



# **SUPERLIFT**<sup>®</sup>

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

### **Superlift 6" lift system for 2007 and Newer 1/2-ton Chevrolet Tahoe / Avalanche / Suburban and GMC Yukon / Yukon XL 2WD and 4WD FRONT 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, stabilizer 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 will ONLY run a factory 20" spare. Will NOT run the factory 18". Recommended backspacing is a 4.5" Minimum and 5.0" Maximum.
- A special tool is required to disassemble / assemble the front struts. Other special tools are recommended to detach/attach the pitman/idler studs. Refer to the factory service manual.
- Front end realignment is necessary. A laser-equipped alignment machine is highly recommended.
- 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. Prep all cutting surfaces by removing all debris and frame coatings.
- After drilling, file smooth any burrs and sharp edges.
- Prior to operating a torch or saw, protect any heat-sensitive components located in the immediate area by covering them with a water-saturated cloth. Most undercoating are flammable but can be extinguished using a water-filled spray bottle. Have a spray bottle and an ABC rated fire extinguisher on hand.
- Paint or undercoat all exposed metal surfaces.
- Prior to attaching components, be sure all mating surfaces are free of grit, grease, undercoating, etc.

- A factory service manual should be on hand for reference.
- Use the check-off box “☐” found at each step to help you keep your place. Two “☐☐” denotes that one check-off box is for the driver side and one is for the passenger side. Unless otherwise noted, always start with the driver side.

**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.

<b>PART NO</b>	<b>DESCRIPTION</b> (Qty.- if more than one)	<b>NEW ATTACHING HARDWARE</b> (Qty.- if more than one)
01-3491 .....	knuckle, driver side	
02-3491 .....	knuckle, passenger side	

**4WD systems only**

55-03-3480 .....	differential drop bracket,..... driver side	(2) 12mm x 30mm bolt (2) 12mm lock washer (2) 1/2" x 1-3/4" bolt (2) 1/2" SAE washer (2) 1/2" stover nut
55-04-3480 .....	differential drop bracket,..... passenger side	(2) 5/8" x 1-3/4" bolt (4) 5/8" SAE washer (2) 5/8" U-bolt washer (2) 5/8" stover nut (1) vent hose extension
66-15-3330 .....	(2) CV axle spacer .....	(12) 10mm x 70mm bolt (12) 10mm flat washer
55-10-3491 .....	differential skid plate .....	(4) 5/16" x 1" stainless allen bolt (4) 5/16" SAE washer (2) 5/16" flange nut

55-11-3491 .....	skid plate .....	(4) 5/16" x 1" stainless allen bolt (4) 5/16" SAE washer (2) 5/16" flange nut
------------------	------------------	---

**2WD systems only**

55-15-3491 .....	front crossmember .....	(2) 5/8" x 4-1/2" bolt (4) 5/8" SAE washer (2) 5/8" stover nut
55-16-3491 .....	rear crossmember .....	(2) 5/8" x 5-1/2" bolt (4) 5/8" SAE washer (2) 5/8" stover nut (1) 1/2" x 5" bolt (2) 1/2" x 1-1/4" bolt (6) SAE washer (3) 1/2" stover nut

55-08-3480 .....	(2) strut spacer .....	(6) 7/16" USS washer (6) 7/16" stover nut
------------------	------------------------	--

66-33-3480	..... (2) strut preload spacer ring	
<b>OR</b>		
01-88150	..... (2) front strut.....	(4) 3/8" x 2-1/2" bolt (8) 3/8" USS washer (4) 3/8" nyloc nut (2) foam compression stop
55-09-3480	..... stabilizer bar bracket, ..... driver side	(2) 10mm x 25mm bolt (4) 10mm flat washer (2) 10mm nyloc nut
1-11-3480	..... frame reinforcement plate	
55-10-3480	..... stabilizer bar bracket, ..... passenger side	(2) 10mm x 25mm bolt (4) 10mm flat washer (2) 10mm nyloc nut
55-13-3480	..... front brake line extension, ..... driver side	(1) 1/4" x 3/4" bolt (1) 1/4" nyloc nut
55-14-3480	..... front brake line extension, ..... passenger side	(1) 1/4" x 3/4" bolt (1) 1/4" nyloc nut
55-15-3480	..... (2) lower link arm bracket, ..... rear	(2) 9/16" x 4-1/2" bolt (4) 9/16" SAE washer (2) 9/16" stover nut (2) 1/2" x 1-1/4" bolt (2) 1/2" x 1-3/4" bolt (6) 1/2" SAE washer (2) 1/2" lock washer (2) 1/2" stover nut (2) welded nut plate
55-17-3480	..... upper link arm bracket, rear, ..... driver side	(1) 9/16" x 3-1/2" bolt (2) 9/16" SAE washer (2) 9/16" stover nut
55-18-3480	..... upper link arm bracket, rear, ..... passenger side	(1) 9/16" x 3-1/2" bolt (2) 9/16" SAE washer (2) 9/16" stover nut
55-20-3480	..... rear track bar bracket.....	(1) 9/16" x 3-1/2" bolt (2) 9/16" SAE washer (1) 9/16" stover nut (1) 7/16" x 1-1/4" bolt (1) 7/16" SAE washer (1) 7/16" stover nut (1) 1-1/4" OD x 1-13/16" sleeve



**FRONT DISASSEMBLY****1) PREPARE VEHICLE...**

- Place vehicle in neutral. Raise 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 rear tires. Remove front tires.
- Disconnect the battery.

**2) 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.
- Remove the torx bolt retaining the rotor to the hub assembly, remove the brake rotor, and set it aside. Save the hardware for re-use.

**3) AXLESHAFTS...**

**NOTE:** For 2WD systems, proceed to the next step.

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

**4) TIE ROD ENDS...**

- Before separating the tie rod end from the knuckle, loosen the jam nut for the tie rod end. It will be necessary to remove the tie rod end and perform some trimming later.
- 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.

**5) STABILIZER BAR...**

- On each side, loosen and remove the bushings and hardware attaching the stabilizer bar link to the the lower control arm. Remove the links and save all bushings and hardware for re-use.
- Remove the bolts securing the stabilizer bar to the frame and remove the bar. Save all hardware and the stabilizer bar for re-use.

**6) STRUT REMOVAL...**

- Mark the orientation of the cam bolts on the upper control arms for later reference during assembly. Loosen the cam bolts and rotate them so that the upper control arm is as far to the outside of the vehicle as possible. This will aid in removing the strut.

- Mark the location of each strut (driver and passenger side) as well as the outermost stud of each strut for later reference during re-assembly.
- Remove the two bolts securing the strut to the lower control arm, followed by the three nuts securing the strut to the frame. Remove the strut while taking precautions not to damage any other vehicle components. Save all hardware for re-use.

## 7) CONTROL ARM / HUB ASSEMBLY...

**NOTE:** For 2WD systems, disregard steps for removal of the CV axleshafts.

- Mark the location of the CV axleshafts (driver and passenger side) for later reference during assembly.
- Remove the dust cap in the center of the hub, followed by the nut securing the axle to the hub assembly (an 1-3/8" socket will fit). Save all hardware for re-use. Slide the axle towards the center of the vehicle to disengage it from the hub and remove the axle from the vehicle.
- Support the control arm / hub assembly with a jack. Remove the upper ball joint nut and, using the appropriate puller tool, separate the upper control arm ball joint from the knuckle. Save all hardware for re-use.
- Remove the nut securing the lower ball joint to the knuckle and, using the appropriate puller tool, separate the lower control arm ball joint from the knuckle. Save all hardware for re-use. Set the knuckle, with the wheel bearing assembly still attached, aside.
- Remove the bolts securing the lower control arm to the frame and set the lower control arm aside. Save all hardware for re-use.

