2019-2025 4.5 inch 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 Offroad 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 Offroad 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 Offroad lift kits are designed and tested to work together. HRG Offroad does not recommend combining this lift kit with any other type of suspension or body lift. Always wear your seat belt.

Recommended tire size:

245/60/18 (stock)(29.6")
255/60/18 (30.0")

245/65/18 (30.5")
255/60/18 (31.1")**MAY REQUIRE FENDER MODIFICATION!**

Extreme tire size:

265/65/18 **REQUIRES MAJOR CUTTING OF INNER FENDER AND REMOVAL OF FENDER LINERS!**

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 4 inch front spacers
2 3 inch rear spacers
2 sway bar end links for lifted application
2 BEAST front brake line relocation brackets
2 BEAST rear brake line relocation brackets
12 M10x25mm bolts (spacers)
4 M8x16 bolts (brake line brackets)
4 M8 nuts (brake line brackets)
2 0.75x1.5 M8 spacers (driveshaft protector)
2 M8x60 bolts (driveshaft protector)
2 M10x110 bolts (engine mount)
2 M10x50 bolts (driveshaft carrier bearings)
3 0.75x1.5 M8 spacers (gas tank bar)
3 M8x40 bolts (gas tank bar)
4 M14x180 bolts (front subframe)
8 M12x70 bolts (front subframe brackets)
4 M14x180 bolts (rear subframe)
8 M12x70 bolts (rear subframe brackets)
2 1x1 M10 spacers (driveshaft carrier bearings)
2 1x2 M10 spacers (engine mount)
4 2.75x2 M14 spacers (front subframe)
4 3.5x2 M14 spacers (rear subframe)
16 1.25x2 M12 spacers (front and rear subframe brackets)
2 0.75x1.5 M8 spacers (parking brake cables)
2 M8X60 bolts (parking brake cables)
2 1 inch foam seals (steering column)
3 extended exhaust hangers

TOOLS REQUIRED: Floor jack, lug wrench, metric socket set to 22mm, metric wrench set to 19mmm, impact gun, pliers, heavy hammer, large pry bar, screwdriver, body saw, plastic cutting tool, torque

wrench

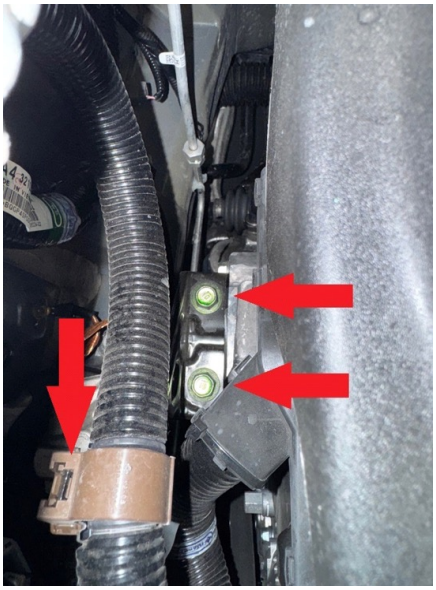
Note to installer: Installing this kit requires cutting of plastic splash shield and sheet metal surrounding steering coupler to allow clearance.

Approximate installation time: 7 hours.

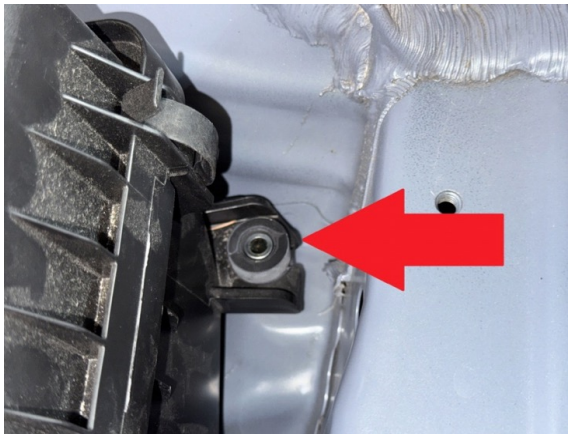
Front installation:

Step 1. Disconnect negative battery terminal.

Step 2. Remove 2 M10 bolts holding passenger side engine dampener to engine, and unclip wiring harness from bracket. Remove black bracket. Bracket will not be reused.

