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#### Superlift Part No. 5100 - 6" lift system for 2003 and Newer JEEP TJ with coil spring suspension

### INSTALLATION INSTRUCTIONS

#### INTRODUCTION

Installation requires a professional mechanic. Prior to beginning, inspect the vehicles steering, driveline, and brake systems, paying close attention to the track bar, 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:

If the optional Rockrunner System is being installed, refer to those instructions before proceeding.

- Prior to beginning the installation, check all parts and hardware in the box with the parts list below. If you find a packaging error, contact Superlift directly. Do not contact the dealer where the system was originally purchased. You will need the control number from each box when calling; this number is located at the bottom of the part number label and to the right of the bar code.
- This 6" lift system requires the installation of a Slip-Yoke Eliminator kit (also called a short shaft conversion) in the transfer case to correct rear driveline angle. This kit increases the overall length of the rear driveshaft and enables the use of a constant velocity joint at the transfer case. If the vehicle is not already equipped with one, the kit is available separately (Superlift part #5080). A new rear driveshaft is also required.
- Exhaust modifications are necessary for factory and most aftermarket exhaust systems due to interference with the upper link drop bracket on the passenger side. This simple modification can be performed by any reputable muffler shop. Refer to step 10.
- An inclinometer, or similar angle measuring tool, is required for a rear driveshaft angle reading. If this tool is unavailable, proper shaft angle can be attained by trial and error.
- Front-end realignment is necessary.
- A factory service manual should be on hand for reference. The manual will contain fastener torque specs, assembly techniques, and 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.

- Any welding must be performed by a professional certified welder.
- After drilling, file smooth any burrs and sharp edges or stress cracks may develop.
- Paint or undercoat all exposed metal surfaces.
- Prior to attaching components, be sure mating surfaces are free of grease, grit, oil, undercoating, etc.
- A torque specification in foot pounds is shown in parenthesis "()" after each fastener.
- Use the check-off box "□" found at each step to help keep your place. Two "□□" denotes that one check-off box is for the driver side and one is for the passenger side.
- An arrow on diagrams indicates which direction is towards "front of vehicle".
- Retain all factory hardware for reuse, unless otherwise specified.

#### 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 (Qty if more than one)	ATTACHING HARDWARE (Qty.)
01-552	(2) front coil spring	
01-553	(2) rear coil spring soft top vehicles	
<b>OR</b> 01-554	(2) rear coil spring <i>hard top vehicles</i>	
55-01-5069	(4) replacement lower links	(16) bushing half (8) sleeve
55-03-5064	rear track bar bracket	(1) 7/16" x 1" bolt (1) 7/16" Nyloc nut (2) 5/16" x 3/4" bolt (2) 5/16" Nyloc nut
55-06-5064	torque shaft bracket	(2) 6mm x 20mm bolt (2) 6mm Nyloc nut
55-01-5067	(2) anti-sway bar bracket, front	(2) 3/8" x 1-1/2" bolt (2) 3/8" nyloc nut
55-09-5064	(2) anti-sway bar link, front	(2) 7/16" x 2-3/4" bolt (2) 7/16" Nyloc nut (4) bushing (4) sleeve
55-07-5120	(2) transfer case drop bracket	(6) 12mm x 80mm bolt
55-08-5120	(2) engine mount spacer plate	
55-10-5064	(2) anti-sway bar link, rear	(4) bushing (4) 1/2" ID poly vinyl sleeve

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55-01-5100	upper link drop bracket, front, driver side	(1) 7/16" x 3" bolt (1) 7/16" x 1-1/4" bolt (3) 7/16" SAE washer (2) 7/16" nyloc nut (1) 3/4" OD x 1/2" ID x 1-1/2" sle (1) 3/8" x 1" double-stud tab bol (2) 3/8" nyloc nut (2) 1/2" SAE washer	
55-02-5100	upper link drop bracket, front, passenger side	(1) 7/16" x 3" bolt (1) 7/16" x 1-1/4" bolt (3) 7/16" SAE washer (2) 7/16" nyloc nut (1) 3/4" OD x 1/2" ID x 1-1/2" sle (1) 3/8" x 1" double-stud tab bol (2) 3/8" nyloc nut (2) 1/2" SAE washer	
55-03-5100	lower link drop bracket, front, driver side	(1) 7/8" OD x 5/8" ID x 2-3/4" sle (1) 9/16" x 5" bolt (1) 9/16" nyloc nut (2) 9/16" SAE washer (2) 1/2" x 1-1/4" bolt (4) 1/2" SAE washer (2) 1/2" nyloc nut	}eve
55-04-5100	lower link drop bracket, front, passenger side	(1) 7/8" OD x 5/8" ID x 2-3/4" sle (1) 9/16" x 5" bolt (1) 9/16" nyloc nut (2) 9/16" SAE washer (2) 1/2" x 1-1/4" bolt (4) 1/2" SAE washer (2) 1/2" nyloc	eve:
55-05-5127	upper link drop bracket, rear, driver side	(2) 7/16" x 1-1/2" bolt (1) 7/16" x 1" bolt (1) 7/16" x 3-1/2" bolt (2) 7/16" tab nut (2) 7/16" SAE washer (2) 7/16" lock washer (2) 7/16" nyloc nut (1) 3/4" OD x 1/2" ID x 1-13/16" (1) 1/4" x 1" bolt (1) 1/4" SAE washer (1) 1/4" nyloc nut (1) 6" x 1-1/2" x 1/4" thick space	

