying close attention to the tie rod / drag link ends, track bar, and ball joints. 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 parts and know where they install. Read each step completely as you go.

Verify that you have the correct Superlift track bar bracket. The track bar runs from the passenger side of the front axle up to the driver side frame rail. Dodge changed the track bar design beginning with the vehicles built on February 8, 1994. You will find the truck's production date on a label located on the driver side doorjamb. This label also contains information such as the truck's serial number, load-rating etc. First, verify the year model. The month and year of manufacture is found at the tag's top, directly below "DATE OF MFR.". Then look at the left-hand lower corner of the tag for the Month/Day/Hour code. It will read "MDH" and be followed by a series of numbers. The first 4 numbers are the month and day of construction. We also ask that you physically check the track bar's diameter.

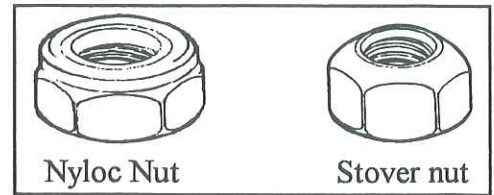
- Trucks built on or before 02-07-94 have a 1-1/8" diameter bar and a flange thickness of .897". Use Superlift bracket #4501.
- Trucks built on or after 02-08-94 have a 1-3/8" diameter bar and a flange thickness of 1.16". Use Superlift bracket #4502.

NOTES:

- The rear lift is sold separately and includes separate installation instructions. Options are a block and add-a-leaf kit combination or new rear springs.
- A factory service manual must be on hand. The manual will contain fastener torque specs, assembly techniques and/or special tool requirements that are unique to this particular year and model vehicle.
- Do not add or fabricate any components to gain additional suspension height.
- A professional, certified welder should do any welding.
- Prior to cutting, check behind the surface being cut for any wires, lines or hoses.
- Prior to operating a torch, saw, or welder, 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 this and an ABC rated fire extinguisher at hand.
- Paint or undercoat all exposed metal surfaces.
- Prior to attaching components, be sure all surfaces are free of grit, grease, undercoating, etc.,
- Front-end alignment is recommended.
- A foot-pound torque rating () is given after each appropriate fastener.
- An arrow on diagrams indicates which direction is toward "front of vehicle".
- 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 if for the passenger side.

PARTS LIST

The part number is stamped into each bracket or printed on an adhesive label. Identify each part and place the appropriate hardware with it.



ART NO.	DESCRIPTION (Quantity - if more than one)	NEW ATTACHING HARDWARE (Quantity - if more than one)	HARDWARE BAG NO.
5-01-4505	radius arm, driver side	(1) 1/2" x 4-1/2" bolt (1) 1/2" Nyloc nut (1) 1/2" flat washer (6) bushing half (1) bushing sleeve, 2 3/8" long (2) bushing sleeve, 2 5/8" long	77-0070 77-0012
5-02-4505	radius arm, passenger side	same as above	77-0070
5-05-4505	bracket, front axle compression travel bump-stop, driver side	(1) 5/16" x 1" bolt (1) 5/16" Nyloc nut (1) 3/8" lock washer (1) 3/8" standard nut (1) polyurethane bump-stop	77-0070
5-06-4505	bracket, front axle compression travel bump-stop, passenger side	same as above	77-0070
5-01-1020	bracket, anti-sway bar relocation, passenger side	(2) 3/8" x 1-1/4" (2) 3/8" Nyloc nut (4) 3/8" flat washer	77-0070
5-02-1020	bracket, anti-sway bar relocation, driver side	same as above	
5-09-4505	plate, front shock absorber, driver side	(1) 1/2" x 1" bolt (1) 1/2" Nyloc nut	77-0070
5-10-4505	plate, front shock absorber, passenger side	same as above	77-0070
-14-4505	(4) brace, (triangular wedge) front axle compression bump-stop		77-0070
5-01-144	coil spring, driver side		
5-01-145	coil spring, passenger side		
1-4005	pitman arm	(1) 1/8" O.D. x 1-1/2" long cotter pin	77-0070
9195	(2) front axle extension travel limiting strap		
5-04-4505	brace, track bar bracket	(2) 7/16" x 1" bolt (2) 7/16" lock washer (2) 9/16" x 3" bolt (2) 9/16" Nyloc nut (2) 2" x 1-7/8" square washer (1) 1" O.D. x 1-5/16" long sleeve	77-0070