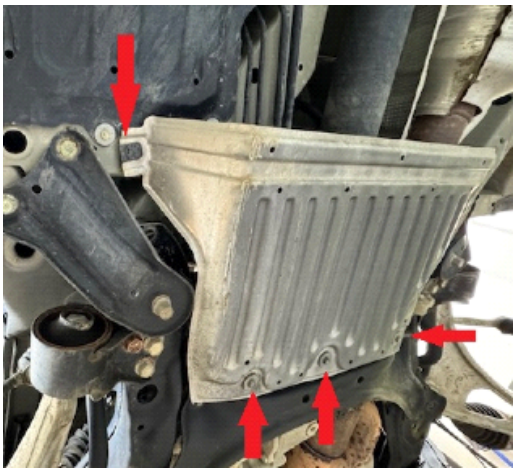


Step 3. Remove air box bolt as shown:



Step 4. lift vehicle and support with jack stands.

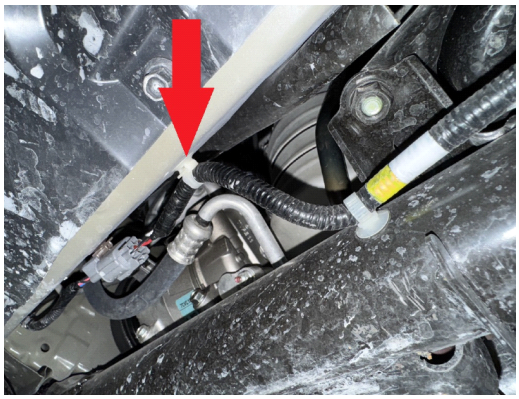
Step 5. Remove clips holding front part of plastic fender liners, and lower plastic splash guard under front valence to gain access to front main subframe bolts. Take care not to break plastic retainer clips. Save hardware for re-installation.



Step 6. Remove plastic clips and 10mm bolts holding aluminum heat shield behind subframe. Save hardware.

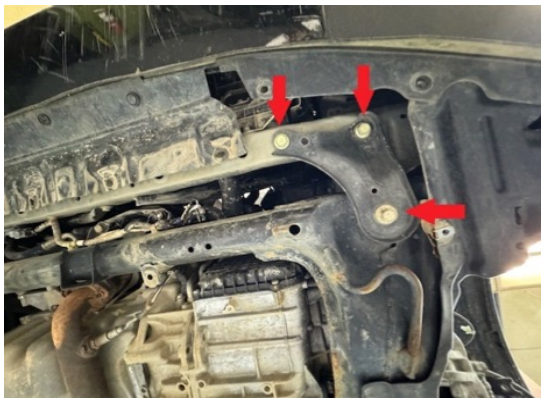
Step 7. Support subframe using a screw jack or floor jack.

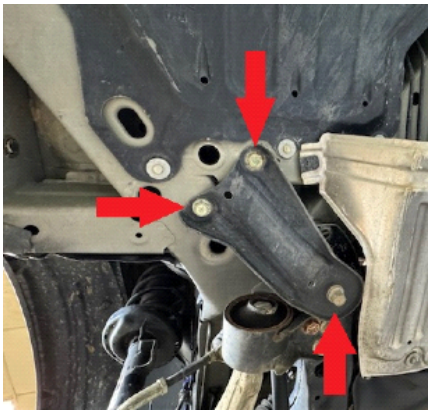
Step 8. Unclip wiring harness from radiator support as shown:



Step 9. Remove the 8 M12 bolts holding subframe stiffener brackets to body. (see photo below)

Step 10. Loosen all 4 but remove ONLY 2 of the 4 main subframe bolts, and temporarily replace them with 2 of the longer M14x180 bolts included in the kit. (This keeps the subframe square and in line)



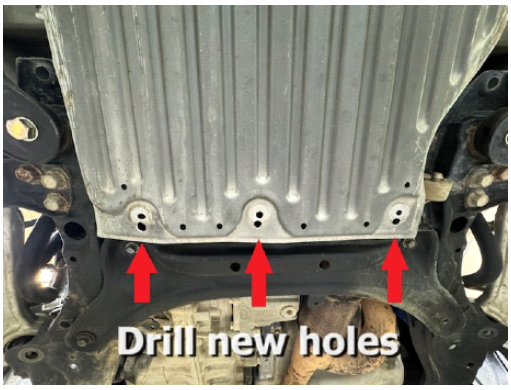


Step 11. Remove the 2 remaining OEM subframe bolts one at a time, lower subframe carefully about 2 inches with floor jack or screw jacks and slip 2.75x2 M14 spacers between subframe and body, installing M14x180 bolts as you go.