## 8) DIFFERENTIAL...

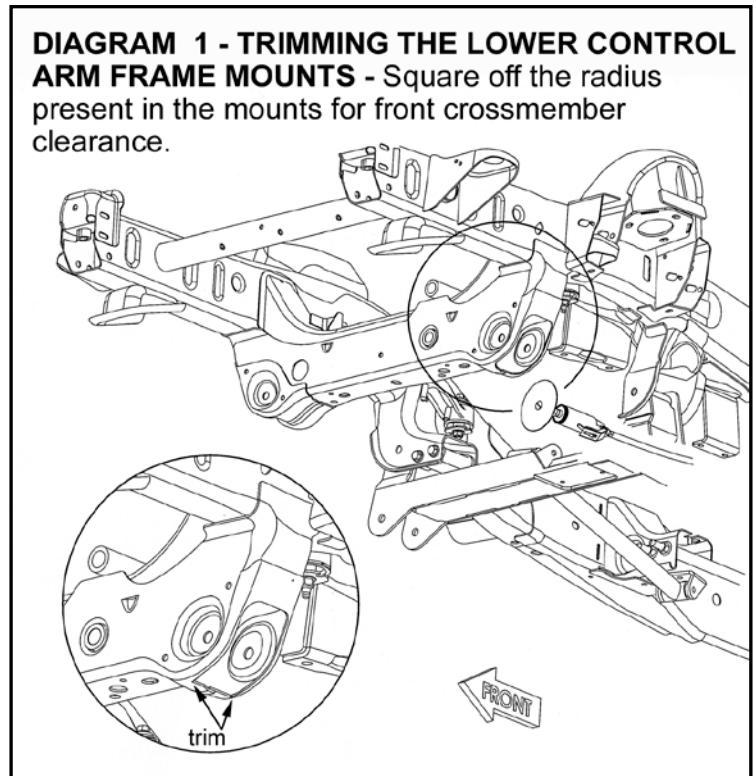
**NOTE:** For 2WD systems, proceed to the next step.

- Remove the electrical plug and vent hose from the differential.
- Mark the driveshaft in relation to the differential yoke for reference during re-assembly. Unbolt the driveshaft from the differential and tie it up out of the way using mechanics wire. Save all hardware for re-use.
- Support the differential housing with a jack.
- Remove and discard the factory rear crossmember.

- Remove the two differential mounting bolts on the driver side, followed by the nuts on the passenger side. With the help of an assistant, carefully lower the differential housing to the floor. Save all hardware for re-use.

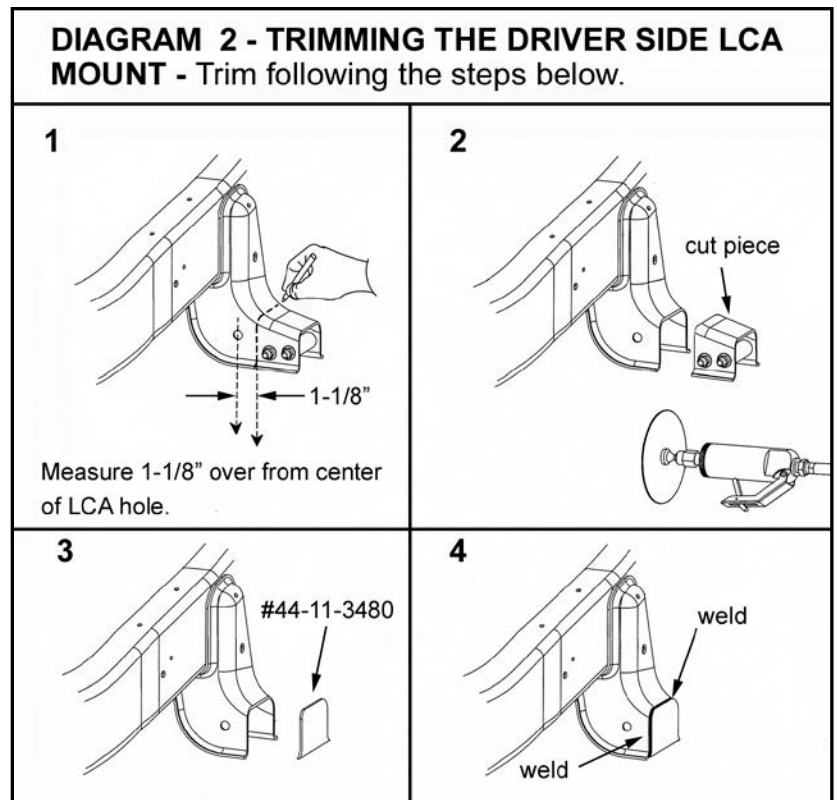
### 9) TRIMMING THE FRAME...

- [DIAGRAM 1] On each side, trim the inside corners of the factory front crossmember enough to facilitate installing the (#55-05-3491) front crossmember. It is only necessary to square off the radius present in the factory crossmember. Test fit the "05" crossmember and trim accordingly.



- [DIAGRAM 2] On the driver side lower control arm mount, measure over 1-1/8" from the center of the lower control arm mount hole. Mark the cut line all the way around the mount. Using a torch, plasma cutter, or similar tool, trim the driver side lower differential mount from the frame.

- [DIAGRAM 2] Test-fit the supplied frame reinforcement plate (#44-11-3480) as shown in Diagram 2. It may be necessary to trim the plate, the frame, or both to achieve proper fitment. Once the reinforcement plate is positioned properly, weld the plate in place. Weld only the outside edge of the plate; if it is welded from inside the control arm bracket, the weld bead may interfere with the crossmember. Once the weld has cooled, grind smooth and paint the affected area.



## FRONT ASSEMBLY

### 10) DIFFERENTIAL BRACKETS...

**NOTE:** For 2WD systems, proceed to the next step.

- Look at the passenger side differential drop bracket (#55-04-3480). 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 side differential mount using the factory hardware. Do not tighten at this time.
- Note that the driver side differential bracket (#55-03-3480) has a taper in it as well; position the bracket so that the small end of the taper faces rearward (to match the taper of the passenger side bracket). Also note there is a hole in the center of the bracket that accommodates a tab in the center of the factory differential mount. Attach the “03” bracket to the factory mount using the supplied 12mm x 30mm bolts and 12mm lock washers. Do not tighten at this time.
- Using a jack, raise the differential into position and line up the mounting holes with the “03” and “04” drop brackets. Attach the differential on the driver side using the supplied 1/2” x 1-3/4” bolts, washers, and nuts. Do not tighten at this time.
- Attach the passenger side of the differential to the “04” bracket using the supplied 5/8” x 1-3/4” bolts, washers, and Stover nuts. The bolts should be installed from the top, and the extra-thick flat washers should be positioned under the nuts. Do not tighten at this time.
- Reconnect the differential wiring. Attach the supplied vent hose extension to the factory vent hose and reconnect it to the differential.
- Tighten the following hardware in sequence:
  - 12mm differential hardware (87)
  - 1/2” differential hardware (76)
  - 5/8” differential hardware (150)
  - Factory hardware on passenger side differential bracket (75)

## 11) FRONT CROSSMEMBER...

- Attach the front crossmember (#55-15-3491) 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 nuts. The bolts should be installed from the front. Note that the crossmember should be positioned so that the mounting tab for the differential skid plate points rearward. Do not tighten at this time.

## 12) REAR CROSSMEMBER...

- Attach the rear crossmember (#55-16-3491) to the original lower control arm rear leg mounting points on the frame using the supplied 5/8” x 5-1/2” bolts, washers, and nuts. The bolts should be installed from the front. Do not tighten at this time.
- On the passenger side of the crossmember is a welded sleeve that is lined up with an existing hole in the frame. Install the supplied 1/2” x 5” bolt, washer, and stover nut through the factory hole and welded sleeve in the crossmember. Do not tighten at this time.
- In the remaining factory holes lined up with the crossmember install the supplied 1/2” x 1-1/4” bolts, washers, and stover nuts.



**13) SKID PLATE...**

- Attach the skid plate (#55-10-3491 on 4WD models and #55-11-3491 on 2WD models) to the mounting tabs on the front and rear crossmembers using the supplied 5/16" x 1" allen head bolts and nuts on the front crossmember, and the 5/16" x 1" bolts and SAE washers on the rear crossmember. Tighten (19).

**14) FASTENER TIGHTENING SEQUENCE...**

- Tighten the 5/8" crossmember hardware (154) and the 1/2" crossmember hardware (76).