NOTE: Your vehicle requires only the #4501 or the #4502, NOT BOTH.			
4501	bracket, early model track bar	(1) 9/16 x 2-1/2" Grade 8 bolt	77-0070
ORR		(1) 9/16" stover nut	
4502	bracket, late model track bar	(1) 9/16", thick flat washer (1) 1/8" O.D. x 1-1/2" long cotter pin	

55-13-4505	(2) bracket, rear axle compression	(4) 3/8" x 5" bolt	77-0070
	travel bump - stop	(4) 3/8" Nyloc nut	
		(8) 3/8" flat washer	
	hardware kit for steering stabilizer	(1) 1/2" x 4" bolt	77-0015
		(1) 1/2" Nyloc nut	
		(1) 1/2" SAE flat washer	
		(1) 1/2", thick flat washer	
		(1) offset sleeve	
		(2) bushing half	
85304	(2) shock absorber, front		
85150	(2) shock absorber, rear		
86010	(4) shock boot	(4) boot ties	
0034	Superlift name badge	alcohol wipe pad	77-0070

FRONT DISASSEMBLY

REPAIR VEHICLE ...

With the vehicle in neutral, raise front of vehicle with a jack positioned under the front axle. Place a jack stand under each frame rail, behind the lower link attaching points, and lower vehicle onto the stands. Leave jack under the axle to support it while the suspension is disassembled.

Put vehicle in park (or first gear for manual transmission) and chock rear wheels to prevent any possibility of movement.

) DRAG LINK...

Remove the tires and wheels. Remove the cotter pin and nut connecting the drag link-to-pitman arm.

Disconnect the drag link using a tie rod separator and let the linkage hang. **WARNING:** Failure to use proper tool could cause damage to the seals. This tool is available from Dodge (#C-3894A). **NOTE:** Replace the link if any stud looseness or deformities are detected, or if you can twist the stud in its socket with your fingers.

) PITMAN ARM...

Remove the pitman arm cotter pin and retaining nut then detach the pitman using a pitman arm puller tool.

WARNING: Failure to use the proper tool could cause damage to the pitman arm and/or the steering box. This tool is available from Dodge (#C-4150-A).

) ANTI-SWAY BAR...

The anti-sway bar assembly consists of a tubular body and two links that connect the body to the front axle. Completely detach the assembly from the vehicle and save it and the remaining hardware for reuse.

) TRACK BAR...

Disconnect the track bar at the frame. We recommend using a special puller tool (Dodge #C-3894A) to dislodge the track bar from all stud from the frame mount. Let the bar hang from the axle mount.

) FRONT SHOCK ABSORBERS...

Put a slight load on the axle / jack to prevent the axle from moving. Raise the hood and remove the top retaining nut on the driver side shock.

Remove the shock tower, which is attached to the coil tower via three nuts. Then screw one of the nuts back onto a stud to keep the ring from falling out when the coils are removed.

Remove the lower shock bolt, then pull the shock up and out through the top of the spring tower.

) BRAKE HOSE BRACKET...

A brake hose bracket is bolted to each side of the front axle, just forward of where the upper link arms attach. Unbolt these brake hose brackets from the axle.

8) FRONT AXLE ELECTRICAL WIRING...

The electrical four-wheel drive wiring must be disconnected so the axle can be lowered enough to allow coil spring removal. Simply unplug the connectors at the passenger side of the axle.

9) COIL SPRINGS...

Remove the upper link-to-axle bolt. The links fit very snugly, so you may have to work the jack / axle up and down slightly to get the links to release from their mounts.

Lower the jack / axle and remove the coil springs. Rubber coil insulators are located between the top of the coils and their towers. Retain these insulators for reuse.

10) MARKING ECCENTRIC CAM BOLT LOCATION...

The lower 4-link arms (one per side) attach to the axle via eccentric cam bolts. Rotating these bolts changes the front axle alignment. It is important that the eccentrics be reinstalled in exactly the same position. To ensure this, use a metal marker to scribe a line across the eccentric washers and the flanges they contact.

Steps 12 through 14 are performed one side at a time. Start at driver side.

11) 4-LINK ARMS...

Remove the lower link arm-to-frame bolt, and dislodge the link from its mount.

Remove the eccentric cam bolt assembly that connects the lower link-to-axle, and remove link from vehicle.

