



# 2019-Present (5<sup>th</sup> GEN) Lowering kit Instructions

Applies 2019-Present Crew/cabs (will not fit classic models)

## REAR SUSPENSION

If your IHC Suspension product has a damaged or missing part, please contact customer service directly and a new replacement part will be sent to you immediately. For warranty issues, please return to the place of installation and contact IHC Suspension.

(956) 424-6901

Monday-Friday 8AM-6PM CST

Or

EMAIL: [Sales@ihcsuspension.com](mailto:Sales@ihcsuspension.com)

WEBSITE: [www.ihcsuspension.com](http://www.ihcsuspension.com)

## LIMITED LIFETIME WARRANTY

This unique product warranty proves our commitment to the quality and reliability of every product that IHC Suspension manufactures. The IHC Suspension product warranty only extends to the original purchaser of any IHC Suspension product, if it breaks, we will give you a new part. Warranty does not apply to discontinued parts.

Our Limited Lifetime Warranty excludes the following IHC Suspension items, bushings, bump stops, ball joints, and shock absorbers. These parts are subject to wear and are not considered defective when worn. They are warranted for 12 months from the date of purchase for defects in workmanship.

**This product warranty is voided if the vehicle is not aligned after kit installation and proper maintenance is routinely done.**

Product purchased directly from IHC Suspension has a 30-day return policy on uninstalled products from the date of purchase (may be subject to restocking fee). Uninstalled product returns must be in the original IHC Suspension packaging. Please call 956-424-6901 to get an RMA# for any return. Customer is responsible for shipping costs back to IHC Suspension. **Returns without RMA# will be refused.** Contact IHC Suspension directly about any potentially defective parts prior to removal from vehicle.

IHC Suspension products are **NOT** intended for off-road abuse. Any damage or failure as a result of abuse voids the warranty of the IHC Suspension product. IHC Suspension is **NOT** responsible for any subsequent damages to any related vehicle parts due to misuse, abuse, improper installation, or lack of maintenance. Furthermore, IHC Suspension reserves

the right to change, modify or cancel this warranty without prior notice.



READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.

INSTALLATION BY A **CERTIFIED PROFESSIONAL TECHNICIAN** IS HIGHLY RECOMMENDED.

IHC Suspension IS **NOT** RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

### **Safety Warning**

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control during abrupt maneuvers.

Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers.

Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. IHC Suspension does not recommend the combined use of suspension drop spindles, drop struts, drop springs or other lowering devices.

You should never operate your vehicle under the influence of alcohol or drugs.

Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every drag race/race use.

It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lowering of their vehicle before the purchase and installation of any IHC Suspension products.

It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle.

All lowered vehicles may have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

### **Installation Warning**

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two-post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to ensure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

IHC Suspension recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components. Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components. Due to payload options and initial ride height variances, the amount of drop is a base figure. Final ride height dimensions may vary in accordance with original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

## **PRE-INSTALLATION MEASUREMENTS**

It is imperative that you record the following measurements and factory components in the tables below. IHC Suspension tests and records as much data from each application as available at the time of product development. Vehicle manufacturers may change components or add models with different options. Recording and not exceeding the fender-to-hub-center IHC Suspension calls out will ensure the drop on the vehicle is correct.

These measurements will affect the performance of this lowering kit. Failure to ensure proper stock conditions may result in over lowering, causing premature failure on ball joints, if 4wd, axles, CV boots and drivetrain. Over lowering a vehicle will also result in an incorrect wheel alignment. This will wear tires incorrectly. Incorrect alignment will cause poor vehicle handling issues including but not limited to under steer. Over lowering the vehicle will also cause incorrect suspension geometry resulting in poor ride quality accompanied by pops and clunks which are symptoms of prematurely wearing components.

Failure to adjust head lamps may cause dangerous driving conditions for you and other drivers on the road. Record the head lamp position before the installation of this lowering kit and adjust to original factory position after the completion to ensure a safe and enjoyable experience. Refer to Owner's Manual.

## **VEHICLE HEIGHT MEASUREMENTS**

	DRIVER BEFORE	DRIVER AFTER	PASS BEFORE	PASS AFTER
FRONT				
REAR				

**\*\*MEASUREMENT IS TO BE PERFORMED FROM CENTER OF HUB TO FENDER EDGE STRAIGHT UP FROM HUB \*\***

- Make sure vehicle is on leveled pavement.
- All 4 tires are same size (if running stagger fitment measurement will vary)
- All 4 tires have corrected air pressure.



# WARNING

## **INSTALLATION WARNING**

IHC Suspension recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two-post vehicle lift with safety jacks.

Otherwise, 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. Lock the steering wheel in the straightforward position with the column lock or steering wheel locking device.

Raise the front of the vehicle and support with safety jack stands at each frame rail behind the lower control arms.

## **Before starting installation**

IHC Suspension highly recommends that the installation of this product be performed by a professional technician with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact IHC Suspension Customer Service to find one of our IHC Suspension Authorized dealers.

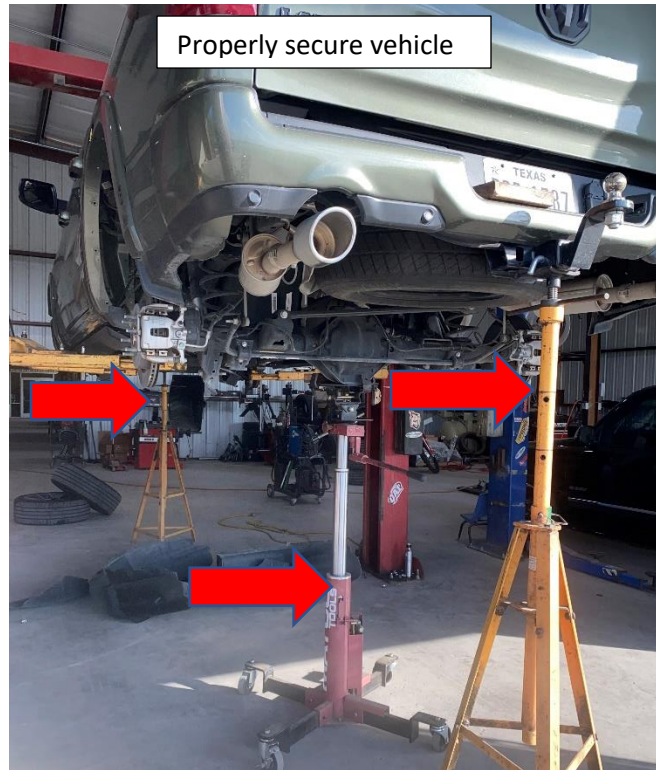
### **INSTALLATION BY A PROFESSIONAL IS HIGHLY RECOMMENDED**

- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- All lifted vehicles may require additional driveline modifications and / or balancing.
- A vehicle alignment is REQUIRED after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- A vehicle lift or hoist greatly reduces installation time.
- Installation time estimates are based on an available vehicle hoist.

Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation of lowering kit

# Disassembly

1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the front tires.
2. Support rear end with jack. Make sure front and rear are also supported to prevent swaying. Refer to pic



3. Remove passenger and driver inner fender liners. Refer to pic

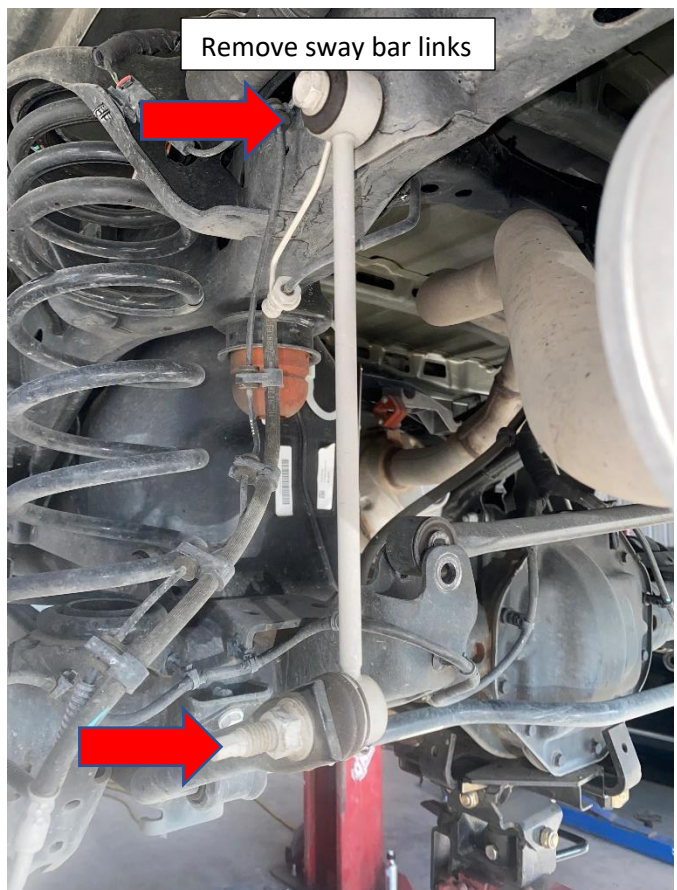
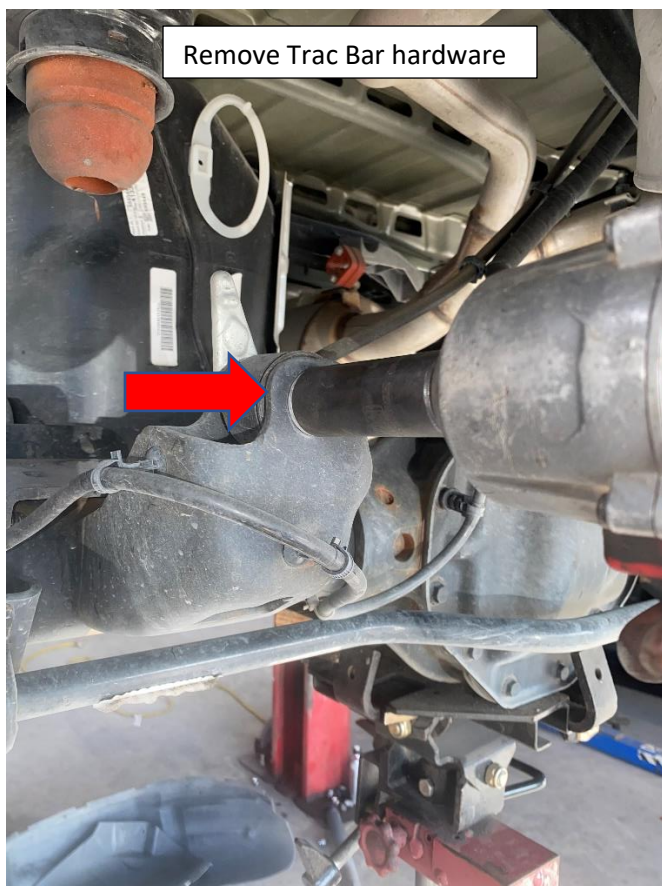