**15) DRIVESHAFT...**

**NOTE:** For 2WD systems, proceed to the next step.

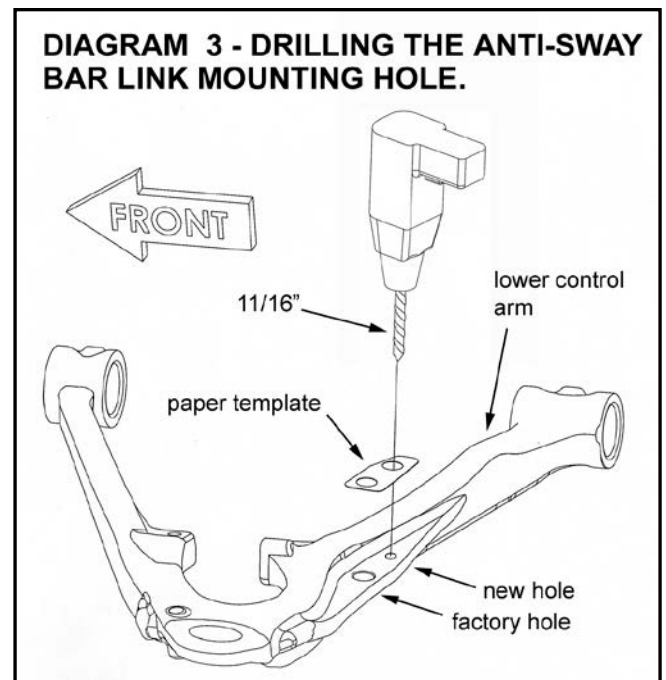
- Line up the front driveshaft with the differential yoke according to the marks made during removal and secure using the factory hardware. Tighten (19).

**16) LOWER CONTROL ARMS...**

- [DIAGRAM 3 and TEMPLATE 1] Cut out the supplied template attached to the end of this instruction form. Line up the template with the existing stabilizer bar link mounting hole as shown. Scribe the location of the new hole to be drilled (which should be inboard of the existing hole).

- Drill an 11/16" hole at the scribed location.

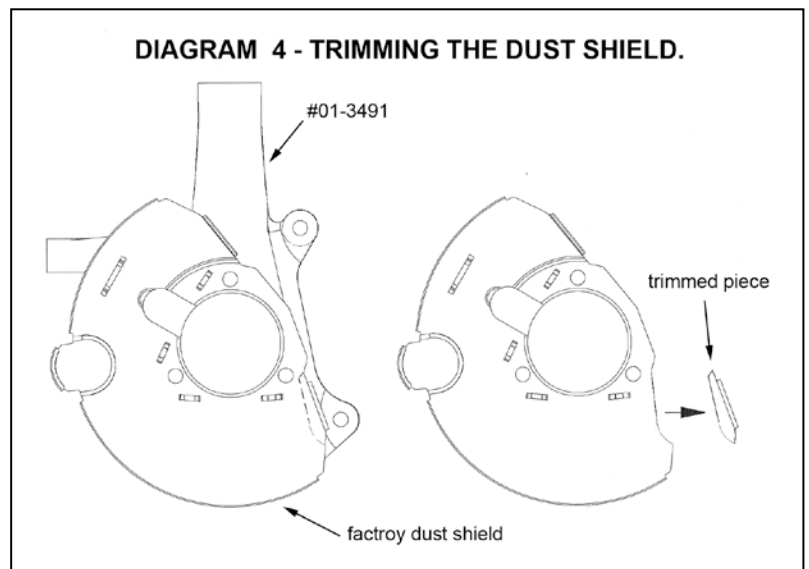
- Attach the lower control arm to the front and rear crossmembers using the factory hardware. The bolts should be installed from the front. Snug, but do not tighten the hardware at this time.

**17) KNUCKLE ASSEMBLY AND INSTALLATION...**

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

- Carefully note the orientation of the dust shield and wheel bearing assembly prior to removal. Remove the three bolts securing the wheel bearing assembly to the factory knuckle.

- [DIAGRAM 4] Remove the dust shield and wheel bearing assembly from the factory knuckle. Now test-fit the dust shield on the new knuckle (#01-3491 driver side and #02-3491 passenger side). Mark the area of the dust shield to be



trimmed as shown. Remove the dust shield and trim at the marked location using a cut-off wheel or similar tool.

- Install the bearing assembly and dust shield on the Superlift knuckle (#01-3491 driver side and #02-3491 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 (#01-3491 driver side and #02-3491 passenger side) on the upper and lower ball joints and secure using the factory nuts. Tighten the upper nut (37) and lower nut (94).
- Check-fit the brake caliper to be sure enough material has been removed from the dust shield. If interference is evident, mark the area on the dust shield, remove the wheel bearing and dust shield from the knuckle, and trim until the necessary clearance is achieved.
- Tighten the three factory bearing assembly bolts (133).

## 18) AXLESHAFTS...

**NOTE:** For 2WD systems, proceed to the next step.

- 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).

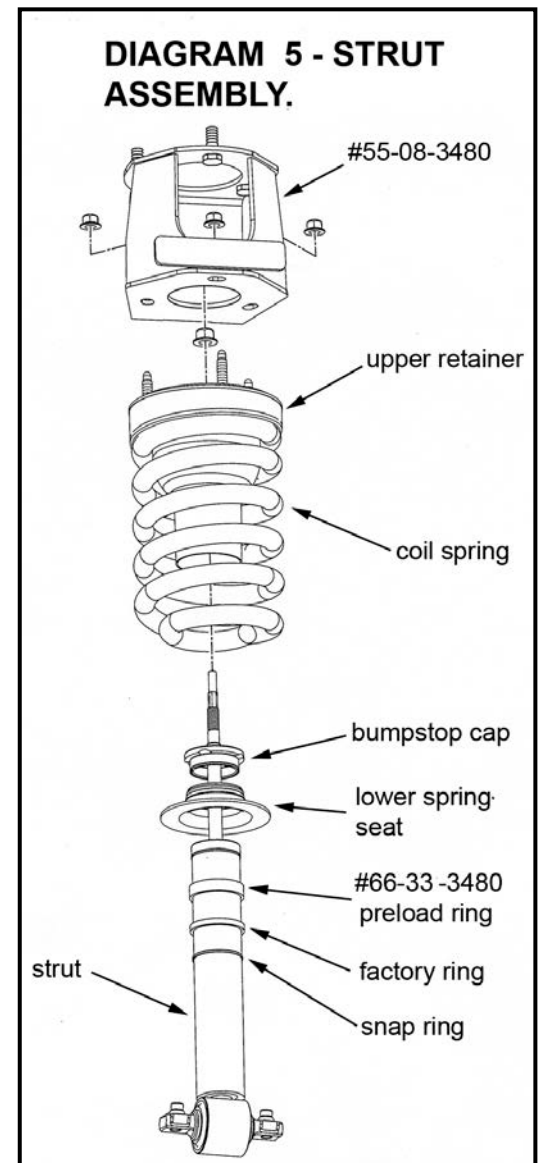
## 19) STRUT PRELOAD SPACER ASSEMBLY AND INSTALLATION...

**NOTE:** If the optional replacement struts have been purchased, proceed to the next step.

**WARNING:** Extreme care must be taken during the following steps. The struts have a tremendous amount of energy stored in them and can cause serious injury or even death if an attempt is made to work on them without the proper tools. Dis-assembly / assembly of the struts can only be performed by a qualified professional with the special equipment designed for this task. If necessary, the struts can be taken to a shop with the proper equipment to have the necessary work performed.

**NOTE:** A factory service manual should be on hand for reference. Perform the strut assembly and installation one side at a time.