Remove the upper link-to-frame bolt. Shift the jack / axle forward approximately 1" to allow clearance for link removal.

FRONT ASSEMBLY**12) RADIUS ARMS: DRIVER SIDE #55-01-4505, PASSENGER SIDE #55-02-4505...**

[DIAGRAM 1] NOTE: At this time, all DRIVER SIDE radius arm-to-frame and axle nuts are hand tightened only. They are torqued in a later step.

Install the bushings and sleeves into the Superlift radius arm's three eye rings. Note that the front / top eye takes the 3/8" long sleeve while the other two eyes take the longer 2-5/8" sleeves. Prelube the rear eye since this pivot point sees quite a bit of movement. Use a light, water resistant, Lithium based grease.

Use the stock eccentric cam bolt to connect the arm's front / bottom eye to the axle.

Pivot the rear of the radius arm up until the front / top eye is captured by it's mount; the eye bolt is not installed until the next step. **NOTE:** Be sure the brake hose is routed above the top leg of the Superlift radius arm (DIAGRAM 4).

Manipulate the jack / axle as necessary to mate the arm's rear eye with it's mount. Reuse the factory eye bolt.

Reconnect axle electrical wiring.

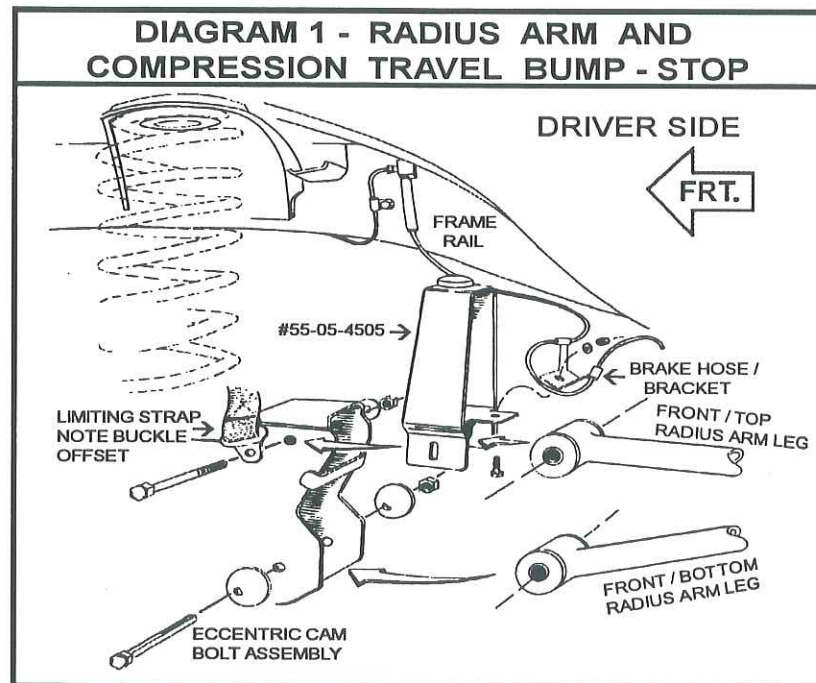
13) COMPRESSION TRAVEL BUMP-STOP BRACKETS:

DRIVER SIDE #55-05-4505, PASSENGER SIDE #55-06-4505...

Bolt the polyurethane bump stop to the top side of the Superlift bump-stop bracket using a 3/8" standard nut and lock washer.

[DIAGRAM 1] Install the Superlift bump-stop bracket as shown. Install the new 1/2" x 4-1/2" eye bolt through the limiting strap, the new bump-stop bracket, and top/front radius arm eye. Secure with the supplied 1/2" Nyloc nut and flat washer; hand tightened only.

Attach the factory brake hose bracket to the Superlift bump-stop bracket with the supplied 5/16" x 1" bolt and Nyloc nut (13).



14) COIL SPRINGS: DRIVER SIDE #01-144, PASSENGER SIDE #01-145...

Lower the jack / axle, place the stock rubber coil spring insulators on top of the coils, and install them onto truck, making sure the coils are installed on the correct side. Keep a slight load on the jack / axle to hold the coils in place.

