1997-2001 Honda CRV2WD/4WD 3" ULTIMATE lift kit installation guide

Professional installation is recommended

FOR OFF-ROAD USE ONLY!

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/wheel sizes:

ALL SIZES assume OEM wheels!

stock: 205/70/15 (26.3")
205/75/15 (27")
225/70/15 (27.4")
215/75/15 (27.7")
225/75/15 (28.2")
235/75/15 (29")
30x9.50R15 (30") (Requires modifying pinch welds)

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 1.5" front lift spacers 5303
2 2.5" rear lift spacers 5201

4 1.25x1" M12 spacers (rear subframe)
4 1.25x1.5" M12 spacers (rear trailing arms)
5 1.25x1" M12 spacers (engine/transmission mounts)
2 2.75x1" M10 spacers for rear differential (4WD kit only)
2 steel 1x1" M10 spacers (propeller shaft)
2 steel 1" "H" spacers (front torque mounts)
8 steel 1.25x1" M14 spacers (main subframe)
2 steel .75x1 M8 spacers (driveshaft safety loop)
4 M10x50mm bolts (torque mounts, propeller shaft)
8 M14x125mm bolts (main subframe)
4 M12x90mm bolts (trailing arms)
4 M12x110mm bolts (rear subframe)
3 M12x45mm bolts (manual transmission only)
2 M12x70mm bolts (auto transmission only)
1 M12x50mm bolts (engine)
2 M8x40mm bolts (driveshaft safety loops)
4 M8x16mm bolts (rear brake line brackets)
4 M8 nuts (rear brake line brackets)
2 Rear brake line relocation brackets
2 Adjustable front upper ball joints
2 Adjustable rear upper control arms
1 1” steering shaft extension
1 extended exhaust hanger for Honda cars

Tools required: Floor jack, lug wrench, metric socket set to 19mm, metric wrench set to 17mm, impact wrench, heavy hammer, pry bar, common pliers, power drill, 1/2" drill bit, torque wrench, paint pen.

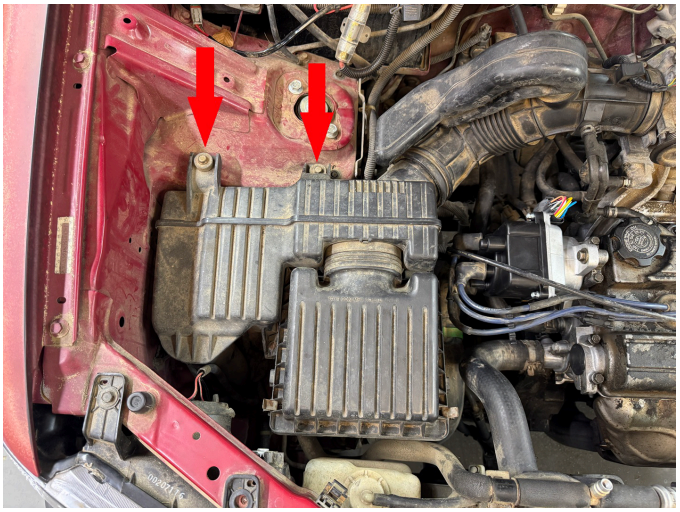
Installation time: 5-8 hours

Skill level: Moderate

Note to installer: All bolts removed to install subframe kit will be replaced with longer bolts. Some OEM hardware will be reused. This instruction book includes steps for both manual and automatic equipped vehicles.

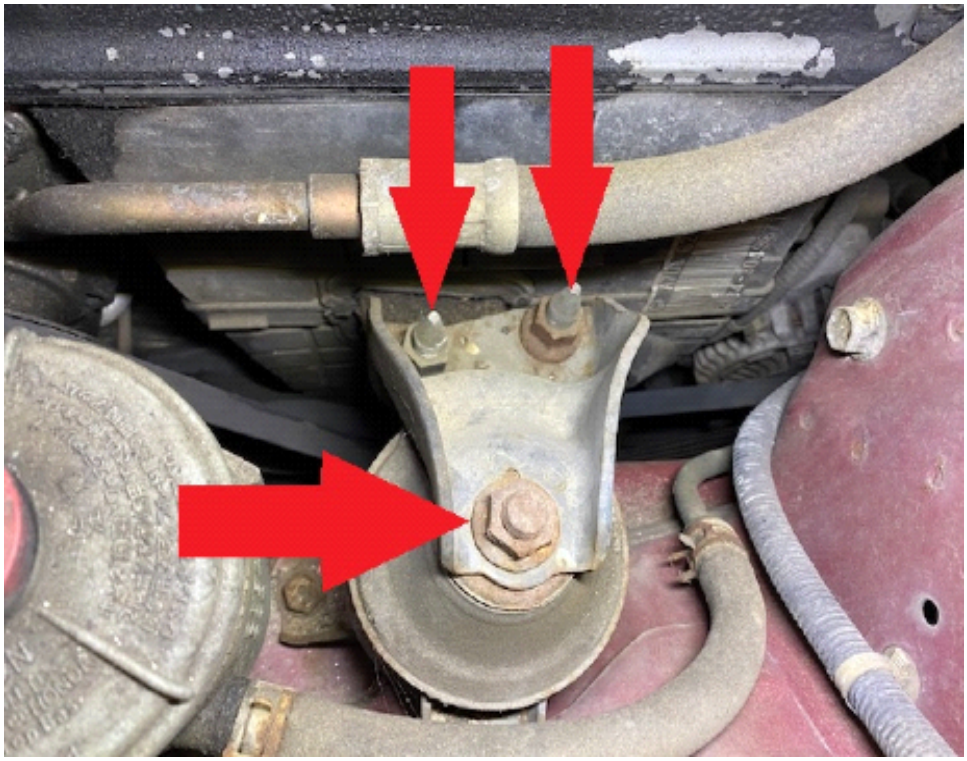
Front installation:

Step 1. Remove factory air box and vacuum chamber. (if applicable)



Step 2. Support engine/transmission with a floor jack and a square of plywood.

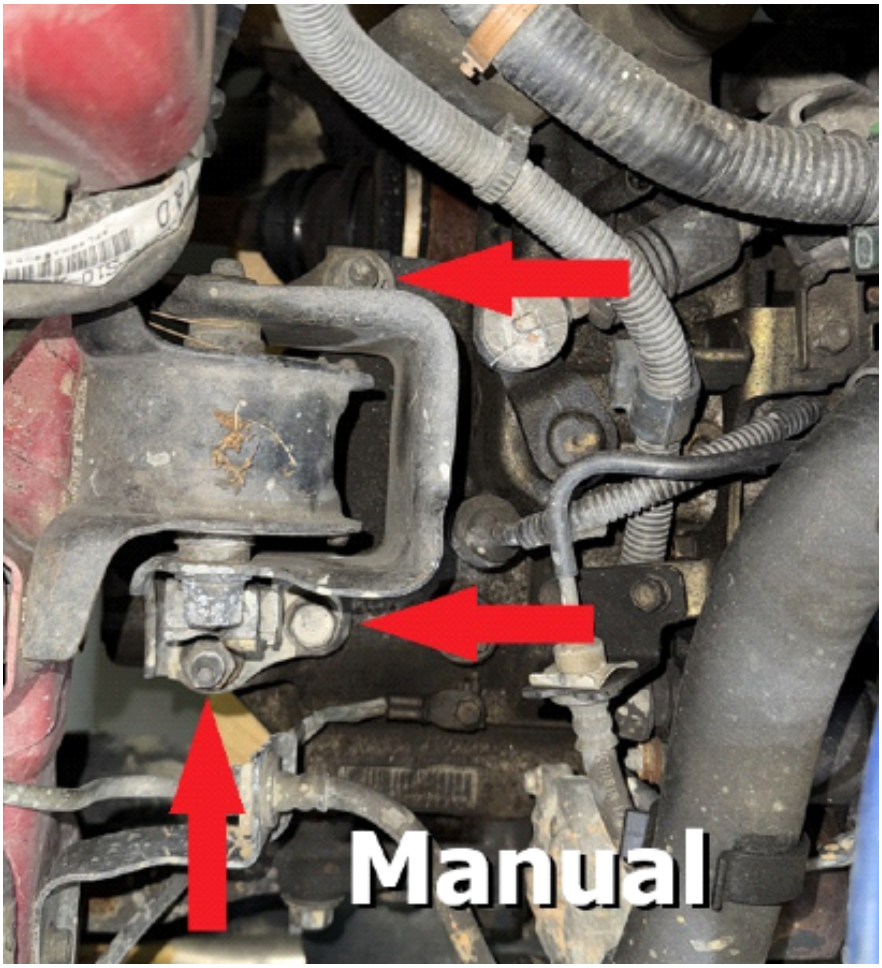
Step 3. Remove 3 17mm nuts, remove upper engine mounting bracket.



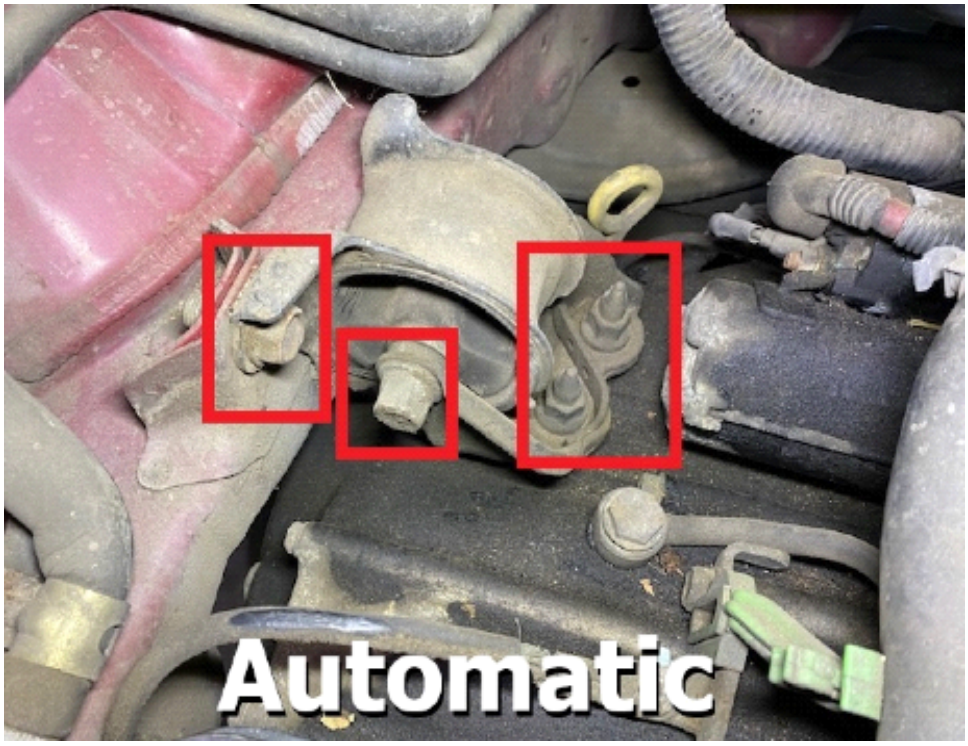
Step 4. Remove stud(s) from engine block bracket. This can be done by tightening 2 17mm nuts against each other and backing the stud out of the bracket. Alternative method: weld nut to stud and back out with an impact gun.