- ☐☐ [DIAGRAM 5] Place the strut assembly in a heavy-duty strut compressor and compress the coil spring enough to unload the shock. Remove the retaining nut on the upper shock mount and carefully remove the strut cylinder. Make careful note of the order and orientation of the strut pieces for proper re-assembly. There is a zinc-plated compression stop cap at the top of the shock body that will need to be lightly tapped off in order to remove the lower spring seat. Save all components for re-use.
- ☐☐ Slide the preload spacer ring (#66-33-3480) over the shock body so that it rests on top of the stock retaining ring. *The "33" preload spacer must be used with the stock ring.* Reinstall the lower spring seat and compression stop cap, then re-assemble the strut in the same order and method in which it was taken apart. Tighten upper retaining nut (37), then carefully unload the coil.
- ☐☐ Attach the strut spacer bracket (#55-08-3480) to the top of the strut assembly using the factory hardware. Note the outermost stud on the strut that was marked during removal points to the outside. Tighten the factory nuts (37).
- ☐☐ Slide the strut assembly through the upper control arm and locate the upper end of the assembly in the frame mount properly, with the name badge plate on the spacer bracket facing out. Secure the upper end of the assembly using the supplied 7/16" washers and stover nuts. Do not tighten at this time.



- ☐☐ Attach the lower end of the strut to the lower control arm using the factory hardware.
- ☐☐ Tighten the 7/16" hardware at the top (70) and the factory hardware at the bottom (37) of the strut assembly.
- ☐☐ Apply the supplied badge to the strut spacer.

## 20) REPLACEMENT STRUT ASSEMBLY AND INSTALLATION...

**NOTE:** If the optional replacement struts have not been purchased, proceed to the next step.

**WARNING:** Extreme care must be taken during the following steps. The struts have a tremendous amount of energy stored in them and can cause serious injury or even death if an attempt is made to work on them without the proper tools. Dis-assembly / assembly of the struts can only be performed by a qualified professional with the special equipment designed for this task. If necessary, the struts can be taken to a shop with the proper equipment to have the necessary work performed.

**NOTE:** A factory service manual should be on hand for reference. Perform the strut assembly and installation one side at a time.

- Make careful note of the order and orientation of all the factory pieces for proper re-assembly, including the position of the upper studs in relation the large bar pin at the bottom of the strut. Place the strut assembly in a heavy-duty strut compressor and compress the coil spring enough to unload the strut cylinder. Remove the retaining nut on the upper shock mount and carefully remove the strut cylinder. The lower spring seat and foam compression stop should come out with the strut; if not, remove these items from the coil assembly.

- [DIAGRAM 5A] There is a metal cap with a light press fit on the body of the factory strut; tap the cap off of the strut with a hammer. Remove the retaining ring and lower spring seat from the original strut and install them in the same order on the #01-88150 replacement. Take special note that the factory lower spacer has a groove machined into it; the snap ring on the strut should recess into this groove.

- Place the supplied cone-shaped foam compression stop over the rod of the new strut with the narrow end facing down as shown. The original compression stop will not be re-used and can be discarded.
- Slide the new strut assembly into the coil spring and be sure all of the strut pieces are in the same orientation as they were originally (refer to the factory service manual). Torque the supplied retaining nut (37) and carefully unload the strut.

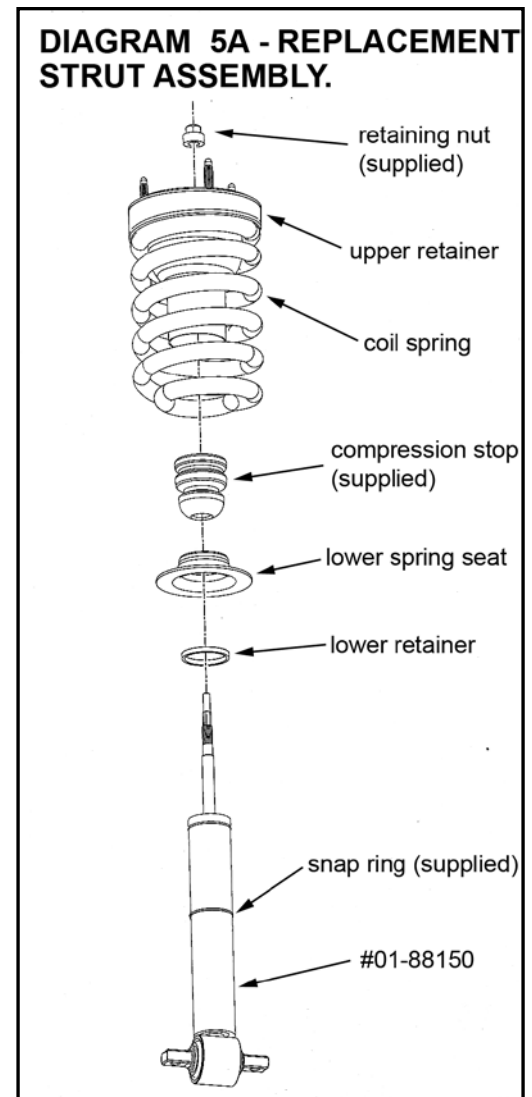
- Slide the strut assembly through the lower control arm and rotate it to match the marks made during removal. Secure the upper end of the strut using the factory nuts. Do not tighten at this time.

- Attach the lower end of the strut to the lower control arm using the supplied 3/8" x 2-1/2" bolts, USS washers, and nyloc nuts. Note that two washers should be used per bolt.

- Tighten the the factory hardware at the top (37) and the supplied hardware at the bottom (30) of the strut.

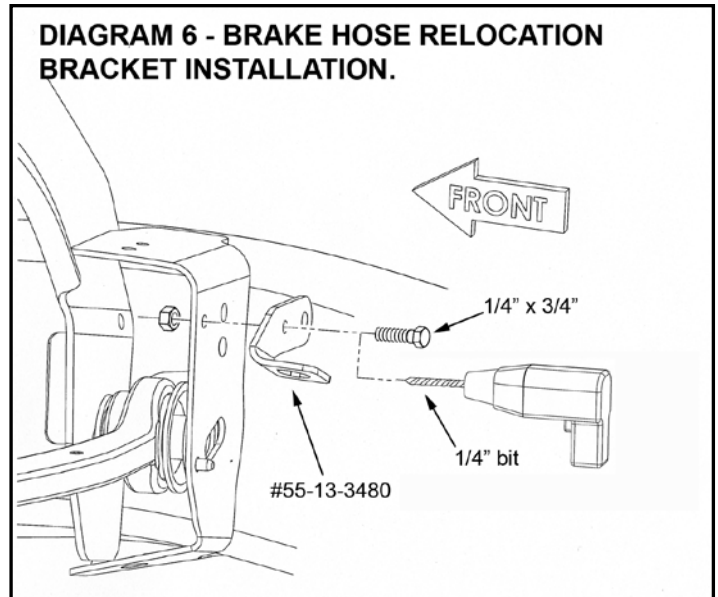
## 21) BRAKE CALIPERS AND ABS WIRING...

- Install the brake rotor and secure it using the factory Torx bolt and tighten (106 in-lb).



- ☐☐ Carefully detach the metal brake line from the rubber hose. Plug the line to minimize fluid loss. Unbolt the brake hose bracket at the frame that secures the connection between the rubber hose and the steel line. Detach the bracket from the hose and discard. Save all hardware for re-use.
- ☐☐ Spread apart the clamped portion of the bracket that attached the brake hose to the upper control arm.

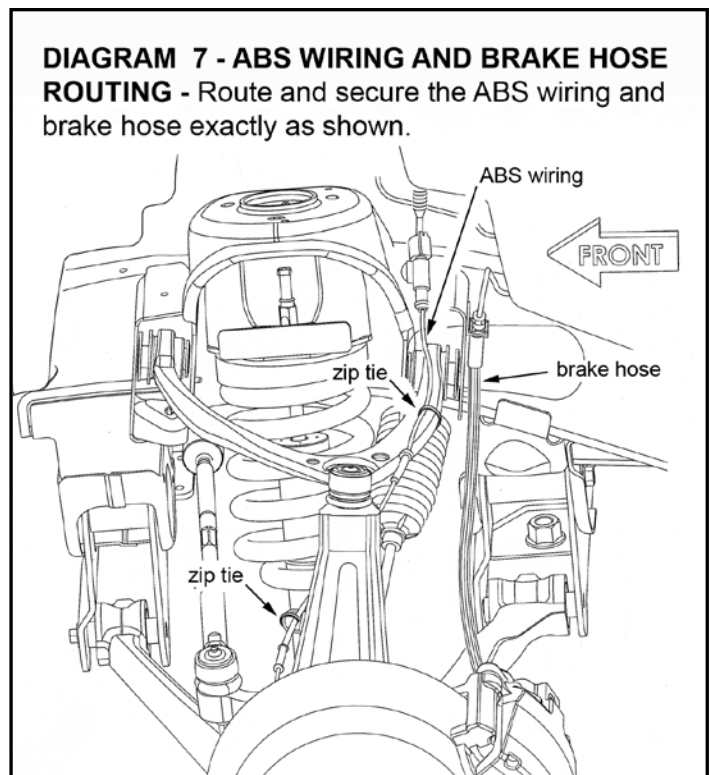
**NOTE:** If the vehicle is equipped with Autoride (electronically controlled shock absorbers), save the brake hose bracket and return it to its factory location on the upper control arm. Tighten the retaining bolt to factory specifications.