Step 12. Install 8 1.25x2 M12 steel spacers between subframe stiffener brackets and body using supplied M12x70 bolts. (see photo)

Step 13. Trim fender liner as necessary to fit with lowered subframe, relocate flap to top side of subframe and secure using original hardware. (see photo)

Step 14. Re-install aluminum heat shield, drill new holes and bend as necessary to fit with lowered subframe. Re-attach using OEM hardware.



Step 15. Using a body saw, cut a notch in the hole in the firewall where the steering column passes through to allow clearance for steering shaft.

ALTERNATE METHOD: Using a screwdriver or round bar, bend sheet metal back about 1/4 inch around

the coupler. Turn steering wheel to verify the coupler has proper clearance.

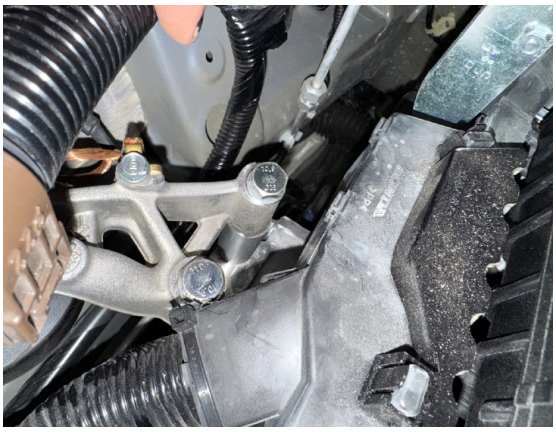
Step 16. Install foam weather seal between steering rack and body.

Step 17. Under driver side dash, remove plastic dust cover on steering column. Trim away plastic as necessary to eliminate contact with steering shaft.

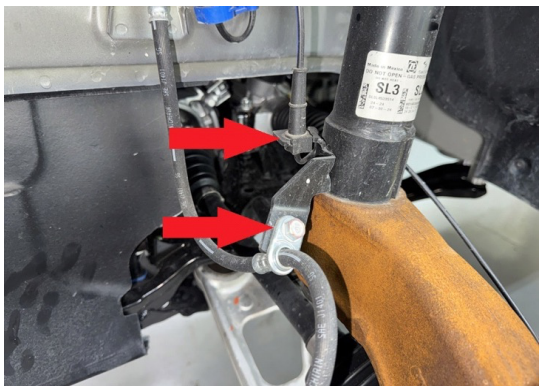
Step 18. Re-install dust cover on steering column below interior dashboard. Double check full rotation of steering wheel to check for any noises or rubbing. Trim as necessary.

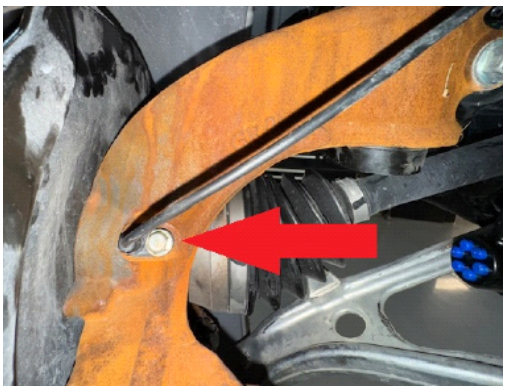
TIP: If necessary, loosen the bolts in the steering column “u-joint” coupler and re-tighten them to eliminate binding.

Step 19. Lower vehicle back down and Install 2 1x2 M10 steel spacers between engine mount and engine bracket, using supplied M10x110mm bolts.



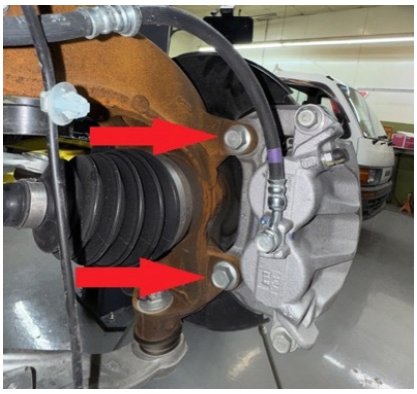
Step 20. Remove brake line and unclip ABS wiring from strut.