Step 5. Reinstall engine mounting bracket and temporarily install 2 M12x50 bolts in place of engine studs.

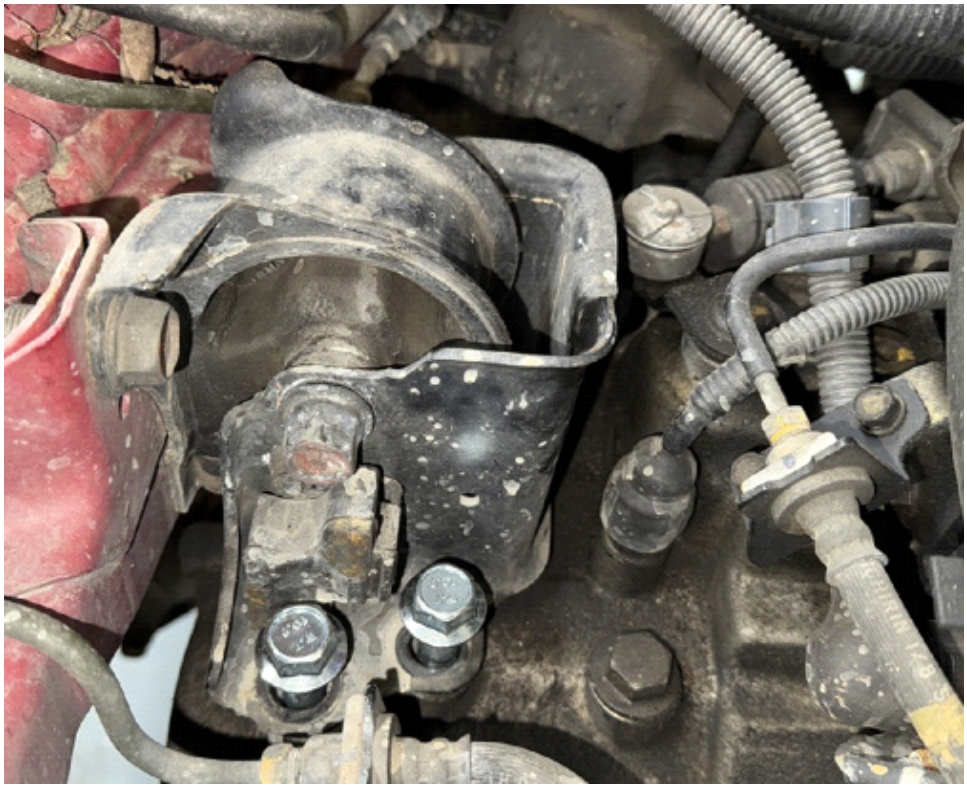
Step 6a. (Manual transmission) Remove transmission mounting bracket and remove studs from transmission case using same technique as removing engine studs. Do not remove transmission mount from frame rail.



Step 6b. (Automatic transmission) Remove transmission mounting bracket AND transmission mount from frame rail. Remove studs from transmission using same technique as removing engine studs.

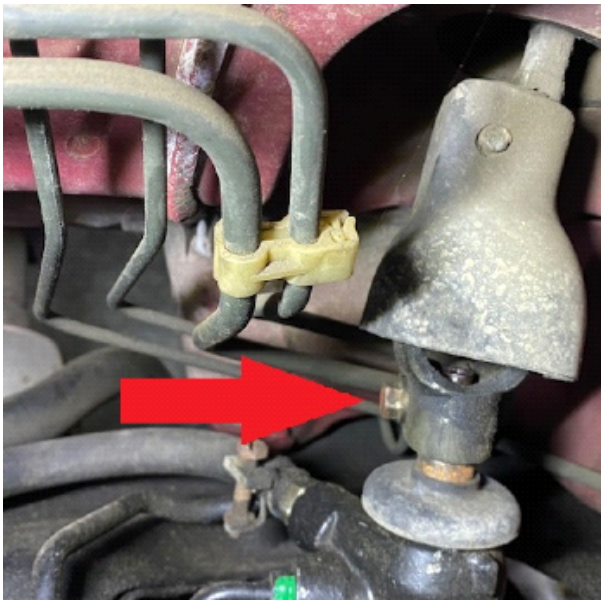


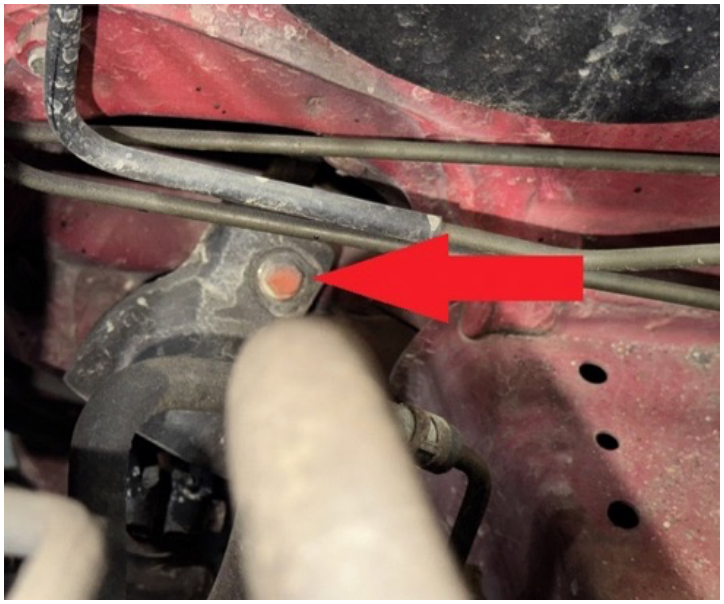
Step 7a. (Manual transmission) Temporarily install 3 M12x45 bolts.



Step 7b. (Automatic transmission) Reinstall transmission bracket and transmission mount. Temporarily install 2 M12x70 bolts.

Step 8. Rotate the steering wheel as needed to access bolts holding steering shaft universal joint. Remove 2 10mm bolts in steering shaft universal joint coupler. Save mounting bolts! (The steering coupler will disconnect in a later step)





Step 9. Turn the wheels straight and secure the steering wheel by passing the seat belt through it as shown.

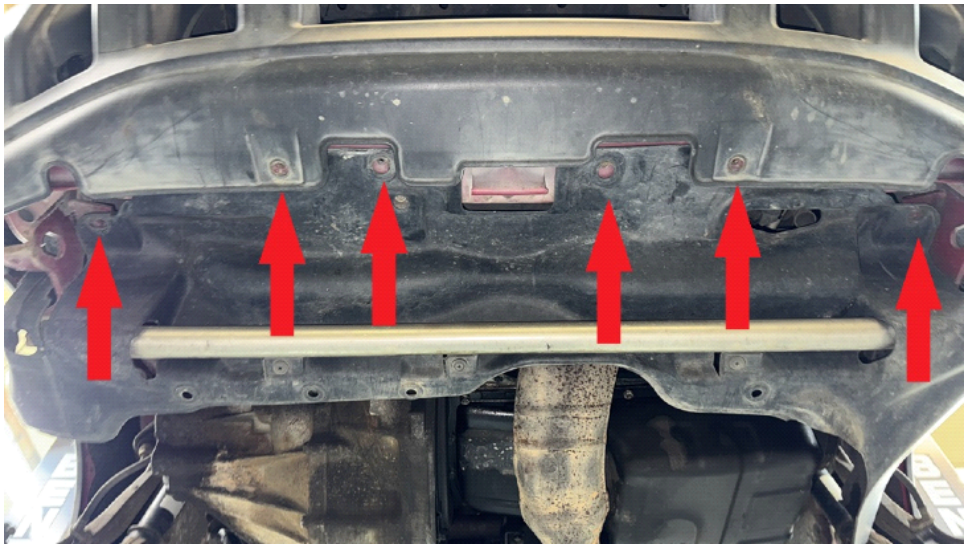
NOTE: Failure to secure the steering wheel can result in damage to air bag ribbon cable!

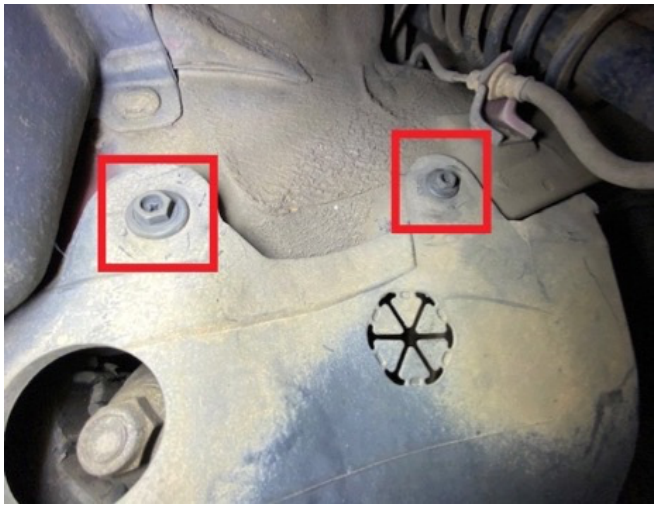
Step 10. Lower jack supporting engine until engine is supported by bolts temporarily installed in previous steps.

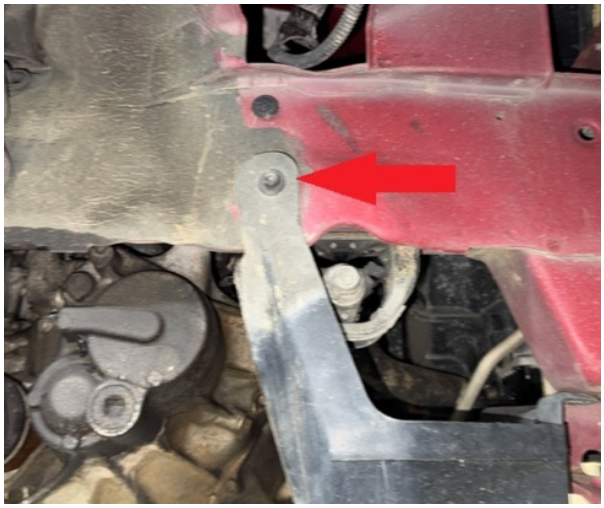
Step 11. Lift vehicle and support with jack stands.