- ☐☐ [DIAGRAM 6] Attach the brake hose relocation bracket (#55-13-3480 driver side and #55-14-3480 passenger side) to the factory brake hose location on the frame. Secure using the factory hardware and tighten (76 in-lb).
- ☐☐ Make sure the relocation bracket is level with the frame. Using the bracket as a template, drill the second mounting hole as shown using a 1/4" bit. Install the supplied 1/4" x 3/4" bolt and nyloc nut. Tighten (76 in-lb).
- ☐☐ Line up the rubber brake hose with the hole in the new bracket and carefully reform the metal line to reach the rubber hose's new location. Connect the metal line and tighten to factory specifications.
- ☐☐ Attach the caliper bracket assembly to the knuckle. Apply the supplied thread-locking compound to the factory caliper bracket bolts and tighten (129). Be sure that the brake hose routing is exactly as shown in the diagram.
- ☐☐ [DIAGRAM 7] Route the ABS wiring exactly as shown in the diagram. Secure the wire to the tab on the knuckle as well as the upper control arm using the supplied zip ties. Reconnect the wiring at the frame.

## 22) AUTORIDE RELOCATION BRACKETS...

**NOTE:** This step only applies to vehicles equipped with Autoride electronic shock absorbers (usually present only on



vehicles with the LTZ option package). If the vehicle does not have Autoride, proceed to step 22. Perform these steps one side at a time.

- Locate the Autoride sensor mounted to the upper control arm mount on the frame. There is an actuating rod that runs from the sensor to the upper control arm. Remove the ball-screw securing the rod to the control arm and let the rod hang. Save all hardware for re-use.

- Remove the bolt securing the Autoride bracket to the upper control arm (this bracket also formerly routed the brake hose, but the hose was removed from this bracket in step 20). Save all hardware for re-use

- [DIAGRAM 8] Position the supplied Autoride bracket (#55-34-3480 passenger side and #55-35-3480 driver side) over the factory bracket as shown.

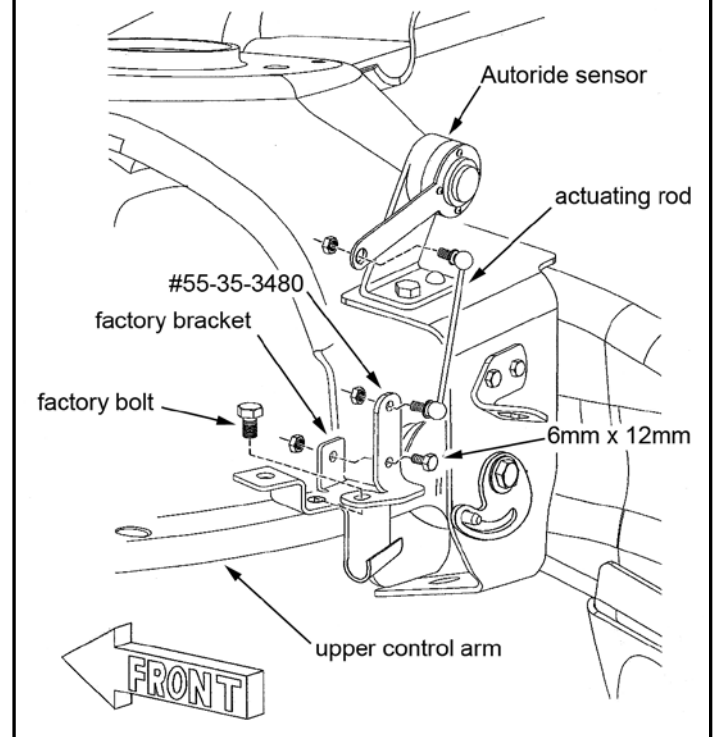
Secure the two brackets to the control arm using the factory bolt. Install the supplied 6mm x 12mm bolt through the two brackets and secure using the supplied nyloc nut. Tighten the factory bolt to factory specifications, followed by the 6mm bolt (105 in-lb).

- Attach the factory actuating rod to the Superlift bracket using the factory hardware and tighten to factory specifications.
- Repeat these steps of the passenger side.

### 23) STABILIZER BAR...

- Attach the stabilizer bar drop brackets (#55-09-3480 driver side and #55-10-3480 passenger side) to the factory stabilizer bar mounts on the frame using the supplied 10mm x 25mm bolts and flat washers. Note that the lower end of the brackets should be offset toward the rear of the vehicle, and that the C-shaped brackets should be pointed toward the center of the vehicle. Do not tighten at this time.
- Attach the stabilizer bar to the "09" and "10" drop brackets using the factory bolts, supplied 10mm flat washers, and supplied 10mm stover nuts. Do not tighten at this time.
- Position a bushing on the lower end of the stabilizer bar links, then insert the link in the hole of the lower control arm that was drilled previously. Install the remaining bushings and hardware, and tighten until the bushings swell slightly.
- Tighten the remaining 10mm hardware (50).

#### DIAGRAM 8 - ATTACHING THE AUTORIDE RELOCATION BRACKETS (AUTORIDE-EQUIPPED VEHICLES ONLY).



**24) TIRES / WHEELS...**

- [DIAGRAM 11] 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.

**25) 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.

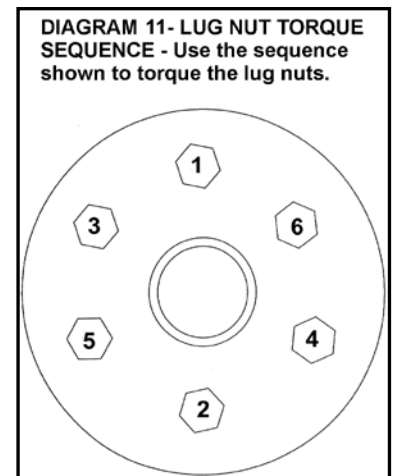
## REAR DISASSEMBLY

**26) PREPARE VEHICLE...**

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

**27) REAR BRAKE LINE RELOCATION...**

- Mark the two metal lines and their corresponding brake hoses (driver and passenger side) for reference during assembly. Disconnect the rear brake hoses from where they attach to the metal brake lines at the frame. Plug the lines to minimize fluid loss.
- Remove the metal clips securing the brake hoses to the support bracket on the frame. Unbolt and discard the factory bracket.
- Carefully re-form the metal lines so that they are positioned below the frame crossmember. Use extreme caution to avoid kinking or otherwise damaging the lines.
- [DIAGRAM 12] Position the brake line bracket (#55-24-3480) on the bottom of the frame crossmember directly below where the original bracket was located. Mark the location of the two mounting holes, remove the bracket, and drill at the marked location using a 17/64” bit.
- Attach the “24” bracket to the crossmember using the supplied 5/16” x 1” self-tapping bolts in the holes just drilled. Tighten (13). Line up the rubber hoses with the mounting holes in the bracket and secure them using the factory clips.



- Re-attach the metal lines to the rubber hoses according to marks made during removal. Tighten to factory specifications.

**WARNING:** Be sure the metal lines are hooked to the correct rubber hose for the driver and passenger side brakes. If swapped, the ABS system will not function properly.

- Connect the differential vent hose to the small hole in the side of the "24" bracket.

