

### Step by step instructions and checklist:

Use the proper tools and safety equipment to perform all work. Torque all fasteners to proper specifications and double check work. Align your vehicle after installation.

G40SL3, G40SL4



Park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake. Disconnect the vehicle power source at the ground terminal on the battery. Raise the front of the vehicle and support with jack stands at each frame rail behind the lower control arms. Remove the front wheels



Support the lower control arm with a suitable jack. Loosen but do not remove the lower control arm bolts. Disconnect the ABS connector at the frame. Remove the brake line bracket on the upper control arm.



Remove the outer tie rod. Strike the tie rod boss with a dead blow hammer to dislodge the taper.



Remove the sway bar end link from the lower control arm



Remove the harness clips from the top of the strut studs. Remove the upper strut mount from the frame. Remove strut assembly from the vehicle.



Remove the lower strut hardware from the lower control arm



Loosen but do not remove the upper ball joint nut. Strike the ball joint boss with a dead blow hammer to dislodge the taper. Let knuckle hang out of the way making sure to not let the brake line over extend.



Remove the upper control arm cam bolts. Note their orientation and locations. They will need to be reinstalled the same way as removed. Remove the upper control arms from the frame.

NOTE: Actual control arms may vary from the picture depending on the kit received. There are 2 different types, One forged/tubular with bonded bushings and One tubular with poly bushings. Forged arms with bonded bushings skip poly install steps. Also note that the poly arms no longer come with Zerk fittings. They use a one time grease pack.

Lightly coat the poly bushings with provided grease pack and insert into pivot points on control arms. Lightly coat crush sleeves and insert into poly bushings. Coat the outer face of the poly bushings with grease, and place washers onto sleeves. Make sure that when installed, the sleeves hold the washers into place. The washers are made to fit over the sleeve once in the vehicle



Install the new upper control arms to the frame using factory hardware in the same orientation as removed. Do not tighten at this time.



Install the new strut extension to the factory strut using factory hardware. Torque to 25 ft-lbs.



Remove the lower nut clips from the strut. Install the completed strut assembly into the vehicle using M10 flange nuts at the frame and M10 X 60mm bolts, washers, and nuts for the lower control arm. Do not tighten at this time.



Attach the upper ball joint to the knuckle using provided hardware. Torque to 85 ft-lbs.



Install the brake line bracket to the control arm using M6 nut and washer. Torque to 5 ft-lbs.



Reconnect the ABS harness.



Install the outer tie rod to the knuckle using factory hardware. Torque to 65 ft-lbs.

# 4WD STEPS (07-13 TRUCK / 07-14 SUV)



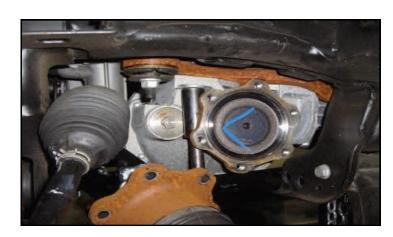
Remove the rear cross member.



Mark the front driveshaft to pinion orientation for reassembly. Remove the front driveshaft from the differential and let hang out of the way.



Disconnect the differential solenoid plug and differential vent tube.



Fully support the differential with a suitable jack. Remove the driver side differential from the hanger.



Remove the passenger side differential from the hanger.

Carefully lower differential out of the vehicle and set aside for modifications.



Mark the lowest cooling fin as shown, use a suitable cutting tool, remove the fin. This is for clearance against the driver side rear control arm pocket.



Remove the pass side differential hanger from the frame.



Remove the pressed in studs from the hanger. You can press them out or use a hammer to remove. Discard as they will not be reused.



Install the provided passenger differential drop to the hanger using M12 x 80mm (front) and 70mm (rear) socket head bolts and flange nuts. Install the hanger back into the frame using factory hardware. Torque all to 45 ft-lbs.



Install the provided driver side diff drop to the driver side hanger using M12 x 45mm (front) and 35mm (rear) socket head bolts. Torque to 45 ft-lbs.



Raise the differential back into the vehicle making sure you have sufficient clearance between all components. If not, then make necessary adjustments to gain clearance. Install using M12 x 35mm bolts, lock washers, and large washers on the passenger side: M12 x 35mm bolts, lock washers, and regular washers on the driver side. Torque to 45 ft-lbs.

Install the rear cross member using factory hardware. Torque to 45 ft-lbs.

Reattach the solenoid plug and vent tube. Install the CV axle to the differential (making sure to line up the previous made mark) using factory hardware and a drop of thread locker per bolt. Torque to 45 ft-lbs.

Install the front driveshaft (making sure to line up the previous made mark) using factory hardware and a drop of thread locker per bolt. Torque to 35 ft-lbs.



Install the ReadyLIFT® skid plate to the frame cross members using the provided self tapping bolts. Do not over tighten to keep from stripping out the holes in the frame.

## **REAR BLOCK INSTALL**

Block the front wheels for safety. Jack the rear up and place jack stands in front of the lower front spring hangers. Support the axle with a suitable jack.



Remove the ABS harness clip at the frame.



Remove the rear shock.



Slightly loosen but do not remove the driver side u-bolts. Remove the passenger side u-bolts completely and discard. Lower the axle enough to remove the factory lift block making sure that all brake lines and ABS lines do not get over extended.



To install the new block passenger side lift block. Make sure the small end of the block is facing the front of the vehicle. Raise the axle and the block up to the spring while aligning the center pin. Install the provided u-bolts, and nuts. Snug the u-bolt nuts but do not fully tighten at this time. Repeat steps for driver side.



Install the provided shock extension to the frame using factory hardware. Install the factory shock to the extension using M14 x 75mm bolts, washers, and nuts. Install the lower shock to the axle using factory hardware. Do not tighten at this time.



Run the ABS line up next to the block, zip tie to the u-bolts to use as a guide. Reinstall the ABS clip back to the frame. You may need to lube the ABS rubber sleeve to slide it further up to line and back into the clip.

Install the rear wheels and lower vehicle to the ground. Torque the lug nuts to the wheel manufacturer specs. Jounce the vehicle to settle to the new ride height. Torque the u-bolts to 110 ft-lbs, and all shock hardware to 65 ft-lbs.

Attach the vehicle power source. Turn the steering wheel lock to lock making sure there is proper clearances between all moving suspension components and brake/ABS lines throughout the suspension cycles.

#### **Final Checks & Adjustments**

Post Installation Warnings: Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque wheels to the manufacturers specs. Move the vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels from lock to lock and verify adequate tire, wheel, brake line, and ABS wire clearances. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brake hoses and ABS lines for adequate slack at full extension. Failure to perform the post inspection checks may result in vehicle component damage and/or personal injury or death to driver and/or passengers. Test drive vehicle and re-check the torque of all fasteners.

#### Wheel Alignment/Headlamp Adjustment

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory or provided specifications. It is recommended that your vehicle alignment be checked after any off-road driving. In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment.

#### **Vehicle Re-Torque and Safety Inspection**

Upon completion of all services and adjustments performed on your vehicle, and within 50 miles of driving, check to ensure that all fasteners and hardware are properly torqued to specification as noted in the vehicles factory service manual.

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