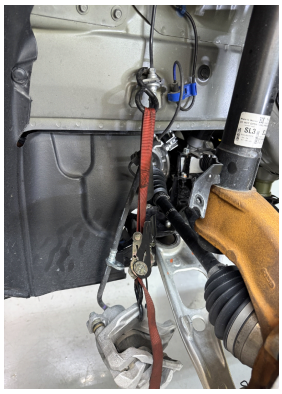




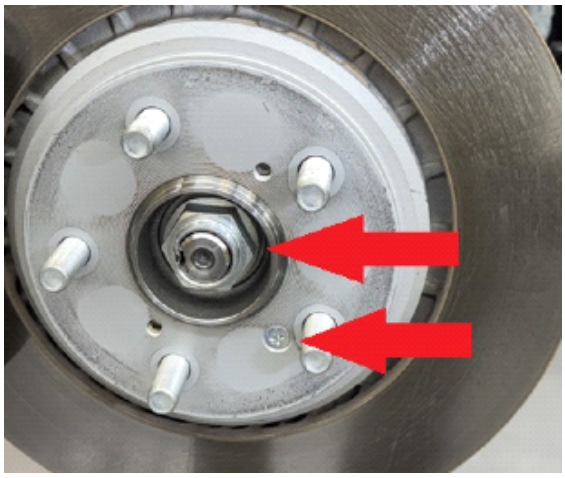
Step 21. Remove nut holding tie rod end to hub, strike knuckle with heavy hammer to dislodge tie rod end.

Step 22. Remove caliper (never loosen the brake line hoses) and use a length of wire to secure it out of the way.

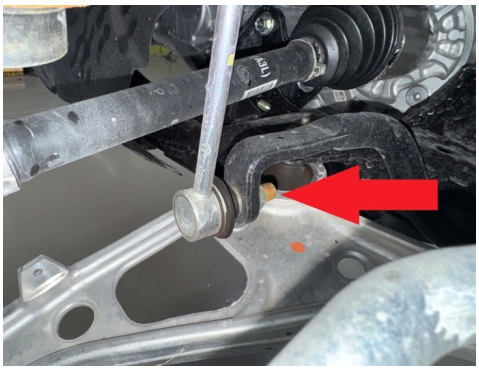




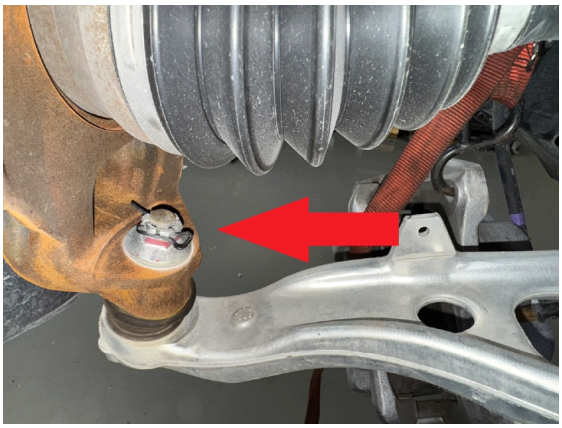
Step 23. Remove brake rotor and axle nut.



Step 24. Remove and discard OEM sway bar link.



Step 25. Remove lower ball joint nut and cotter pin.



Step 26. Have a helper pry downward on the lower control arm while striking the hub with a large hammer, to separate the ball joint from the hub. This can take dozens of hits. Be careful not to hit the ball joint boot.

Step 27. Remove plastic access panels under hood to reach driver side front upper strut mount.

Step 28. Remove 14mm nuts holding struts to body, remove strut and hub assembly as one piece. Do not separate strut from hub.

Step 29. Attach spacers to struts using OEM hardware. L is for DRIVER SIDE on U.S. models!

Step 30. Mount spacer, strut, and hub assembly back into shock tower using M10 nuts provided in the kit. Torque nuts to 33 ft-lb.

Step 31. Have a helper pry down on the lower control arm while moving hub back into position. Slide the axle back into the hub and angle the lower ball joint so that it feeds into the hole in the bottom of the hub. Once the ball joint is oriented properly, release pressure on the pry bar. The ball joint will pop into place. This step may take several attempts!

