



2003-2008 3-inch Ultimate lift kit installation guide

Professional installation is recommended

IMPORTANT!

Lifting and modifying the suspension on your vehicle may result in drive line vibrations, damaged bushings, erratic handling characteristics, and shortened suspension component life. HRG Off-road recommends the following:

- Checking and/or replacing worn drive axles with new parts, not remanufactured.
- Checking and/or replacing all worn factory rubber bushings with urethane bushings, such as Prothane.
- Checking and/or replacing worn shock absorbers and bump stops.
- Performing a 4-wheel alignment after working on suspension components.

Lift kits may not be legal for use on public highways in your area. Please check local laws before installing!!

WARNING!

Lifted vehicles are more prone to rolling over.

Some HRG Off-road products are designed to improve off-road capabilities. Modifying the suspension of your vehicle may result in handling characteristics that are different from a factory equipped vehicle. Extreme care must be used to prevent a rollover or loss of control. Always operate your modified vehicle at a reduced speed to ensure your ability to maintain control under all driving conditions. Driving your vehicle in an unsafe manner may result in serious injury or death. HRG Off-road lift kits are designed and tested to work together. HRG Off-road does not recommend combining this lift kit with any other type of suspension or body lift. Always wear your seat belt.

Recommended tire/wheel sizes:

Stock: 235/70/16 (29")

16" wheels

245/70/16 (29.5")

255/70/16 (30.0")

245/75/16 (30.5")

255/75/16 (31.1) May require fender modification!

17" wheels

245/65/17 (29.5")

255/65/17 (30.0")

245/70/17 (30.4")

265/65/17 (30.5")

255/70/17 (31.0") May require fender modification!

18" wheels

255/60/18 (30.0")

265/60/18 (30.5")

245/65/18 (30.5")

255/65/18 (31.0")May require fender modification!

Be sure to check fitment prior to installation! These sizes are only suggestions. HRG is not responsible for improperly fitted wheels/tires!

Included in the kit:

2 2.5" front lift spacers 5321 (1L, 1R)
2 2.0" rear lift spacers 5300
6 M10x25mm grade 10.9 bolts
2 Sway bar end links
2 brake line extension brackets
2 Rear shock extension brackets
2 Camber adjustment bolts (optional)
2 Adjustable rear upper control arms (optional)
4 2.75x1" M14 spacers (front subframe)
4 2.75x2" M14 spacers (rear subframe)
4 2x3" M14 spacers (rear trailing arms)
6 1.25x1" M12 spacers (front subframe stiffener brackets)
2 1x1" M10 spacers (passenger side engine mount)
2 1x1" M10 spacers (center driveshaft carrier bearing)
4 .75x1" M8 spacers (driveshaft safety loops)
4 M8x40mm bolts (driveshaft safety loops)
4 M14x150mm bolts (rear subframe)
4 M14x115mm bolts (rear trailing arms)
2 M10x50mm bolts (center driveshaft carrier bearing)
2 M10x70mm bolts (passenger side engine mount)
6 M12x50mm bolts (front subframe stiffener brackets)
2 0.5x1 M6 spacers (rear ABS wiring mount)
2 M6x40 bolts (rear ABS wiring mount)
1 1" foam seal (steering coupler)
5 extended exhaust hangers (mufflers)

Tools required:

Floor jack, lug wrench, metric socket set to 21mm, metric wrench set to 19mm, impact gun, pliers, heavy hammer, plastic cutting tool, body saw or large screwdriver, torque wrench.

Note to installer: Some bolts removed to install lift kit will be replaced with longer bolts. Some OEM hardware will be reused. **Installing this kit requires cutting of plastic splash shield and sheet metal surrounding steering coupler to allow clearance.**

Approximate installation time 4-6 hours.