4. Remove oem shocks. Refer to pic

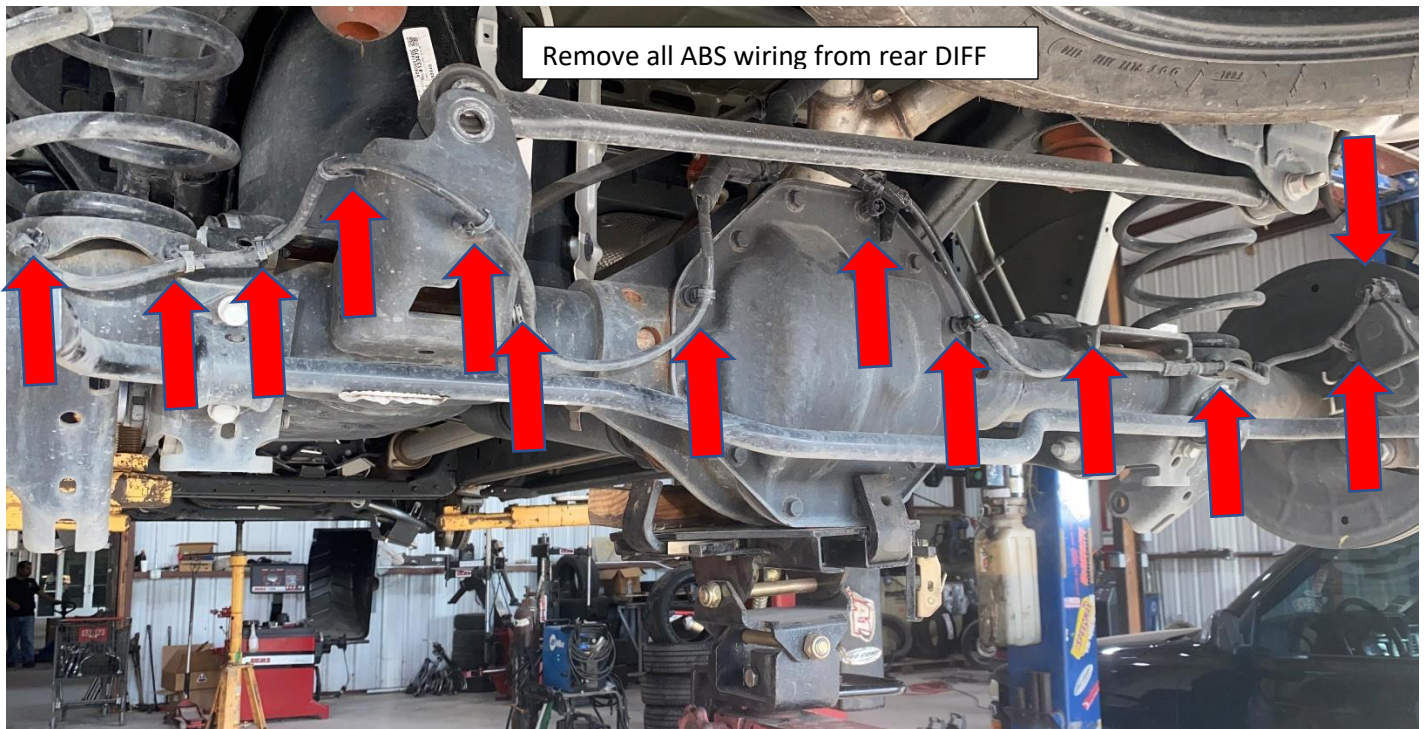


5. Remove trac bar from Diff side and remove OEM sway bar links. Refer to pics

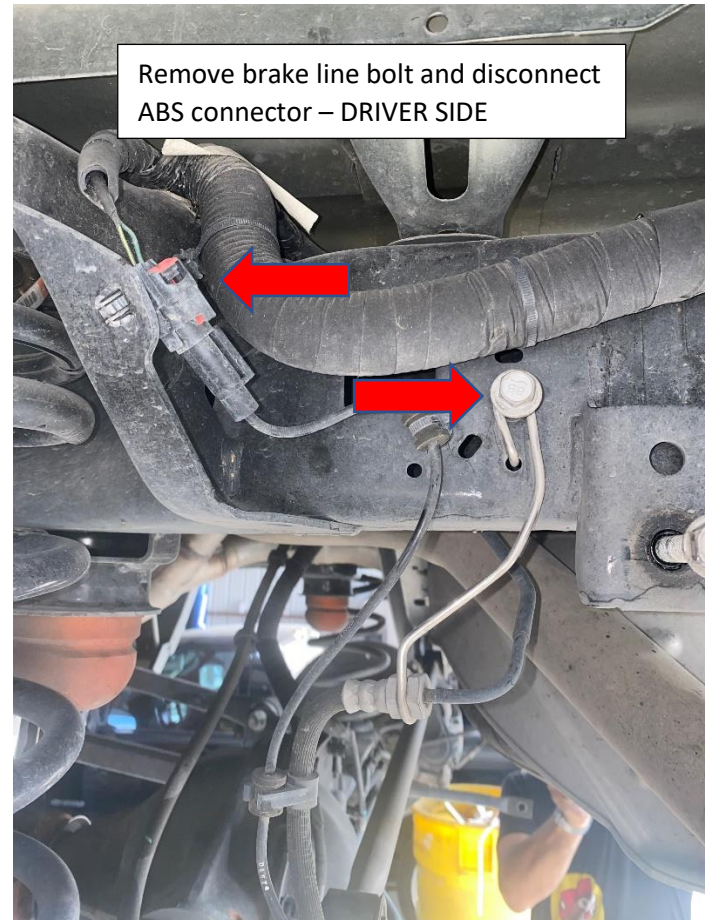
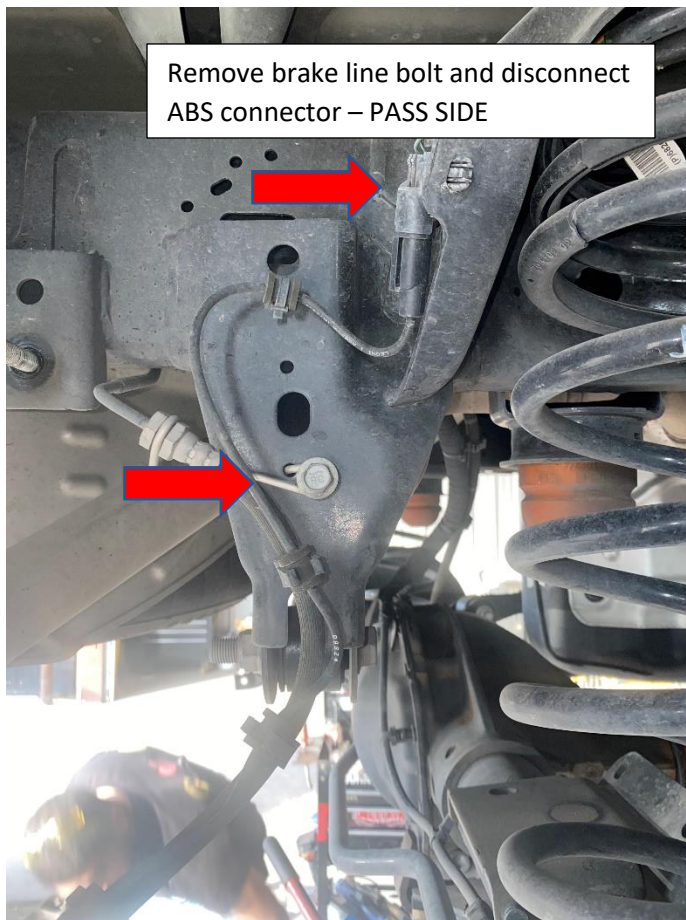