**NOTE:** Bleeding the brake system will occur once the lift installation is complete.

### 28) TRACK BAR...

- Loosen, but do not remove, the bolt that attaches the track bar to the frame. Remove the bolt securing the track bar to the axle. Save all hardware for re-use. Tie the track bar up and out of the way.

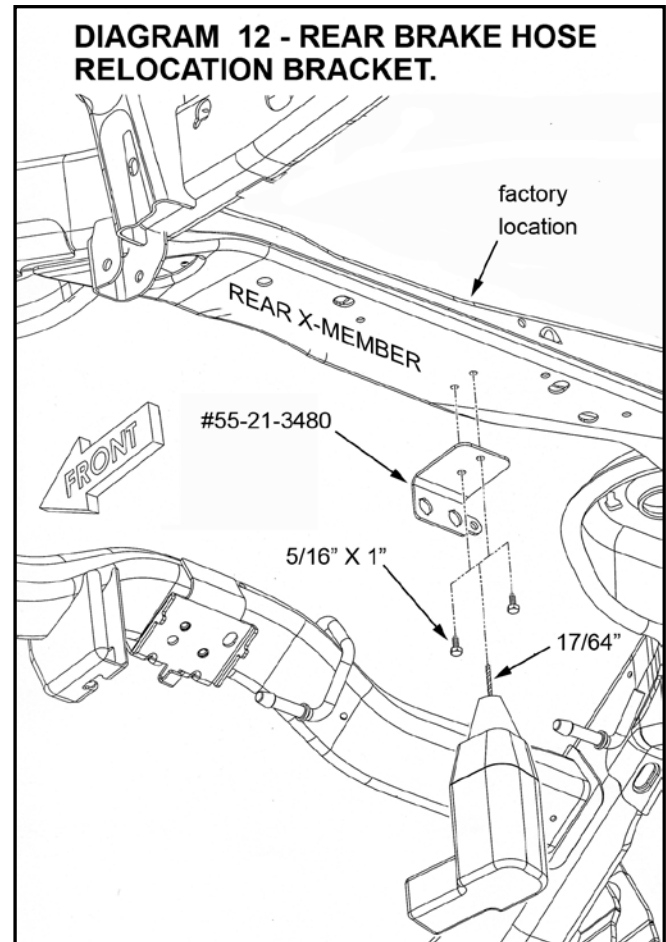
### 29) STABILIZER BAR LINKS AND SHOCKS...

- On each side, remove and discard the factory stabilizer bar links.

- Remove the bolts securing the shocks to the axle. Save all hardware for re-use. It is not necessary to remove the shocks from the vehicle.

### 30) COIL SPRINGS...

- Lower the rear axle enough to facilitate removing the coil springs.



## REAR ASSEMBLY

### 31) UPPER AND LOWER LINK ARM BRACKETS...

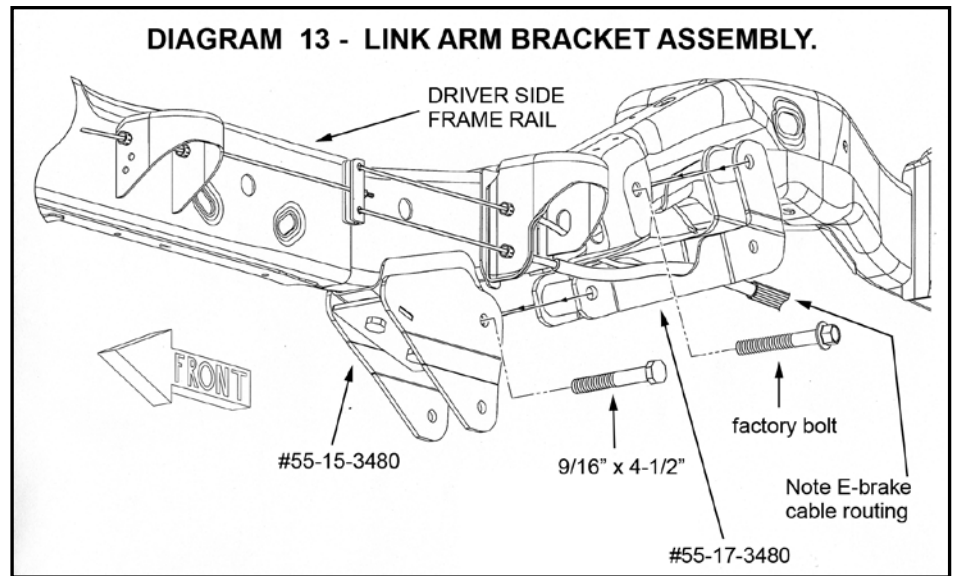
- Loosen the upper and lower link arm bolts at both the frame and axle. Do not remove the bolts entirely at this time.
- On the driver side, unclip the parking brake cable and pull it through the frame. Tie it up and out of the way.
- If the vehicle is equipped with Autoride electronic shock absorbers, locate the sensor mounted on the frame above the upper link arms. There is an actuating rod that runs from the sensor to the upper control arm. Unbolt the ball-screw from the upper control arm and tie the actuating rod up and out of the way. Save all hardware for re-use.

**NOTE:** Perform the following steps one side at a time. Start on the driver side.



- ❑❑ Remove the upper and lower link arm bolts at the frame and axle, then remove the arms from the vehicle. Save all components and hardware for re-use.

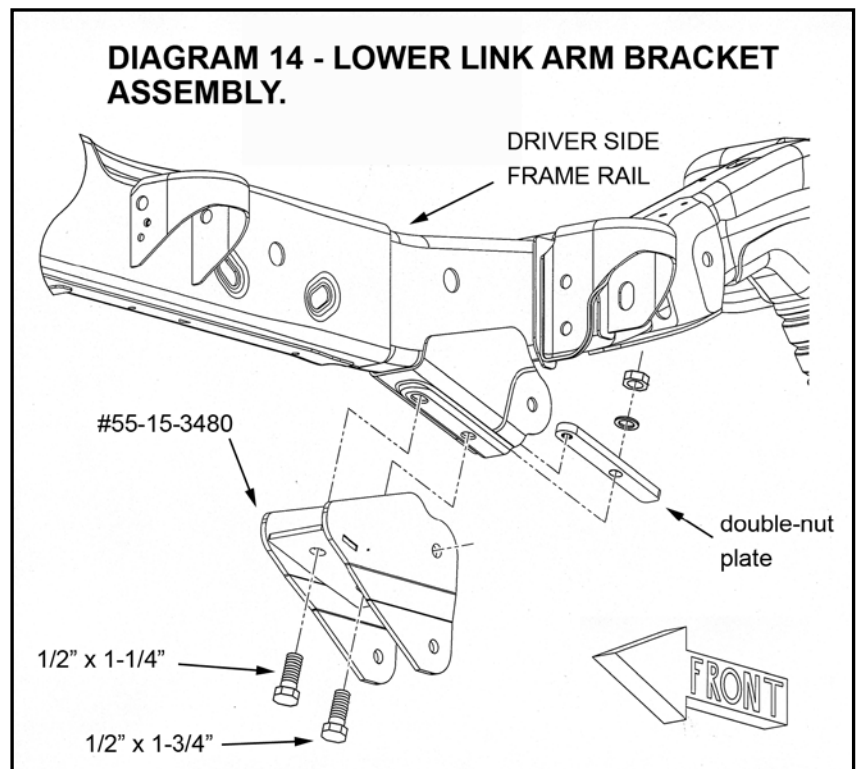
- ❑❑ [Diagram 13] Install the upper link arm drop bracket (#55-17-3480 driver side and #55-18-3480 passenger side) as shown. Slide it into the factory upper and lower mount and loosely secure the upper end using the factory hardware. Do not tighten at this time.



- ❑❑ Slide the lower link arm drop bracket (#55-15-3480) over the factory lower mount as shown in Diagram 10. Insert the supplied 9/16" x 4-1/2" bolt through the lower link arm bracket, factory mount, and upper link arm bracket and loosely secure using the supplied washer and stover nut. The bolt should be installed from the outside. Do not tighten at this time.