Skill level: Moderate

Front installation:

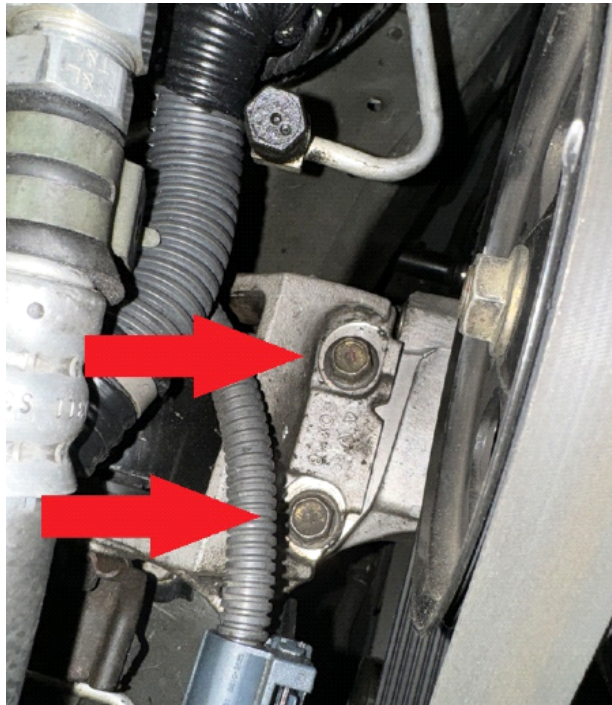
Parts required: 2 front spacers, 6 M10 nuts, 2 sway bar end links, 2 16mm camber bolts, 6

m12x50 bolts, 2 M10x70 bolts, 4 2.75x1 M14 spacers, 1.25x1 M12 spacers, 2 1x1 M10 spacers, 2 brake line extension brackets

Step 1. Disconnect negative battery terminal.

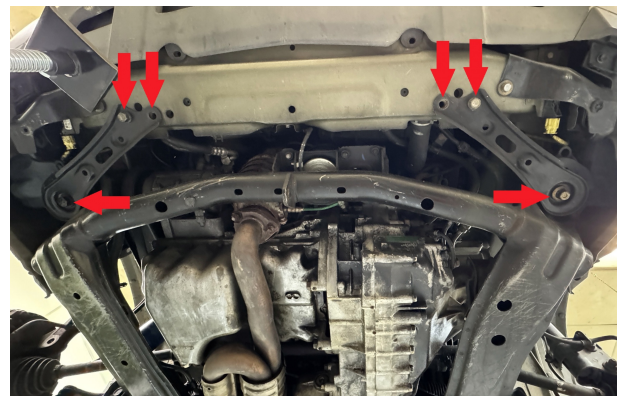
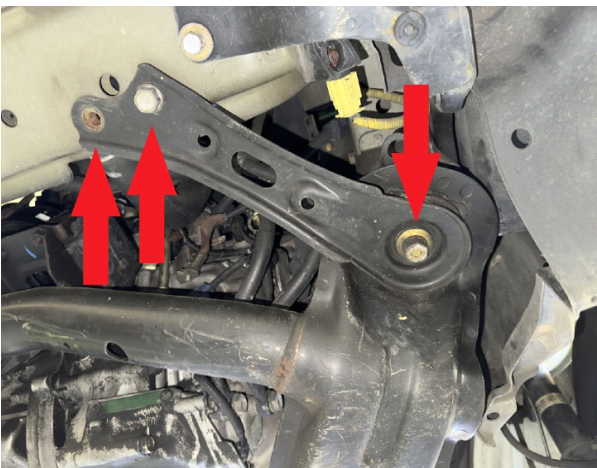
Step 2. Support engine/transmission with floor jack, taking care not to damage oil pan.

Step 3. Remove 2 M10 bolts holding passenger side engine mount to engine bracket.