6. Remove all ABS wiring clips from DIFF. Refer to pic

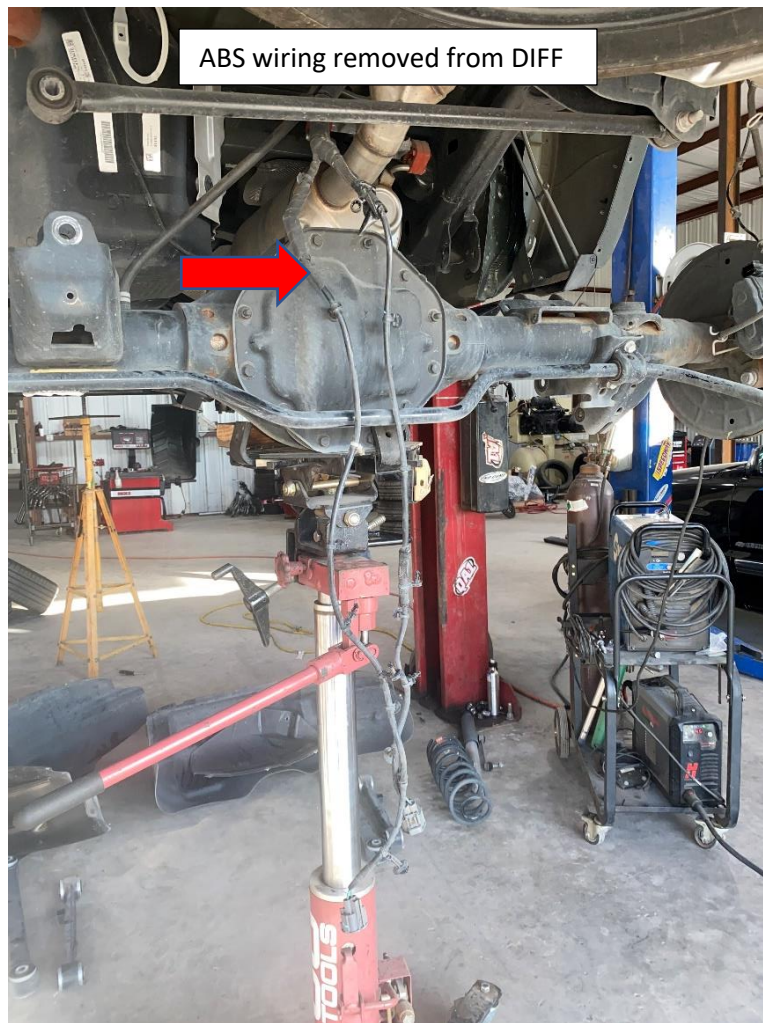


7. Remove Driver and Pass side BRAKE lines from frame. Also disconnect ABS connectors. Refer to pic

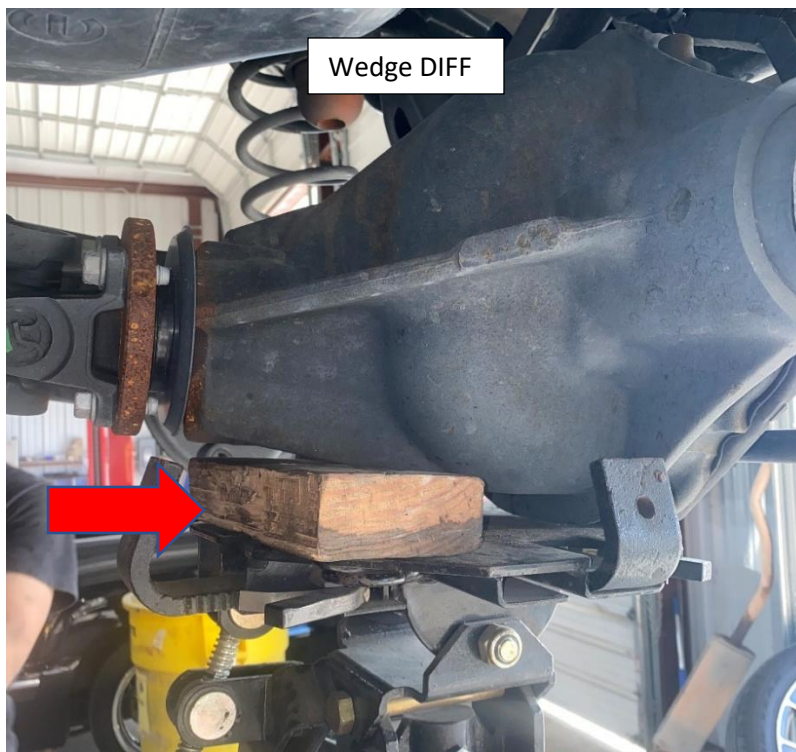




8. All ABS wiring should be moved out of the way. Refer to pic

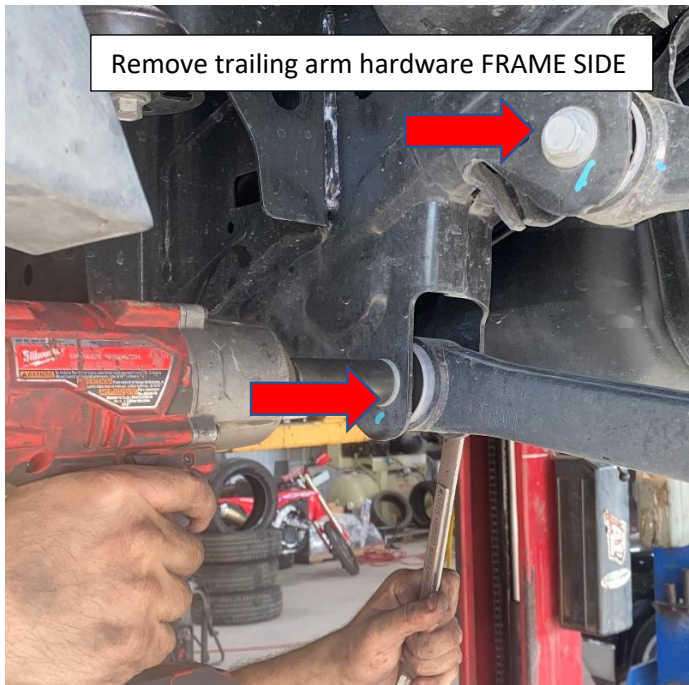


9. Wedge suitable tool under pinion to prevent diff from pivoting downward. Refer to pic

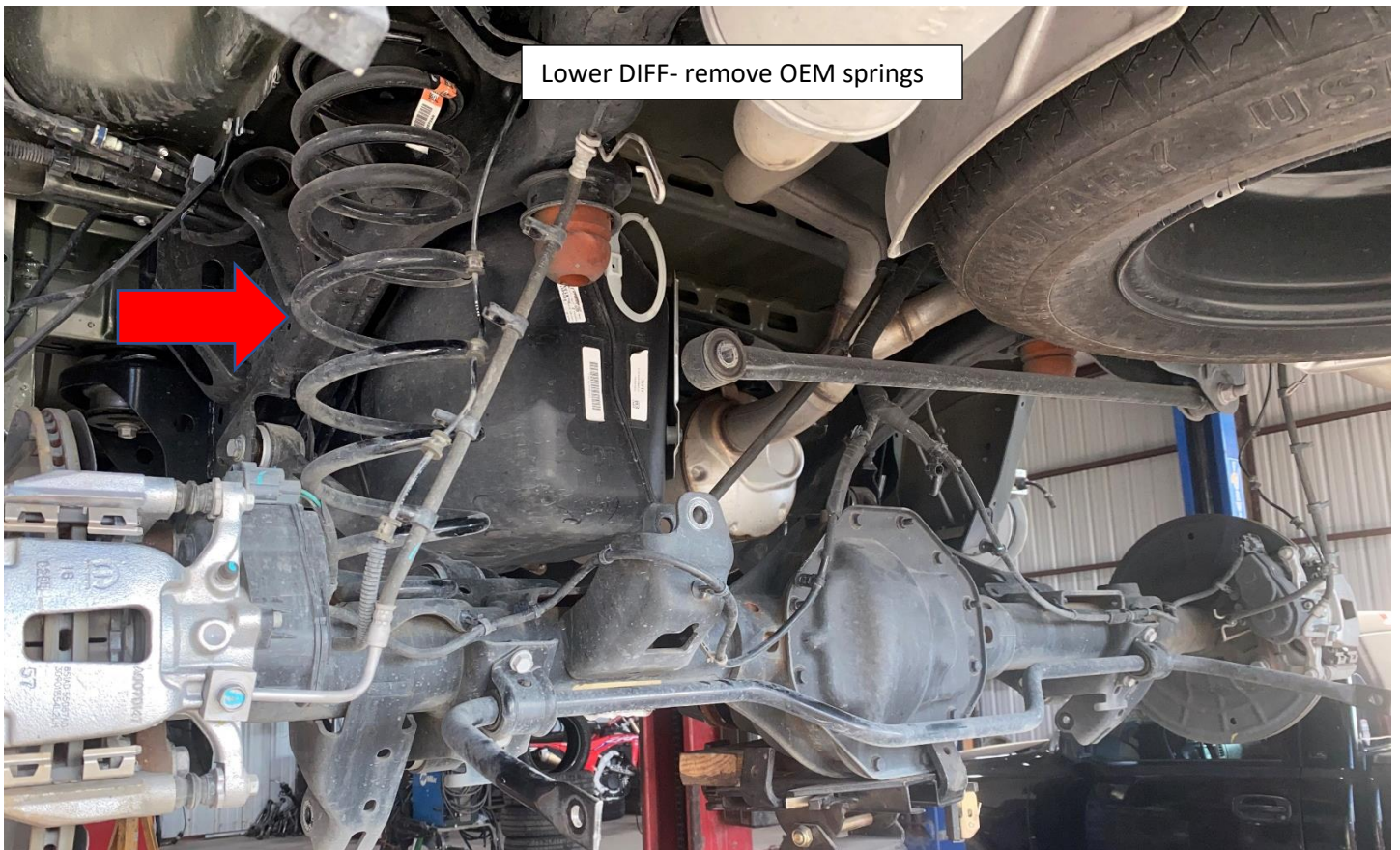




10. Remove upper and lower trailing arms from frame side and diff side. Refer to pic



11. Lower diff downward several inches to remove OEM springs. Refer to pic





# CUT KIT INSTALLATION – MUST READ

**CUT KIT installation must be performed while the rear suspension is unloaded.**

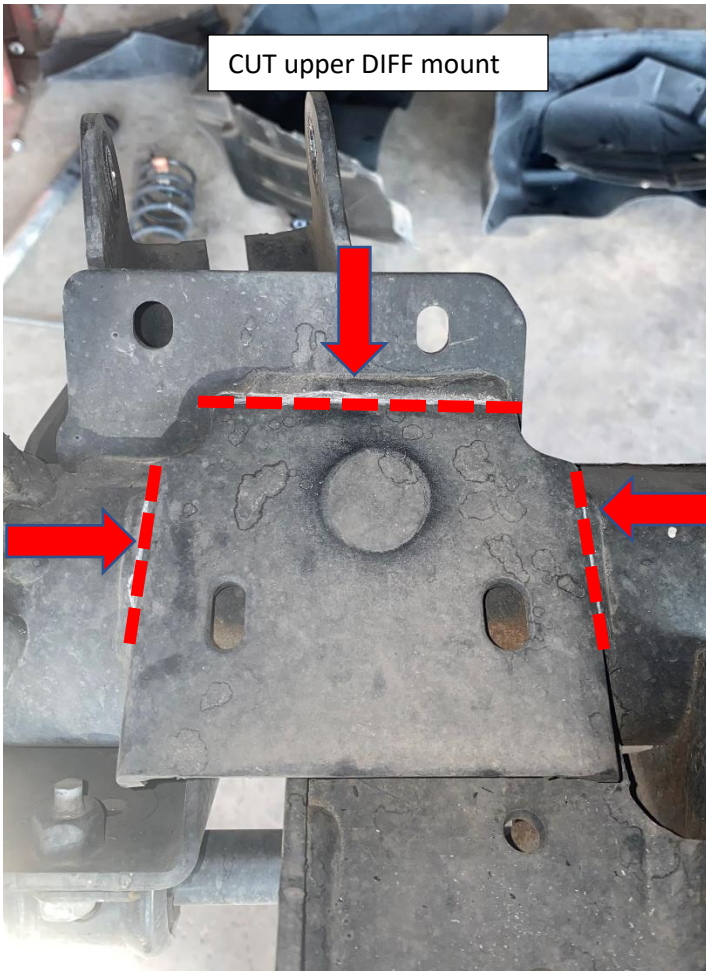
**Safety Reminder:** Proper use of safety equipment and eye/face/hand protection is absolutely necessary when performing the following procedures!

Check the differential to be sure that all lines, electrical wiring, control cables and other components are cleared from this area to avoid damaging them in the following steps. Be sure to wear proper safety protection when using power tools! DO NOT create sparks near flammable or explosive materials.

