

### Superlift 5" - 6" Standard Series lift system for 1999 and Newer CHEVY / GMC 1/2-ton AVALANCHE, TAHOE, SUBURBAN, YUKON, YUKON XL without electronic control shock absorbers 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:

- 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 system requires the use of wheels with a maximum 4-5/8" backspacing. Superlift recommends a 16x8 or 17x8 wheel with the equivalent of a 35x12.50 tire. This system will allow the use of a factory wheel and tire, but not a factory wheel with a larger-than-factory tire.
- Superlift recommends installing the TruSpeed speed signal calibrator on any vehicle with an electronic speedometer and larger-than-stock tires. The TruSpeed corrects the speedometer and other speed-signal related functions. The TruSpeed calibrator is available separately.
- Welding is required and must be performed by a certified professional. Refer to step 11.
- Bracketry is available separately that allows the vehicle to be returned to stock. If there is a possibility that the vehicle will be returned to stock in the future, all factory components and hardware should be saved for later use.
- A special tool is required to load / unload the torsion bars (step 2). Other special tools are recommended to detach / attach the ball joint / pitman / idler studs. Refer to the factory service manual.
- Front end realignment is necessary.
- This system utilizes the stock torsion bars, which normally yield the best ride quality. But, if the "final product" ride and handling seem too soft, heavier Gross Vehicle Weight Rating (GVWR) bars can be installed. Generally, heavier torsion bars are only needed to compensate for the extra weight of a winch or snowplow, or when the truck is subjected to

extreme off-road use. Also, wider tires and wheels proportionally increase the leverage on the bars, which results in lower ride height and a "spongier" ride. GM offers torsion bars with various rates that are heavier than stock. Your vehicle's existing torsion bar rate can be identified by a 3-letter code stamped into the bars' ends. The code is also on an adhesive tag wrapped around the bars.

- 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 welder, 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.

**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	<b>DESCRIPTION</b> (Qty if more than one)	NEW ATTACHING HARDWARE (Qty if more than one)
01-3330	knuckle, driver side	. (1) 1/4" x 1/2" self-tapping bolt (3) zip tie (1) thread-locking compound
02-3330	knuckle, passenger side	. (1) 1/4" x 1/2" self-tapping bolt (3) zip tie (1) thread-locking compound
55-04-3330	differential drop bracket, passenger side	. (2) 9/16" x 2" bolt (2) 9/16" extra-thick flat washer (2) 9/16" USS washer (2) 9/16" nyloc nut
55-05-3370	front crossmember	. (2) 5/8" x 4-1/2" bolt (4) 5/8" USS washer (2) 5/8" nyloc nut

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55-06-3370	. rear crossmember	(1) 9/16" x 4-1/2" bolt (2) 9/16" USS washer (1) 9/16" nyloc nut (2) 5/8" x 5-1/2" bolt (4) 5/8" USS washer (2) 5/8" nyloc nut
1-07-3370	. frame reinforcement bracket	
55-09-3370	. (2) kicker brace	(4) 7/16" x 4" bolt (4) 7/16" SAE flat washer (4) 7/16" nyloc nut (8) bushing half (4) sleeve
55-10-3370	. (2) kicker brace mounting bracket	(2) 7/16" x 1-1/4" bolt (2) 7/16" x 2" bolt (2) 7/16" SAE washer (2) 7/16" nyloc nut (2) tab nut
55-13-3370	. (2) kicker brace mounting bracket at rear crossmember	
55-11-3370	. belly pan	(2) 3/8" x 1-1/4" bolt (2) 3/8" SAE washer (2) 3/8" nyloc nut (2) 5/16" x 1-1/4" bolt (2) 5/16" SAE flat washer (2) 5/16" nyloc nut
55-01-3310	. torsion bar drop bracket, driver side	(3) 3/8" x 1" self-tapping bolt (1) 9/16" x 3" bolt (1) 9/16" nyloc nut (2) bushing half (1) sleeve
55-02-3310	. torsion bar drop bracket, passenger side	(3) 3/8" x 1" self-tapping bolt (1) 9/16" x 3" bolt (1) 9/16" nyloc nut (2) bushing half (1) sleeve
55-12-3330	. torsion bar drop bracket, passenger side	(2) 7/16" x 1" bolt (2) 7/16" x 1-1/2" bolt (8) 7/16" SAE washer (4) 7/16" nyloc nut (4) extra thick washer (4) bushing half (2) 11/16" x 1-1/2" sleeve