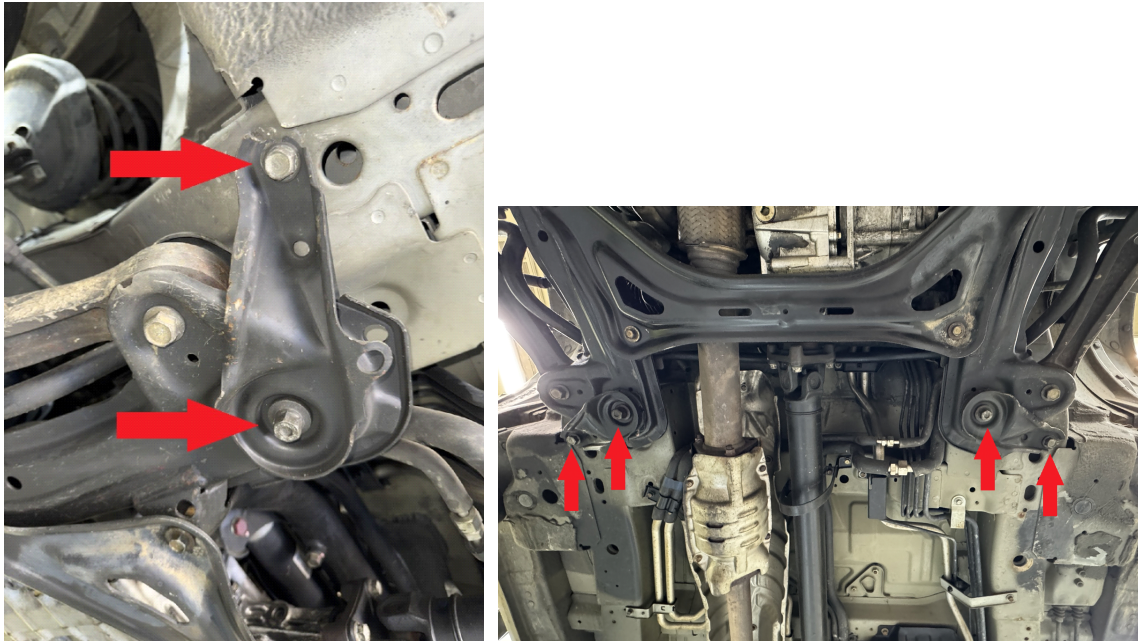


Step 4. Remove lower plastic splash guard under front valence to gain access to front main subframe bolts. Take care not to break plastic retainer clips. Save hardware for re-installation.

Step 5. Remove 4 M12 bolts holding main subframe bolt retainer brackets to body.



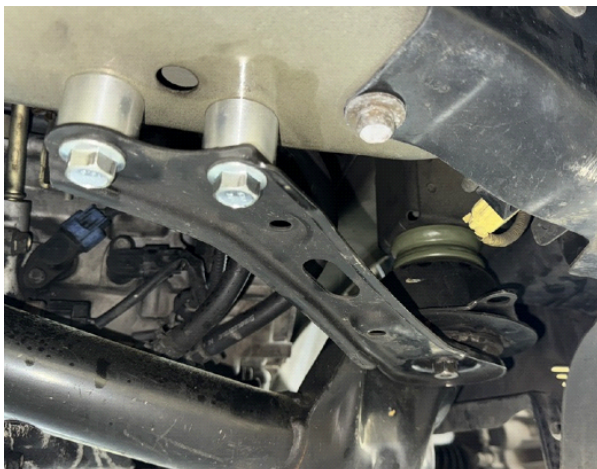
Step 6. Loosen but do not remove 4 M14 main subframe bolts allowing subframe to drop approximately one inch.



Step 7. Carefully lower engine/subframe with floor jack approximately 1 inch. Remove main subframe bolts one at a time and slip 2.75x1 M14 spacers between subframe and body, re install factory bolts as you go. This keeps the subframe square and aligned during installation.

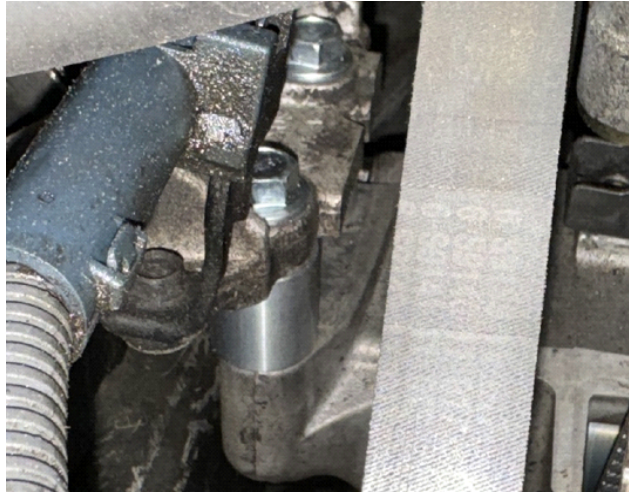


Step 8. Install 4 1.25x1 M12 spacers between main subframe bolt retainer brackets and body using supplied M12x50 bolts.



Step 9. Install 2 1x1 M10 spacers between engine mount and engine bracket, using supplied M10x70mm bolts (see

photo.)



Step 10. Trim plastic splash shield as necessary to fit with lowered subframe, reinstall using original hardware.