Be careful when cutting the differential mounts. DO NOT remove any material from the differential that is not shown/described here. Be careful not to damage any lines or other components. Avoid creating any sharp corners or other defects that may cause unnecessary stress-concentrated areas in the differential. Avoid overheating differential.

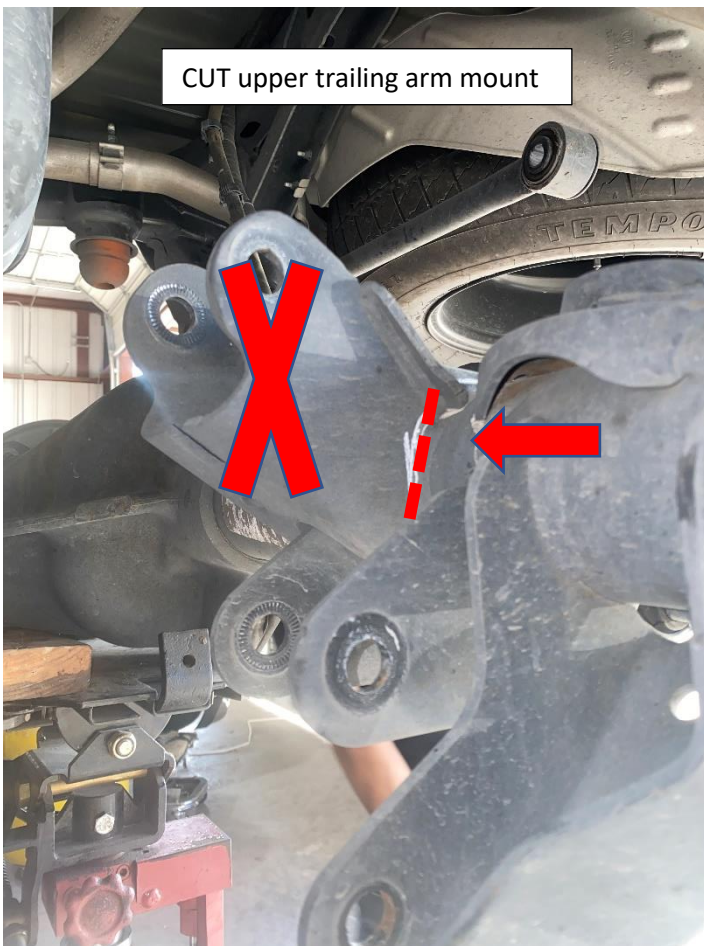
**Safety Recommendation:** Due to the proximity of fuel tank to this area, we DO NOT recommend using a flame-cutting torch or plasma cutter when performing these operations.

12. Mark differential where you will need to cut. Lower the Differential as much as possible and cut where sparks aim away from fuel tank. Continue to cut top differential bracket off. Refer to pic





13. Cut upper trailing arm mount OFF differential. Refer to picture



14. After cutting grind surfaces down to give clean look and spray paint to prevent surface rusting. Refer to pic





15. Cut off rear bump stops. Refer to pic



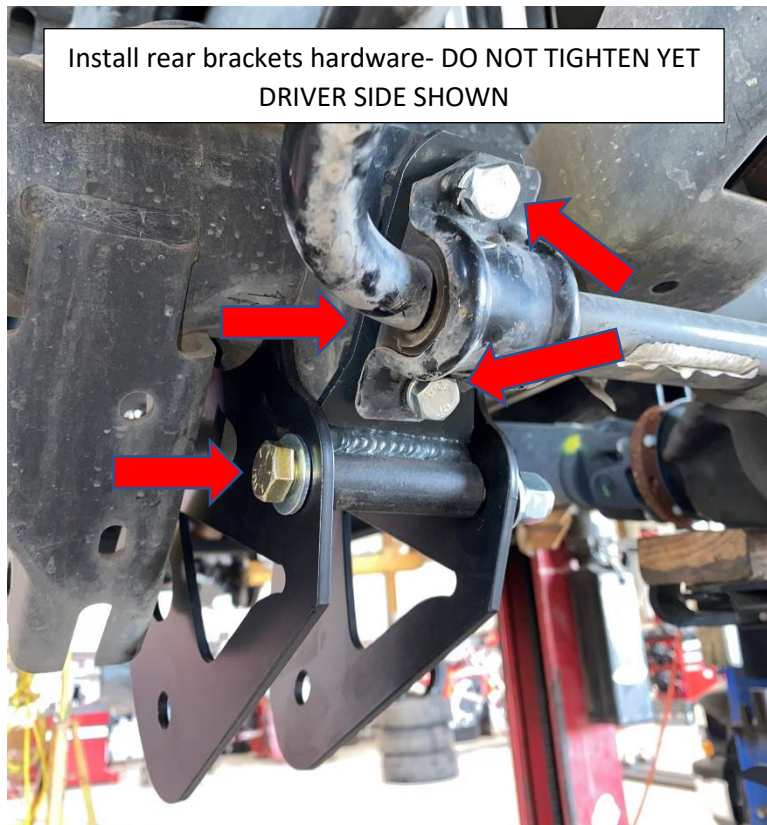
16. 4 link relocation brackets are directional. Install 4 link relocation brackets. DO NOT TIGHTEN!!!