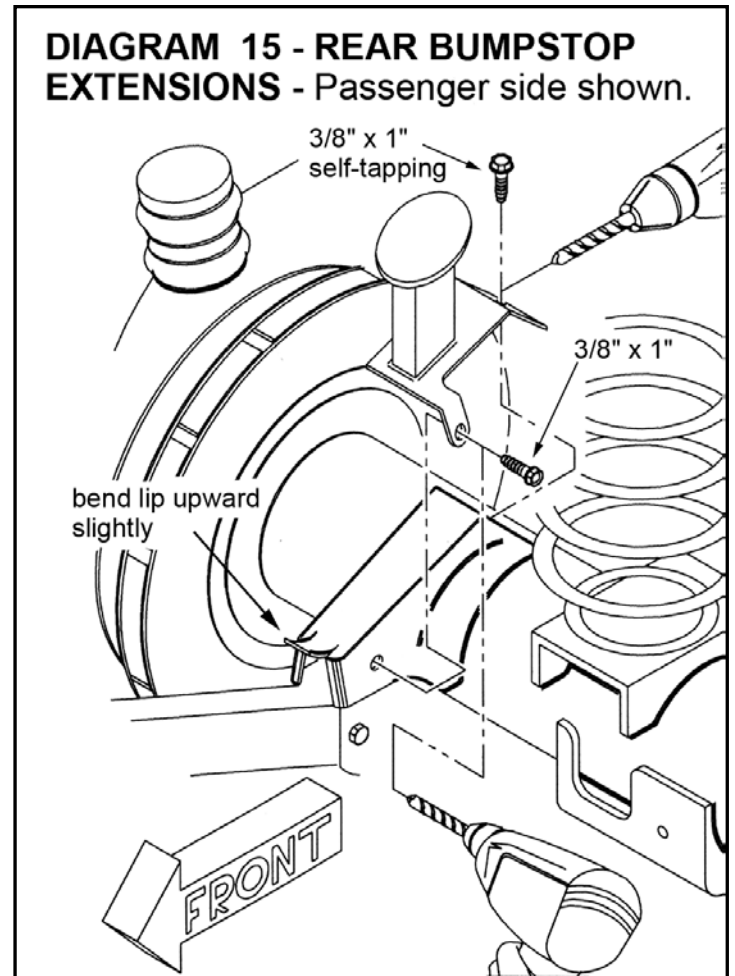
- ❑❑ [DIAGRAM 14] Insert the supplied threaded plate into the factory lower link arm mount on the frame as shown. Note that the plate has two holes; one is threaded. Position the plate so that the threaded hole is the furthest forward. Note that it may be necessary to bend a gusset inside the driver side lower link arm bracket upward slightly to allow the plate to seat properly.

- ❑❑ Install the supplied 1-1/4" x 1-1/4" bolt with an SAE washer and lock washer through the lower link arm bracket (#55-15-3480) and into the threaded hole in the plate. Install the supplied 1/2" x 1-3/4" bolt through the remaining hole in the bottom of the "15" bracket, factory mount, and threaded plate, and secure it using the supplied 1/2" stover nut.



- ❑❑ Tighten the 9/16" hardware (82) and 1/2" hardware (57).

- Attach the factory upper link arm to the drop bracket using the supplied 9/16" x 3-1/2" bolt, washer, and stover nut, then attach it to the axle using the factory hardware. Snug, but do not tighten at this time.
- [DIAGRAM 15] Bend the lip on the lower link arm axle bracket upward slightly for clearance.
- Attach the factory lower link arm to the drop bracket and axle using the factory hardware. Snug, but do not fully tighten at this time.
- Tighten the remaining 9/16" hardware (82) and the factory hardware (120).
- Repeat these steps on the passenger side.
- On the driver side, route the emergency brake cable through the upper link arm bracket and back into the existing mount in the frame. Reconnect it to the rest of the E-brake system.



### 32) #01-328 REAR COIL SPRINGS...

- Position the coil springs on the lower spring seats on the axle. Be sure they are rotated so that they will engage the upper and lower seats properly. Make sure the factory rubber isolator is in position, then raise the axle enough to seat the springs. Leave the jack in position to support the axle.

### 33) REAR SHOCK BRACKETS...

- Position the rear shock relocation brackets (#55-26-3480 passenger side and #55-27-3480 driver side) over the factory lower shock mounts on the axle. Insert the supplied 9/16" x 1-1/4" bolts, SAE washers, and stover nuts through each hole in the side of the relocation brackets and the factory lower shock mount holes. Do not tighten at this time.
- Install the supplied 7/16" x 1-1/4" bolt through the hole of the bottom of the relocation bracket and factory shock mount, and secure using the supplied washers and stover nut.
- Tighten the 9/16" bolts (82) and 7/16" bolts (37).
- Raise the axle enough to line up the lower end of the factory shock absorbers with the upper holes in the relocation brackets. Secure using the factory hardware and tighten (70).

### 34) COMPRESSION STOP EXTENSIONS...

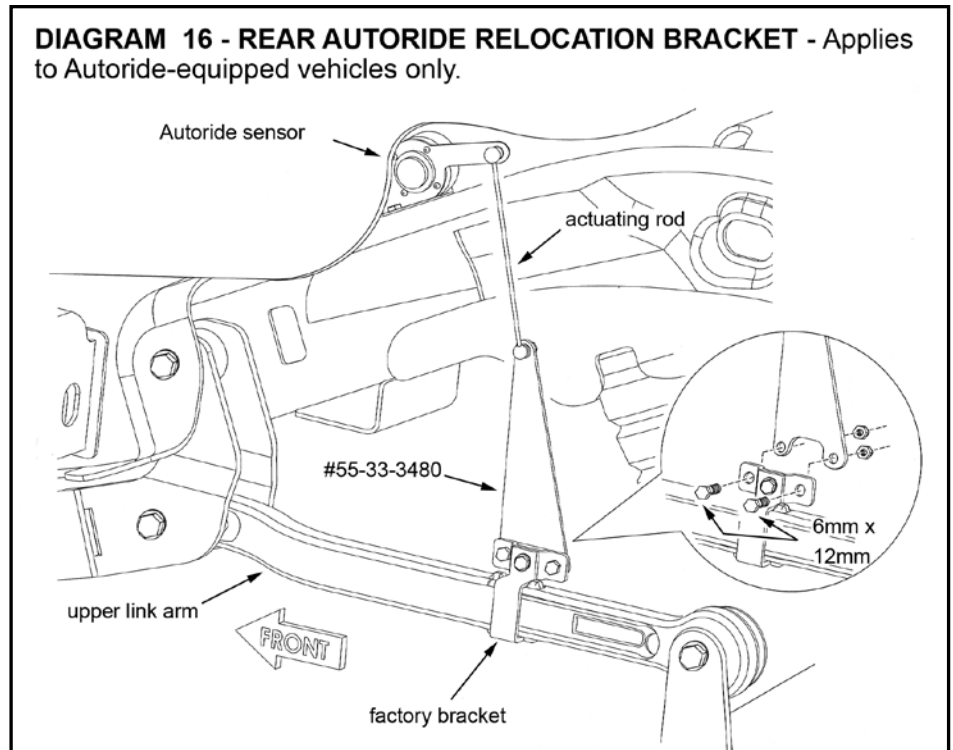
- [Diagram 15] Position the compression stop brackets (55-11-3310 driver side and 55-12-3310 passenger side) over the trailing arm mounts on the axle as shown.

- 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).



### 35) STABILIZER BAR LINKS...

- First, lubricate the supplied bushings and sleeves with a light, Silicone or Lithium based grease; then install 5/8" ID bushings and 5/8" OD sleeves into the bottom (eyeing) end of the Superlift stabilizer bar links. (#55-29-3400)
- Apply anti-seize to the top (stud) end of the Superlift stabilizer bar links. Install the 1/2" jam nut onto the link then the 90° swivel end. Adjust the swivel end to reach a center of swivel-to-center of eye length of 13-5/16" then tighten the jam nut.
- Position one 1/2" SAE washer onto the link stud then insert stud through the stabilizer bar body attachment hole. Position remaining 1/2" SAE washer, Nyloc nut and tighten (80).
- Attach the Superlift links' lower ends using the factory hardware. Tighten (150).