Step 12. Remove wheels.

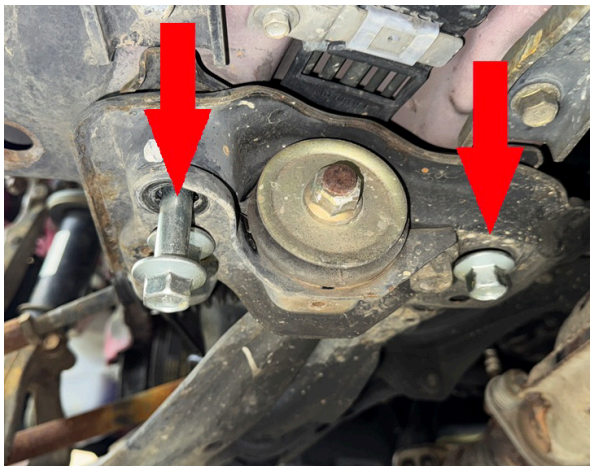
Step 13. Remove plastic splash shield and bar from under front bumper (if applicable)







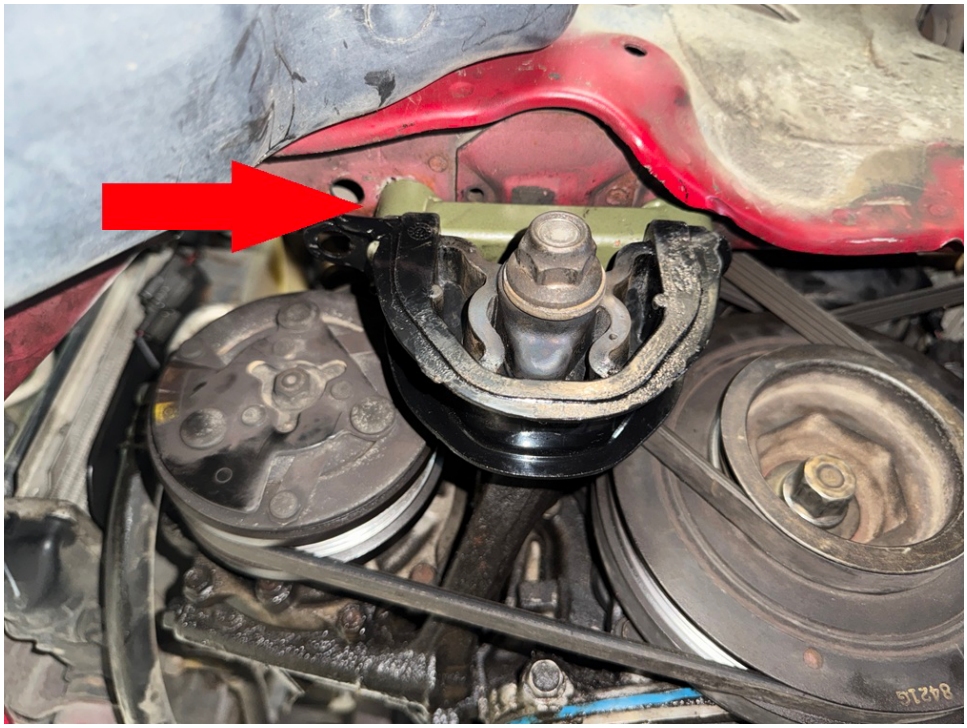
Step 14. Support subframe with floor jack or safety jack. Remove main subframe bolts **one at a time** and replace them with the M14x125 bolts included with the kit. Do not install subframe spacers at this time.



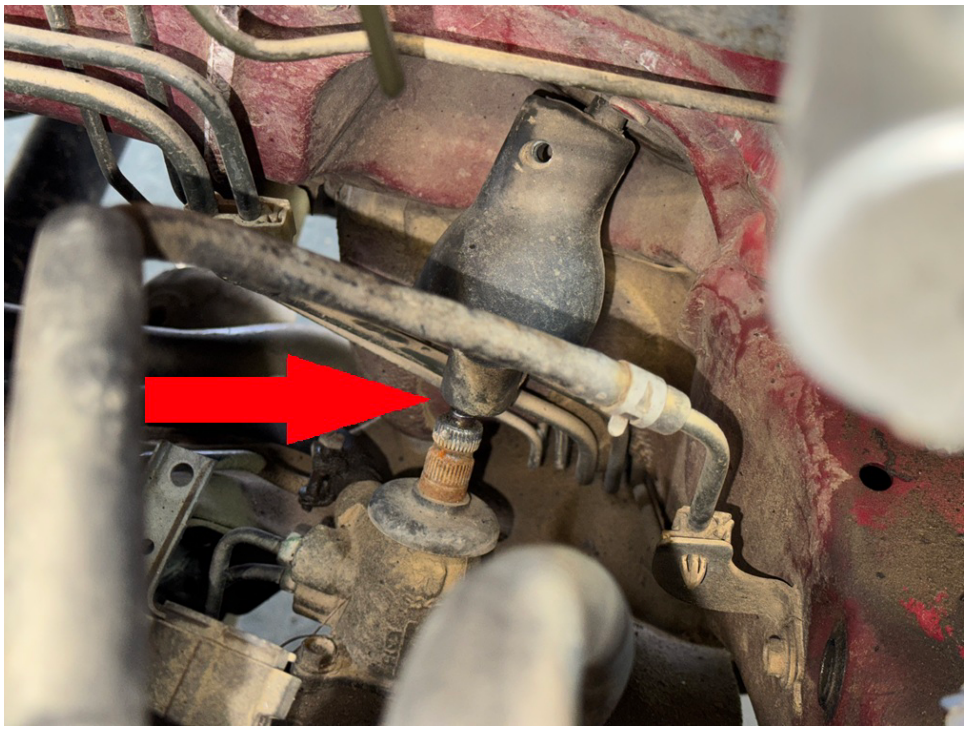
Step 15. Carefully lower subframe approximately 1- 1.5 inches.

Step 16. Remove 14mm bolts holding torque mounts.

Step 17. Place 2 1" "H" spacers between torque mounts and frame rail and install 4 M10x50 bolts in torque mounts. Torque bolts to 35 ft-lb.

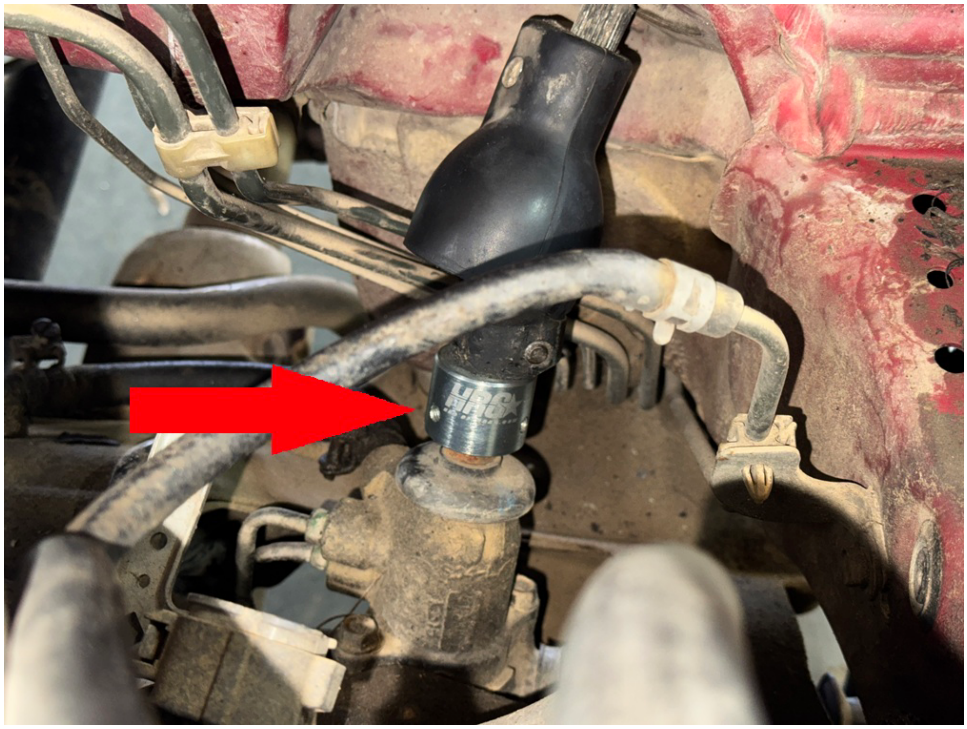


Step 18. Disconnect steering coupler from steering rack.



Step 19. Loosely install set screws into steering shaft extension using a 6mm hex key. Spread heavy grease on both male and female ends of extension.

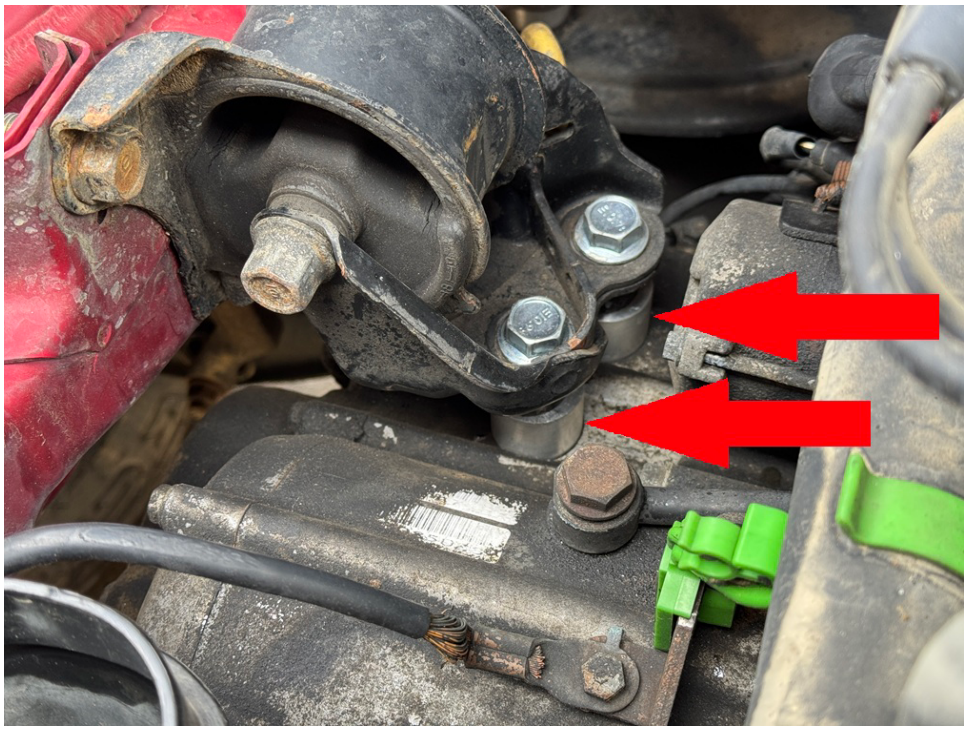
Step 20. Install steering shaft extension onto steering shaft. Push the OEM coupler up as far as it will go to allow room to slide over the extension. You may need to lower the subframe some more to get it on.