17. BOTH DRIVER AND PASSENGER SIDE MUST BE DONE AT SAME TIME!!





18. Remove rear sway bar hardware and install IHC bracket with new hardware. DO NOT TIGHTEN YET! Refer to pic



19. Install UPPER trailing arm to 4 link bracket FIRST! Then shift axle forward and attach to frame side.

20. **DO NOT TIGHTEN ANYTHING YET!!** Refer to pic

21. NOTE: upper trailing arm is at angle. Failure to follow these steps will lead to difficulty of installation.

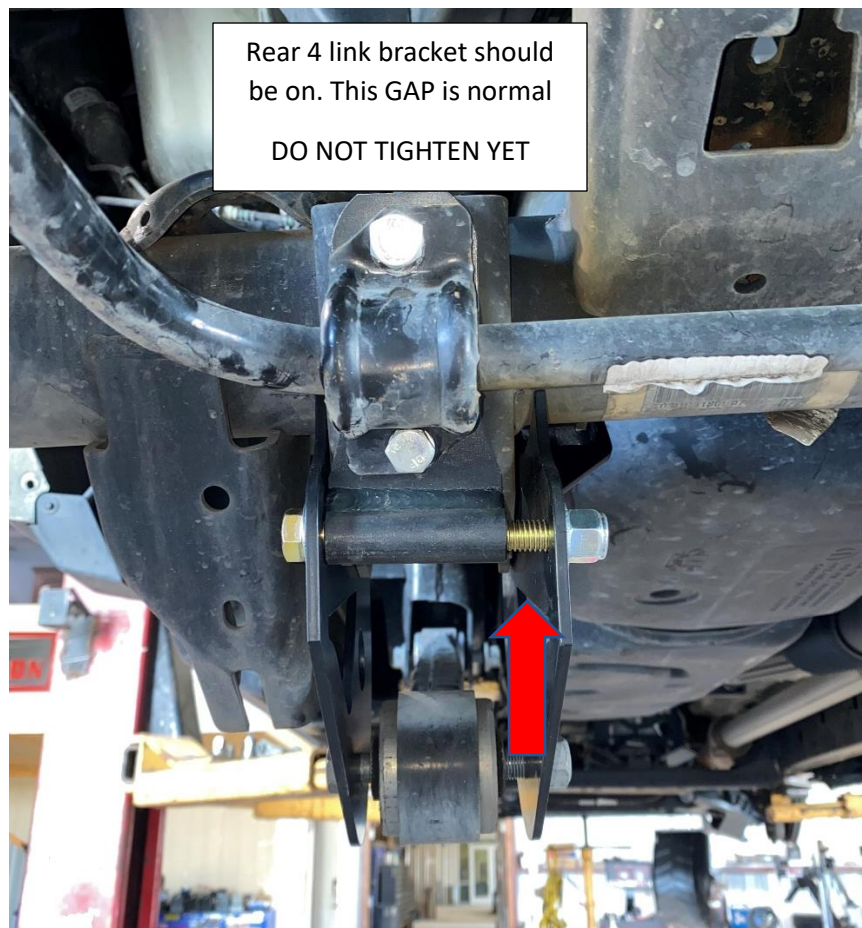


22. Install LOWER trailing arm to diff side and frame side. Refer to pic



23. Rear 4 link relocation bracket should look like this. You will tighten hardware with suspension loaded.

24. DO NOT TIGHTEN YET! Refer to pic





25. IHC rear Lowering springs are 4" out of the box. Customer will need to trim to size. To achieve 5" rear drop customer will trim 1 full turn from **top side**.

26. NOTE: IHC SUSPENSION RECOMMEND TRIMMING 1 DRIVER/ 2 PASSENGER TO COMPENSATE FOR FUEL TANK

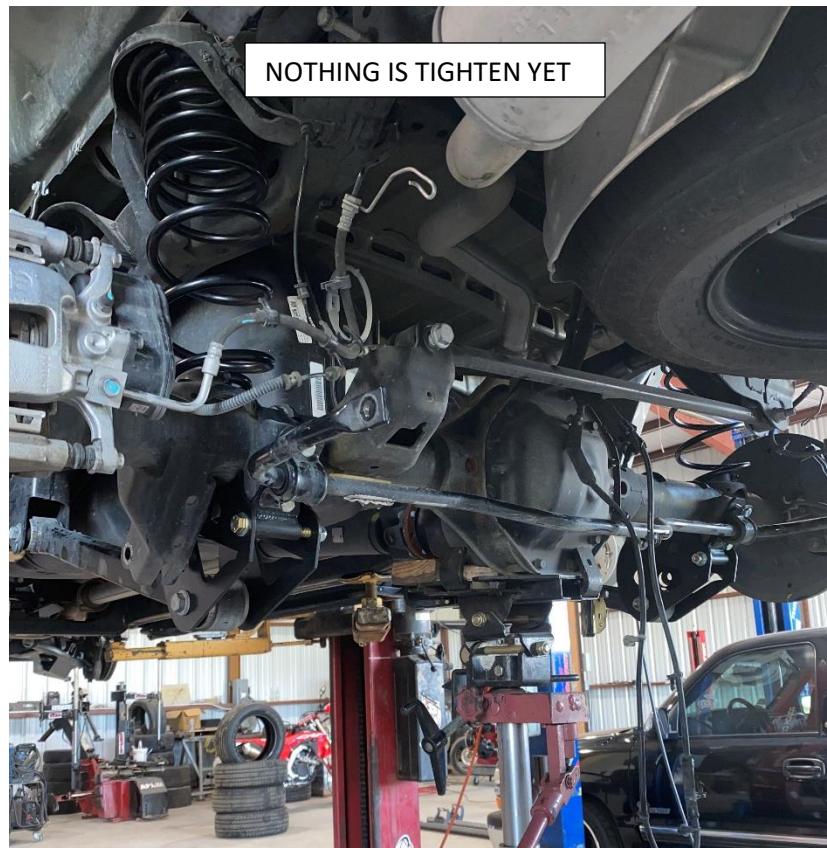


27. Install OEM isolator on top of IHC springs and install IHC Springs. NOTE: LOWER IHC SPRINGS NEED TO BE Clocked AS PICTURE. FAILURE TO DO SO WILL RESULT PUSING SPRING TOO FAR BACK. Refer to pic