FORM #5127.03-091707	PRINTED IN U.S.A.	PA	AGE 40F 22
55-06-5127	upper link drop bracket, rear, passenger side	. (2) 7/16" x 1-1/2" bolt (1) 7/16" x 1" bolt (1) 7/16" x 3-1/2" bolt (2) 7/16" tab nut (2) 7/16" SAE washer (2) 7/16" lock washer (2) 7/16" nyloc nut (1) 3/4" OD x 1/2" ID x 1-13/16" = (1) 6" x 1-1/2" x 1/4" thick spacer	
55-07-5127	lower link drop bracket, rear, driver side	<ul> <li>(1) 9/16" x 5" bolt</li> <li>(1) 9/16" SAE washer</li> <li>(1) 9/16" nyloc nut</li> <li>(1) 7/8" OD x 5/8" ID x 2-3/4" sleet</li> <li>(2) 1/2" x 1" bolt</li> <li>(2) 1/2" lock washer</li> <li>(2) 1/2" stover nut</li> <li>(1) 3/8" x 1" self-tapping bolt</li> </ul>	eve
55-08-5127	lower link drop bracket, rear, passenger side	<ul> <li>(1) 9/16" x 5" bolt</li> <li>(1) 9/16" SAE washer</li> <li>(1) 9/16" nyloc nut</li> <li>(1) 7/8" OD x 5/8" ID x 2-3/4" slee</li> <li>(2) 1/2" x 1" bolt</li> <li>(2) 1/2" lock washer</li> <li>(2) 1/2" stover nut</li> <li>(1) 3/8" x 1" self-tapping bolt</li> </ul>	eve
55-09-5100	rear drop bracket brace, driver side	. (1) 7/16" x 1" bolt (1) 7/16" SAE washer (1) 7/16" nyloc nut	
55-10-5100	rear drop bracket brace, passenger side	. (1) 7/16" x 1" bolt (1) 7/16" SAE washer (1) 7/16" nyloc nut	
55-29-5700	adjustable track bar body, front	<ul> <li>(2) bushing half</li> <li>(1) 3/4" OD x 1-9/16" sleeve</li> <li>(1) extra-thick washer</li> <li>(1) 1/2" X 3" bolt</li> <li>(1) 1/2" SAE washer</li> <li>(1) 1/2" tab nut (#10-5700)</li> <li>(1) heim joint</li> <li>(2) 9/16" heim spacer</li> <li>(1) 9/16" x 2-3/4" bolt</li> <li>(1) 9/16" SAE washer</li> <li>(1) 9/16" stover nut</li> <li>(1) 3/4" jam nut</li> </ul>	

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55-15-5700	. front track bar bracket	.(2) 3/4" OD x 2-3/8" sleeve (2) 1/2" x 3-3/4" fine-thread bolt (2) 1/2" SAE washer (2) 1/2" fine-thread stover nut (1) 9/16" x 2-1/4" bolt (1) 9/16" SAE washer (1) 9/16" extra-thick flat washer (1) 9/16" stover nut
55-12-5100	. adjustable track bar body, rear	<ul> <li>.(2) bushing half</li> <li>(1) sleeve</li> <li>(1) extra-thick washer</li> <li>(2) 1/2" X 2-3/4" bolt</li> <li>(2) 1/2" SAE washer</li> <li>(2) 1/2"nyloc nut</li> <li>(2) spacer</li> <li>(1) heim joint end</li> <li>(1) 3/4" jam nut</li> </ul>
55-13-5100	. rear shock bracket extension, driver side	.(1) 3/8" x 1" bolt (2) 3/8" SAE washer (1) 3/8" nyloc nut (1) 1/2" x 2-3/4" bolt (2) 1/2" SAE washer (1) 1/2" stover nut (1) 5/8" OD x 1/2" ID x 1-3/8" sleeve
55-14-5100	. rear shock bracket extension, passenger side	.(1) 3/8" x 1" bolt (2) 3/8" SAE washer (1) 3/8" nyloc nut (1) 1/2" x 2-3/4" bolt (2) 1/2" SAE washer (1) 1/2" stover nut (1) 5/8" OD x 1/2" ID x 1-3/8" sleeve
55-15-5100	. emergency brake drop bracket, rear	.(2) 3/8" x 3/4" bolt (2) 3/8" nyloc nut
19-5100	. (2) replacement poly bumpstops, front	
9003	. (2) compression travel stop spacer, rear	.(2) 10mm x 100mm bolt
66-20-5100	. (4) lower compression travel spacer	.(4) 5/16" x 1-3/4" self-tapping bolt
01-1106	. pitman arm	.cotter pin, 1/8" x 2"
03-5062	. (2) cam bolt assembly	
44-13-5040	. brake line drop bracket, front, driver side	.(1) 5/16" x 3/4" bolt (1) 5/16" SAE washer (1) 5/16" nyloc nut