Step 21. Release seat belt holding steering wheel, and rotate wheel as needed to allow access to the lower steering coupler bolt and extension set screws. Tighten bolt and screws. DO NOT TIGHTEN upper bolt on the OEM steering coupler until all the subframe bolts are tightened in a later step.

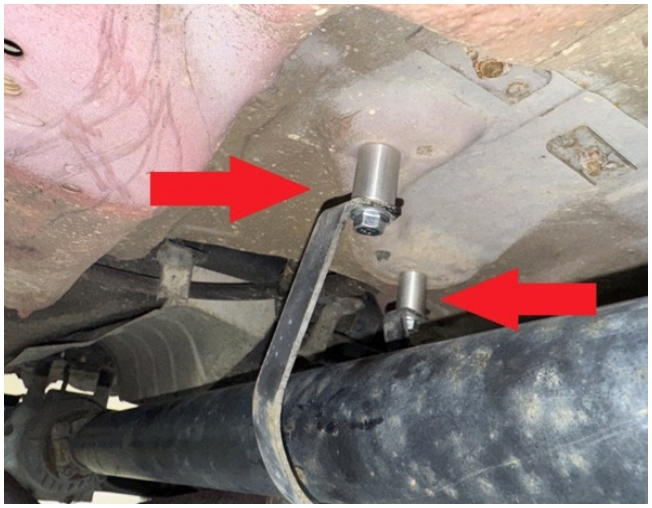
Step 22. Install 2 1.25x1 M12 spacers between engine bracket and mount. Reinstall engine mount using 2 M12x50mm bolts. Torque to 60 ft-lb.

Step 23a. For **automatic** RT4WD and 2WD transmissions: install 2 1.25x1" M12 spacers between transmission bracket and transmission, permanently install 2 M12X70 bolts. Torque to 60 ft-lb.

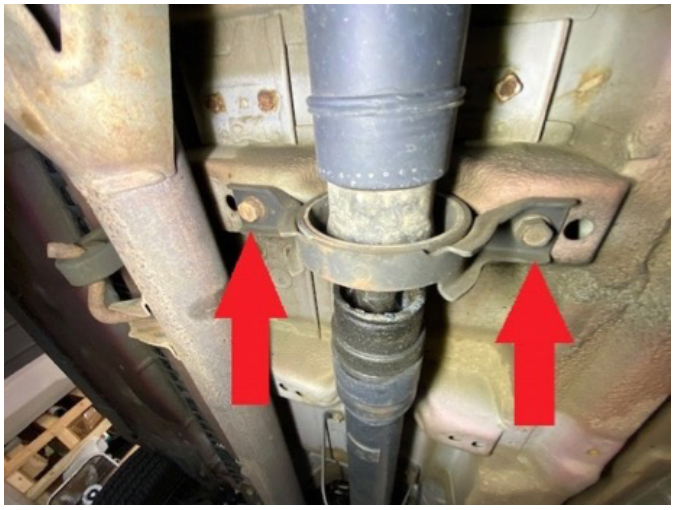


Step 23b. For **manual** RT4WD and 2WD transmissions: Install 3 1.25x1" M12 spacers between transmission bracket and transmission, permanently install 3 M12x45 bolts. Torque to 60 ft-lb.

Step 24. Remove 4 12mm bolts holding driveshaft safety loops to body. Install 4 0.75x1" spacers and M8x40 bolts as shown.

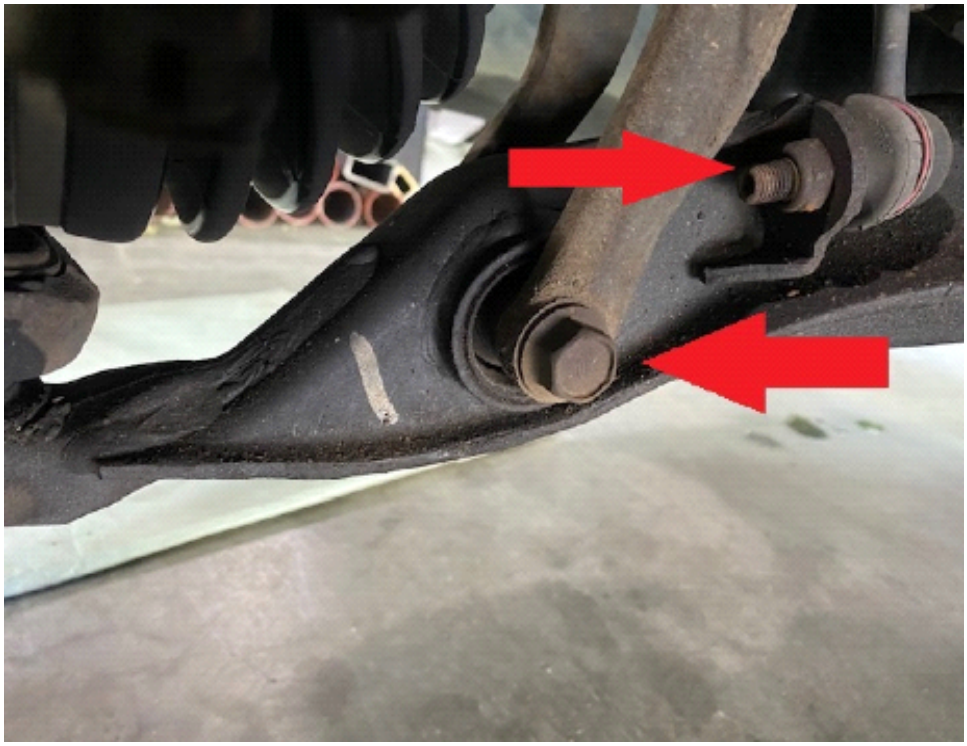
Step 25. Support propeller shaft, aka drive shaft, with floor jack. Carefully remove 2 bolts holding carrier bearing on propeller shaft, install 2 1x1" spacers and 2 M10x50mm bolts. Torque bolts to 30 ft-lb.



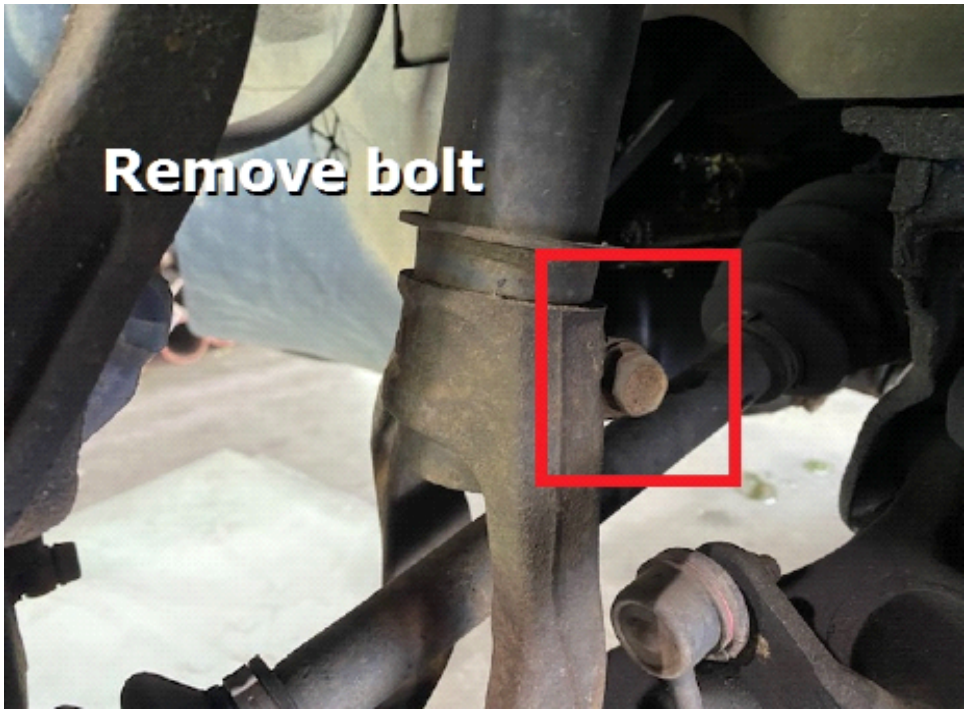

Step 26. Using a pry bar, bend loops to clear driveshaft (if necessary).

Step 27. Remove rubber exhaust pipe hanger next to carrier bearing and replace with extended hanger provided in the kit.

Step 28. Remove 17mm bolt connecting driver side strut fork to lower control arm, remove nut holding sway bar end link to lower control arm



Step 29. Remove 14mm bolt connecting strut fork to strut, remove strut fork. Save hardware.

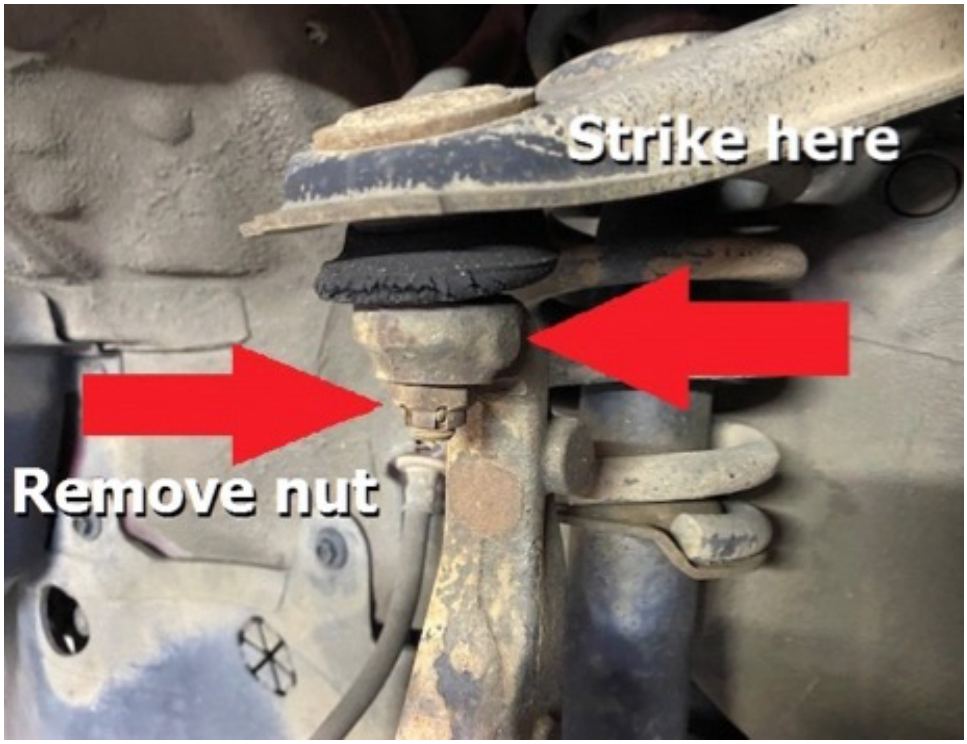


Step 30. Remove 10mm bolts holding ABS wire and wheel sensor to steering knuckle (if applicable). Move ABS wiring out of the way.