Step 32. Reinstall axle nut, torque to 242 ft-lb.

Step 33. Reinstall brake rotor and caliper. Tighten brake caliper bolts to 80 ft-lb

Step 34. Reinstall tie rod end. Do not forget cotter pin!

Step 35. Install BLBL on brake line mount to relocate brake line. (see photo)

Step 36. Repeat installation process for passenger side. **(sway bar end links will not bolt up until both sides are lifted)**

Step 37. Install new sway bar end links using supplied hardware. Torque sway bar nuts to 56 ft-lb.

Step 38. Double check all bolts.

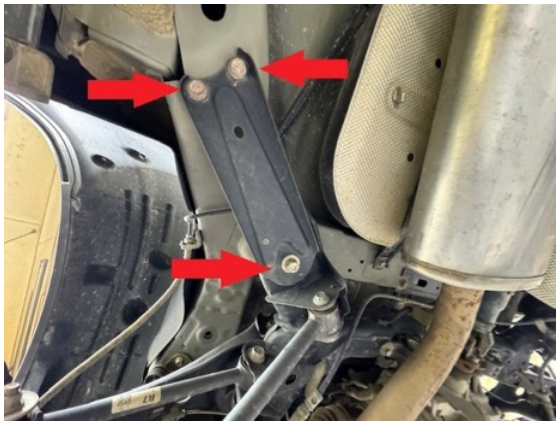
Step 39. Check brake dust shields for contact with rotors, bend back as necessary to prevent noise.

Rear installation:

Step 1. Lift vehicle and support with jack stands.

Step 2. Support rear subframe with floor jack.

Step 3. Remove 4 M12 bolts holding rear subframe support brackets to body.



Step 4. Loosen 4 main M14 bolts holding subframe to body, removing only the front 2. Temporarily install 2 M14x180 bolts. This keeps the subframe square and in line when lowering.

Step 5. Remove the remaining 2 OEM subframe bolts, and carefully lower the subframe approximately 2 inches.

Step 6. Place 2 of the 4 3.5x2" M14 spacers between subframe and body. Install M14x180 bolts. Be sure

to pass bolts through support brackets! (see photos below)

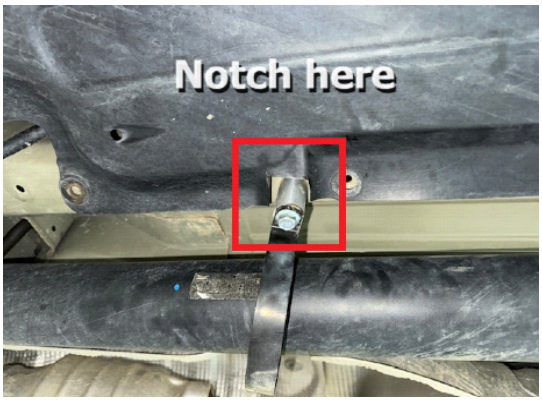
Step 7. Remove rear subframe bolts one by one, installing remaining 3.5x2 spacers and installing M14x180 bolts. (see photos)

Step 8. Place 1.25x2 M12 spacers between subframe stiffener brackets and body, install 8 M12x70 bolts.

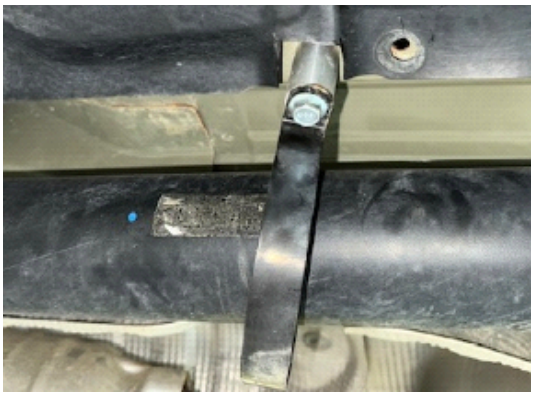
Step 9. Remove 2 bolts holding parking brake cables (see photo below)

Step 10. Install 2 0.75x1.5 M8 spacers between parking brake cable bracket and body using 2 M8x60 bolts.