### 36) AUTORIDE RELOCATION BRACKETS...

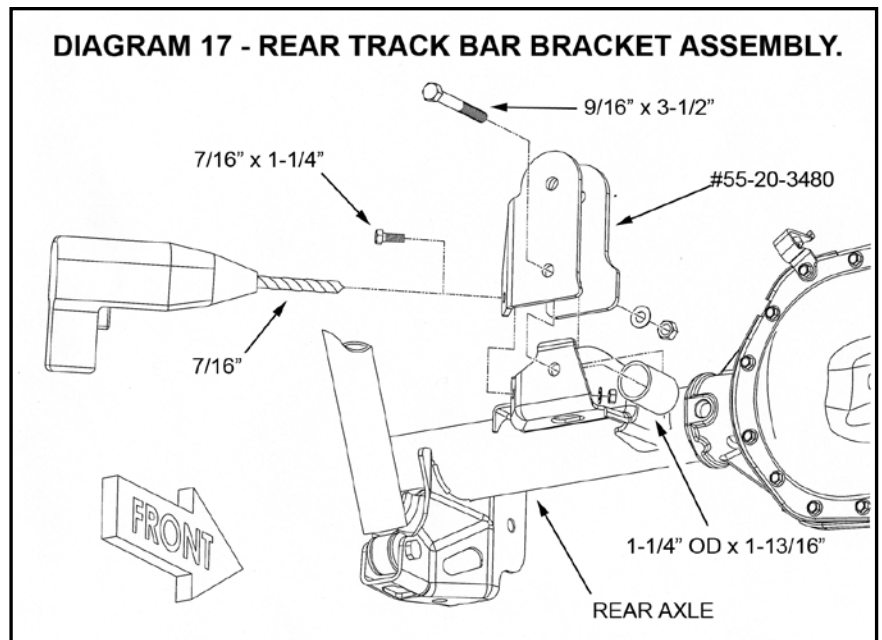
**NOTE:** This step only applies to vehicles equipped with Autoride electronic shock absorbers (usually present only on vehicles with the LTZ option package). If the vehicle does not have Autoride, proceed to step 22. Perform these steps one side at a time.

- [DIAGRAM 16] Attach the supplied Autoride relocation bracket (#55-33-3480) to the factory bracket on the upper link arm, where the actuating rod for the Autoride sensor was removed during disassembly. Position the bracket as shown, so that the vertical edge faces forward. Secure the bracket using the supplied 6mm x 12mm bolts and stover nuts. Tighten (105 in-lb).
- Attach the actuating rod from the sensor to the upper end of the "33" bracket using the factory ball-screw and hardware. Tighten to factory specifications.

- Repeat these steps on the other side.

### 37) TRACK BAR BRACKET...

- [DIAGRAM 17] Position the track bar relocation bracket (#55-20-3480) over the factory mount on the axle as shown. Insert the supplied 1-1/4" OD x 1-13/16" sleeve in the factory track bar mount and install the supplied 9/16" x 3-1/2" bolt through the "20" bracket, factory mount, and sleeve. Secure using the supplied SAE flat washers and stover nuts. Snug, but do not tighten at this time.



- Verify that the original track bar mounting hole and the new hole in the "20" bracket are aligned vertically. Using the bracket as a template, drill a hole in the side of the factory mount using a 7/16" bit.
- Install the supplied 7/16" x 1-1/4" bolt, washer, and nyloc nut in the hole just drilled. Tighten the 9/16" bolt (82) and 7/16" bolt (37).

**NOTE:** The track bar will be connected once the vehicle is on the ground with the suspension supporting the vehicle's weight.

### 38) TIRES / WHEELS...

- Install the tires and wheels per step 25 and lower the vehicle to the floor.

## FINAL PROCEDURES

### 39) FINAL HARDWARE TIGHTENING...

- Rotate the cam bolts for the upper control arm to line up the marks made during removal. Tighten (53).
- Tighten the lower control arm bolts (129).
- Connect the lower end of the track bar to the axle using the factory hardware and tighten (140).
- Tighten the factory upper and lower link arm hardware (120).
- Tighten the 9/16" link arm hardware (109).

**40) 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.
- Bleed the brake system following the procedure found in the factory service manual.
- Reconnect the battery.

**41) Activate four wheel drive system and check front hubs for engagement****42) HEADLIGHTS...**

- Readjust headlights to proper setting.

**43) 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.

**44) ALIGNMENT...**

- Realign vehicle to factory specifications. The following are the recommended specifications:

Caster (degrees):  $4.5^{\circ} \pm 1.0^{\circ}$

Camber (degrees):  $0.0^{\circ} - 0.3^{\circ}$

Toe-In (degrees):  $0.1^{\circ} \pm 0.2^{\circ}$

**Limited Lifetime Warranty / Warnings**

Your Superlift<sup>®</sup> product is covered by the Limited Warranty explained below that gives you specific legal rights. This limited warranty is the only warranty Superlift<sup>®</sup> makes in connection with your product purchase. Superlift<sup>®</sup> neither assumes nor authorizes any retailer or other person or entity to assume for it any other obligation or liability in connection with this product or limited warranty.

**What is covered?** Subject to the terms below, Superlift<sup>®</sup> will repair or replace its products found defective in materials or workmanship for so long as the original purchaser owns the vehicle on which the product was originally installed. Your warrantor is LKI Enterprises, Inc. d/b/a Superlift<sup>®</sup> Suspension Systems ("Superlift<sup>®</sup>").

**What is not covered?** Your Superlift<sup>®</sup> Limited Warranty does not cover products, parts or vehicles Superlift<sup>®</sup> determines to have been damaged by or subjected to:

- Alteration, modification or failure to maintain.
- Normal wear and tear (bushings, tie-rod ends, etc.). Scratches or defects in product finishes (powdercoating, plating, etc.),
- Damage to or resulting from vehicle's electronic stability system, related components or other vehicle systems.
- Racing or other vehicle competitions or contests. Accidents, impact by rocks, trees, obstacles or other aspects of the environment.
- Theft, vandalism or other intentional damage.

**Remedy Limited to Repair / Replacement.** The exclusive remedy provided hereunder shall, upon Superlift's inspection and at Superlift's option, be either repair or replacement of product or parts covered under this Limited Warranty. Customers requesting warranty consideration should contact Superlift® by phone (1-800-551-4955) to obtain a Returned Goods Authorization number. All removal, shipping and installation costs are customer's responsibility.

If a replacement part is needed before the Superlift® part in question can be returned, you must first purchase the replacement part. Then, if the part in question is deemed warrantable, you will be credited / refunded.

### **Other Limitations - Exclusion of Damages - Your Rights Under State Law**

- Neither Superlift® nor your independent Superlift® dealer are responsible for any time loss, rental costs, or for any incidental, consequential or other damages you may have.
- This Limited Warranty gives you specific rights. You may also have other rights that vary from state to state. For example, while all implied warranties are disclaimed herein, any implied warranty required by law is limited to the terms of our Limited Lifetime Warranty as described above. Some states do not allow limitations of how long an implied warranty lasts and / or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you.

### **Important Product Use and Safety Information / Warnings**

As a general rule, the taller a vehicle is, the easier it will roll over. Offset, as much as possible, what is lost in rollover resistance by increasing tire track width. In other words, go "wide" as you go "tall". Many sportsmen remove their mud tires after hunting season and install ones more appropriate for street driving; always use as wide a tire and wheel combination as feasible to enhance vehicle stability. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll bar and cage system. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capabilities are decreased when significantly larger / heavier tires and wheels are used. Take this into consideration while driving. Also, changing axle gear ratios or using tires that are taller or shorter than factory height will cause an erroneous speedometer reading. On vehicles equipped with an electronic speedometer, the speed signal impacts other important functions as well. Speedometer recalibration for both mechanical and electronic types is highly recommended.

Do not add, alter, or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the Superlift® product purchased. Mixing component brands is not recommended.

### **SUPERLIFT SUSPENSION SYSTEMS**

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

# TEMPLATE 1 - DRILL TEMPLATE FOR THE LOWER CONTROL ARMS.