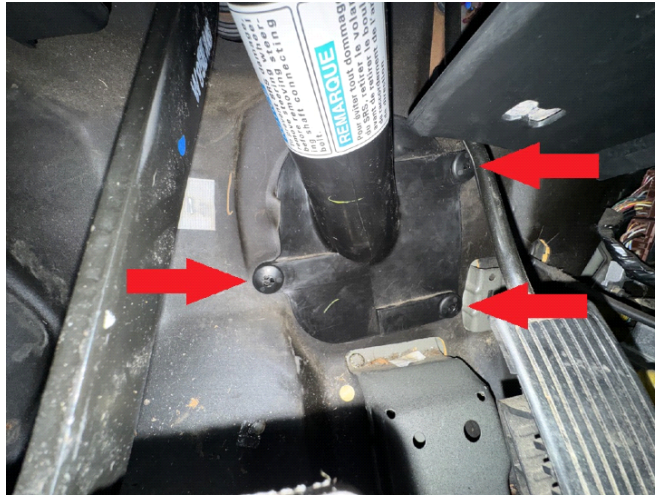
Step 11. Pull driver side inner carpeted kick panel and remove.



Step 12. Under driver dash, remove plastic cover, disconnect light



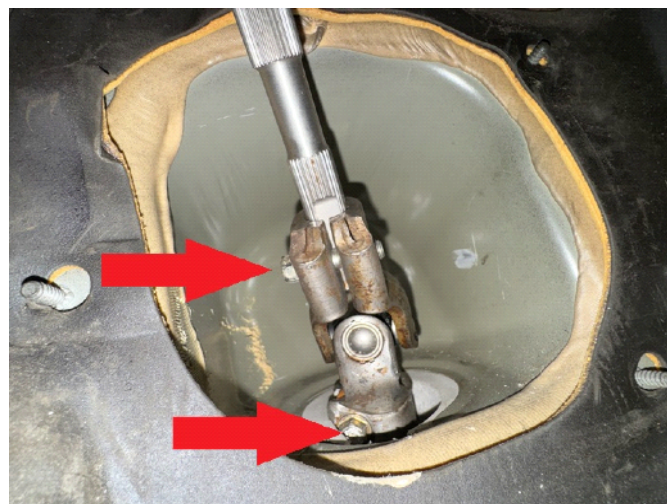
Step 13. Remove plastic cover over steering column.



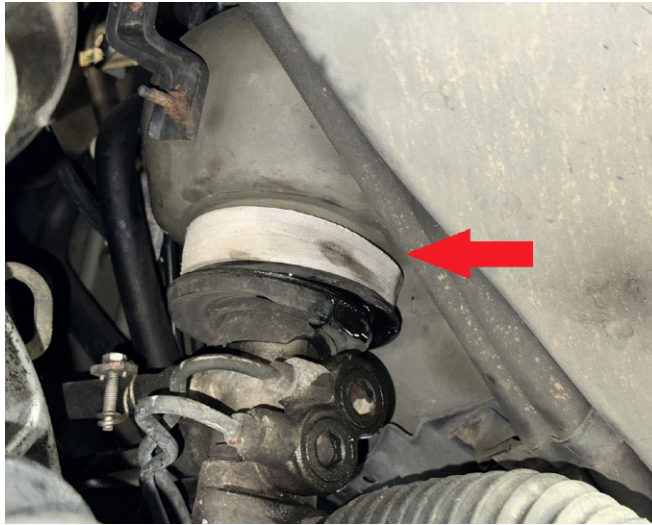
Step 14. Using a body saw, trim sheet metal for clearance around steering "U-joint" coupler. This can also be done by simply bending the sheet metal back about 1/2 inch around the coupler. Turn steering wheel to verify the coupler has proper clearance.



Step 15. Rotate steering wheel to check for noises. If noise is present, loosen (DO NOT REMOVE) bolts on steering "U-joint" coupler, and then re-tighten. (See photo)



Step 16. Install foam weather seal between steering rack and body.



Step 17. Re-install dust cover on steering column, under dash panel, and carpeted kick panel.



Step 18. Remove plastic access panels under hood to reach driver side upper strut mounting nuts.