Step 11. Using a plastic cutting tool, notch plastic as shown:



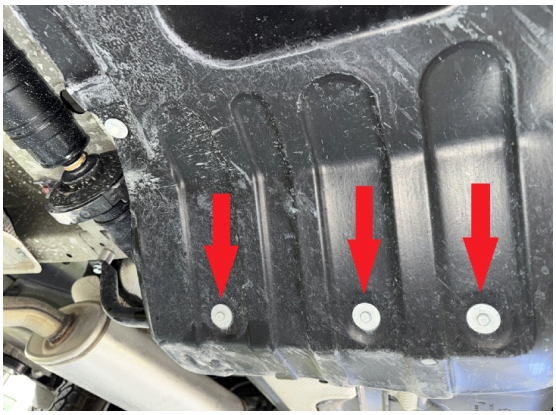
Step 12. Remove bolts holding driveshaft protector, place 0.75x1 M8 spacers between protector and body. (see photo)



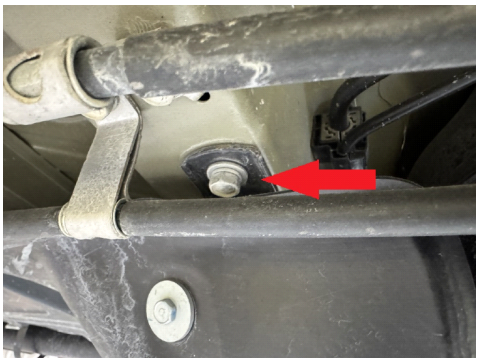
Step 13. Remove 2 M10 bolts holding driveshaft carrier bearing.

Step 14. Install 2 1x1 M10 spacers between carrier bearing and body, install 2 M10x50 bolts.

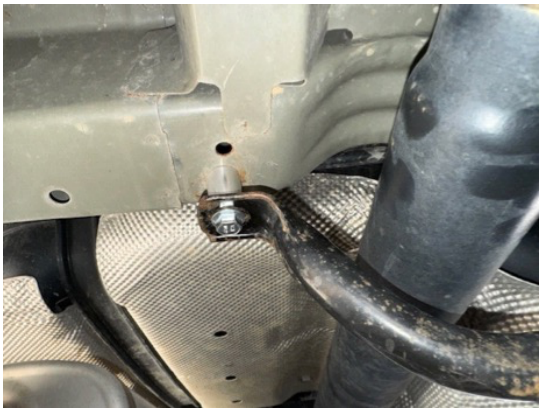
Step 15. Loosen 10mm bolts holding plastic under tray to gas tank bar.



Step 16. Remove 3 M8 bolts holding gas tank bar to body.



Step 17. Place 3.75x1 M8 spacers between gas tank bar and body, install 3 M8x40 bolts.



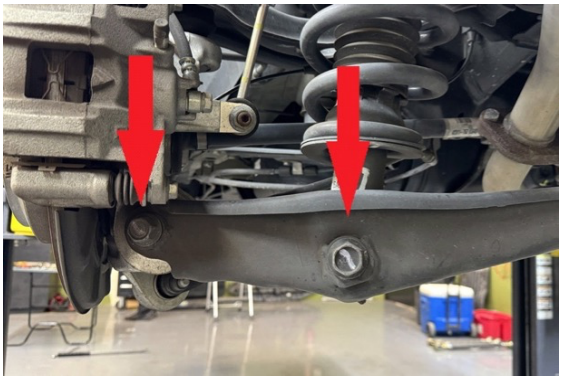
Step 18. Remove rubber rear tailpipe hangers from tailpipe.

Step 19. Attach extended exhaust hanger to OEM hanger with M12x70 bolt and M12 nut. Adjust height as necessary (see photo)

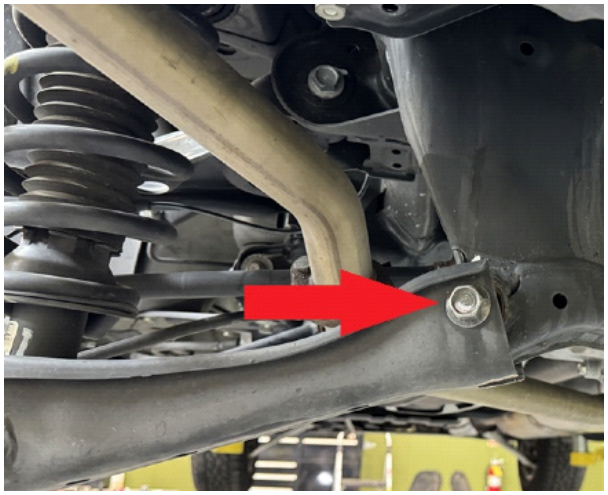
Step 20. Remove wheels.