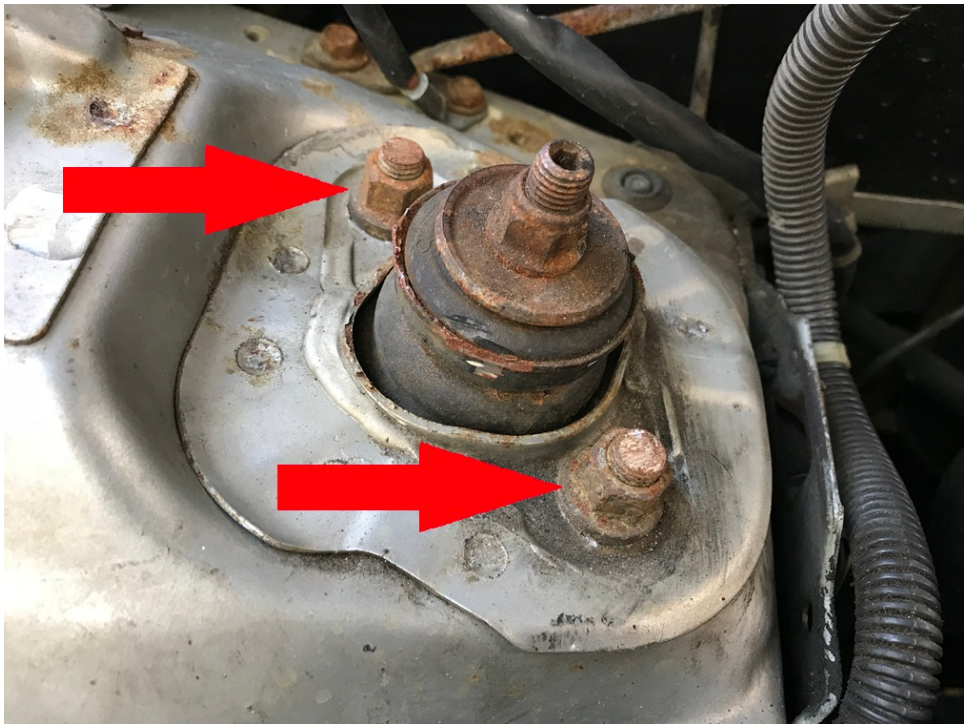
Step 31. Remove 2 10mm bolts holding brake line mounting bracket to steering knuckle.

Step 32. Remove cotter pin and castle nut on upper ball joint.

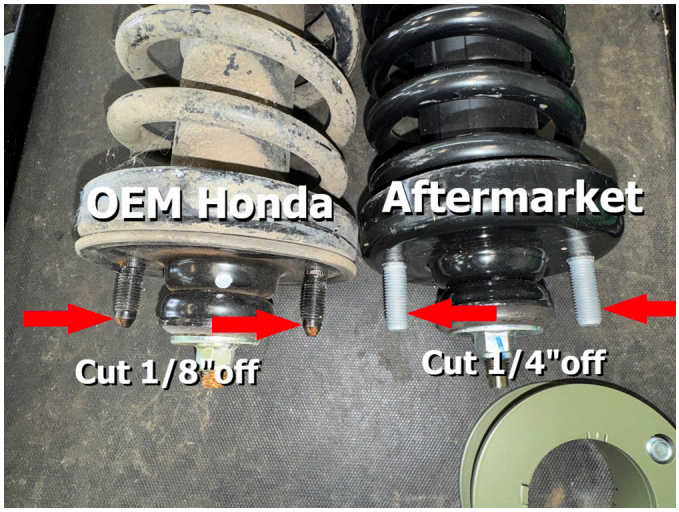
Step 33. Carefully strike knuckle with a large hammer to dislodge ball joint, allowing front suspension to drop down. Take care not to allow the axle to pop out of the inner socket.



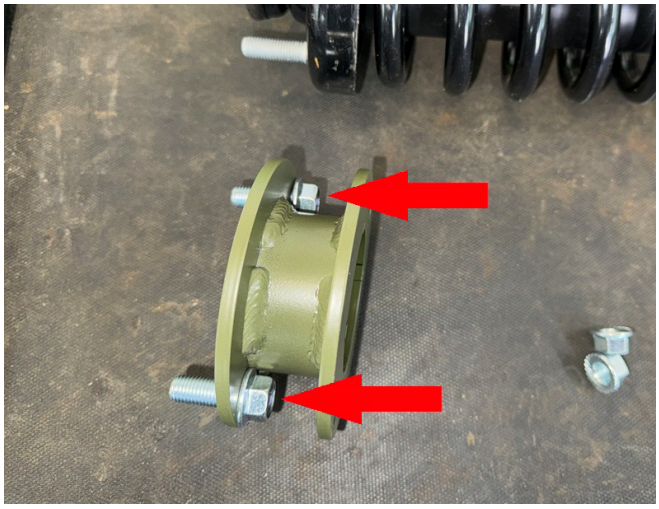
Step 34. Remove 14mm nuts at the top of the strut connecting strut to strut tower. Remove strut. Save hardware for reinstallation.

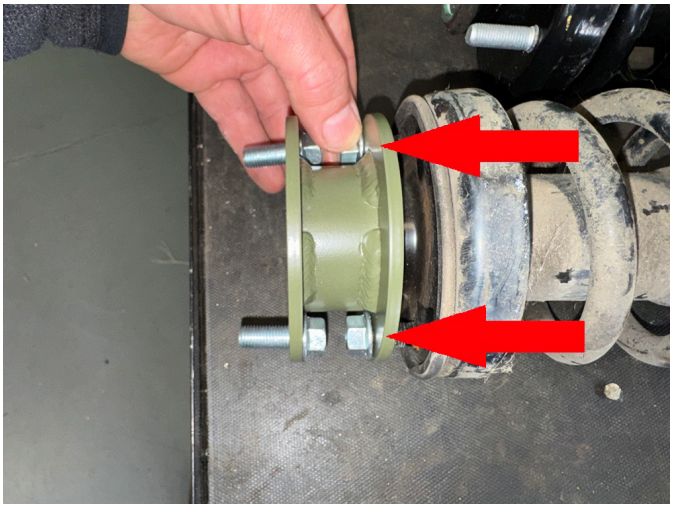


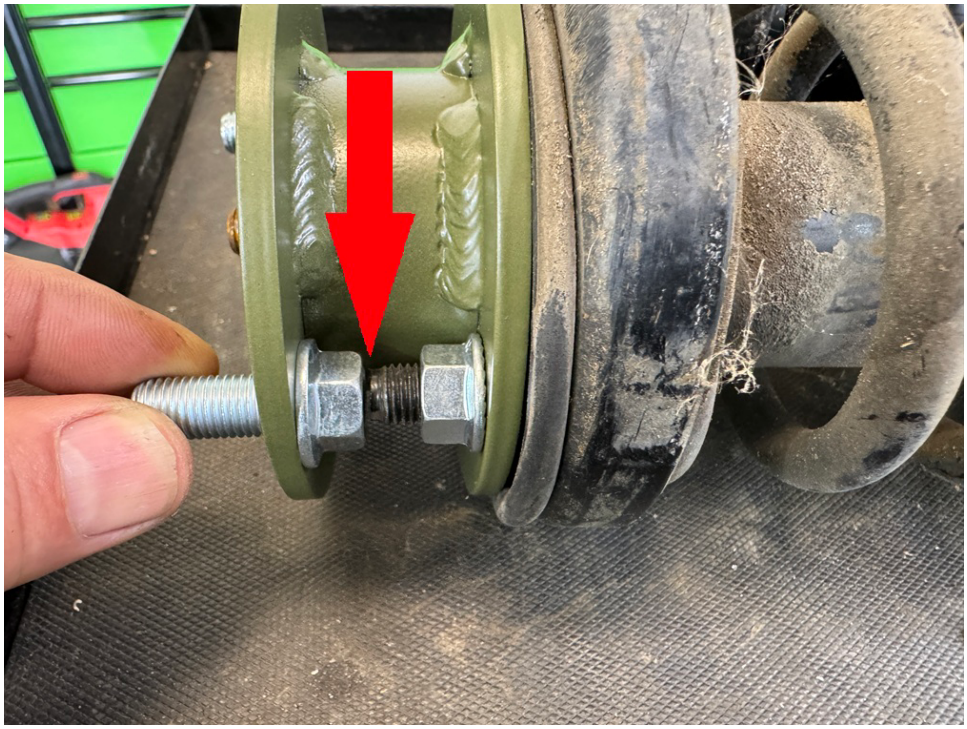
Step 35. Trim strut studs as shown in photo.



Step 36. Place M10x25 bolts through lift spacer as shown and then bolt spacer to the top of the strut using the OEM nuts. Be sure there is a gap between the top of the stud and the spacer mounting bolt.







Step 37. Reinstall strut and spacer combo with M10 nuts provided in the kit.

Step 38. Reinstall lower strut fork.

Step 39. Using a floor jack, compress suspension to align upper ball joint and knuckle.

Step 40. Install castle nut and cotter pin on upper ball joint.