15) TRACK BAR BRACKET BRACE #55-04-4505, EARLY MODEL TRACK BAR RELOCATION CASTING #55-01-4501 OR LATE MODEL TRACK BAR RELOCATION CASTING #55-01-4502... [DIAGRAMS 2 and 3]

Insert the supplied 1" x 1-5/16" sleeve into the large hole in the center of the frame crossmember, located under the engine. The sleeve must be forcefully driven into the hole for the first 1/4" or so.

Loosely attach the Superlift track bar brace to the Superlift track bar relocation casting with two 7/16" x 1" bolts and lock washers.

Place the taper of the track bar relocation bracket into the factory bracket. Insert the 9/16" x 2-1/2" Grade 8 bolt from the top with a thick flat washer, through the stock track bar attaching point and Superlift casting as shown. Use a Stover nut. Do not torque yet.

Insert, from the bottom, a 9/16" x 3" bolt into the driver side hole of the track bar brace. Install the 2" x 1-7/8" square washer and 9/16" Nyloc nut; hand tighten only.

Place the other 9/16" x 3" bolt into the passenger side hole, again from the bottom, and install a 2" x 1-7/8" square washer and 9/16" Nyloc nut; hand tighten only.

Torque these bolts in this sequence:

1) Bolt A - one track bar relocation casting bolt (115)

2) Bolt B - one bracket-to-crossmember bolt

Use an impact and tighten bolt B until the track bar bracket and crossmember mate flush. There is an inner lip on the crossmember that has to be collapsed between the supplied square washer and sleeve.

3) Bolt C - one bracket-to-crossmember bolt (70)

WARNING: Do not over tighten Bolt C or you will deform the crossmember.

4) Bolt D - two brace-to-casting bolts (50)

Shift the jack/ axle as necessary to install the track bar into the Superlift extension bracket. Torque the nut (62) and install new cotter pin.

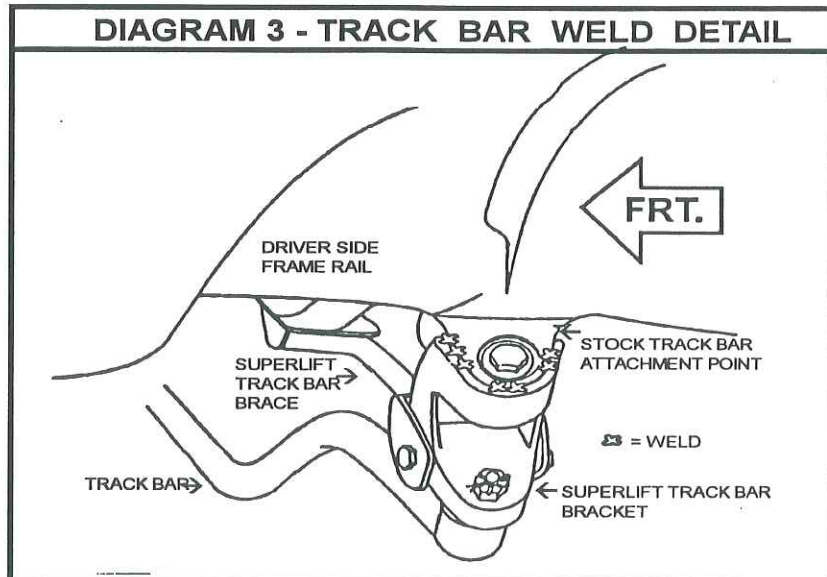
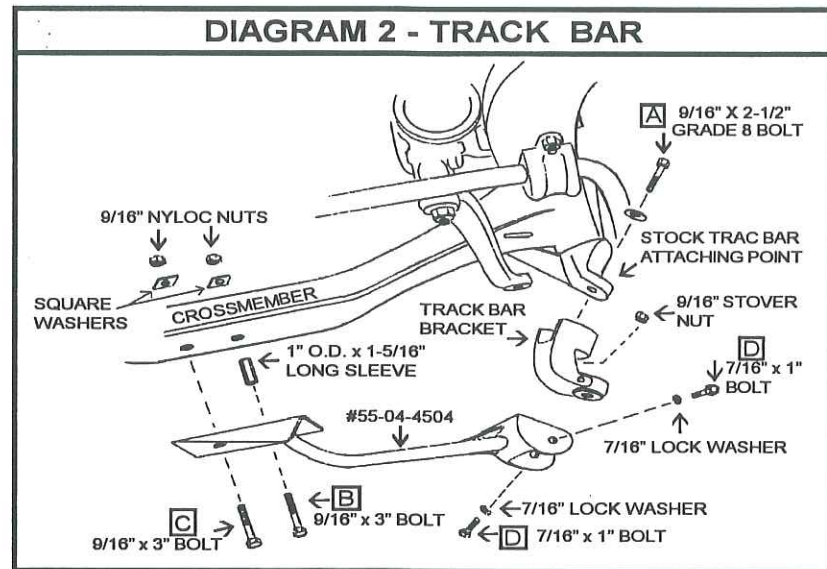
Thoroughly clean the areas to be welded, as shown in Diagram 3. Skip weld using an E6011 rod. Stick is preferred over MIG due to its superior penetration. If professional on-site, welding is not available, the truck can carefully driven to a welding shop as long as the track bar bracket / brace assembly is properly torqued.