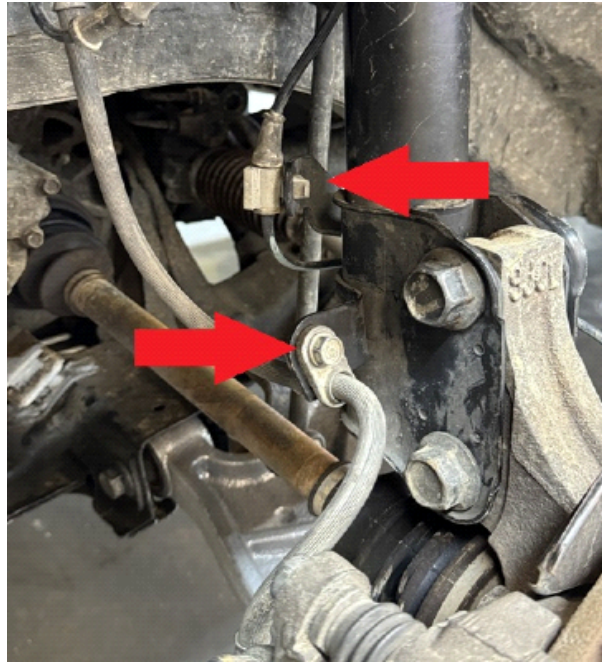
Step 19. Remove nuts holding struts to body, leave one nut on so struts do not fall when lifting vehicle to access bottom bolts. Save hardware.

Step 20. Jack up vehicle and support with jack stands.

Step 21. Remove wheels.

TIP: Installation is made easier by disassembling both left and right side suspension at the same time.

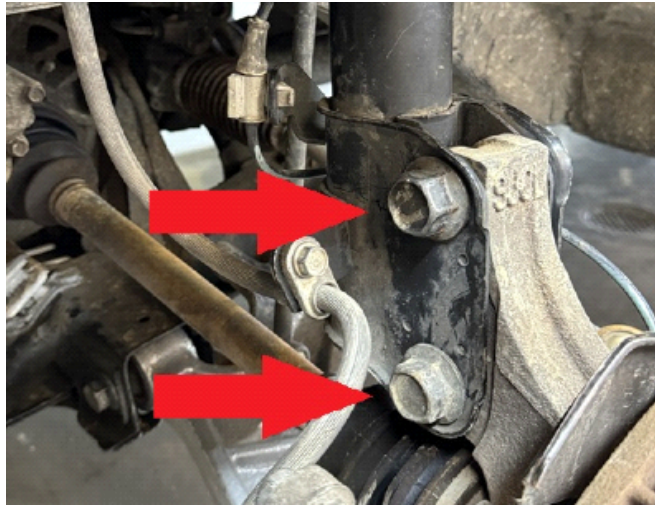
Step 22. Remove brake lines and ABS lines from driver side strut.



Step 23. Remove and discard OEM sway bar links.



Step 24. Remove bolts connecting strut to hub and remove strut (see photo) Save hardware for reinstallation. If installing camber adjustment bolts, only one original bolt from each side will be reused.



Step 25. Using a length of wire, or large zip ties, secure wheel hub so as to prevent axle shaft from slipping out of inner CV joint.

Step 26. Install spacer onto strut using hardware provided in kit. (See photo)

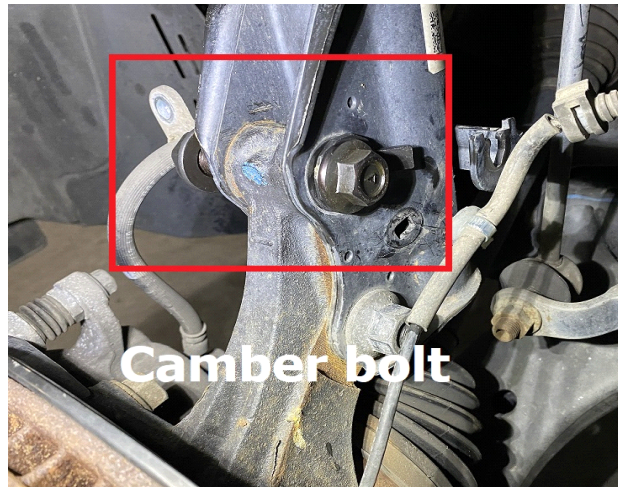


Step 27. Reinstall strut, using original hardware to bolt strut to body. Tighten mounting nuts to 33 ft-lb. This process is made easier by pulling up the wiper cover. (See photo below)

NOTE: L designates DRIVER SIDE and R designates PASSENGER SIDE on U. S. models.