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44-14-5040	brake line drop bracket, front, passenger side	. (1) 5/16" x 3/4" bolt (1) 5/16" SAE washer (1) 5/16" nyloc nut
85312	(2) front shock absorber	. (2) shock hardware pack
85131	(2) rear shock absorber	. (2) shock hardware pack
86010	(4) yellow shock absorber boot	. (4) shock boot cable tie
0034	Superlift badge	alcohol wipe pad

## FRONT DISASSEMBLY

#### 1) PREPARE VEHICLE...

- Place vehicle in low gear or park. With the suspension supporting vehicle weight, and the vehicle on level ground, use an inclinometer to take a rear driveshaft angle reading. One of the last installation steps will be to reset the driveshaft angle as close as possible to this reading.
- Place vehicle in neutral. Raise front of vehicle with a jack, and secure a jack stand behind the lower link arms, beneath each frame rail. Ease the frame down onto the stands. Support the outboard end of the driver and passenger side axle tube with a floor jack; the frame is to remain on the stands.

#### 2) TRACK BAR...

- Loosen the nut holding the upper end of the track bar to the frame. Using a ball joint separator (also called a pickle fork), disconnect the track bar from the frame.
- Disconnect the lower end of the track bar from the axle. Set the bar and all hardware aside.

#### 3) DRAG LINK and PITMAN ARM...

- Remove the cotter pin and nut that connects the drag link to the pitman arm. Use a puller tool to detach the link from the arm.
- Remove the nut and washer from the steering gear shaft, then use a puller tool to remove the pitman arm from the shaft.

#### 4) SHOCK ABSORBERS...

Disconnect and discard the existing shocks.

#### 5) ANTI-SWAY BAR LINKS...

□□ On each side, disconnect the sway bar link from the axle bracket and the bar body.

#### 6) LOWER LINK ARMS...

- □□ Cam bolts attach the lower links to the front axle housing. Front end alignment is altered as the bolts are rotated. Paint or scribe alignment marks on each cam bolt and axle bracket so the bolts can later be returned to their original position.
- On each side, remove the cam bolt assembly from the link's axle end. Then remove the attaching bolt at the rear of the lower link arm where it connects to the frame rail and remove the link. Save all hardware for reuse.

## 7) COIL SPRINGS...

Lower the jack/axle assembly until the coil springs are free from their upper seats. A retainer clip must be removed at the base of the driver side coil. Remove the coils.

## FRONT ASSEMBLY

- LOWER LINK ARM DROP BRACKETS... NOTE: Perform steps 8 through 12 one side at a time. Start on the driver side.
- □ [DIAGRAM 1] Install the lower link arm drop bracket (#55-03-5100 driver side and #55-04-5100 passenger side) over the factory lower link attachment point on the frame. Insert the 5/8" ID x 2-3/4" crush sleeve inside the factory bracket and line it up with the original link mounting hole. Install the supplied 9/16" x 5" bolt through the drop bracket, sleeve, and factory bracket as shown, then snug using the supplied washers and nyloc nut. Do not tighten at this time.
- □□ There are two 1/2" holes in the rear edge of the drop bracket; the lower hole lines up with an existing hole in the frame. Install a 1/2" x 1-1/4" bolt, washer, and nyloc nut in the lower hole. Snug, but do not tighten at this time.
- □□ Using the bracket as a template, mark and drill a 1/2" hole in the frame for the upper hole. Install the supplied 1/2" x 1-1/4" bolt, washer, and nyloc nut in the hole that was just drilled.
- □□ Tighten the 9/16" bolt (82) and the 1/2" bolts (57).

# 9) LOWER LINKS...

□ The lower link arms (#55-01-5069) have been preset to the correct length at the factory but may have changed slightly during the normal shipping and handling process. Verify that all the arms are set to 16-1/4".





□□ [DIAGRAM 2] Install the upper end of the lower link arms (#55-01-5069) in the drop brackets using factory hardware. Attach the end of the arm equipped with the zerk fitting to the frame and position the zerk upward so it will not be damaged during trail use. Note the lower eye offset; be sure the eye is positioned properly on the axle. Do not tighten the hardware at this time.

## 10) UPPER LINK ARM DROP BRACKETS...

**NOTE:** Wranglers equipped with factory and most aftermarket exhaust systems require exhaust modifications in order to clear the passenger side trailing link drop bracket. The modifications can be performed by any reputable muffler shop.

- □□ Verify the axle is well supported. Disconnect the upper link arm at the frame. If the replacement Rockrunner upper link arms (optional) will be installed, remove the factory link entirely. Save all hardware for reuse.
- Test-fit the passenger side upper link drop bracket (#55-02-5100) to ensure it clears the exhaust pipe. If not, cut the pipe approximately 8 -12 inches away and on both sides of the pipe's 90 degree bend. The exhaust modifications can be done after the installation is complete.