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66-15-3330	(2) CV axle spacer	. (12) 10mm x 70 mm bolt (12) 10mm flat washer		
55-19-3280	(2) compression stop extension, rear	. (4) 3/8" x 1" bolt (4) 3/8" USS washer (4) 3/8" nyloc nut		
55-18-3330	(2) front anti-sway bar link	. (2) 7/16" stover nut (2) 7/16" SAE washer (2) 7/16" USS washer (2) 5/8" OD x 3/16" sleeve (4) poly bushing half		
01-328	coil springs, rear			
55-03-3310	shock relocation bracket, rear, driver side	. (1) 9/16" x 3-1/2" bolt (1) 9/16" nyloc nut (1) 1/2" x 1-1/4" bolt (1) 1/2" nyloc nut (1) 7/8" x 1-7/8" sleeve		
55-04-3310	shock relocation bracket, rear, passenger side	. (1) 9/16" x 3-1/2" bolt (1) 9/16" nyloc nut (1) 1/2" x 1-1/4" bolt (1) 1/2" nyloc nut (1) 7/8" x 1-7/8" sleeve		
55-05-3310	rear brake line drop bracket	. (1) 5/16" x 1-1/4" bolt (1) 5/16" nyloc nut		
55-01-3317	rear brake line drop bracket	. (2) 5/16" x 1-1/4" self-tapping bolt		
55-06-3310	rear track bar drop bracket	. (1) 9/16" x 3-1/2" bolt (1) 9/16" nyloc nut (2) 7/16" x 1" bolt (2) 7/16" nyloc nut (1) 7/8" x 1-7/8" sleeve		
55-11-3310	compression stop bracket, rear, driver side	. (2) 3/8" x 1" self-tapping bolt (1) 3/8" x 1" bolt (1) 3/8" nyloc nut		
55-12-3310	compression stop bracket, rear, passenger side	. (2) 3/8" x 1" self-tapping bolt (1) 3/8" x 1" bolt (1) 3/8" nyloc nut		
55-14-3310	(2) anti-sway bar links, rear	. (2) 1/2" x 2-1/2" bolt (2) 1/2" SAE washer (2) 1/2" stover nut (4) bushing half (2) 5/8" x 1-1/2" sleeve		
	(2) shock absorber, front	. (2) shock boot*, yellow (2) hardware pack and cable tie		
*(NOTE: Shock boots, if desired, purchased separately)				

\*(NOTE: Shock boots, if desired, purchased separately)

0034.....alcohol wipe pad

00461..... decal, "Warning To Driver"

### FRONT DISASSEMBLY

### 1) PREPARE VEHICLE...

- Place vehicle in neutral. Raise the front of vehicle with a jack and secure a jack stand beneath each frame rail, behind the lower control arms. Ease the frame down onto the stands, place transmission in low gear or "park", and chock the rear tires. Remove the front tires.
- Disconnect the battery.

# 2) UNLOADING THE TORSION BARS...

**WARNING:** Be extremely careful when loading and unloading the torsion bars; there is a tremendous amount of energy stored in them. Keep your hands and body clear of the adjuster arm assembly and the puller tool in case anything slips or breaks.

- □□ Mark the torsion bars to indicate their indexing in relation to the lower control arms and adjusting arms.
- □ A special torsion bar puller tool is required to unload the torsion bars. Use the tool to load the torsion bar, then remove the adjusting bolt and nut block. Unload the bar, slide the adjuster arms out of the crossmember, then slide the torsion bars forward (into the lower control arms).

**NOTE:** Because of the extreme loads generated by the torsion bars on these vehicles, a standard two-jaw puller tool tends to bend the "lips" of the crossmember (which it uses for attachment) and may pop out of place. We have had the best results using a C-clamp type puller tool. If one cannot be found locally, this tool (PN J-22517-C) is available from the Kent Moore Tool Group in Roseville, Michigan (800/345-2233 or 313/774-9500).

#### 3) TORSION BAR CROSSMEMBER...

Remove the two bolts that attach the crossmember to the frame and set the crossmember aside. Save all hardware for re-use.

# 4) BRAKE CALIPERS...

- **Unbolt** the brake hoses from the upper control arm.
- □□ Remove the two bolts securing the caliper bracket to the knuckle. It is not necessary to remove the caliper from the bracket. Leave the brake hose attached to the caliper, and using mechanic's wire, hang the calipers out of the way. Take precautions to ensure the brake hose isn't stretched or pinched.
- □□ Unplug the ABS wire from the connector located at the top of the frame rail and unclip the wire from the upper control arm.
- **D** Remove the brake rotor and set it aside.

### 5) AXLESHAFTS...

- Remove any factory skid plates or shields that block access to front suspension components.
- **D** Remove the six bolts that attach the axleshaft to the CV flange on the differential.

# 6) TIE ROD ENDS...

Remove the nuts securing the tie rod ends to the knuckle. Using the appropriate puller tool (refer to the factory service manual), separate the tie rod end from the knuckle.

# 7) SWAY BAR...

Loosen the threaded rod inside the sway bar end link and remove the bushings, rod, and tube. Set these parts aside.

# 8) CONTROL ARM / HUB ASSEMBLY...

- Remove and discard the front shocks. Save the lower shock hardware for re-use.
- □□ Mark the axleshafts' respective positions (Driver and Passenger).
- Remove the dust cap in the center of the wheel bearing assembly in order to gain access to the axleshaft nut. Remove the axleshaft nut, then remove the axleshaft from the vehicle. Save all hardware for re-use.
- □□ Support the control arm / hub assembly with a jack. Remove the upper ball joint nut securing the knuckle to the upper control arm. Using the appropriate puller tool, separate the upper ball joint from the knuckle. Save all hardware for re-use.
- Remove the lower ball joint nut and, using the appropriate puller tool, separate the ball joint from the knuckle. Set the knuckle (with the wheel bearing assembly still attached) aside.
- Remove the bolts that hold the lower control arm to the frame and set the lower control arm aside. Save all hardware for re-use.

