

# 1988-1998 C1500 Lowering Kit Instructions

Applies to all 2wd coil springs. All cabs.

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



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. Remove the tie rods from the knuckle. Strike the tie rod boss on the knuckle with a dead blow hammer to dislodge the taper from the knuckle.

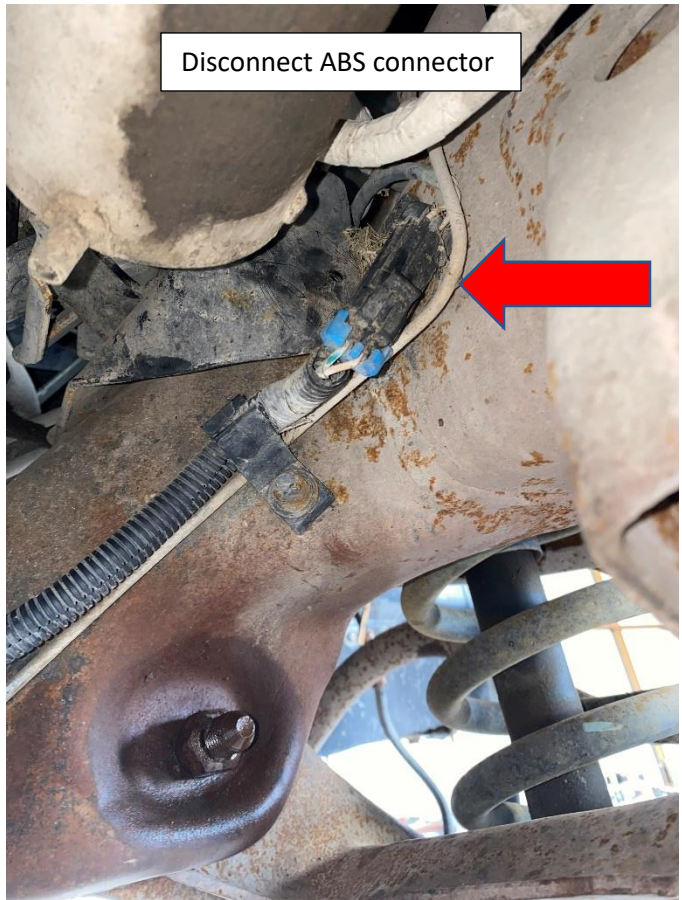


3. Disconnect brake line from UCA and ABS wiring from UCA ball joint. Refer to pic





4. Disconnect ABS wiring from top shock and disconnect connector. Refer to pics



5. Remove sway bar link





6. Remove the brake caliper and properly secure. NOTE: DO NOT OVEREXTEND BRAKE HOSE

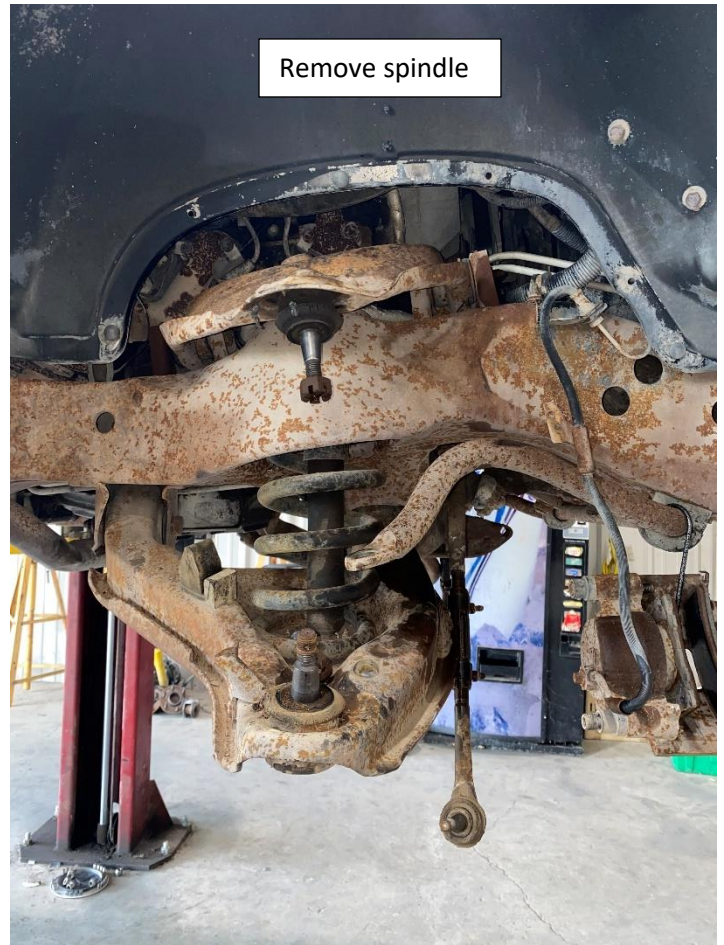


7. Loosen the upper/lower ball joint nut. Strike the ball joint boss on the knuckle with a dead blow hammer to dislodge the taper. REMOVE SPINDLE.