- □□ [DIAGRAM 3A] Install the upper link drop bracket (#55-01-5100 driver side and #55-02-5100 passenger side) in the factory frame brackets and loosely secure using the supplied 7/16" x 1-1/4" bolt, washer, and nut as shown. Snug, but do not tighten at this time.
- □□ Insert the 1/2" ID x 1-1/2" sleeve inside the drop bracket and line it up with the original link mounting hole. Install the 7/16" x 3" bolt through the drop bracket, original mounting hole, and sleeve. Snug with the supplied washers and nyloc nut, but do not tighten at this time.

- [DIAGRAM 3B] Using the bracket as a template, mark the location of the two 3/8" holes to be drilled in the bottom of the frame. Remove the bracket, then drill the holes using a 13/32" drill bit.
- □□ Insert the tab studs in the access hole on the outside of the frame and line up the studs with the holes drilled previously. Once the studs are in place, secure using the supplied 3/8" washers and nyloc nuts.

**WARNING:** Use caution when installing the tab studs to avoid dropping them inside the frame. If needed, a magnet can be used to retrieve them.

- □□ If the factory upper links will reused, attach them to the drop brackets at this time using the factory hardware. If the optional upper Rockrunner links will be used, install now per separate instructions. Do not tighten at this time.
- $\Box$  Tighten the 7/16" bolts (37) and the 3/8" nuts (23).

## 12) COMPRESSION TRAVEL STOP EXTENSIONS...

- □□ On each side, pry the factory compression stop from its cup, taking care not to damage the cup.
- □□ Install the replacement poly compression travel stops (#19-5100) in the factory cups. It may be necessary to raise the axle in order to press the stops in the cups. It may also be necessary to trim the end of the stop slightly so that the stop's retaining groove fully engages the tabs in the cup.
- Drill out the existing hole in the center of the lower spring seat to 17/64"
- □□ Position the lower compression stop spacer (#66-20-5100) on the spring seat and secure using the supplied 5/16" x 1-3/4" self-tapping bolt (24).

#### 13) COIL SPRINGS #552...

- Lower the axle far enough to facilitate installing the coil springs. Use caution to prevent over-extending brake lines, vent hoses, etc.
- □□ Install the coils. Position the coil in the tower first, then slide it into place on the axle seat.
- **D** Reattach the retaining clip at the bottom of the driver side coil.
- Repeat steps 8-13 on the passenger side.
- 14) SUPERLIFT SHOCK ABSORBERS...

On each side:

- □□ Install shock boot and decal.
- □□ With the lower half of the stem hardware in place, insert the top end of the shock through the hole in the factory shock tower. Install the other half of the hardware and tighten only until the bushings start to swell slightly. Install jam nut.
- Attach the lower end of the shock to the axle using the factory hardware (21).

## 15) TRACK BAR BRACKET...

- Drill out the existing track bar mounting hole at the frame using a 9/16" bit.
- □ [DIAGRAM 4] Position the track bar bracket (#55-15-5700) as shown, with the ears of the bracket positioned over the driver side frame rail. Install the supplied 9/16" x 2-1/4" bolt with the supplied 9/16" flat washer through the hole in the bottom of the "15" bracket and the factory track bar mounting hole. Secure using the supplied extrathick flat washer and stover nut, then tighten (115).
- □ Using the "15" bracket as a template, drill the two mounting holes on both the inside and outside of the driver side frame rail using a 1/2" bit.
- Remove the "15" bracket and *drill out* the outside holes only to 3/4". Do not drill the inside holes to 3/4". the crush sleeves that will be installed should have a snug fit; do not "wallow out" the 3/4" holes.



□ Carefully insert the supplied 3/4" OD x 2-3/8" crush sleeves in the 3/4" holes. *Do not drop them inside the frame.* 

**NOTE:** If the crush sleeves are a little loose in the frame holes, it is a good idea to very lightly tack-weld them in place; just enough to keep them from falling inside the frame is all that is needed. Also, the sleeves should be flush with the outside of the frame rail. If they protrude past the frame, grind them down until they are flush.

Reinstall the "15" bracket and tighten the 9/16" bolt (115). Install the supplied 1/2" x 3-3/4" tapered allen bolts through the "15" bracket, frame, and crush sleeve as shown in Diagram 9. Secure using the supplied 1/2" washers and fine-thread nuts. Tighten (110).

## 16) TRACK BAR...

**NOTE:** In most cases it will be easier to attach the track bar once the vehicle is on the ground with the suspension supporting the vehicle's weight. Perform all steps below but leave the bar loose at the frame until the vehicle can be lowered to the ground.

Drill out the existing mounting hole for the track bar on the axle using a 1/2" drill bit.