Step 28. Install bolts holding strut to hub. Torque nuts to 135 ft-lb. Install camber adjustment bolt in place of top strut mounting bolt. (See photo)



Step 29. Install new sway bar end link. (sway bar links **will not** line up with sway bar until both left and right side is lifted.) Torque sway bar end link nuts to 85 ft-lb

Step 30. Install brake line bracket. Torque to 24 ft-lb. (see photo)



Step 31. Reattach ABS wire to strut.

Step 32. Repeat installation process for passenger side

Step 33. Reinstall plastic splash shield under front bumper, cut/modify as needed.

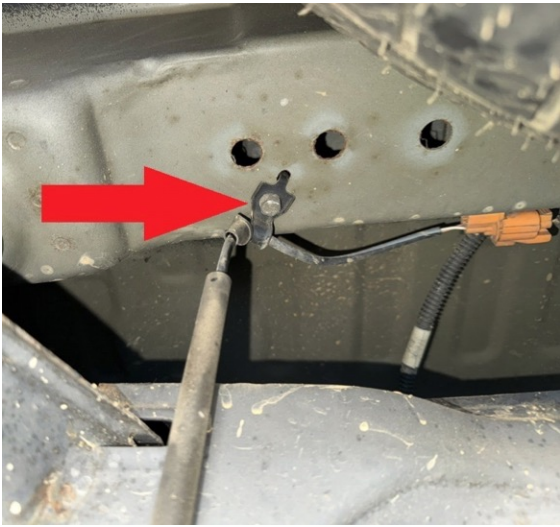
Step 34. Reinstall wheels and lower vehicle.

Rear installation:

Parts required: 2 rear spring spacers, 2 M10x50 bolts, 4 2.75x2 M14 spacers, 2 1x1 M10 spacers, 2 0.5x1 M6 spacers, 2 M6x40 bolts, 4 0.75x1 spacers, 4 M8x40 bolts, 4 2x3 M14 spacers, 4 M14x115 bolts, 2 adjustable rear upper control arms.

Step 1. Support rear subframe with floor jack or safety jack.

Step 2. Remove 2 bolts holding ABS wire to chassis (if applicable), directly above the rear subframe. Install 0.5x1 M6 spacer and M6x40 bolts as shown:



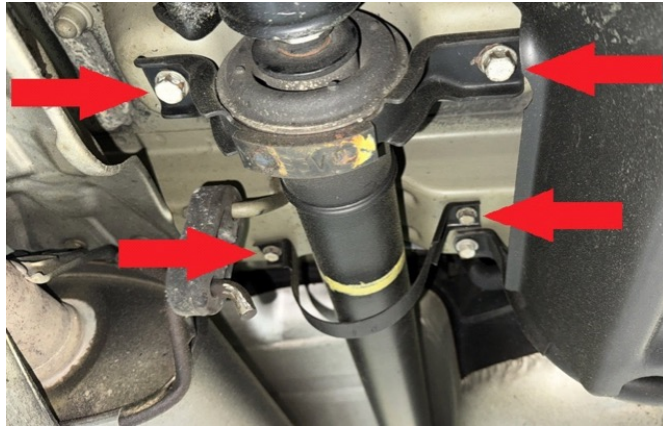
Step 3. Loosen all 4 but only remove 2 main M14 bolts holding subframe to body. (this procedure will keep the subframe aligned).



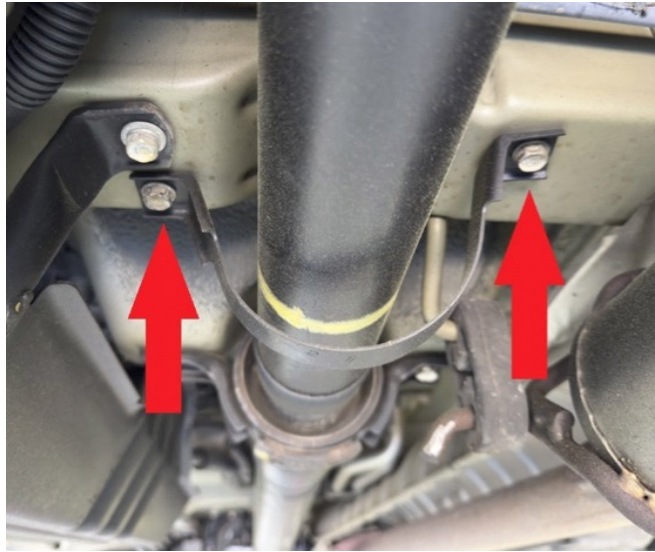
Step 4. Carefully lower the subframe enough to install one 2.75x2" M14 spacer between subframe and body and install M14x150 bolts included in the kit. Repeat this step for remaining 3 subframe spacers. Torque subframe bolts to 110 ft-lb.