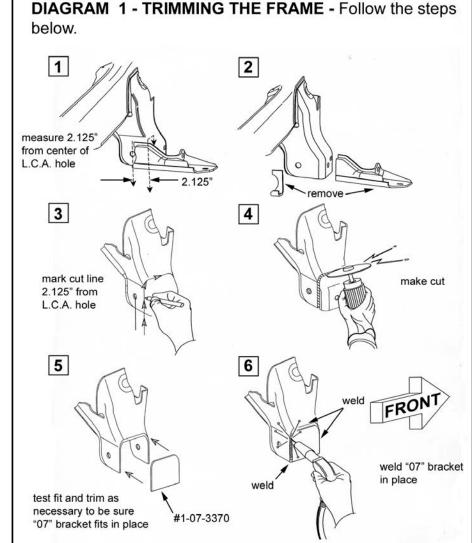
# 9) COMPRESSION TRAVEL STOPS...

**Pry** out the compression travel stops from their mounting cups and save for re-use.

# 10) DIFFERENTIAL...

- Disconnect the electrical plug and vacuum tube from the differential.
- Position a jack underneath the differential housing and place just enough pressure on the jack to support the differential's weight.
- Unbolt the driveshaft from the differential yoke and tie the driveshaft out of the way. Retain all the factory hardware.
- **Q** Remove and discard the factory rear crossmember.
- Remove the driver side lower differential bolt and the two differential bolts on the passenger side, followed by driver side upper differential bolt. Carefully lower the differential to the floor.

- 11) TRIMMING THE FRAME...
- [DIAGRAM 1] Cut the driver side lower differential mount following Diagram 1 using a torch or similar tool.
- Test-fit the supplied frame reinforcement bracket (#1-07-3370) as shown in Diagram 1. It may be necessary to trim the bracket in order to fit the installer's cut lines. Care should be taken to trim the piece as precisely as possible to ensure a good solid weld.
- Once the reinforcement bracket fits adequately, weld it to the frame as shown in Diagram 1.



# ASSEMBLY

#### 12) PASSENGER SIDE DIFFERENTIAL DROP BRACKET...

[DIAGRAM 2] Look at the passenger side differential drop bracket (55-04-3330). Looking from the side of the bracket, you will notice it has a taper in it; the "tall" end of the taper should be positioned forward (toward the front bumper), while the "short" end of the taper should be positioned rearward (toward the rear bumper). Attach the "04" bracket to the factory passenger differential bracket as shown using the original hardware and two of the supplied 9/16" USS washers. Do not tighten at this time.

#### 13) FRONT CROSSMEMBER...

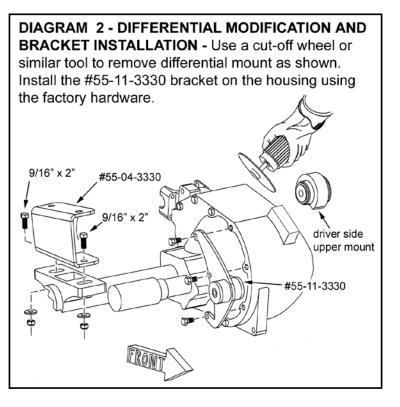
□ Attach the front crossmember (#55-05-3370) to the original lower control arm front leg mounting points on the frame using the supplied 5/8" x 4-1/2" bolts, washers, and nyloc nuts.

The crossmember should be positioned so that the mounting tabs for the differential are pointing rearward (toward the rear bumper), and the bolts should be installed from the front. Do not tighten at this time.

# 14) DIFFERENTIAL...

[DIAGRAM 2] Using a cut-off wheel or reciprocating saw, cut off the ear for the driver side upper differential mount as shown. Smooth the area that was cut for appearance and adequate clearance with other components.

**WARNING:** Do not use a torch or similar tool that generates extreme heat to make the necessary cuts to the differential. Excessive heat will warp the differential housing and irrevocably damage it.



- □ Install the bushing halves and sleeve in the #55-11-3330 differential bracket using a siliconbased grease.
- □ [DIAGRAM 2] Attach the #55-11-3330 to the differential housing as shown using the factory hardware and tighten (35).
- ❑ With the help of an assistant, raise the differential into position and secure the driver side front mount (#55-11-3330) in the front crossmember tabs using the supplied 9/16" x 4" bolt, washer, and nyloc nut. The bolt should be installed from the outside. Do not tighten at this time.
- Secure the passenger side of the differential to the "04" bracket using the two supplied 9/16" x 2" bolts, extra-thick flat washers, USS washers, and stover nuts. The bolts should be installed from the top, and the extra-thick washers should be positioned under the nuts. Do not tighten at this time.
- Reconnect the differential vacuum tube and wiring.