- [DIAGRAM 5] Lubricate and install the supplied bushings and sleeve in the lower end of the track bar (55-29-5700). Note that the supplied thick washer should be positioned between the two bushing halves inside the eye of the bar. Install the supplied grease fitting in the eye of the bar as well.
- Thread the heim joint (03-5070) with the supplied jam nut in the upper end of the track bar.
- Set the length of the track bar to 32-3/8" measured from the center of each eye. This will provide a baseline for final adjustment.



[DIAGRAM 5] Slide the bushing end of the track bar into the axle bracket and attach using the supplied 1/2" x 3" bolt and "10-5700" tab nut (57).

**NOTE:** Final adjustments will be made once the suspension installation is complete.

## 17) SUPERLIFT PITMAN ARM #1106...

- Align and install the pitman arm on the steering gear shaft. Install the stock washer and nut, then tighten (185).
- □□ Connect the drag link to the pitman arm, tighten nut (60), and install new cotter pin. If the castellations and the cotter pin do not align, tighten (do not loosen) the nut until they align.

#### 18) ANTI-SWAY BAR LINKS: (qty. 2) #55-09-5064 FOR FRONT ANTI-SWAY BAR LINK...

Note: If optional Superlift Quick Disconnect links are being used, install now per separate instructions.

- □□ Attach a #55-01-5067 bracket to each end of the sway bar body using a 3/8" x 1-1/2" bolt and nyloc nut (23). Insert the bolt facing up, and be sure the bracket legs are facing downward.
- □□ Install the supplied bushings and sleeves into the eyes of each #55-09-5064 anti-sway bar link. Note that the smaller ID sleeve installs in the upper end of each link.

- □□ Position the upper end of each link into the #55-01-5067 bracket and secure using the supplied 7/16" x 2-3/4" bolt (37). Note that the bolts should be installed from the outside.
- □□ Slide the lower end of each link into the stock brackets on the axle and secure using the stock hardware. Tighten to factory specifications.

### 19) BRAKE LINE EXTENSIONS...

- On each side, unbolt the bracket that holds the brake line fitting to the frame (where the rubber hose connects to the hard line).
- □□ Attach one end of the brake line extension (#55-13-5040 driver side and #55-14-5040 passenger side) where the fitting used to be on the frame using the factory hardware. Note that lower end of the bracket should step away from the frame. Also note that the brackets are side-specific.
- □□ Carefully reform the metal brake line so that the fitting reaches the lower end of the extension. Attach the fitting to the bracket using the supplied 5/16" x 3/4" bolt, washer, and nyloc nut (13).

**NOTE:** Use extreme caution when reforming metal brake line to avoid pinching or otherwise damaging the line. Be sure the line's new location does not interfere with any other moving components.

## 20) TIRES / WHEELS...

CAUTION: Before installing each wheel, be sure to remove any built-up corrosion on the wheel mounting surfaces. Ensure wheels are

installed with good metal-to-metal contact. Improper installation could cause loosening of the wheel nuts. Never use oil or grease on lug studs or nuts.

- [DIAGRAM 7] All wheel nuts should be tightened just snug, then gradually tightened in sequence to the proper torque specification (80 to 110).
- With the front of vehicle still on stands, and suspension "hanging" at full extension travel, turn steering lock-to-lock while checking components for proper operation and clearances.

Remove jack stands and lower vehicle to floor.

## 21) TORQUE SHAFT BRACKET #55-06-5064...



The torque shaft bracket is part of the transfer case shifter assembly. This step prevents shifter bind after the case is lowered.

[DIAGRAM 8] From under the vehicle, locate the torque shaft bracket. It is attached to the inside of the transmission tunnel and acts as a pivot for the transfer case shift lever. Remove the two bolts that attach the swivel plate-to-bracket. Also remove the swivel plate gasket.



- Attach the swivel plate Attach the swivel plate Attach the Superlift torque shaft bracket (#55-06-5064) using the factory bolts and nuts (18).
- □ Insert the torque shaft through the swivel plate, then attach the "06" bracket to the factory torque shaft bracket as shown using the supplied 6mm x 20mm allen head bolts and 6mm nyloc nuts (18).

**NOTE:** It may still be necessary to adjust the factory linkage in order to obtain optimal shifting.

#### 22) ENGINE MOUNT SPACERS...

- Loosen, but do not remove, the transmission mount.
- Place a block of wood under the transmission bellhousing and engine oil pan and position a jack so that it supports, but does not raise, the engine. Take precautions to avoid damaging any components.
- □□ On each side, remove the two bolts that secure the engine mount to the frame. Save all hardware for reuse.
- □□ Carefully raise the engine approximately 3/8" and slide the engine mount spacers (#55-08-5120) between the engine mount and frame mount.

**WARNING:** Use extreme caution to avoid placing fingers or any other body parts between the engine and frame at any time while the engine is unbolted from the frame.

Line up the bolt holes in the engine mounts, spacer plates, and frame, then lower the engine. Reinstall the factory hardware and tighten to factory specifications.