Step 5. Loosen M10 bolts holding center drive shaft carrier bearing. Remove one bolt, install 1x1" M10 spacer and M10x50 bolt, and then repeat process for second bolt.



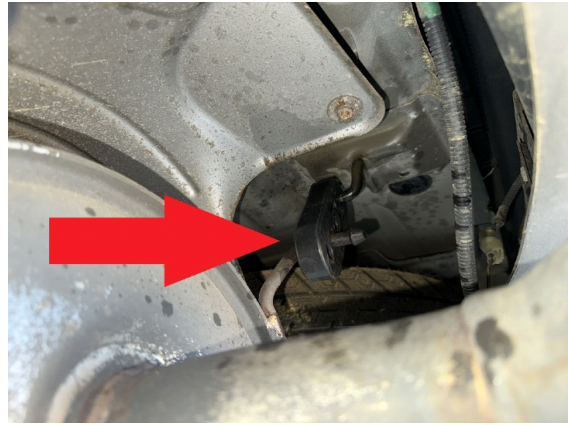
Step 6. Remove M8 bolts from both front and rear driveshaft safety loops, install (2) 0.75x1" M8 spacer and M8x40 bolts between loops and body. Install remaining 2 0.75x1" M8 spacers if necessary to allow enough clearance for drive shaft.



Step 7. Remove one M14 bolt and loosen second M14 bolt in driver side rear trailing arm. Install 2x3" M14 spacers one at a time. Install M14x115 bolts. (repeat process for passenger side)



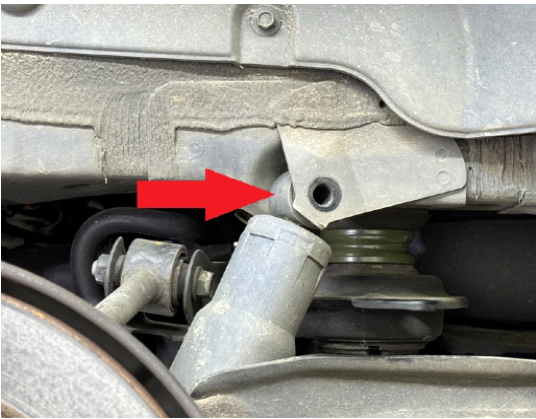
Step 8. Install extended exhaust hangers on both mufflers as shown:



Step 9. Install 1 more exhaust hanger on mid pipe as shown:



Step 10. Remove upper and lower bolts holding driver side shock absorber.

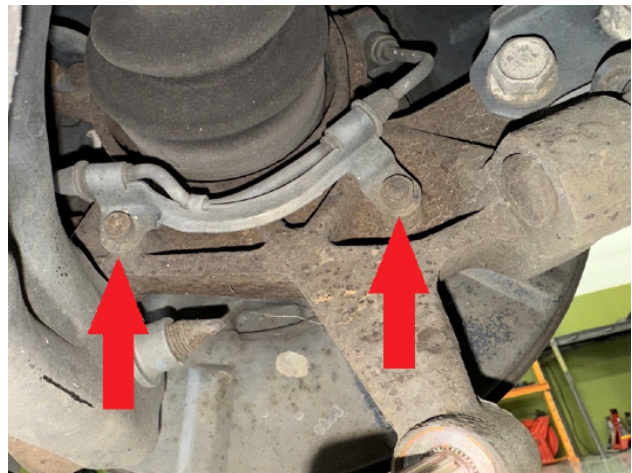
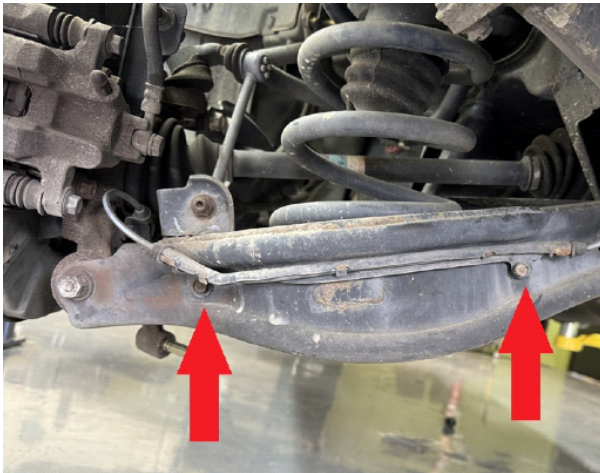