# 15) REAR CROSSMEMBER...

- Position the rear crossmember (#55-06-3370) in the rear legs for the lower control arms and loosely secure using the supplied 5/8" x 5-1/2" bolts, USS washers, and nyloc nuts. The bolts should be installed from front-to-rear. Do not tighten at this time.
- □ Install the supplied 9/16" x 4-1/2" bolt, USS washers, and nyloc nut. The bolt should be installed from the outside. Do not tighten at this time.
- **Q** Re-install factory compression stops in the cups on the "06" crossmember.

#### 16) BELLY PAN...

Position the belly pan (#55-11-3370) between the front and rear crossmembers and loosely secure to the rear crossmember using two of the the supplied 5/16" x 1-1/4" bolts, SAE washers, and 5/16" nyloc nuts. Secure the belly pan to the front crossmember using two 3/8" x 1-1/4" bolts, washers, and nyloc nuts.

## 17) FASTENER TIGHTENING SEQUENCE...

- **D** Torque the following in sequence:
  - □ 5/16" belly pan hardware (19).
  - □ 3/8" belly pan hardware (23).
  - □□ 5/8" crossmember hardware (154).
  - 9/16" differential hardware (114).
  - Factory hardware on passenger side differential bracket (75).

### 18) DRIVESHAFT...

Reattach the front driveshaft using the factory hardware and tighten (19).

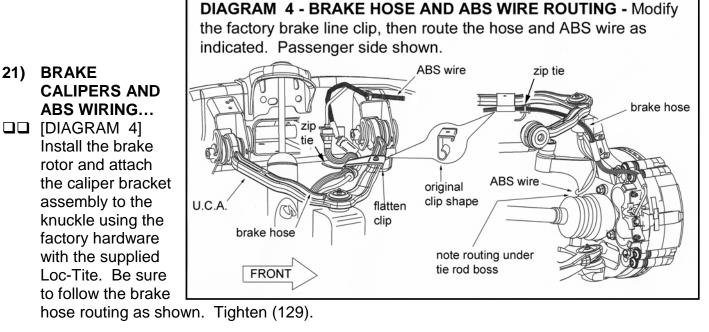
# 19) KNUCKLE ASSEMBLY AND INSTALLATION...

**NOTE:** Perform the following steps on one knuckle at a time.

- □□ Install the lower control arm in the crossmembers using the factory hardware. Install the hardware for both legs front-to-rear. Snug, but do not tighten at this time.
- Remove the three bolts securing the wheel bearing assembly to the factory knuckle. Carefully note the orientation of the dust shield and wheel bearing assembly prior to removal.
- □□ Install the bearing assembly and dust shield on the Superlift knuckle (#01-3330 driver side and #02-3330 passenger side) using the factory hardware. Be sure the orientation of the dust shield and bearing assembly matches original. Use the supplied thread-locking compound on the three factory fasteners
- □□ Install the knuckle assembly (#01-3330 driver side and #02-3330 passenger side) on the upper and lower ball joints and secure using the factory nuts. Tighten the upper nut (37) and lower nut (94).
- **□** Tighten the three factory bearing assembly bolts (133).

# 20) AXLESHAFTS...

- □□ Turn each knuckle so that the front of the knuckle is pointing outward. Position and install the axleshafts according the marks made during removal (Driver and Passenger). This is done by passing the differential end of the axleshaft in front of the differential housing and then sliding the shaft through the hub assembly. Secure the shaft with the factory nut and tighten (148-165). Reattach the dust cap.
- Position an axleshaft spacer (#66-15-3330) between the flange on the axleshaft and the flange on the differential and secure using the supplied 10mm x 70mm bolts and flat washers. Tighten (58).



- □□ Modify the brake hose clip as shown in Diagram 4 and attach it to the upper control arm with the factory hardware. Attach the remaining brake hose bracket to the knuckle using the supplied 1/4" x 1/2" self-tapping bolt.
- □□ Follow the routing for the ABS wiring and attach it to the brake hose using the supplied zip ties as shown in Diagram 4. Reattach the wiring to the connector on the frame.

#### 22) TIE ROD ENDS...

Attach the tie rods ends to the knuckle and secure using the factory hardware (50).

**NOTE:** The factory service manual recommends replacing the tie rod end nuts.

#### 23) SHOCK ABSORBERS...

- □ Install the shock boots (if purchased separately) on the front shocks (#88100).
- Attach the cylinder end of the shock to the factory lower control arm mount using the factory hardware. The bolt should be installed from the rear. Do not tighten at this time.
- □□ Place a washer and bushing half on the stem end of the shock and extend it through the upper shock mount on the frame. Install the remaining bushing, washer, and nut, then tighten until the bushings swell slightly.
- **□** Tighten the lower shock hardware (59).