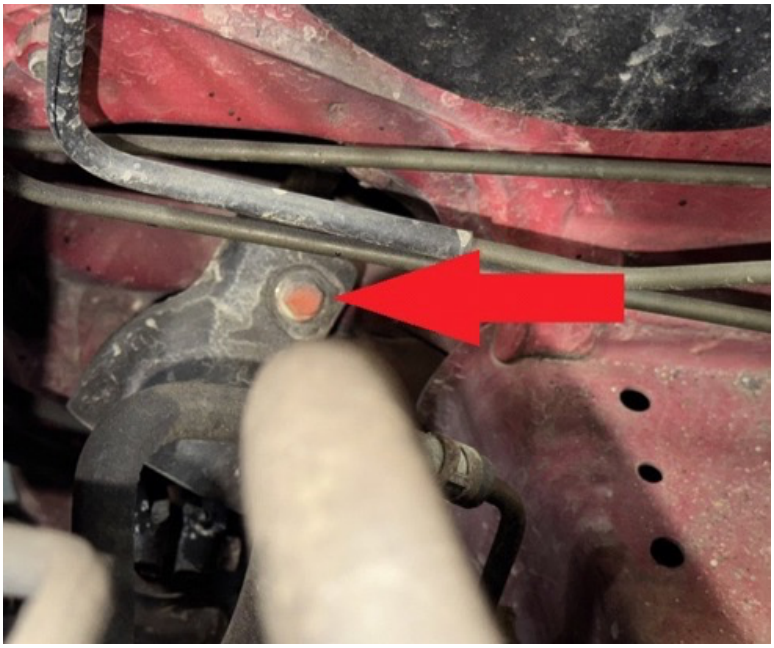
Step 41. Reinstall wheel sensor and ABS wiring (if applicable)

Step 42. Relocate brake line bracket to upper mounting hole on knuckle (see photo)

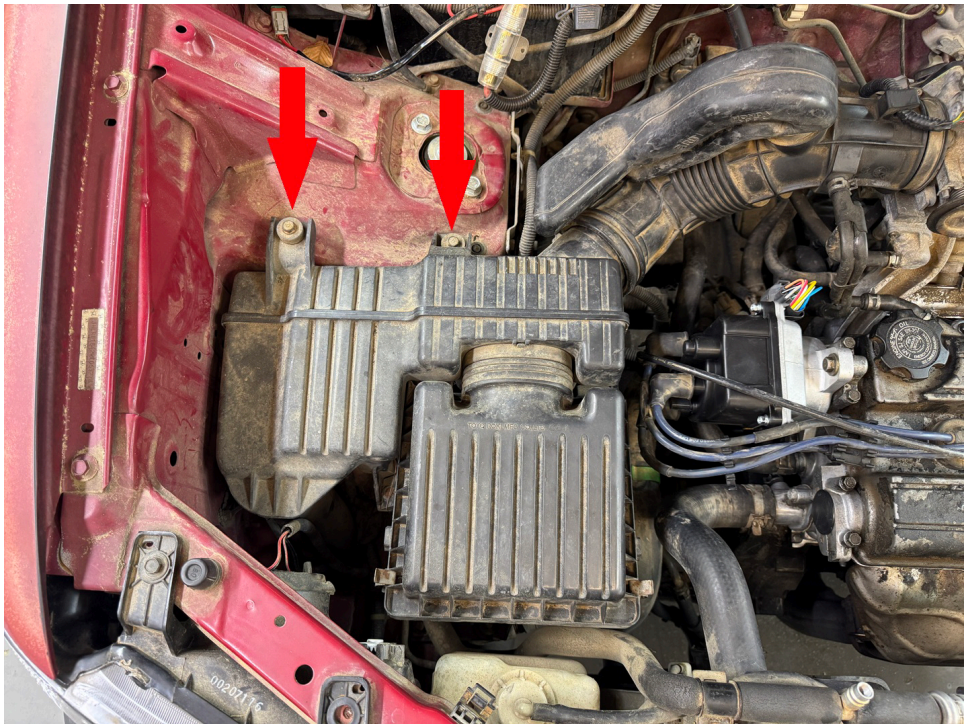
Step 43. Repeat installation process on passenger side.

Step 44. Tighten all subframe bolts to 110 ft-lb.

Step 45. Tighten upper pinch bolt on steering coupler.



Step 46. Reinstall air box.

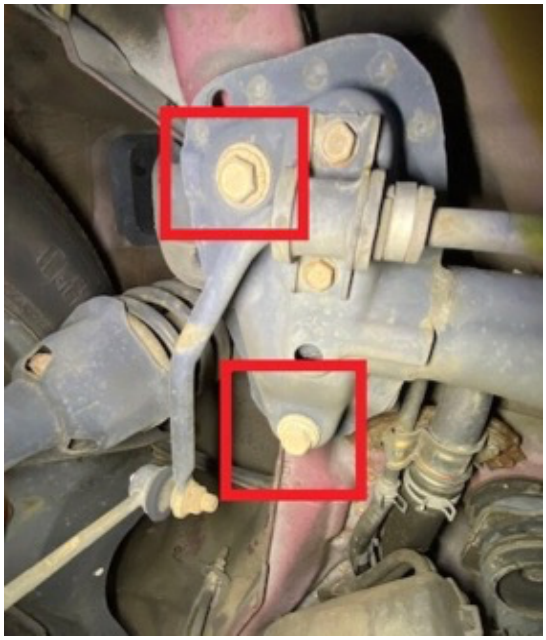


Step 47. Reinstall vacuum chamber.

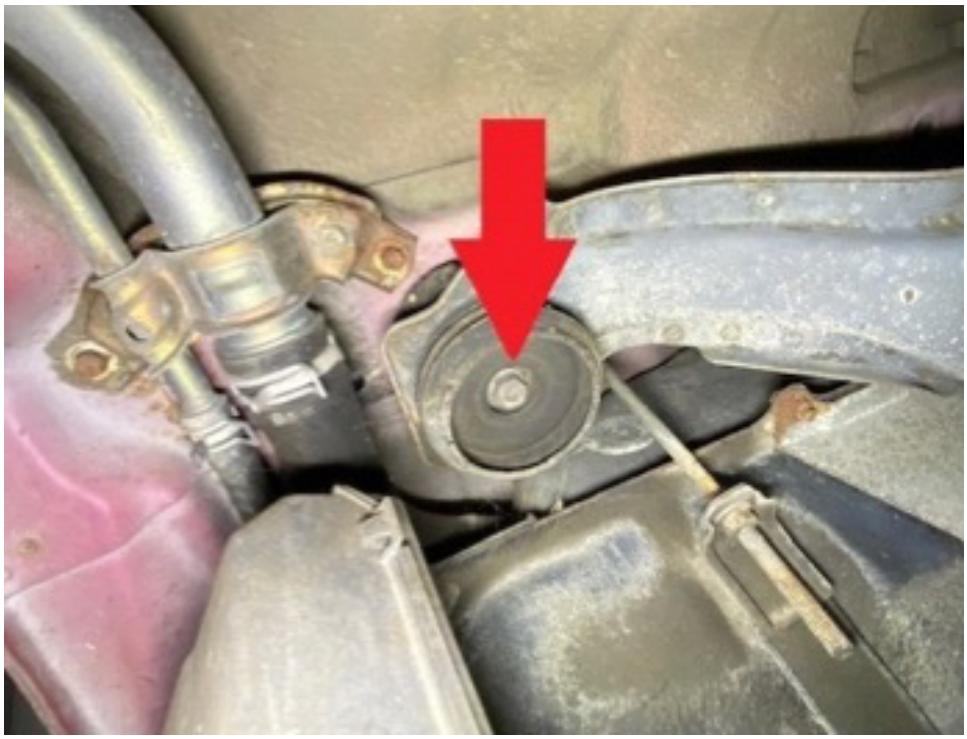
Rear installation:

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

Step 2. Remove 17mm bolts holding rear subframe to body one at a time and temporarily install M12x110 bolts in place of the OEM bolts.



Step 3. **(4WD ONLY)** Remove the 2 14mm bolts holding rear differential mounting bracket to body. Save bolts.



Step 4. Carefully lower rear subframe and differential approximately 1 inch.

Step 5. Remove M12x110 bolts one at a time and install 4 1.25x1" M12 spacers between subframe and body.

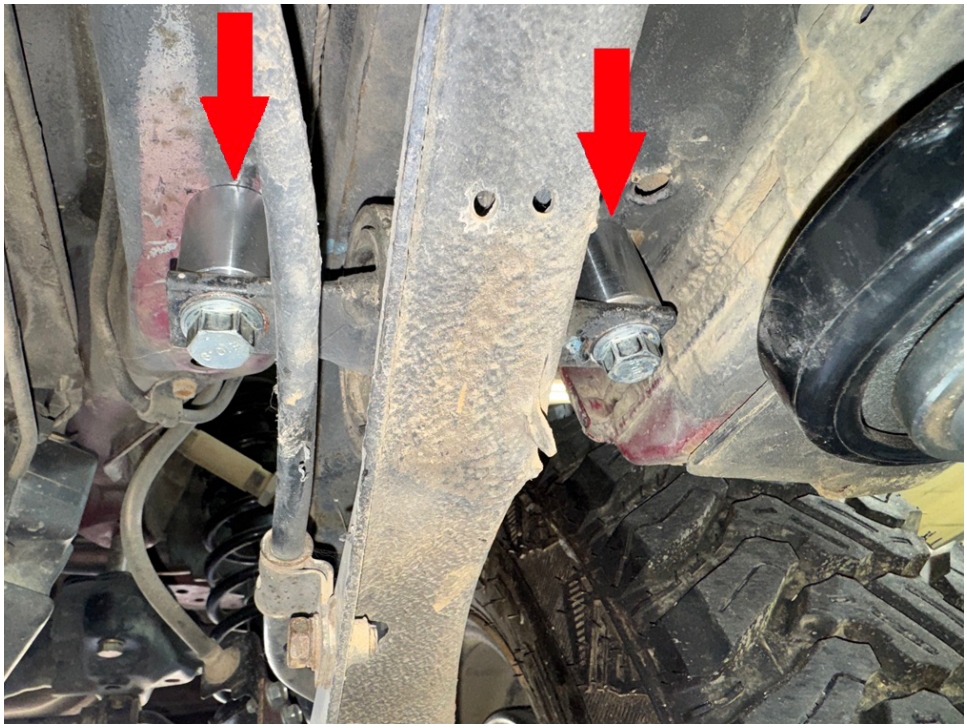
Step 6. **(4WD ONLY)** Install 2 2.75x1" M10 spacers between rear differential support bracket and frame. Reinstall OEM bolts.