Step 11. Remove bolt holding upper control arm to subframe.



Step 12. Remove cotter pin and nut holding upper control arm to hub. Strike with heavy hammer to release arm from hub. Remove and discard OEM rear upper control arm.

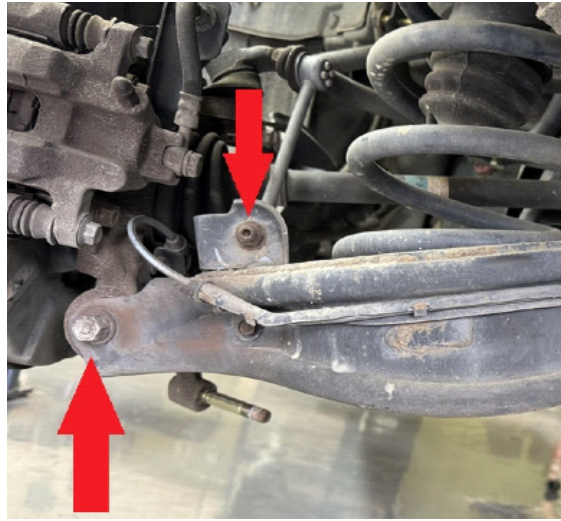
Step 13. Remove bolts holding ABS wire to rear lower control arm, and hub. Pull ABS wiring clear from the lower control arm.



Step 14. Support rear lower control arm with floor jack. (Under the spring)

Step 15. Remove bolt holding sway bar end link.

Step 16. Remove bolt holding lower control arm to hub, loosen bolt holding lower control arm to subframe, do not remove bolt.



Step 17. Use the floor jack to release pressure on the spring.



Step 18. Remove spring and rubber isolator.

Step 19. Install spacer on the top of the spring, between the spring and the spring seat. Re-use rubber spring isolator. Be sure to align spring so that the end of the coil meets up with the ridge in the rubber isolator. (See photo)



Step 20. Using a floor jack, compress spring by lifting on the lower arm until the lower control arm can be reinstalled. Use a screwdriver to position the hub so that the bolt holes line up. (see photo) Leave these bolts loose until vehicle is on the ground in a later step.



Step 21. Adjust rear upper control arm to be roughly the same length as the OEM arm and install in reverse order of removal. Do not forget the cotter pin! These arms will be adjusted by the alignment technician.



Step 22. Install shock extensions to lower end of shock using supplied hardware, bolt assembly to rear lower arm with OEM hardware. Reinstall upper shock bolt. Torque all bolts to 45 ft-lb



Step 23. Reinstall ABS wiring and reconnect sway bar link. Torque sway bar link nuts to 44 ft-lb.

Step 24. Repeat installation process for passenger side.

Step 25. Reinstall wheels and lower vehicle.

Step 26. Torque all lower control arm bolts to 85 ft-lb.

Step 28. Get a professional alignment. **BE SURE TO INFORM YOUR ALIGNMENT TECHNICIAN THAT YOU HAVE CAMBER ADJUSTERS INSTALLED!!**

Step 29. Find some trails!



Note: Installing a lift kit will change the suspension geometry and will require a 4 wheel alignment, and possibly front/rear camber correction kits.

Warning: Failure to follow the procedures in these installation instructions may result in unsafe handling characteristics, damage to vehicle, or loss of control.

For tech support, please call 1-844- HRG LIFT (474-5438) from 8-4:30 PM EST Mon-Thu 8-3:30 PM Fri or email us 24/7 at support@hrgoffroad.com.

This product is intended for off-road use only!!

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