# 24) TORSION BAR DROP BACKETS...

- One each side, slide the torsion bars into the lower control arms following the indexing marks made during removal. Be sure to slide them in far enough not to interfere with the installation of the crossember.
- □□ Lubricate and install the supplied bushings and 11/16" x 1-1/2" sleeves in the torsion bar crossmember drop brackets (55-01-3310 driver side and 55-02-3310 passenger side).
- [DIAGRAM 7] Position the torsion bar drop brackets against the frame as shown in Diagram 7. Note the pointed end of the "01" and "02" brackets should be positioned toward the front bumper. Loosely attach the brackets to the factory torsion bar crossmember mount located on the inboard side of the frame using the supplied 9/16" x 3" bolts and nyloc nut. Snug, but do not fully tighten the bolt. This will locate the drop brackets correctly on the frame for the

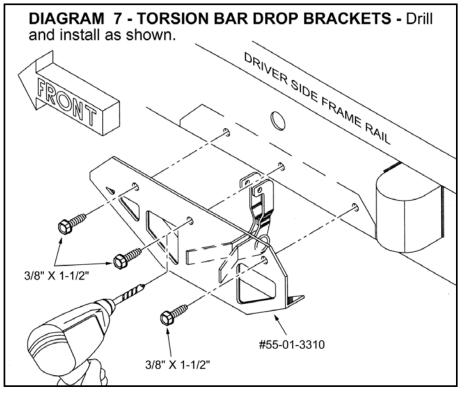
drilling procedure performed next.

- □□ Clamp the "01" and "02" brackets so that they are flush against the side of the frame. Using each bracket as a template, mark and drill the location of the mounting holes (three on each side) in the side of the frame using a 5/16" drill bit.
- On each side, install and tigten the supplied 3/8" x 1" self-tapping bolts (three per side) in the side of the frame (24). Then tighten the 9/16" bolts (82).

# IMPORTANT: Do not

exceed the specified torque for the self-tapping bolts.

- Reinstall the torsion bar crossmember using the factory hardware and tighten to factory specifications.
- □□ Insert the torsion bar adjusting arms in the crossmember, then slide the bars back into the arms. Again, follow the indexing marks made during removal.
- Using the torsion bar puller tool, load the torsion bars enough to insert the adjusting bolt and nut block in the crossmember, then release the tension on the tool.

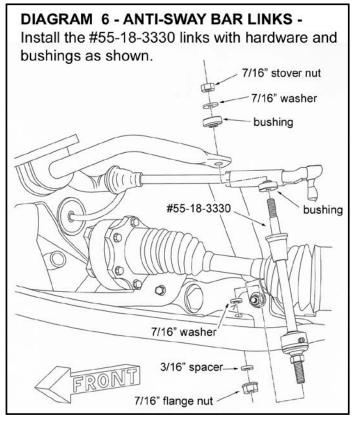


### 26) ANTI-SWAY BAR...

[DIAGRAM 6] Install the supplied antisway bar links (#55-18-3330) with the hardware and bushings as shown. For clarification, the swivel end of the link installs in the lower control arm. Be sure to position the grease fitting so that it is easily accessible. Tighten the lower end (57) and the upper end until the bushings swell slightly.

## 27) KICKER BRACES (1999 – EARLY 2000 MODELS)...

- Lubricate and install the supplied bushings and sleeves in the kicker braces (#55-09-3370).
- Attach the kicker brace crossmember brackets (#55-13-3370) to the "06" rear crossmember using the supplied 7/16" x 1-1/4" bolt, washer, and nyloc nut. Do not tighten at this time.

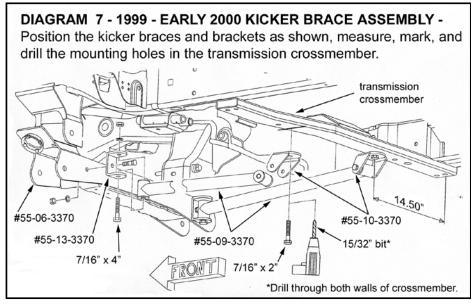


- □ Attach the kicker braces to the mounts on the rear crossmember using the supplied 7/16" x 4" bolts, washers, and nyloc nuts. Snug, but do not fully tighten at this time.
- □ Attach the kicker brace mounting brackets (#55-10-3370) to the other end of the kicker braces using the supplied 7/16" x 4" bolts, washers, and nyloc nuts.
- □□ [DIAGRAM 7] Measure inboard 14-1/2" from the end of the crossmember (where it attaches

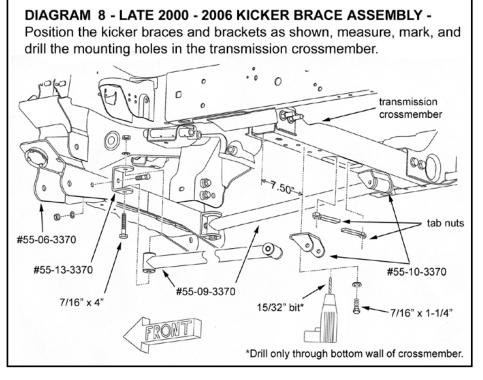
to the frame ) and position the mounting hole for the "10" bracket at that spot. Mark the hole, swing the bracket out of the way, and drill through both walls of the crossmember using a 15/32" bit.