Step 7. Remove the bolt holding parking brake cable and 2 bolts holding brake hardline to driver side trailing arm. (see photo)

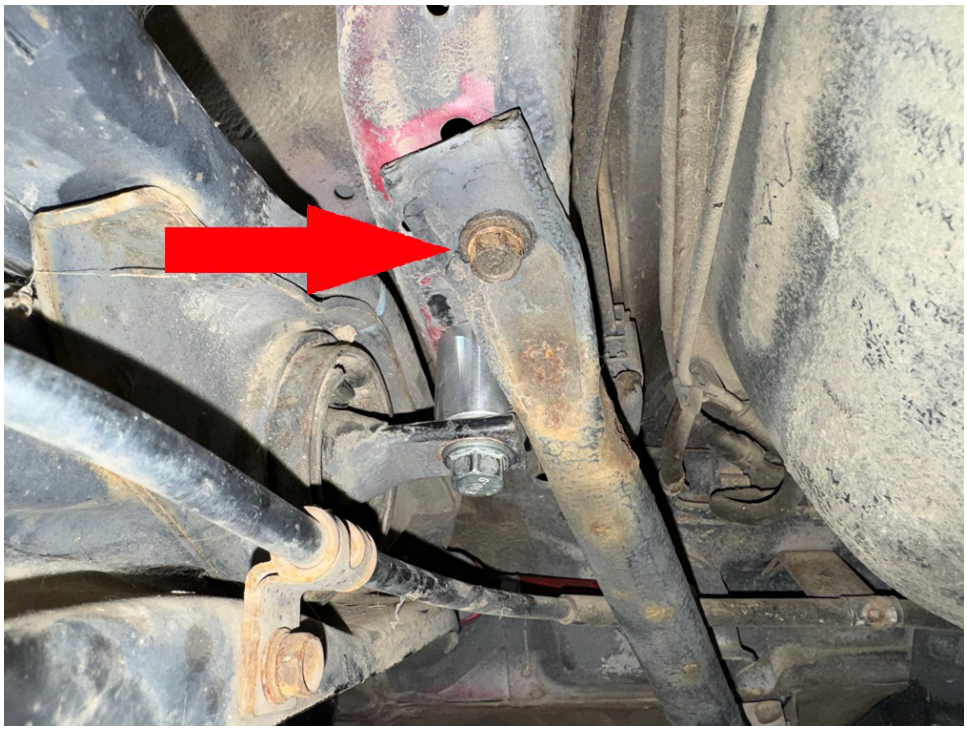
Step 8. Mount brake line relocation bracket as shown using OEM hardware to attach brake hardline to bracket. (see photo) Reinstall bolt holding parking brake cable to trailing arm.

Step 9. Remove 14mm bolt holding chassis bar to frame. **(98-01 only)**

Step 10. Install 2 1.25x1.5” M12 trailing arm spacers and M12x90mm bolts. (see photo)

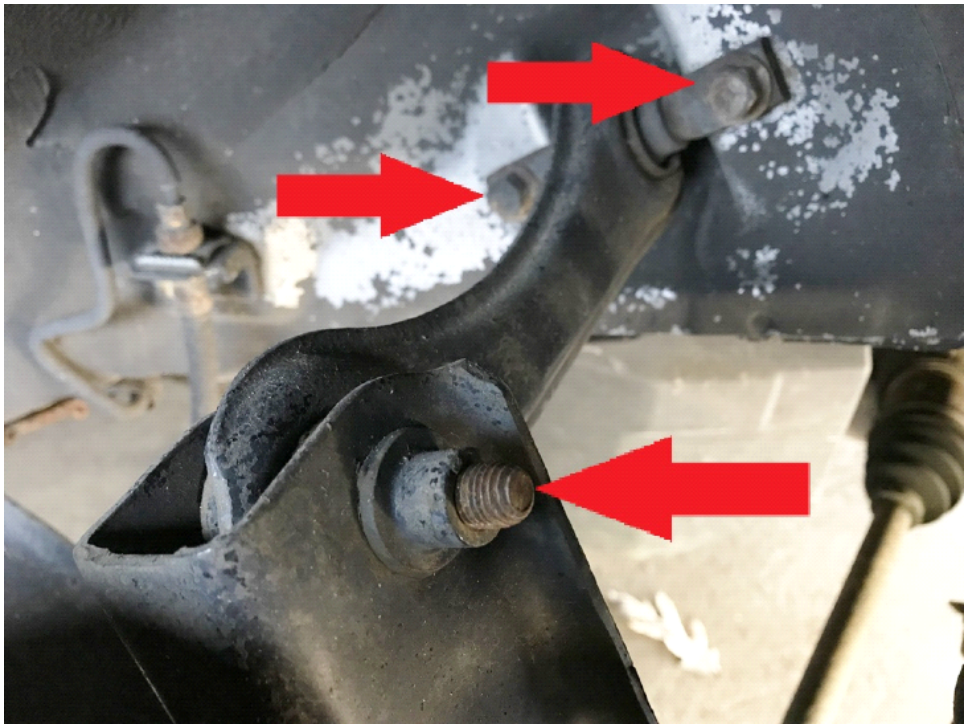


Step 11. Reinstall 14mm bolt in chassis bar.



Step 12. Repeat installation process on passenger side.

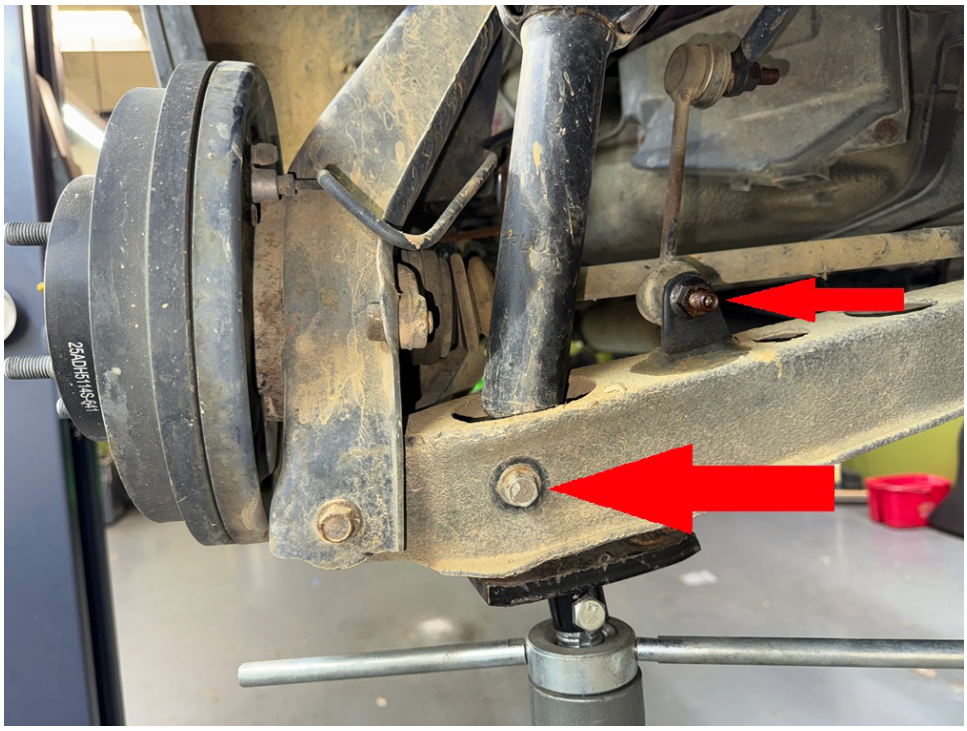
Step 13. Remove bolts holding OEM rear upper control arm in place.



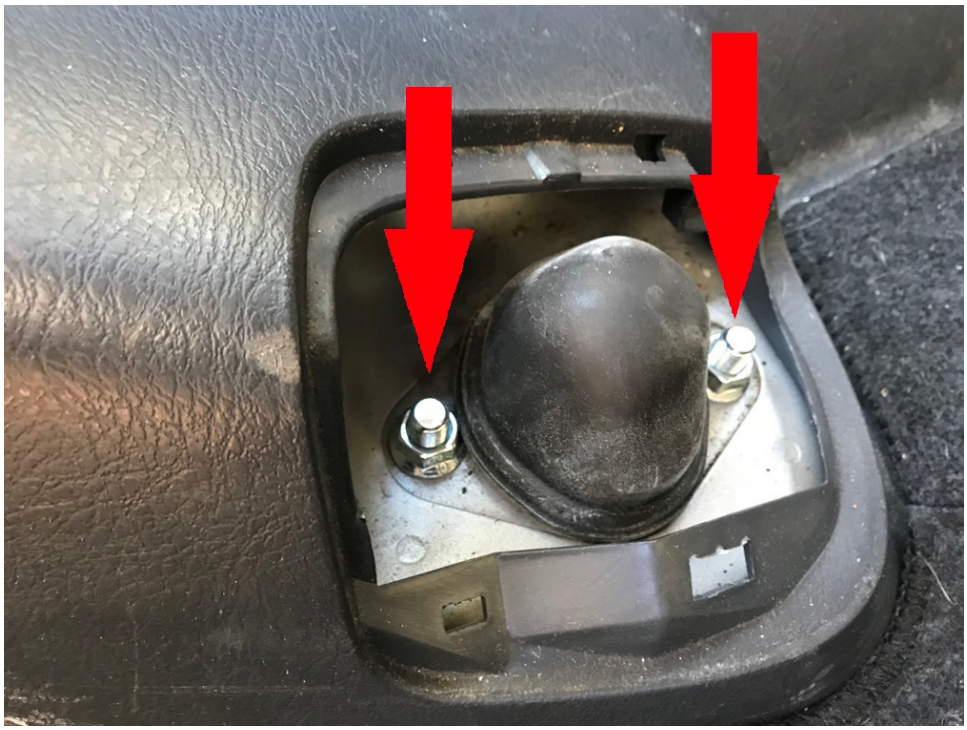
Step 14. Install new adjustable upper control arm in place of original control arm. Take care when installing the 2 14mm bolts holding the upper control arm to the body, as these are prone to cross-threading. Adjust new camber arm to be slightly longer than the OEM control arm. (Alignment technician will perform final adjustments)

Step 15. Remove bolt holding strut to lower control arm. **Note: these bolts are prone to seizing inside the lower control arm bushing. If the bolts seize, you will need to cut the bushings and replace them, or replace both struts *and* the rear lower control arms.**

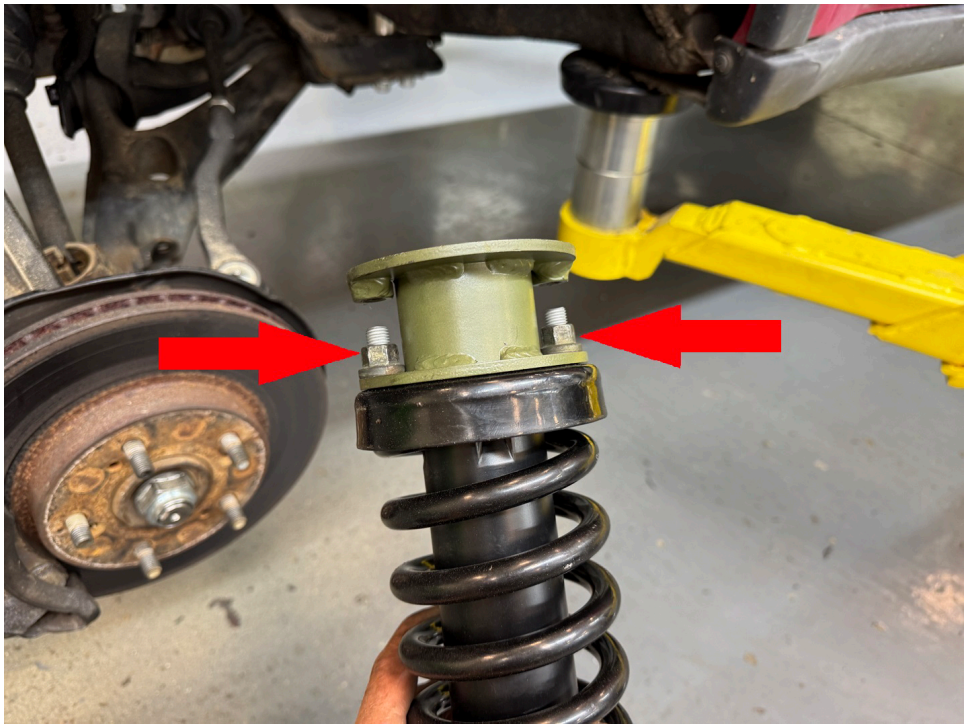
Step 16. Remove nut holding rear sway bar link to lower control arm (if applicable) allowing arm to drop down.