#### 23) LOWERING the TRANSFER CASE: #55-07-5120...

[DIAGRAM 9] Position a jack beneath the driver side of the transfer case crossmember / skid plate, just inboard of the plate-to-frame mounting bolts. Load the jack so that it will support the plate's weight when the three bolts are removed. After removing the driver's side bolts, loosen (do not remove) the passenger's side plate-to-frame bolts.

- Lower the jack just enough to install the driver side drop bracket (#55-07-5120), and insert the new 12mm x 80mm Allen head bolts. Leave bolts loose so the other side can be installed.
- Relocate the jack to the passenger side and repeat the installation procedure for the other "07" drop bracket.
- □ Tighten all six plate bolts (31).
- Tighten the transmission mount to factory specifications.

## REAR DISASSEMBLY

#### 24) SECURE VEHICLE...

Raise rear of vehicle with a jack positioned at outboard ends and secure a jack stand beneath each frame rail, in front of the lower link arms. Ease the frame down onto the stands, but leave a slight load on the jack. Chock front tires. Remove rear tires.

#### 25) SHOCK ABSORBERS...

Disconnect and discard the factory shocks. Save all hardware for reuse.

#### 26) ANTI-SWAY BAR LINKS...

• On each side, disconnect the sway bar link from the axle bracket and the sway bar body.

## 27) TRACK BAR...

Unbolt the track bar from the axle and the frame, then set the bar and all hardware aside.

#### 28) BRAKE LINES...

Detach the brake hose from the driver side upper link arm. Also remove the bolt securing the brake hose fitting (where the rubber hose meets the metal line) on the inside of the frame.

## 29) PARKING BRAKE...

Loosen the parking brake adjuster located on the underside of the body near the passenger side of the frame enough to facilitate disconnecting the cables that run to the rear brakes. Detach the cables from the bracket and let hang.

#### 30) LINK ARMS...

Remove the bolts securing the parking brake cables to the upper link arms. Save all hardware for reuse.



Remove the bolts securing the lower link arms to the frame and to the axle. Discard the links but save all hardware for reuse.

## 31) COIL SPRINGS...

□□ Lower the axle assembly until the coil springs are free from their seats, then remove the coils. Inspect the thin, disc shaped rubber gasket that insulates the top of the coil and replace if necessary.

## REAR ASSEMBLY

## 32) LOWER LINK ARM BRACKETS...

**NOTE:** Perform steps 31-38 one side at a time.

- [DIAGRAM 10] Install the lower link arm drop bracket (#55-07-5127 driver side and #55-08-5127 passenger side) over the factory upper mounts as shown and loosely secure using the supplied 1/2" x 1" bolts, washers, and nyloc nuts. Do not tighten at this time.
- □□ Line up the supplied 5/8" ID x 2-3/4" long sleeve with the factory link mounting hole. Install the 9/16" x 5" bolt through the drop bracket, factory bracket, and sleeve as shown in Diagram 10. The bolt should be installed from the outside. Do not tighten at this time.
- **D** Tighten the 1/2" bolts (57).



□□ Using the tab at the top of the bracket as a template, drill a 21/64" hole on the inside of the frame. Install the supplied 3/8" x 1" self-tapping bolt and tighten (24).

**CAUTION:** Do not overtighten the 3/8" bolt.

□ After verifying their length is set to 16-1/4", install the lower link arms (#55-01-5069) using the factory hardware. Note that one of the eyes is offset slightly; the offset eye should be attached to the axle similar to the front installation. Do not tighten at this time.

## 33) UPPER LINK ARM DROP BRACKETS...

• On each side, unbolt the upper link arm from the frame and from the axle. Save all hardware for reuse.

**NOTE:** If the optional upper Rockrunner links will be installed, unbolt the factory link arm from the axle and discard, then attach the Rockrunner links to the axle per separate instructions.

Using a 7/16" bit, drill out the factory link arm mounting hole.

□□ [DIAGRAM 11] Slide the upper link arm drop bracket (#55-05-5127 driver side and #55-06-5127 passenger side) over the factory upper mount. Install the two 7/16" x 1-1/2" bolts through the top of the drop bracket and factory holes as shown. It may be necessary to bend the fuel lines at the top of the frame slightly to allow sufficient bolt clearance. The bolts should be installed from the bottom with washers. Secure the bolts with the supplied tab nuts and tighten (37).



**WARNING:** Extreme care should be taken when altering the position fuel or brake hard lines. Take precautions not to pinch or otherwise damage the lines. Be sure the lines have adequate clearance away from the installed hardware and other undercarriage components. Contact with other components can cause the lines to work-harden over time and lead to eventual line failure.

- □□ Line up the 1/2" ID x 1-13/16" long sleeve with the original link mounting hole drilled previously. Install the supplied 7/16" x 3-1/2" bolt through the drop bracket, sleeve, and the original link mounting hole. Do not tighten at this time.
- □□ Using the drop bracket as a template, drill out the mounting hole to the right of the original link mounting hole as shown in Diagram 11 using a 7/16" drill bit. Install a 7/16" x 1" bolt, washer, and nyloc nut in the hole. Do not tighten at this time.
- Attach the brake line junction block to the "07" drop bracket using the supplied 1/4" x 1" bolt, washer and nyloc nut (76 in-lb) as shown.