Attach the mounting bracket to the crossmember using the

supplied 7/16" x 2" bolts, washers, and nyloc nuts.



- □□ Tighten all of the 7/16" kicker brace hardware (57).
- 28) KICKER BRACES (LATE 2000 TO CURRENT MODELS)...
- Lubricate and install the supplied bushings and sleeves in the kicker braces (#55-09-3370).
- □□ Attach the kicker brace crossmember brackets (#55-13-3370) to the "06" rear crossmember using the supplied 7/16" x 1-1/4" bolt, washer, and nyloc nut. Do not tighten at this time.
- Attach the kicker braces to the mounts on the rear crossmember using the supplied 7/16" x 4" bolts, washers, and nyloc nuts. Snug, but do not fully tighten at this time.
- □ Attach the kicker brace mounting brackets (#55-10-3370) to the other end of the kicker braces using the supplied 7/16" x 4" bolts, washers, and nyloc nuts.
- [DIAGRAM 8] Measure inboard 7-1/2" from the end of the crossmember (where it attaches to the frame horns) and position the mounting hole for the "10" bracket at that spot. Mark the hole, swing the bracket out of the way, and drill through the bottom of the crossmember only using a 15/32" bit.
- Attach the mounting bracket to the crossmember using the supplied 7/16" x 1-1/4" bolts, washers, and tab nuts.



□□ Tighten all of the 7/16" kicker brace hardware (57).

# **REAR PROCEDURE**

# 29) PREPARE VEHICLE...

Raise the rear of vehicle with a jack and secure a jack stand beneath each frame rail, just in front of the trailing arm mounts. Ease the frame down onto the stands, place transmission in low gear or "park", and chock the front tires. Leave the jack so that it supports, but does not raise, the rear axle. Remove the rear tires.

# 30) REAR BRAKE LINE RELOCATION...

**NOTE:** There are two different styles of rear brake line used on the various vehicle applications depending on the year and model. With one style the brake line connection

(where the metal line on the frame connects to the rubber hose going to the axle) is fixed in a bracket attached to the bottom of a rear frame crossmember, while the other has the connection fixed in a bracket above the rear frame crossmember. For those with the connection mounted **below** the crossmember, use brake line drop bracket **#55-05-3310** to space the junction block up at the axle. For those with the brake line connection mounted **above** the rear crossmember, use brake line relocation bracket **#55-01-3317**. Identify which type of brake line configuration is present on the vehicle and then refer to the procedure below:

**WARNING:** Only one of the two brake line relocation brackets provided should be used on the vehicle. **Do not install both**.

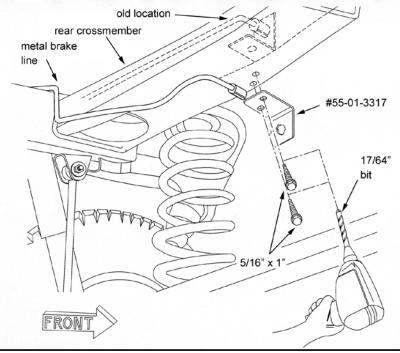
For those brake line connections mounted below the rear frame crossmember:

- Remove the bolt securing the rear brake line junction block to the differential cover.
- Attach the rear brake line relocation bracket (55-05-3310) to the differential cover where the brake line junction used to be using the factory hardware and tighten.
- □ Reform the metal brake lines to enable the junction block to reach the upper end of the "05" bracket. Use extreme caution to avoid pinching or otherwise damaging the brake lines.
- □ Secure the junction block to the "05" bracket using the supplied 5/16" x 1-1/4" bolt and nyloc nut (13).

#### For those brake line connections mounted above the rear frame crossmember:

- Disconnect the brake hose at the frame where it attaches to the metal line. Use a cap or plug to minimize fluid loss.
- Remove the metal retaining clip that secures the rubber hose to the factory L-shaped bracket on the frame. Save the retaining clip for re-use, but unbolt and discard the L-shaped bracket.
- [DIAGRAM 7] Carefully re-form the metal brake line so that is re-positioned at the bottom of the rear crossmeber as shown.
- Temporarily slide the rear brake line drop bracket (#55-01-3317) on the hard line at the new location and use the bracket as a template to mark the location of the two mounting belos to be dr

**DIAGRAM 7 - MOUNTING THE #55-01-3317 BRAKE LINE RELOCATION BRACKET -** Relocate the metal brake line below the rear crossmember and mount the bracket as shown.



of the two mounting holes to be drilled.

- □ Remove the bracket, move the brake hose and line out of harm's way, and drill two holes using a 17/64" bit at the marked locations.
- Attach the "01" bracket to the frame using the two supplied 5/16" x 1" self-tapping bolts and tighten (8).
- □ Position the rubber hose through the hole in the "01" bracket secure it using the factory retaining clip. Connect the metal line to the hose and tighten to factory specifications.
- Bleed the brakes following the procedure found in the factory service manual.