8. Remove spindle from UCA and carefully remove spindle assembly. Refer to pic

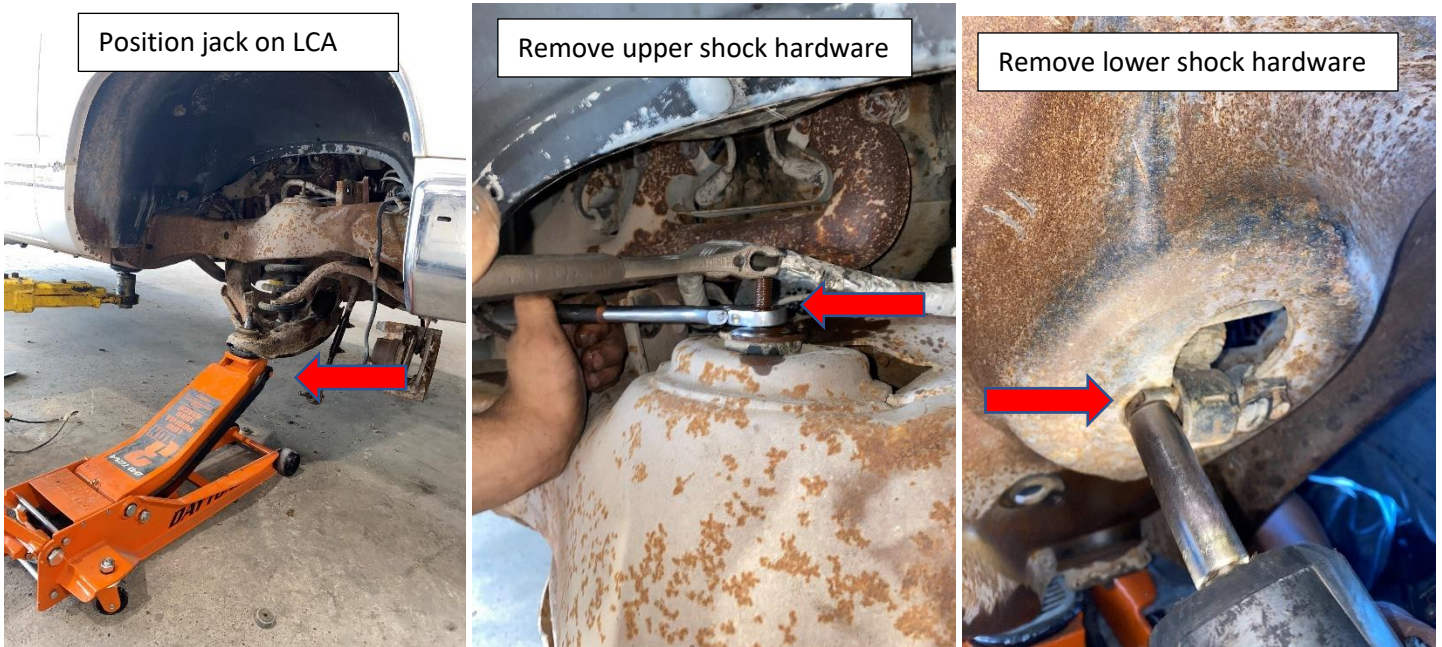


9. Remove upper control arm

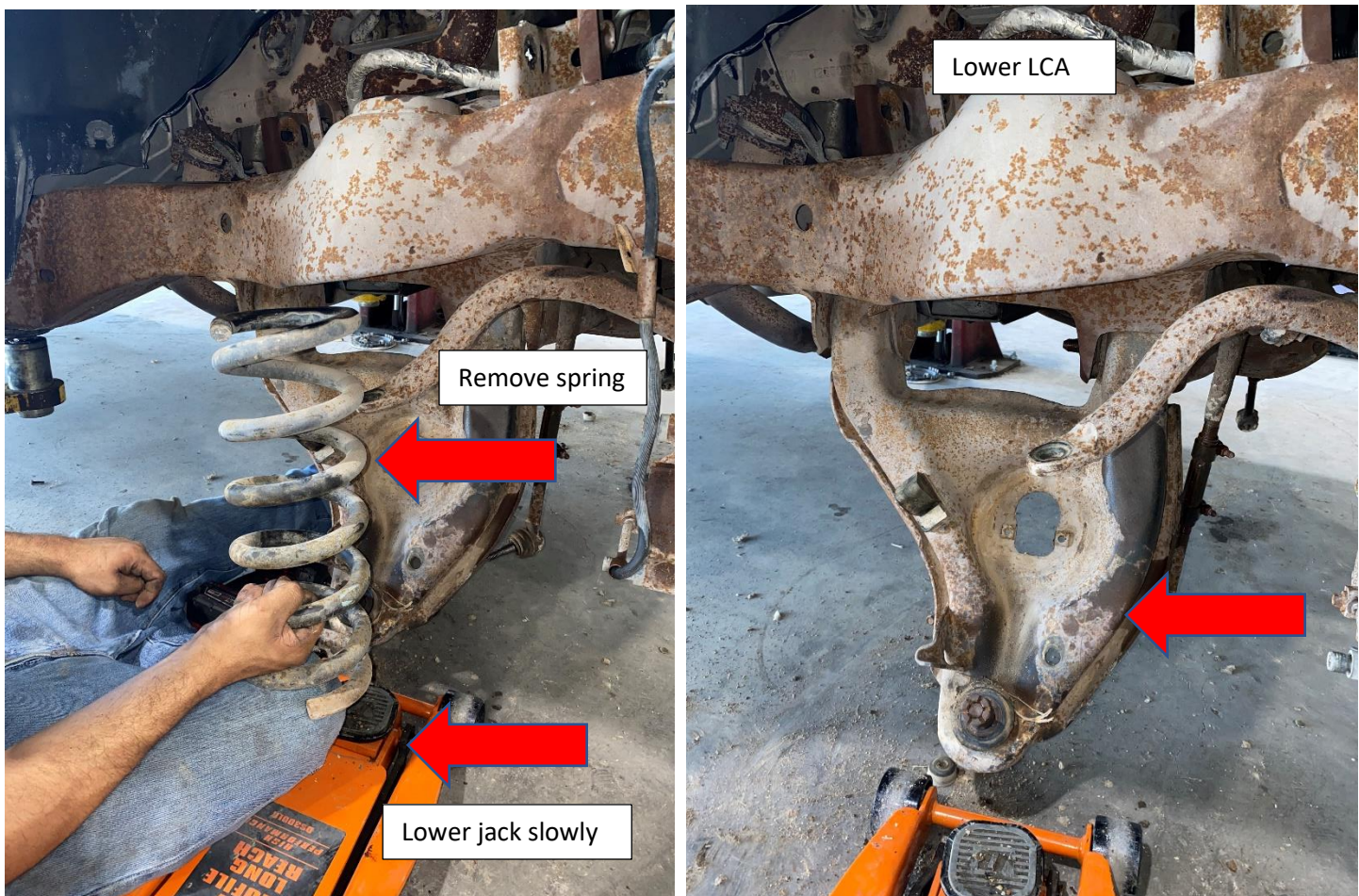




10. Position floor jack under lower control arm. Remove OEM shocks. Refer to pic