## 34) LINK ARM BRACKET BRACE...

Refer to Diagram 11 once again. Position the rear drop bracket brace (#55-09-5100 driver side and #55-10-5100 passenger side) as shown on the 9/16" bolt for the lower drop bracket. Install the supplied 7/16" x 1" bolt through the brace and mounting hole in the upper drop bracket. Tighten the 7/16" bolt (37) and the 9/16" bolt (82).

## 35) CAM BOLT SLOTS...

On each side, look at the axle bracket that captures the upper link's rear eye. Knock out the perforated plug that makes the round hole a slotted hole. If necessary, dress the slot with a file and paint the exposed metal.

## 36) UPPER LINK ARMS...

- On each side, use Superlift cam bolt assembly #03-5062 to reattach the link to the axle.
   Install the bolts from the inside so they point outward. Rotate the cams so that the tall side of the lobes point straight up (12 O'clock position). Do not fully tighten; the bolts are torqued in a later step.
- □□ On each side, attach the link's front eye to the frame using the factory hardware. Do not fully tighten; the bolts are torqued in a later step.

## 37) DROP BRACKET TIGHTENING SEQUENCE...

□ □ Tighten all of the 7/16" bolts (37) and 1/2" bolts (57) for the upper and lower link arm drop brackets. The link arms will be tightened in a later step.

# 38) TRACK BAR BRACKET #55-03-5064...

- [DIAGRAM 12] There are two existing holes in the factory track bar-toaxle mount where the plastic cover was attached. Drill out these holes to 5/16" diameter.
- The "03" bracket fits down over the top of the factory mount, as shown. Use the furnished 7/16" fastener at the factory mount's bar eye hole (37). Tighten the 5/16" hardware (13). The



track bar is installed in a later step.

## **39) COMPRESSION TRAVEL STOP EXTENSIONS: (qty. 2) #9003...** On each side:

- □□ Pry the factory compression stop from it's mounting cup, taking care not to damage the cup. Remove the 10mm bolt that attaches the cup to the spring tower.
- Position the Superlift compression stop spacer (#9003) between the upper spring tower and mounting cup and install the new 10mm x 100mm bolt (30). Reinstall the factory rubber compression stop into the mounting cup.
- Drill a 17/64" hole in the center of the lower spring seat.

□□ Position a lower bumpstop spacer (#66-20-5100) on the lower spring seat and secure using the supplied 5/16" x 1-1/2" self-tapping bolt (24).

## 40) SUPERLIFT COIL SPRINGS #553 SOFT TOP OR #554 HARD TOP ...

- On each side, position the coil spring on the upper spring seat. Do not forget the stock rubber coil isolators for the top of the coils.
- Line up the springs with the axle seats. It may be necessary to pry down on the axle slightly for coil installation.
- After both coils are in place, jack up the axle assembly until the springs are seated. Be sure the frame rails remain on the jack stands.

# 41) PARKING BRAKE CABLE DROP BRACKET #55-15-5100...

- [DIAGRAM 13] Attach the parking brake cable drop bracket (#55-15-5100) to the factory bracket as shown using the supplied 3/8" x 3/4" bolts and nyloc nuts (23).
- Route the cables from the rear brakes to the lower holes and clip into place as shown. Reconnect the cables to the adjusting mechanism, then adjust the cables following the procedure found in the factory service manual.
- Reattach the cables to the upper link arms using the factory hardware. It may be necessary to adjust the position of the factory cable brackets in order to attach them properly.



- 42) ANTI-SWAY BAR LINKS: (qty. 2) #55-10-5064 REAR ANTI-SWAY BAR LINK... Note: If optional Superlift Quick Disconnect Links are being used, install now per separate instructions.
- □□ Install the supplied bushing halves and sleeves in the eyes of each #55-10-5064 anti-sway bar links.
- □□ Position the ends of each link in the stock brackets on the axle and on the frame, then secure using the stock hardware. Tighten to factory specifications.
- 43) SHOCK BRACKET EXTENSIONS AND SHOCKS...

- [DIAGRAM 14] On each side, attach the shock bracket extensions (#55-13-5100 driver side and #55-14-5100 passenger side) to the shock mounts on the axle using the 3/8" x 1" bolt, washer, and nyloc nut as shown.
- □□ Line up the supplied 1/2" ID x 1-3/16" sleeve with the factory shock mounting hole as shown, then install the 1/2" x 2-3/4" bolt, washer, and nyloc nut. Due to the variance of the factory



mounts, extra 1/2" washers are provided to take up any slack between the mounts and the extensions. Do not tighten at this time.

- □□ Install shock boot and decal.
- Position shock and tighten the two factory upper bolts (23) and the single factory lower bolt (74).
- $\Box$  Tighten the 3/8" bolt (23) and the 1/2" bolt (57).
- 44) TIRES / WHEELS...