### 31) TRACK BAR...

- Pop loose the metal clips holding the emergency brake cable to the track bar and let the cable hang.
- Remove the lower track bar bolt that attaches the track bar to the axle. Loosen, but do not remove, the bolt that secures the track bar to the frame. Tie the track bar out of the way and save the hardware for reuse.

### 32) ANTI-SWAY BAR LINKS AND SHOCKS...

- □□ On each side, remove and discard the factory anti-sway bar links. Save all hardware for reuse.
- □□ On each side, unbolt the lower end of the shocks from axle but leave the upper end attached to the frame. Save all hardware for reuse.

#### 33) COIL SPRINGS...

- Lower the axle with the jack enough to facilitate removing the rear springs. Discard the stock springs.
- □□ Remove the uper link arm bolts at the axle and continue lowering the axle enough to install the Superlift coil springs (#01-328). Raise the axle enough to seat the springs in the upper spring buckets on the frame.
- □□ There are tabs at the top of the axle link arm brackets that serve as extension travel stops by contacting the upper link arms. With the jack still placing enough pressure on the axle to keep the coil springs seated in their buckets, use an adjustable wrench or similar tool to bend the stop tabs upward slightly just enough to facilitate reinstalling the upper link arms with the factory hardware. Snug, but do not fully tighten the hardware at this time.
- □□ Remove the jack and check for adequate extension travel stop contact; the coil springs should remain seated in the upper and lower buckets when the stop tabs make contact with the upper link arms. If not, adjust the stop tabs as necessary until the desired amount of extension travel is achieved.

**WARNING:** Failure to adjust the extension travel stops properly may result in dislodging of the rear coil springs.

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# 34) TRACK BAR BRACKET...

□ [DIAGRAM 8] Place the track bar bracket (55-06-3310) over the factory track bar mount on the axle as shown. Insert the 7/8" OD x 1-7/8" sleeve inside the factory track bar mount as

shown, then install the supplied 9/16" x 3-1/2" bolt through the "06" bracket, sleeve, and factory mount. Snug the bolt with the supplied 9/16" nyloc nut.

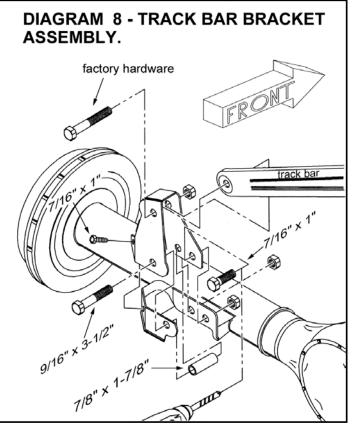
Install the supplied 7/16" x 1" bolt through the side lip of the bracket (to the left of the 9/16" bolt) and into the existing hole in the factory mount. Secure using a 7/16" nyloc nut, but do not fully tighten at this time.

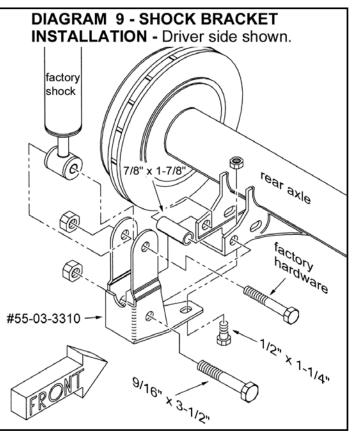
> **NOTE:** The hole in the side lip of the factory track bar bracket (referenced in the previous step) may not be present and must be drilled on some vehicles. To determine the location of this hole, install the "06" track bar bracket with the supplied 9/16" x 3-1/2" bolt as described above. Level the axle from side-to-side, then level the bracket so that the original track bar hole and the new track bar mounting hole are lined up vertically. Using the "06" bracket as a template, drill a 7/16" hole in the side lip of the factory bracket and then install the 7/16" x 1" bolt and nyloc nut as shown in Diagram 7.

- Using the "06" bracket as a template, drill a 7/16" hole in the factory track bar mount as shown in Diagram 7. Looking from the rear of the vehicle, this hole will be to the right of the 9/16" bolt installed previously. Clean up any burrs, then install the supplied 7/16" x 1" bolt and nyloc nut (52).
- □ Tighten the remaining 7/16" bolt (52) and the 9/16" bolt (82).

# 35) REAR SHOCK BRACKETS...

 [Diagram 9] Place the shock relocation brackets (55-03-3310 driver side and 55-04-3310 passenger side) over the existing lower shock mounts on the rear axle as shown. Insert the supplied 7/8"





OD x 1-7/8" sleeve inside the existing mount, then install the supplied 9/16" x 3-1/2" bolt through the relocation bracket, existing mount, and sleeve as shown. Snug the bolt with a 9/16" nyloc nut, but do not fully tighten at this time.