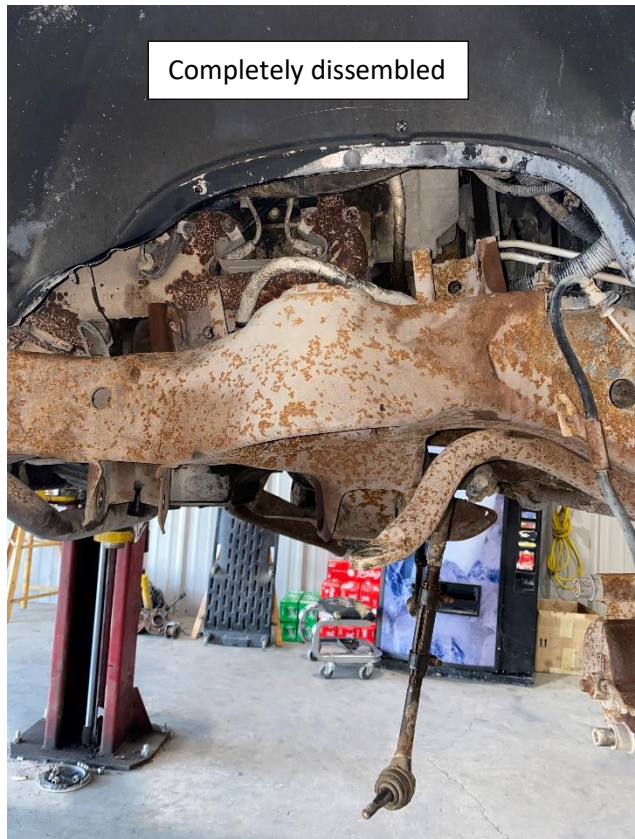


11. Carefully lower floor jack and remove OEM spring. NOTE: SPRING IS UNDER PRESSURE.





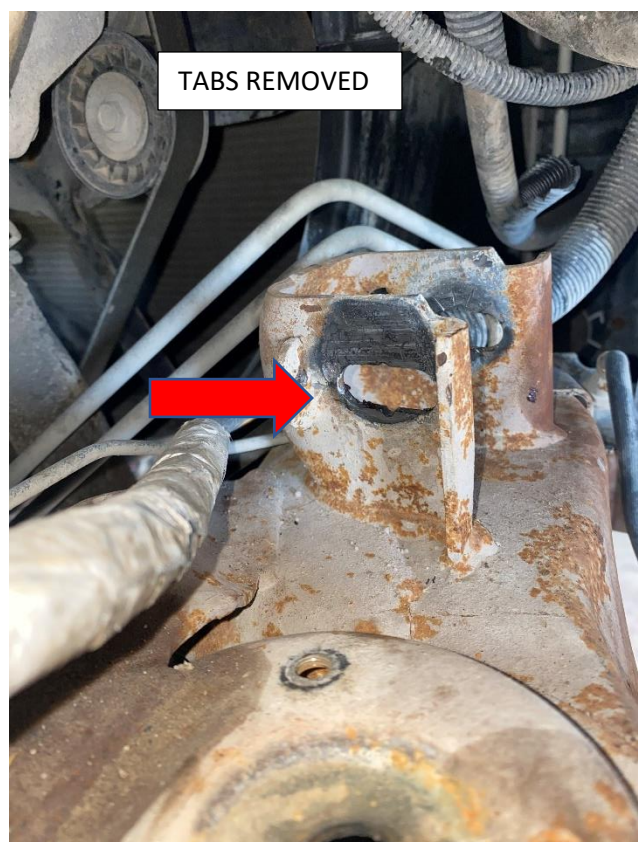
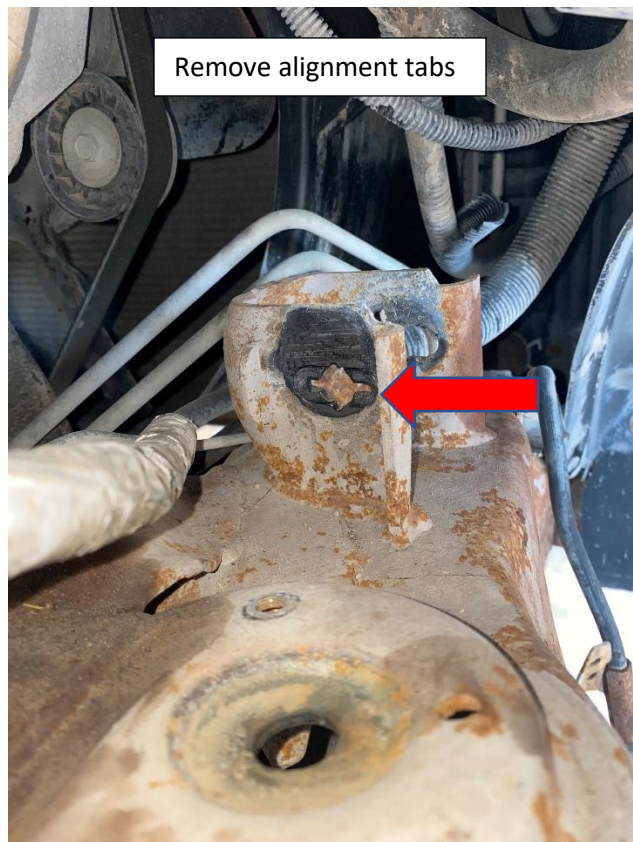
12. Remove lower control arm.