Re-torque the three track bar relocation casting bolts after the welded assembly has cooled.

Clean the welded area and paint or undercoat the exposed metal surfaces.

16) SHOCK ADAPTER PLATES: DRIVER SIDE #55-09-4505, PASSENGER SIDE #55-10-4505... [DIAGRAM 4]

Extend the shock to its on-vehicle running length of approximately 21" (measured from the center of bottom eye to the end of the stem). Install shock boot and decal.



- Install the shock from the top through the coil spring tower. Attach the shock to the axle using the stock hardware (100).
- Place the washer and bottom bushing half onto the shock stem.
- The shock adapter plate mates to the top of the spring tower as shown. But, first place the 1/2" x 1" limiting strap bolt, pointing outward, through it's hole in the shock plate. The bolt must be installed now because there is not enough room for installation with the plate in place. Now tighten the three factory stud nuts.
- Insert the shock stem through the adapter plate, install the remaining hock bushing hardware and tighten (26).
- Place the upper end of the limiting strap onto the 1/2" x 1" bolt and tighten (57). Be sure the buckle offset angles away from the shock plate.

17) PITMAN ARM #4005...

- The Superlift pitman arm is indexed to fit on to the Dodge steering output shaft. Align these teeth, thread factory nut onto the sector shaft and torque (185).
- Disconnect the factory steering stabilizer from both the frame and the drag link.
- Loosen the drag link adjustment sleeve clamps and rotate the drag link end 180 degrees. Insert drag link end into pitman arm, tighten nut (65), and install new cotter pin.
- Position the adjustment sleeve clamps so the clamp bolts are parallel with the floor and tighten (40).
- Note that the factory steering stabilizer's tapered drag link mounting stud will no longer fit the drag link since the link was rotated 180°. The furnished hardware allows the stabilizer to be retained. First, remove the tapered stud by grinding-off the swedge fit washer, then pressing-out the stud and rubber bushing. Install the new hardware as shown in Diagram 5.

18) RADIUS ARM TORQUE SEQUENCE...