Step 17. Remove nuts holding strut to shock tower. Remove strut.

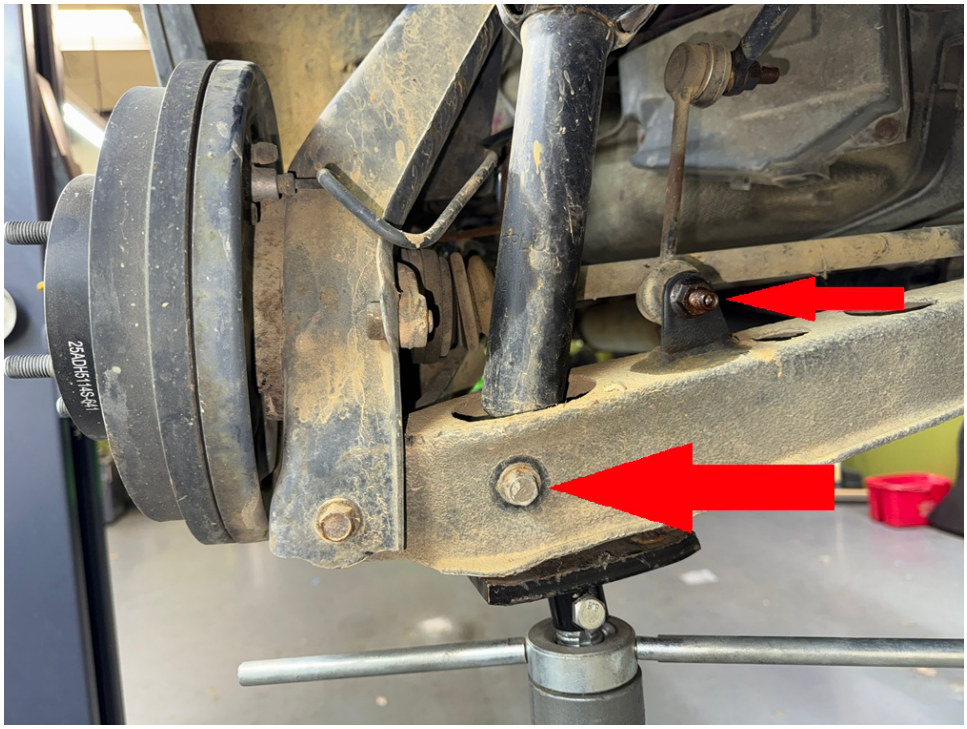


Step 18. Attach 2.5" lift spacer to strut using the OEM Honda nuts.

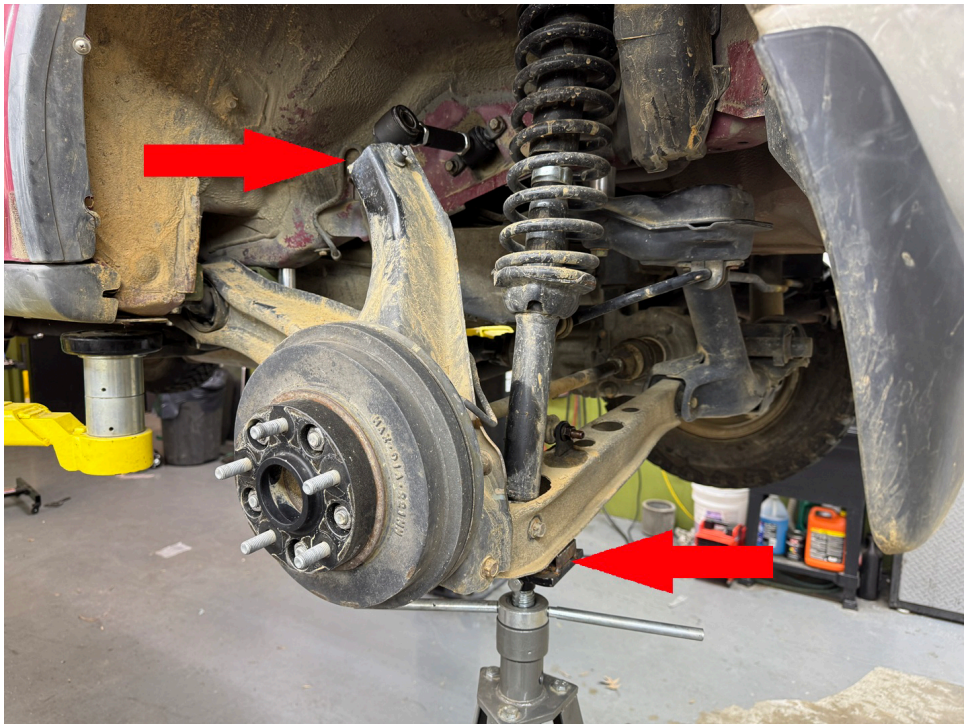


Step 19. Reinstall strut/spacer assembly to shock tower using supplied M10x25mm bolts. Replace plastic cover.

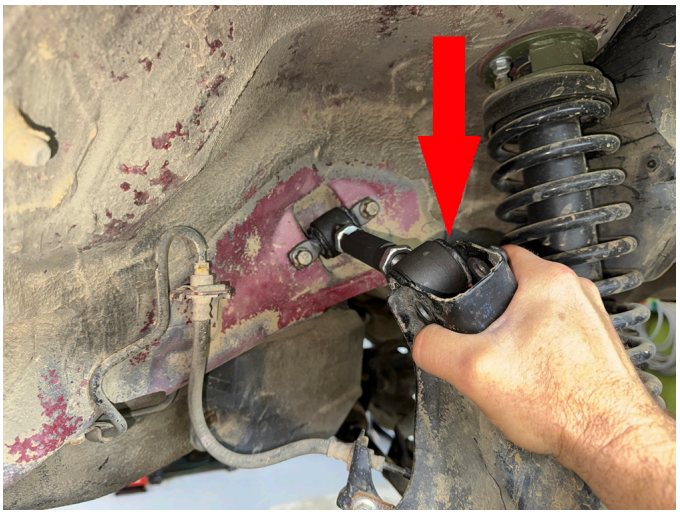
Step 20. Install bolt holding strut to lower control arm.



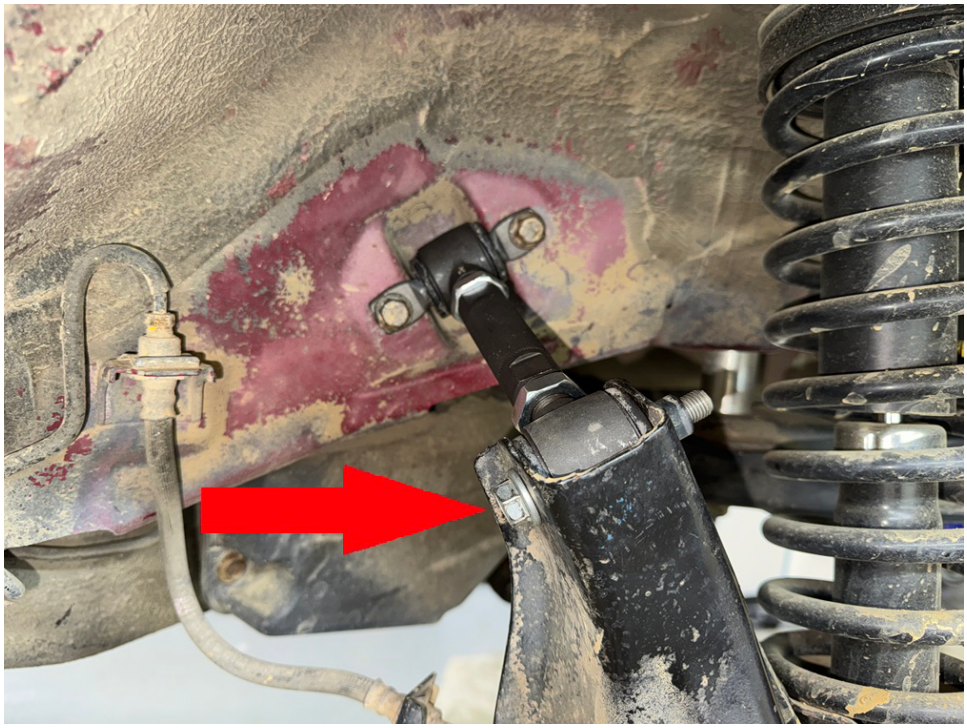
Step 21. Using a floor jack, compress suspension to align rear upper control arm to trailing arm.



Step 22. Using a rubber mallet, position rear upper control arm so that the bolt holes line up.



Step 23. Install rear upper control arm bolt.



Step 24. With suspension compressed, tighten all lower control arm bolts.

Step 25. Repeat installation process on passenger side.

Step 26. Check clearance between rear strut and trailing arm. Depending on the brand and shape of the rear struts, it may be necessary to trim the trailing arm to gain clearance where the two parts meet.

Step 27. Reinstall wheels and lower vehicle to the ground. Roll back and forth to settle suspension.

Step 28. Using a torque wrench, double check all bolts and mark bolts with paint pen that have been double checked.

Step 29. Get a professional alignment.

Step 30. Find some trails!!

Installing a lift kit will change the suspension geometry and will require a 4 wheel alignment.

Failure to perform a wheel alignment will result in unsafe handling characteristics, acclerated tire wear, and a significant reduction in fuel mileage.

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!!