13. Remove UCA alignment tabs.

14. NOTE: USE CHISEL OR AIRHAMMER TO REMOVE.

15. NOTE: IF THIS STEP IS SKIPPED TRUCK WILL NOT HAVE ADJUSTMENT TO ALIGN!



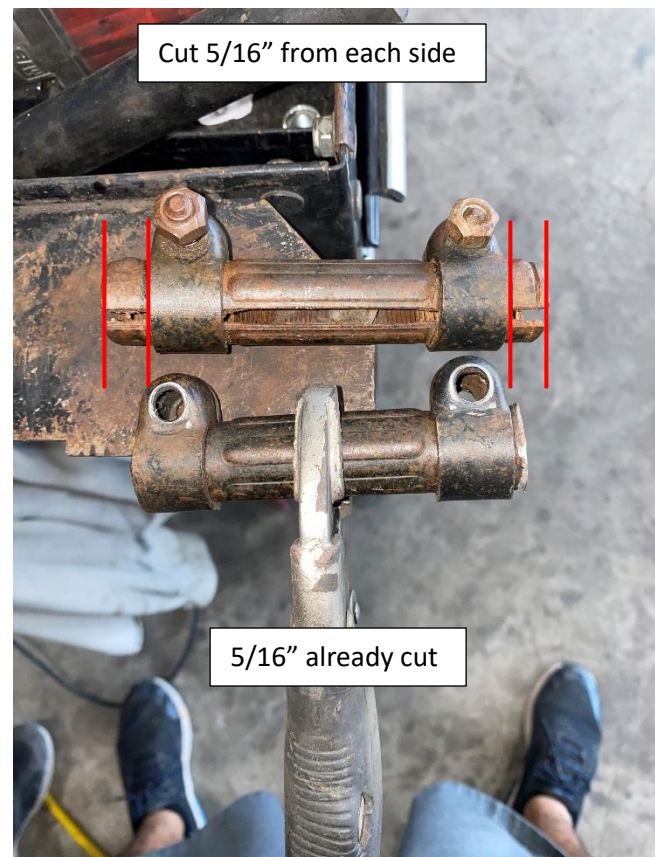
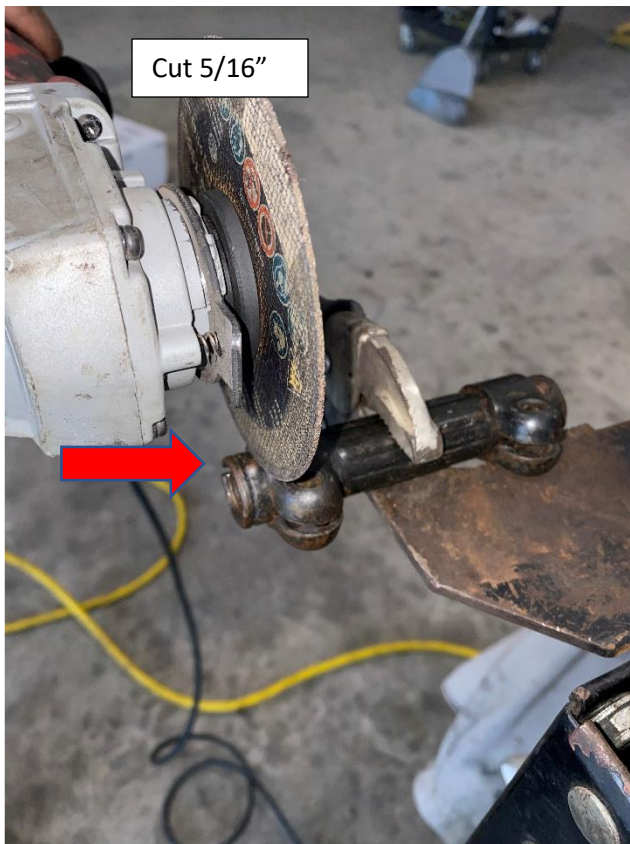