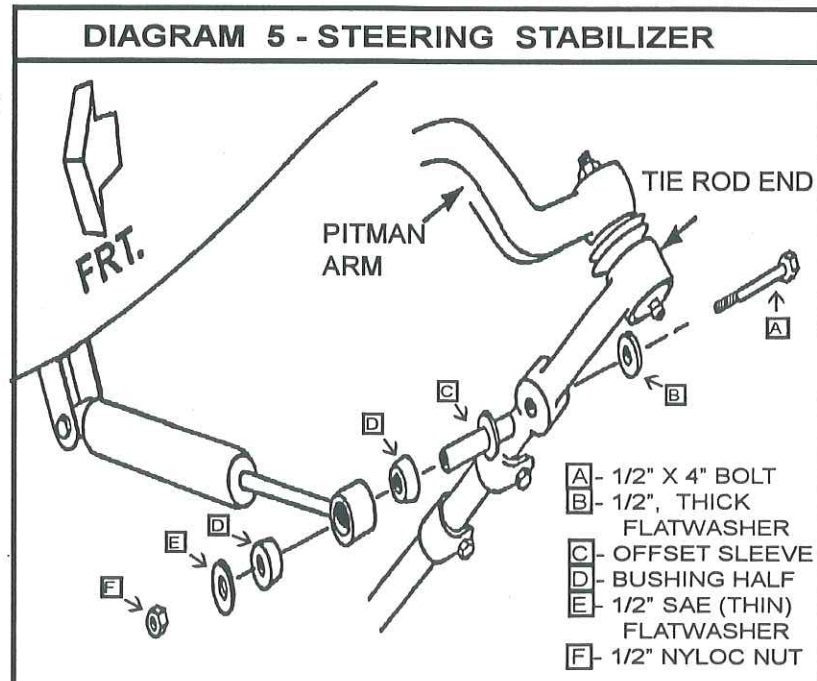
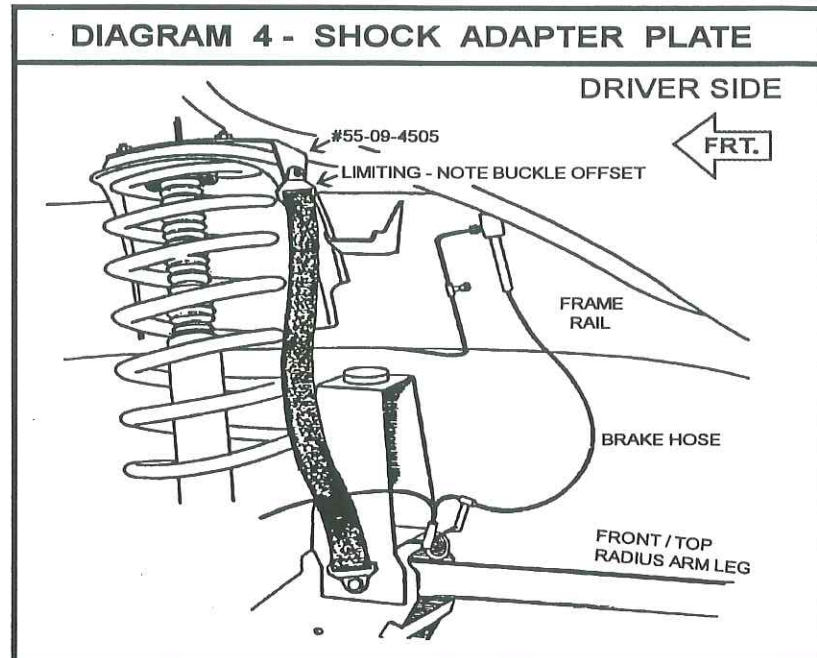
- Reinstall the tires / wheels and lower the vehicle to floor. The radius arms are tightened with the suspension supporting the vehicle's weight. Realign the eccentric cam bolts with the marks made in step 10 and tighten (110).
- Tighten top radius arm bolt (89).
- Tighten rear radius arm bolt (62).
- Lubricate the radius arms rear eyes via their grease fittings.

19) FRONT ANTI-SWAY BAR RELOCATION BRACKETS:

DRIVER SIDE #55-02-1020,

PASSENGER SIDE #55-01-1020...

- Attach the relocation bracket to the frame rail using the factory hardware. Do not tighten at this time.
- Attach the anti-sway bar to the relocation brackets using the supplied 3/8 x 1-1/4" bolts, using Nyloc nuts and flatwashers on both sides. Make sure that the anti-swaybar is "square" in relation to the vehicle's frame. Shift the anti-sway bar as far forward in the slots as possible and tighten all hardware (28-33).
- Reconnect the anti-sway bar end links to the axle mounts using the factory hardware (27).



20) COMPRESSION TRAVEL BUMP - STOP REINFORCEMENT WEDGES #1-14-4505...

- [DIAGRAM 6] On each side, the stock frame bump-stop contact point is strengthened by welding in 2 triangular shaped wedges. Start on driver side.
- Paint or undercoat all exposed metal surfaces.
- Repeat procedure on the passenger side.

21) REAR AXLE COMPRESSION TRAVEL BUMP - STOP - LOWERING BRACKETS #55-13-4505...

NOTE: The Superlift brackets will work on either side of the truck.

- The stock stops are rubber units that bolt to the bottom of the frame rails directly above the rear axle. Unbolt the stops from the frame.
- The stock nuts are welded to the frame. Drill these out to 13/32"
- Position the Superlift lowering brackets between the stock stops and the frame rails. Attach the Superlift bracket and stock stops to the frame rails using 3/8" x 5" bolts, Nyloc nuts, and flat washers (30). The flat washers are used on the nut side.

22) REAR LIFT...