CAUTION: Before installing each wheel, be sure to remove any built-up corrosion on the wheel mounting surfaces. Ensure wheels are installed with good metal-to-metal contact. Improper installation could cause loosening of the wheel nuts. Never use oil or grease on lug studs or nuts.

- □□ [DIAGRAM 7] All wheel nuts should be tightened just snug, then gradually tightened in sequence to the proper torque specification (80 to 110).
- □ With rear of vehicle still on stands, and suspension "hanging" at full extension travel, check all components for proper operation and clearances.
- Remove jack stands and lower vehicle to floor.
- 45) TIGHTEN the SUSPENSION COMPONENTS... The suspension must be supporting the vehicle's weight when these components are torqued:
- □ Track bars, both ends, front and rear (74)
- Lower link arms, both ends, front and rear (130)

- Upper link arms, frame end, front and rear (55)
- Upper link arms, axle (cam bolt) end, front and rear (85)

**NOTE:** Prior to torquing the cam bolts, again use the inclinometer to take a rear driveshaft angle reading, and compare this to the reading taken in Step 1. Rotate the cam bolts as needed to get shaft angle as close to the Step 1 reading as possible. This will minimize or eliminate shaft vibration due to excessive angle. The 12 O'clock position that the cams were initially adjusted to in Step 35 yields the least amount of angle. It is important that both cams are adjusted identically. To reduce vibration under acceleration, rotate the cams to move the pinion bearing downward. To reduce vibration under deceleration, rotate the pinion bearing upward.

#### 46) TRACK BAR #55-12-5100...

- Lubricate and install the supplied bushings and sleeves in the upper end of the track bar (55-12-5100). Note that the supplied extra-thick washer should be positioned between the two bushing halves in the eye of the bar.
- □ Thread the heim joint with the supplied jam nut in the lower end of the track bar. Set the length of the track bar at 32-5/8" measured from eye-to-eye. This will provide a baseline for adjustment.
- Insert the heim end of the track bar into the track bar bracket on the axle and loosely secure using the factory hardware.
- □ Slide the bushing end of the track bar into the frame bracket and attach using the supplied 1/2" x 2-3/4" bolt and nyloc nut (57).

#### 47) TRACK BAR ADJUSTMENT...

**NOTE:** This procedure must be performed for both the front and rear track bars.

- □□ Verify that the (front) tires are pointed straight ahead. Position a plumb bob or similar tool against the inside edge of the frame. Measure the distance between the line of the plumb bob and the end of the axle. Record this measurement, then repeat the procedure on the other side.
- Compare the two measurements recorded in the previous step; the goal is to make them equal:

**On the front:** If the driver side measurement is greater than the passenger side, the track bar needs to be lengthened. If the passenger side measurement is greater than the driver side, the track bar needs to be shortened.

**On the rear:** If the driver side measurement is greater than the passenger side, the track bar needs to be shortened. If the passenger side measurement is greater than the driver side, the track bar needs to be lengthened.

Disconnect the heim end of the track bar from the vehicle and make the appropriate adjustments. Tighten the jam nut firmly, then reattach the bar to the frame and torque (57).

□□ Once installation is complete, test-drive the vehicle and repeat the measuring procedure to verify the adjustments made were correct.

**NOTE:** The maximum amount of adjustment is no more than 1-1/8" of exposed heim joint threads as measured from the end of the track bar.

□□ Install the supplied cotter pin in the castle nut on the upper end of the track bar.

## 48) HEADLIGHTS...

Readjust headlights to factory setting.

## 49) FINAL OVERALL INSPECTION and TORQUE CHECK...

Perform a front-to-rear inspection. With the suspension supporting vehicle weight, cycle steering lock-to-lock and inspect steering, suspension, driveline, and brake systems for proper operation, tightness, and adequate clearances. Retorque all fasteners.

## 50) TRANSMISSION SHIFTER MODIFICATION...

This step is only necessary if the vehicle exhibits problems shifting after the lift installation is complete.

- Test drive the vehicle and shift through all gears. If it is difficult to shift into (or the transmission jumps out of) Second, Fourth, or Reverse, the shifter is likely hitting the edge of the transmission tunnel due to the transfer case drop and will need to be modified slightly.
- Set the parking brake on the vehicle and put the transmission in neutral. Remove the shift knob and upper shifter boot. Shift the transfer case lever into neutral and remove the console, lower shift boot, and dust boot.
- Remove the shifter from the transmission following the procedure found in the factory service manual.
- [DIAGRAM 15] Disassemble the shifter according to the diagram. Place the lower portion of the shifter in a vice or press and bend it slightly (about 3 degrees) at the point shown. It will be necessary to heat the shifter with a torch in order to bend it in most cases. Do not heat the shifter excessively, and do not bend it more than necessary.
- Reassemble the shifter and install it by reversing the steps followed for disassembly.



## 51) SAFETY DECAL...

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

### 52) ALIGNMENT...

□ Realign vehicle to factory specifications.

#### 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.