16. Remove Outer tie rod from inner. CUT outer tie rod  $\frac{3}{8}$ ". Refer to pic

17. NOTE: MAKE SURE TIE ROD IS PROPELRY SECURED. USE SAFTLEY GLASSES.

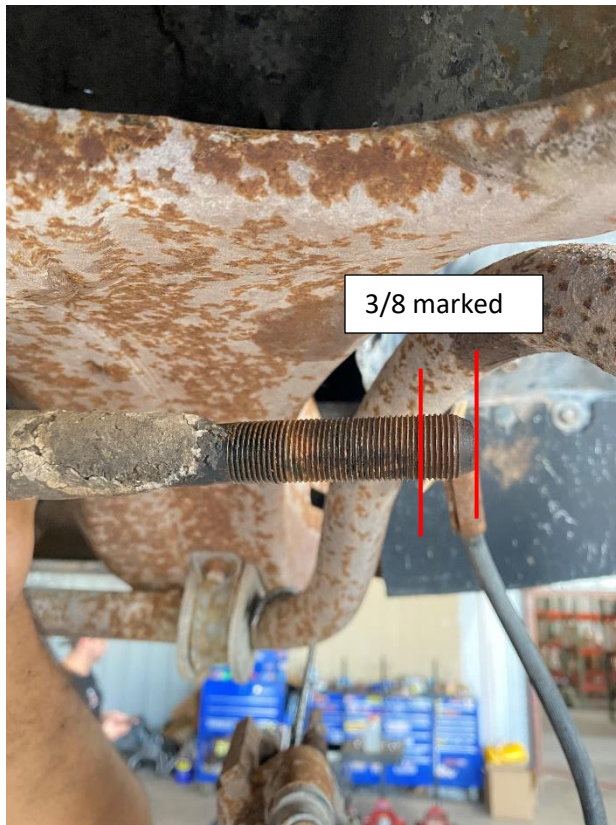


18. Cut sleeve  $\frac{5}{16}$ " on both sides. Refer to pic





19. Remove inner tie rod. CUT 3/8". Refer to pic



## INSTALLATION

20. Lubricate upper and lower frame pockets with multi-purpose grease. Refer to pic

21. NOTE: IF THIS STEP IS SKIPPED NOISES MAY OCCUR





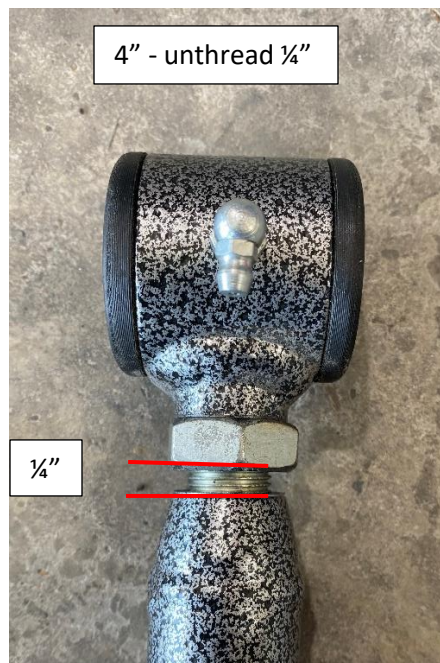
22. Install ZERK fitting on upper and lower control arms



23. Upper control arms have threaded ends for camber adjustment.

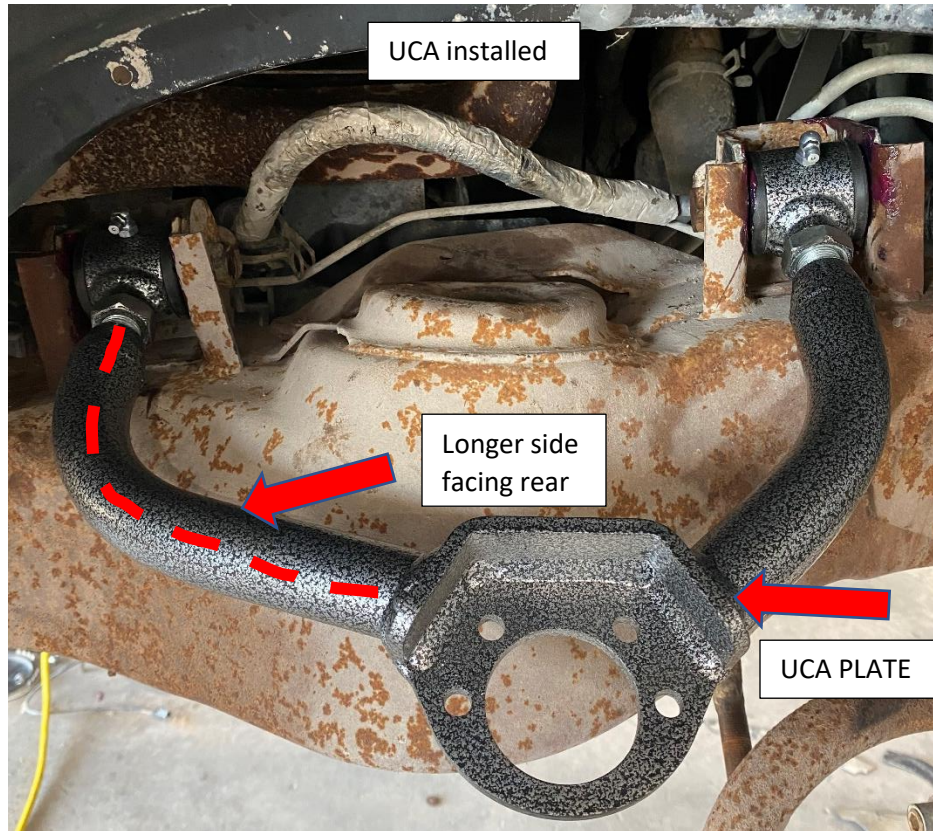
NOTE: IHC UCA have threaded ends for camber adjustment. Refer to chart to make correct adjustment.