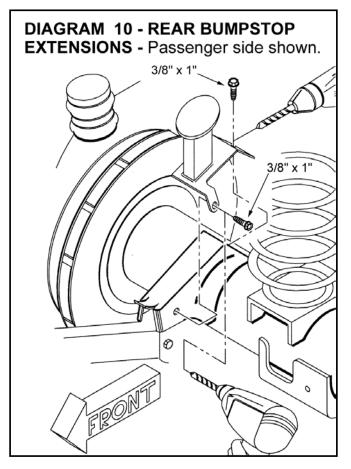
- □□ Insert the supplied 1/2" x 1-1/4" bolt through the bottom hole of the relocation bracket and the existing hole in the factory mount. Secure and tighten using a 1/2" nyloc nut (57). Then tighten the 9/16" bolt (82).
- Raise or lower the rear axle to line up the "03" and "04" brackets with the lower eyes of the rear shocks. Insert each shock eye in its respective bracket, then secure using the factory hardware and tighten to factory specifications.

# 36) COMPRESSION STOP EXTENSIONS...

- □ □ [Diagram 10] Position the compression stop brackets (55-11-3310 driver side and 55-12-3310 passenger side) over the trailing arm mounts on the axle as shown.
- □□ Using the bracket as a template, mark the location of the two mounting holes to be drilled in the trailing arm bracket.
- □□ Remove the bracket and drill the hole on the rear of the stop using a 5/16" bit. Clean up any burrs with a file.
- Drill the hole on the side of the stop to 3/8". Clean up any burrs with a file.
- □□ Slide the compression stop bracket back into place and secure using the 3/8" x 1" self-tapping bolt in the 5/16" hole (24). Install the 3/8" x 1" bolt and nyloc nut in the 3/8" hole (33).

# 37) ANTI-SWAY BAR LINKS...

- Lubricate and install the supplied bushings and sleeves in the rear anti-sway bar links (#55-14-3310).
- On each side, loosely attach the "14" links to the factory frame attachment points using the supplied 1/2" x 2-1/2" bolt, washer, and stover nut.



- □□ Attach the lower end of the "14" links to the anti-sway bar using the factory hardware.
- □□ Tighten the upper (57) and lower (67-82) link hardware.

# 38) FINAL PROCEDURES...

**Q** Reinstall the rear tires and wheels per step 39 and lower the vehicle to the floor.

- □□ With the vehicle on the ground, connect the lower end of the track bar to the track bar bracket using the factory hardware. Tighten the upper and lower bolts (140).
- **□** Tighten the upper link arm bolts at the axle (120).
- **D** Reattach the emergency brake cable clips to the track bar.

#### 39) TIRES / WHEELS...

□ [DIAGRAM 10] Tighten the lug nuts (140) 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.

#### 40) 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

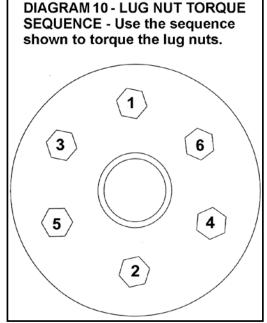
proper operation and clearances. Pay special attention to the clearance between the tires / wheels and brake hoses, wiring, etc.

- Lower vehicle to the floor.
- Reconnect the battery.

#### 41) ADJUSTING FRONT RIDE HEIGHT ...

□ Manually bounce the front and rear of vehicle to normalize the torsion bars and leaf springs.

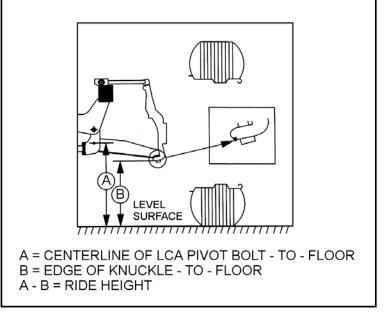
□□ On each side, fully tighten the LCA-to-crossmember bolts (107).



- [DIAGRAM 11] Position the vehicle on a level surface. Measure from the LCA front pivot bolt center down to the floor. Record this as Measurement "A".
- □□ Now measure from the inside edge of the knuckle (at the lower ball joint boss) down to the floor. Record this as Measurement "B".

Subtract Measurement "B" from "A" for the ride height figure. Minimum ride height is 5.0"; maximum is 6.0". Ideal ride height is somewhere in between. Raise height by tightening the torsion bar adjusting bolt; lower height by loosening the bolt. It will be necessary to bounce the front of the vehicle every 1-2 turns of the

# DIAGRAM 11 - Ride height adjustment.



adjusting bolt to resettle the torsion bars. This will ensure accurate adjustments. Adjust height 3/8" to 1/2" above the final desired ride height, since the bars will settle slightly after the vehicle is driven.

**NOTE:** Exceeding the stated minimum or maximum heights will cause the suspension to continually "top out" or "bottom out". This results in a harsh ride, accelerated suspension component wear, and possibly component failure.

# 42) 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.

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

#### 44) HEADLIGHTS...

Readjust headlights to proper setting.

# 45) SUPERLIFT WARNING DECAL...

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.

#### 46) ALIGNMENT...

Realign vehicle to the specifications found in the factory service manual. Alignment must be performed by a certified professional. Record the ride height measurement at time of alignment. If, in the future the torsion bars settle excessively, alignment can be restored by adjusting-up the bars to their original ride height.

#### 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.

#### SUPERLIFT SUSPENSION SYSTEMS

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