Step 21. Remove bolt holding driver side strut to lower control arm. (middle bolt) (see photo below)

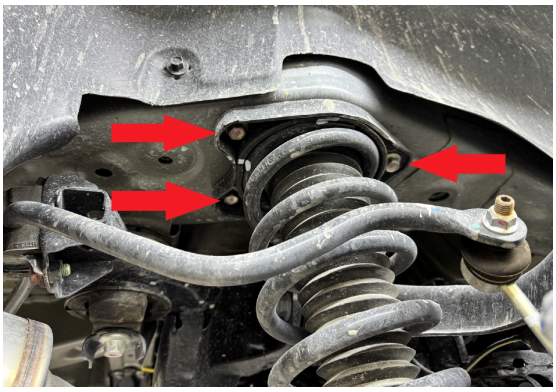
Step 22. Remove bolt holding lower control arm to wheel hub. (outermost bolt on lower control arm)



Step 23. Loosen but do not remove bolt holding lower control arm to subframe. (innermost bolt) to allow arm to move freely.

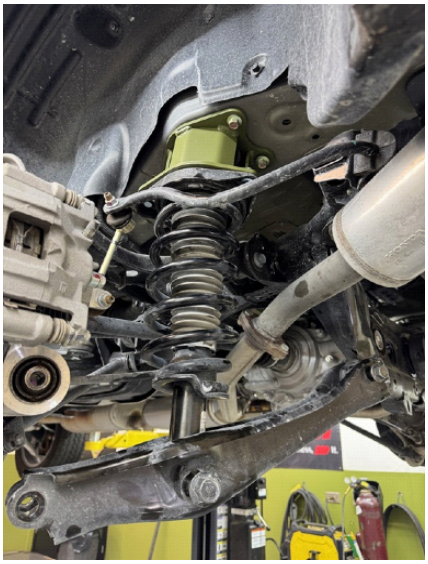


Step 24. Remove 3 bolts holding strut to body and remove strut.

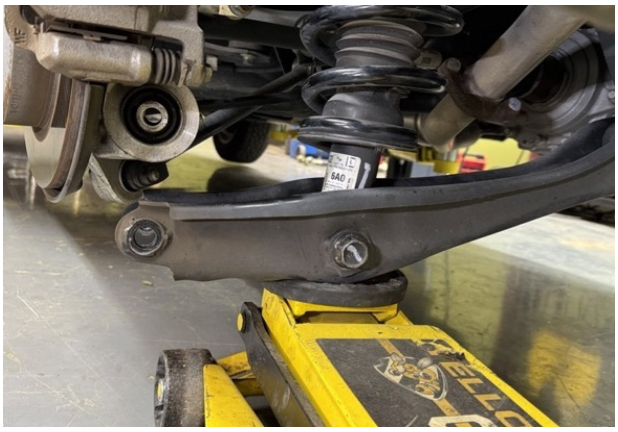


Step 25. Place spacer on top of strut and attach using hardware provided in the kit.

Step 26. Install strut/spacer combination using OEM hardware. Be careful not to cross thread these bolts! Torque OEM bolts to 44 ft-lb. (see photo)



Step 27. Using a floor jack, lift lower control arm until bolt holes line up.



Step 28. Reinstall bolt holding lower control arm to hub. Torque bolts to 135 ft-lb.

TIP: do not fully tighten lower control arm bolts until vehicle is resting on the ground (this will help prolong bushing life)

Step 29. Install rear brake line relocation bracket as shown. Torque bolts to 25 ft-lb(see photo)

Step 30. Repeat installation process for passenger side.

Step 31. Reinstall wheels and lower vehicle.

Step 32. Double check all bolts.

Step 33. Reconnect battery.

Step 34. Get a professional alignment.

Step 35. Find some trails!

Note: Installing a lift kit/subframe kit changes the suspension geometry and will require a 4 wheel alignment.

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!!