DROP AMOUNT	HOW MUCH TO UNTHREAD UCA
3" Drop	Stock Length – DO NOT UNTHREAD
4" Drop	Unthread $\frac{1}{4}$ "
5" Drop	Unthread $\frac{3}{8}$ "

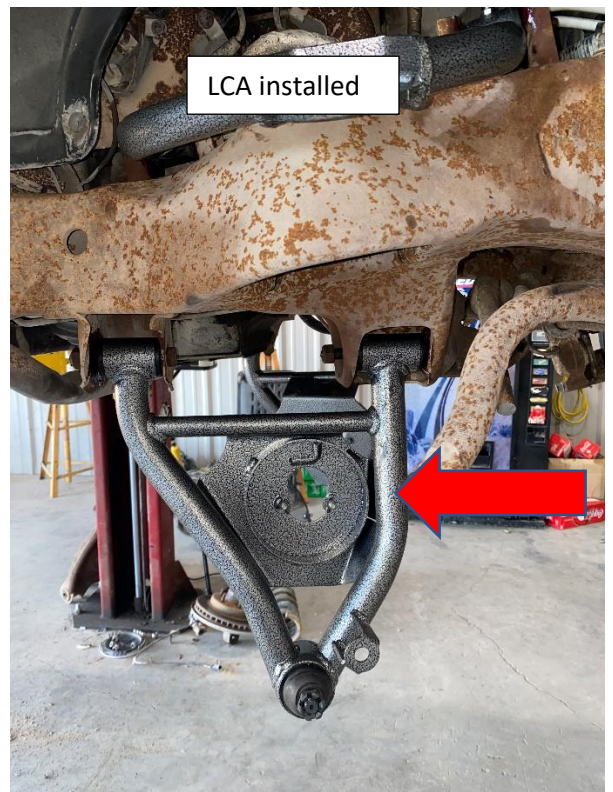




24. Install IHC UCA. Do not tighten. Refer to pic
25. NOTE: IHC UCA are directional. They are labeled P and D. Longer side of UCA goes facing rear of truck. Picture shown is PASS.
26. NOTE: JAM NUT MUST BE TIGHTEN TO CONTROL ARM SIDE!!!

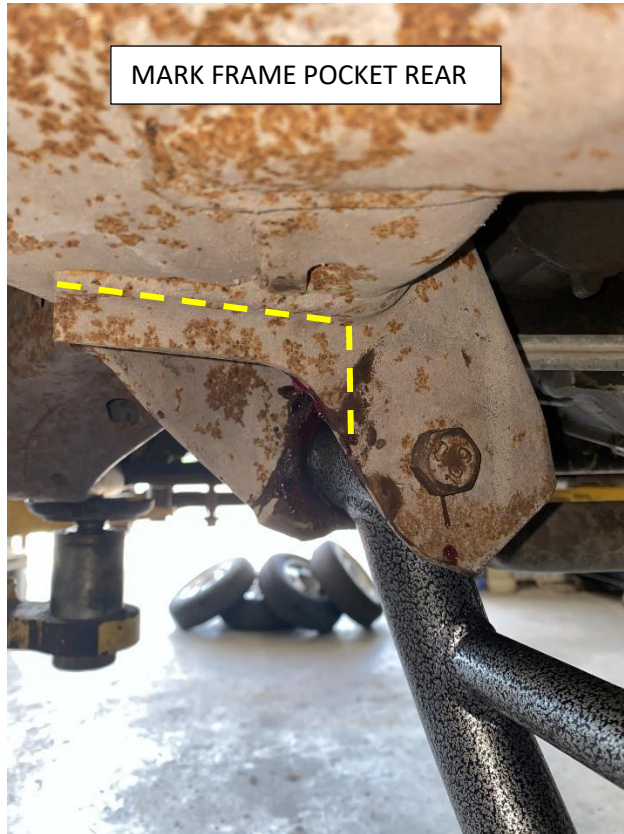


27. Recommend flaring out lower frame pocket 1/16" each side and Install IHC LCA. Refer to pic

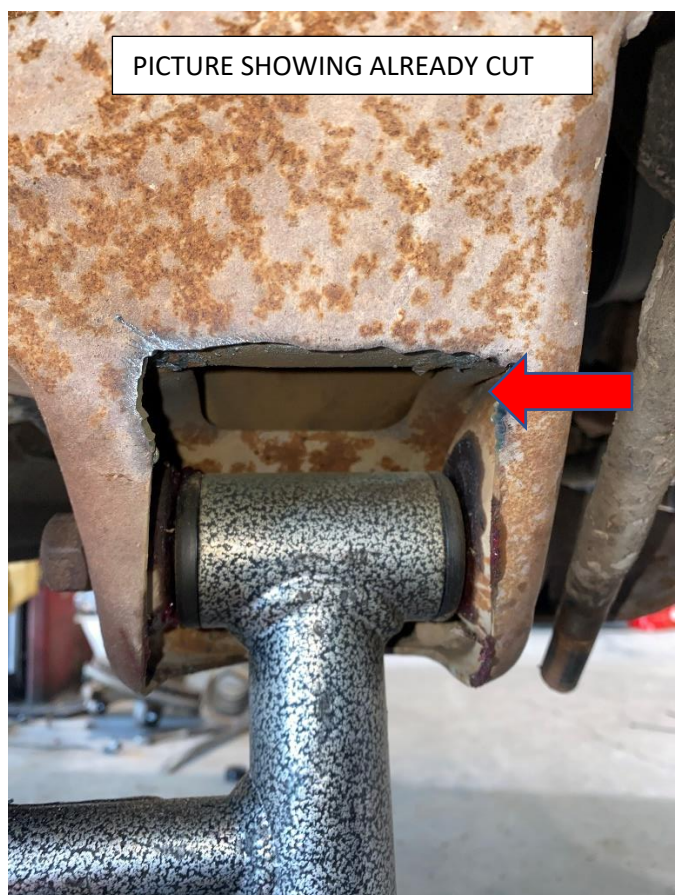




28. CUT lower frame pocket to allow more Lower control arms travel. NOTE: If this step is skipped LCA will contact frame stiffing ride and damage to LCA may occur.