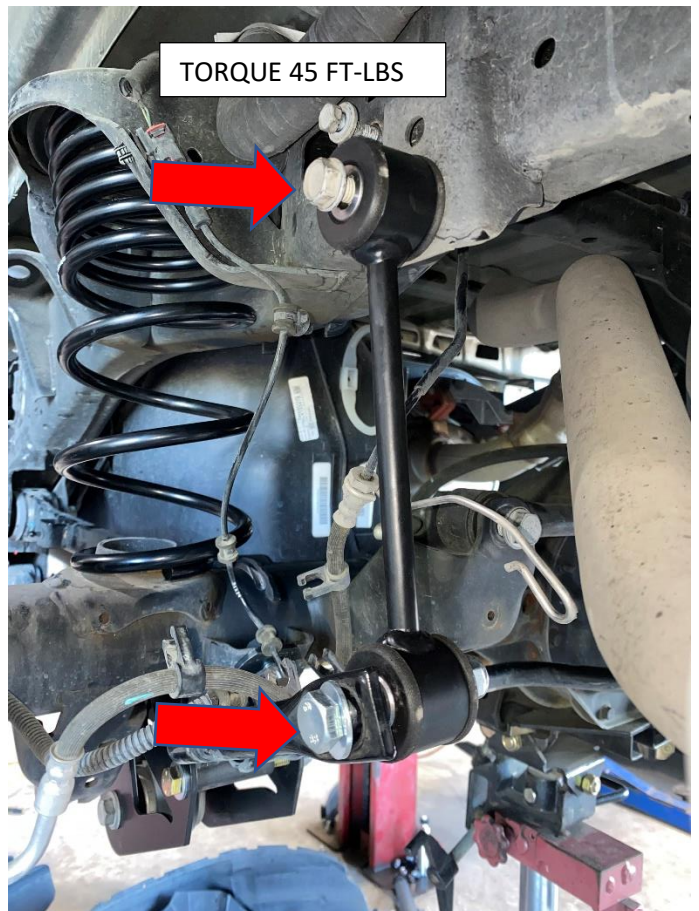




28. Rear suspension should look like this. NOTHING IS TORQUED DOWN!! Refer to pic



29. Install trac bar and IHC shorter sway bar links. Refer to pic

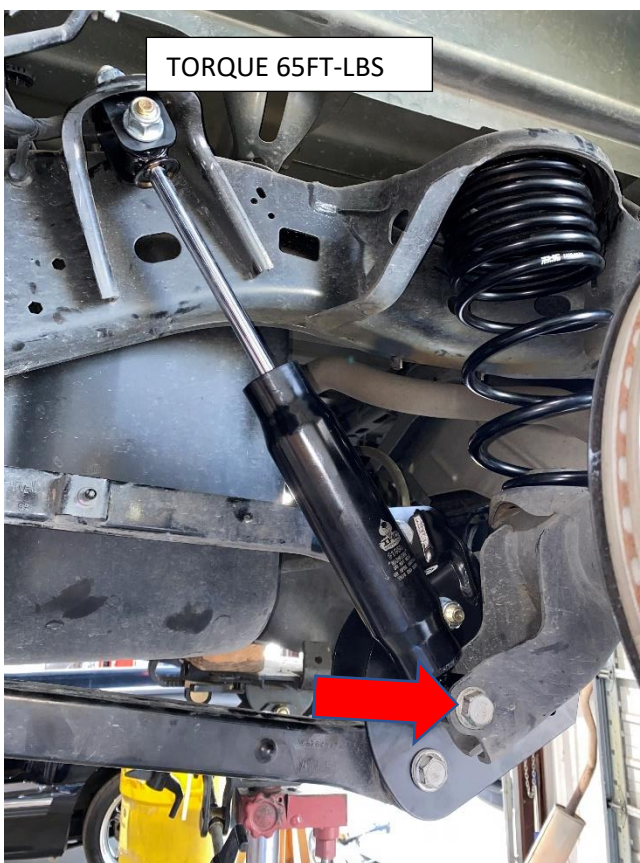




30. Install IHC inner sleeves into shock and install IHC shock adapter to top side. Refer to pic

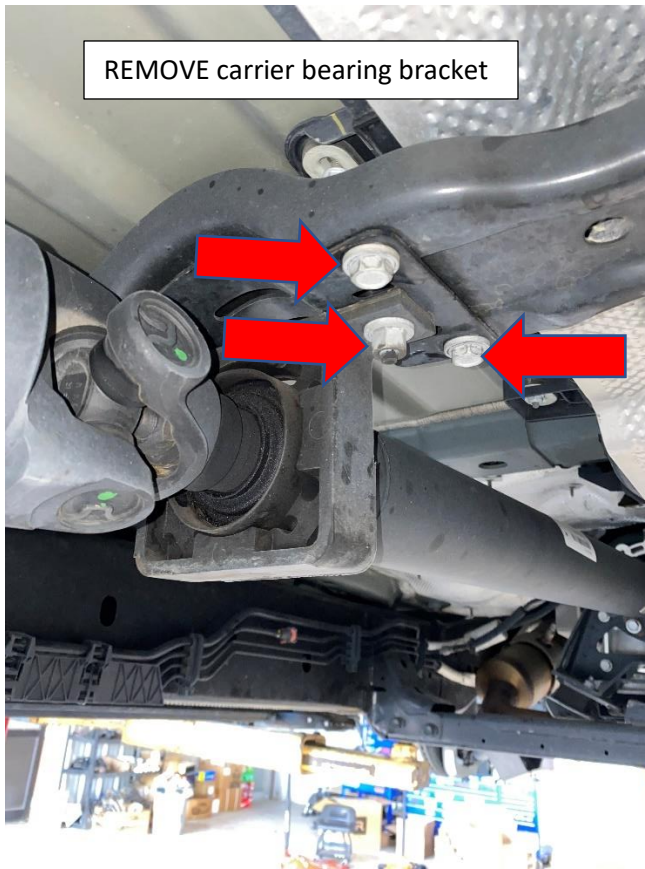


31. Install IHC drop shocks. Refer to pic

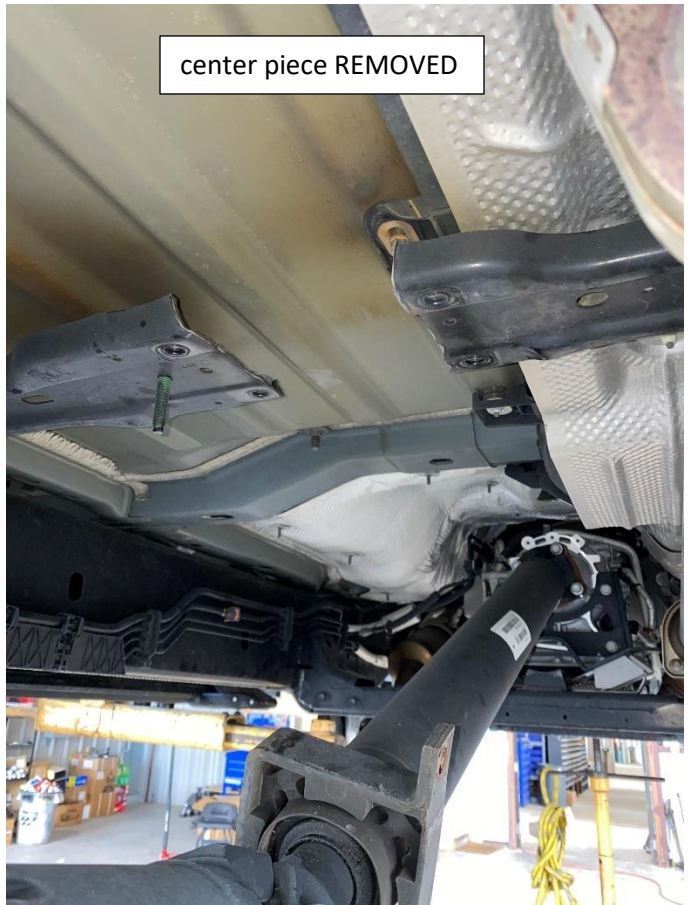




32. Remove carrier bearing bracket from cross member. Refer to pic

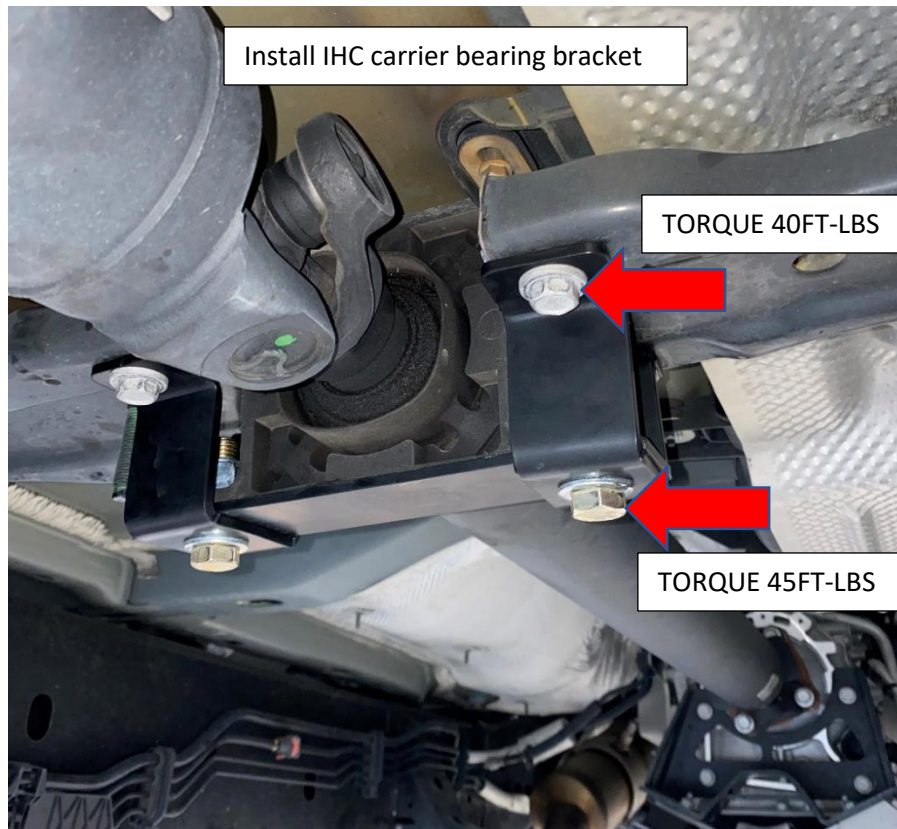


33. Cut cross member towards inside right before it bends upwards. Refer to pic



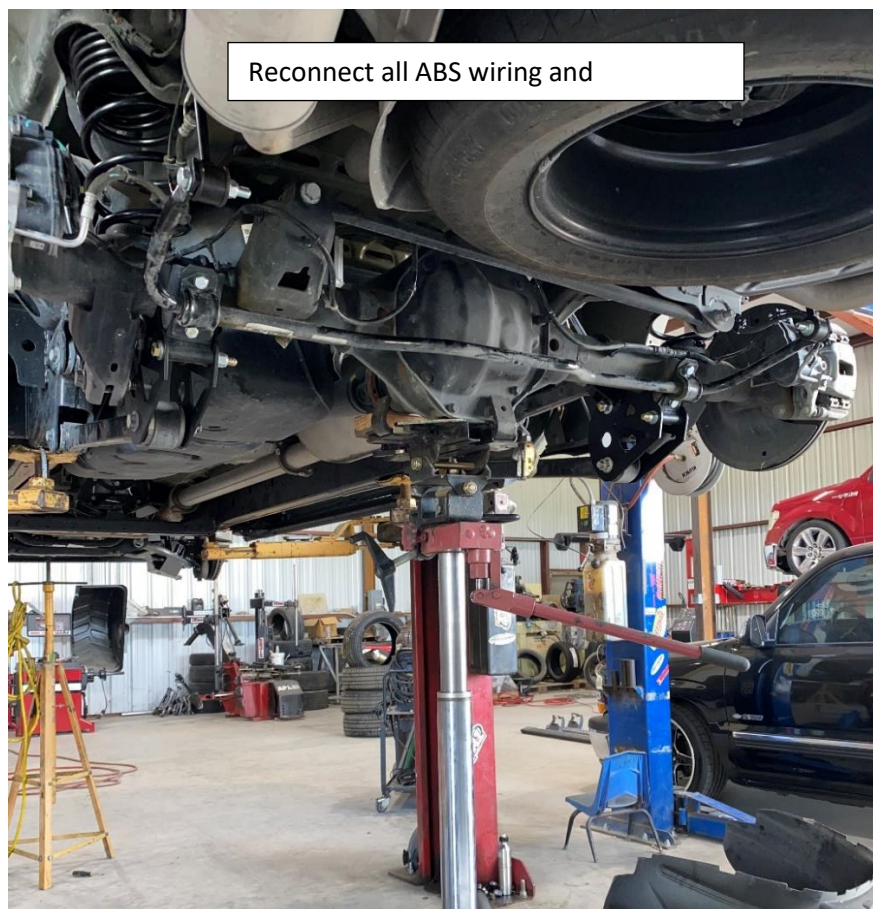


34. Bolt up IHC carrier bearing bracket as shown in the picture below

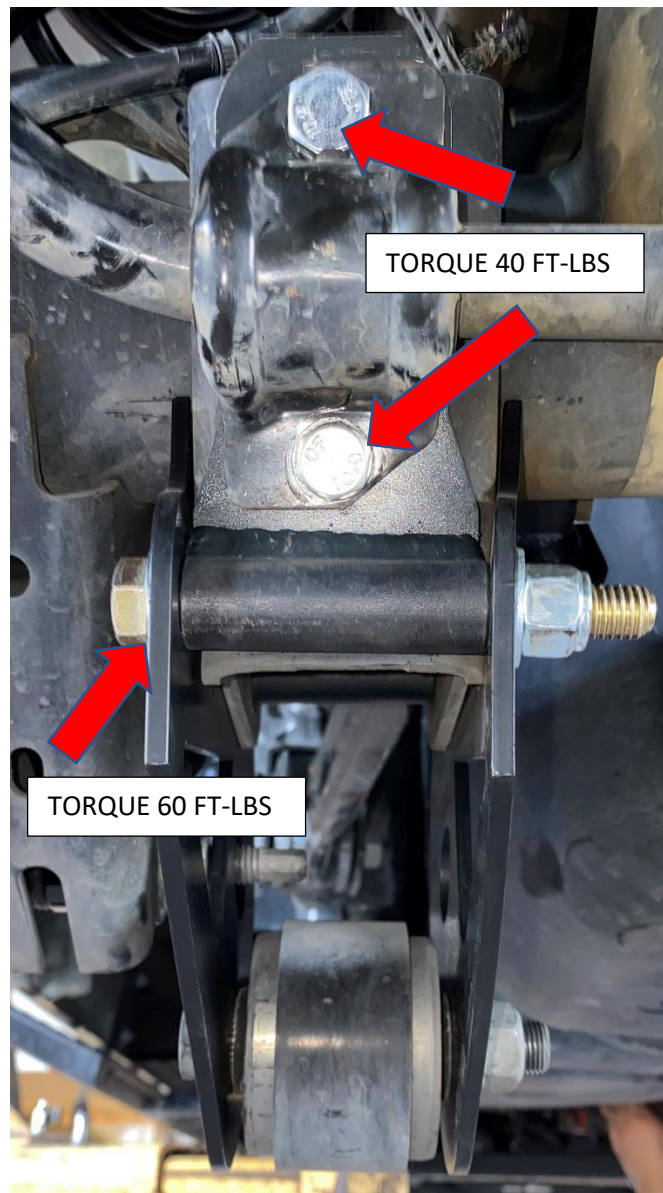


35. Raise rear suspension upward and reconnect all ABS wiring and connectors.

36. NOTE: DO NOT RAISE VEHICLE OFF HOIST!!!



- 37. Lower vehicle to the ground.
- 38. Torque upper trailing arms 135FT-lbs and Lower trailing arms to 135FT-LBS.
- 39. Torque 4 link relocation bracket hardware. Refer to pic



- 40. Install the wheels and lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturers specs. Jounce the vehicle to settle the suspension to the new ride height. Reconnect the battery ground terminal.





**FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS**

**Final Checks & Adjustments**

Once the vehicle is lowered to the ground, check all parts which have rubber, Delrin or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension, adjust, as necessary.

**MAINTENANCE**

RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THEREAFTER. RECOMMENDED TO PERFORM MAINTENANCE ON ALL BALL JOINTS AND CONTROL ARMS. ADD GREASE EVERY 6 MONTHS OR EVERY 10K MILES. FAILURE TO PERFORM MAINTENANCE WILL CAUSE PREMATURE WEAR ON BALL JOINTS AND BUSHING.