Raise the rear of the vehicle with a floor jack positioned under the axle. Place jackstands 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 front tires to prevent accidental movement.

- Remove tires, U-bolts and shocks. Lower the axle assembly by lowering the jack. **WARNING:** Do not overextend the brake hose or the axle vent hose.
- Position the Superlift blocks on top of the factory blocks with the tall end of the taper facing rearward. Install the U-bolts, thick flatwashers and the Nyloc nuts. Tighten using an "X" pattern (112).
- Extend the Superlift shock to its on-vehicle running length of approximately 21" (measured from center of eye to center of eye). Install shock boot and decal. Install the shock using the factory hardware.
- Re-install the tires / wheels and lower the vehicle to the floor.

23) CLEARANCES AND TORQUE CHECK...

- Raise the front of the vehicle with a bumper jack and let the suspension hang. Cycle steering lock to lock, and inspect steering, suspension and driveline systems for tightness, proper operation, and adequate clearances.
 - Lower the truck to the floor and repeat the inspection procedure.
- Retorque all fasteners.

24) SAFETY DECAL...

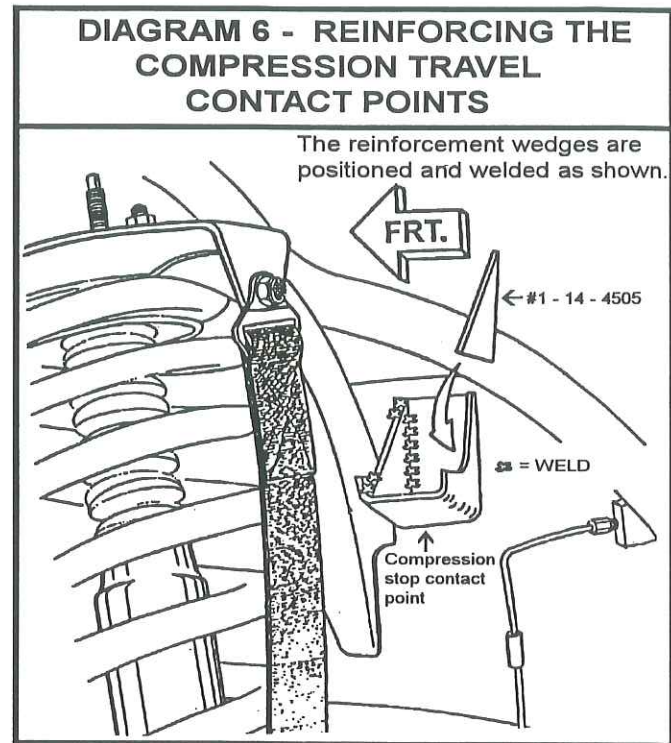
- Install "Warning to Driver" decal. Refer to the "NOTICE TO DEALER AND VEHICLE OWNER" section below.

25) SUPERLIFT NAME BADGE...

The system includes one 2" x 5" oval name badge (#0034). Additional and/or larger badges can be purchased directly from Superlift. The large oval badge (#0035) measures 4" x 10.5". Please call for more information. 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 the 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.
- NOTE:** Do not touch the surface again with your hands, they transfer body oils.

- Remove mounting tape backing, line up badge, and press in place.
- Press firmly on the badge face and hold for 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 cleaning solution.



26) HEADLIGHTS...

- Readjust headlights to proper setting.

27) ALIGNMENT...

Front end alignment has not been significantly altered by the suspension lift. We do suggest that it be checked to ensure proper handling and tire wear.

28) TURNING RADIUS STOP ADJUSTMENT...

Steps are performed one side at a time. Start at driver side. When a different width tire and/or different offset wheel is used, the stop bolts must be adjusted. The stop bolts are located on the front axle knuckles.

On driver side side, loosen the jam nut and screw the bolt all the way in. Either the end of the sector's turning radius or tire-to-spring contact will stop the turning.

- Adjust the stop bolt out until the bolt limits turning at least 1/2" before tire contact or the end of the sector radius.

Repeat procedure on passenger side.

The amount of adjustment may differ slightly. Longer bolts may be needed. If a tire makes contact with the radius arm, tire damage may occur. This can also increase the possibility of vehicle rollover. If the steering sector is at full lock and receives a blow (rut, curb, etc.), steering linkage and/or steering sector main shaft failure may occur.

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 roll over may occur.

Generally, braking performance 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.