29. Refer to pic with frame already cut out

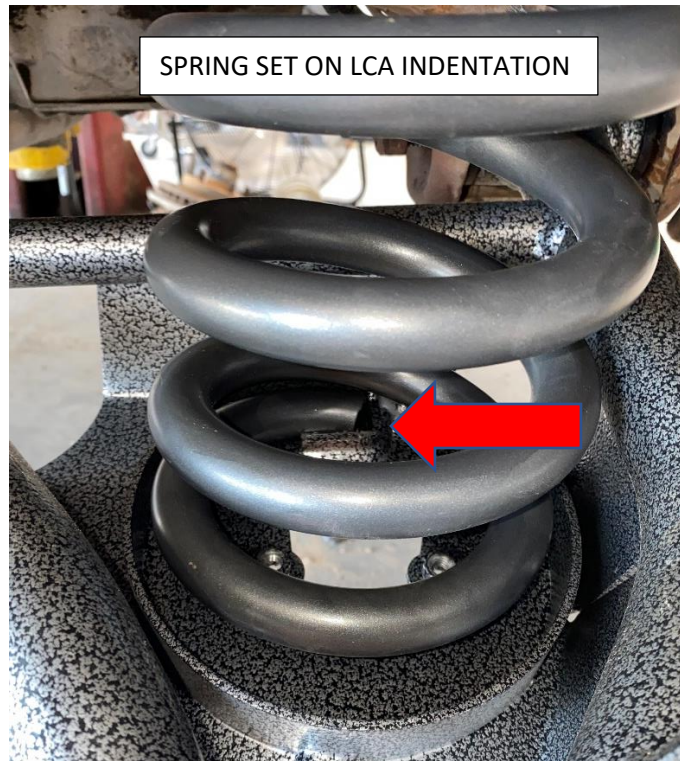




30. Install isolator on drop spring. NOTE: zip tying isolator prevents from moving. Refer to pic

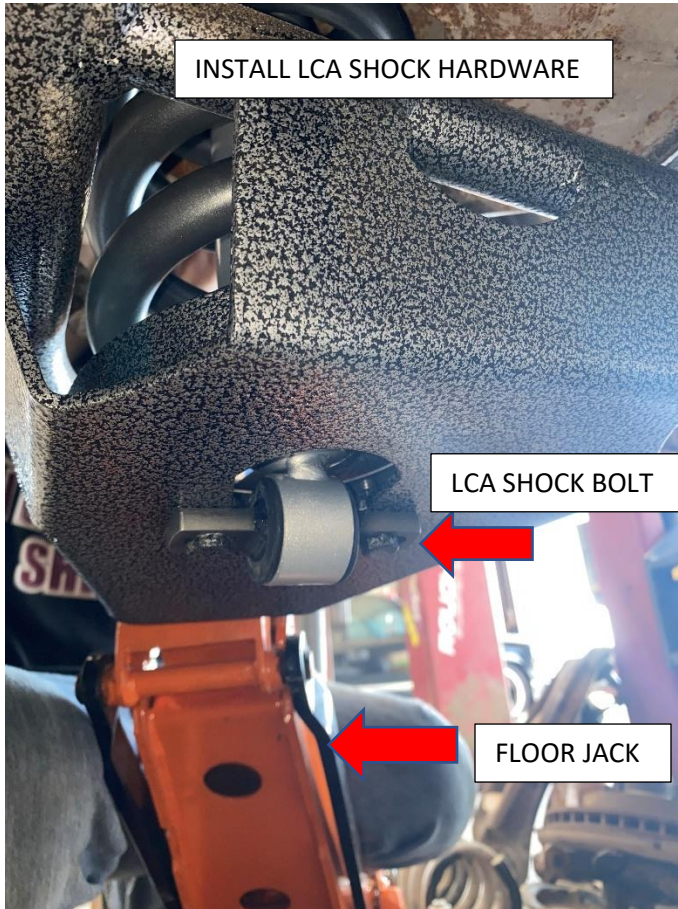


31. Insert DROP spring into IHC LCA. NOTE: IHC lower control arm has indentation for springs to properly set into LCA.

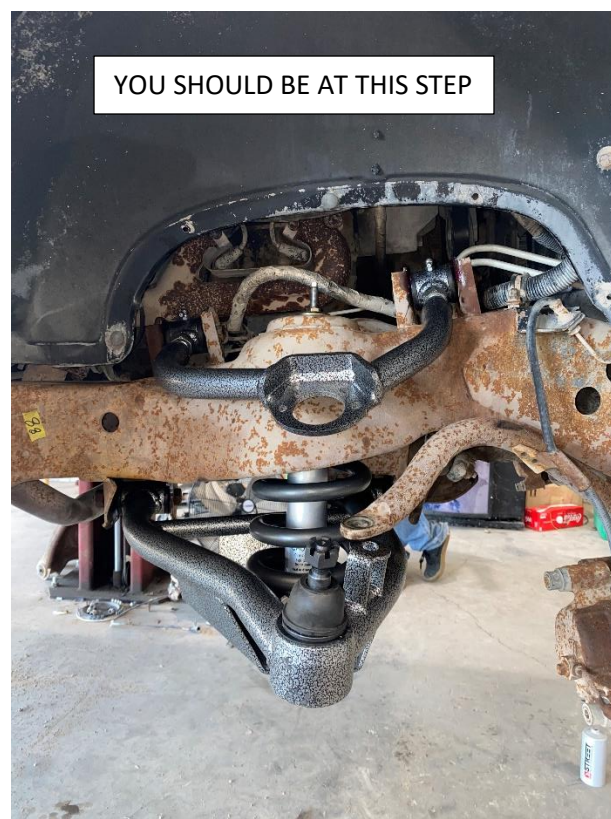




32. Raise lower control arm and install OEM spring to keep upper and lower arms together. TORQUE lower shock bolt 20 FT-LBS and UPPER 25 FT-LBS.



33. Front suspension should look like this. Refer to pic





34. Install IHC upper ball joint to IHC UCA. **Torque to 18Ft-lbs**



35. Install OEM spindle and cotter pins. **TORQUE** to below values.

- **TORQUE LOWER BALL JOINT 110FT-LBS. NOTE: NOTE: Plus, additional torque to align cotter pin. Not to exceed 140 ft. lbs. maximum**
- **TOQUE UPPER BALL JOINT TO 65ft-lbs. NOTE: Plus, additional torque to align cotter pin. Not to exceed 90 ft. lbs. maximum**





36. Install Caliper and **TORQUE to 105 ft-lbs.** NOTE: MUST ADD RED LOC-TITE

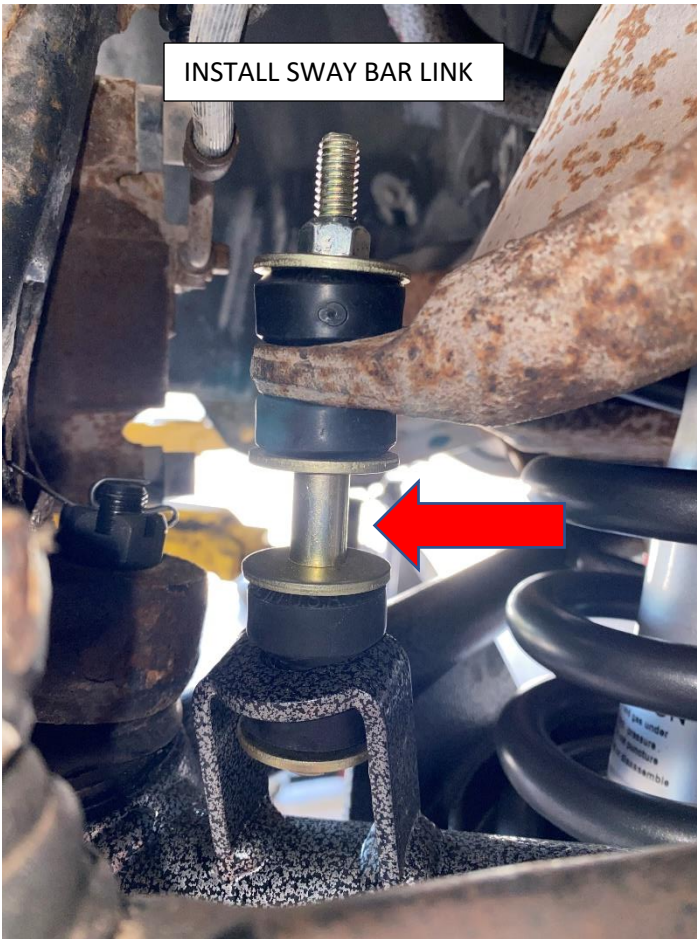


37. Install Inner and outer tie rods. Refer to pic





38. Install shorter sway bar links. TORQUE TO 14 FT-LBS. Refer to pic



39. Continue to repeat steps 2-37 on opposite side.

40. Lubricate all control arms and ball joint zerk fitting.

**NOTE: failure to lubricate control arms bushing and ball joints at initial installation will void warranty and pre-mature damage to bushing and ball joints will occur.**

41. Jounce the front of the vehicle to settle the front suspension.

42. Ensure suspension is loaded before torquing lower control arms.

43. Final torque to be set by alignment technician.

44. Move the upper control arm to middle. Initial torque to 80FT-LBS. (Final torque to be set by alignment technician. DO NOT FORGET TO TIGHTEN UCA JAM NUT TO CONTROL ARM SIDE!!!)

45. Torque lower control arms 114ft-lbs.

46. Prior to installing wheels, complete all installation steps on the opposite side. 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. Torque the lower control arm hardware to 114 FT-LBS. Final torque to be done by the alignment technician. Reconnect the battery ground terminal. Start the vehicle and turn the steering wheel lock to lock and verify all clearances between tire, body, and suspension components. Adjust, as necessary.

47. NOTE: Have a reputable alignment shop set alignment to the recommended specs. If driving vehicle to an alignment shop, adjust toe prior to vehicle operation. Recheck that all hardware is of proper torque values and all electrical connections are hooked up. Start vehicle and verify that all dash warning lights are off. Cycle the steering wheel from lock to lock to check for any interference of wheels, tires, brake lines, hoses, wires, etc. and ensure adequate clearance throughout the suspension cycle. Adjust, as necessary.



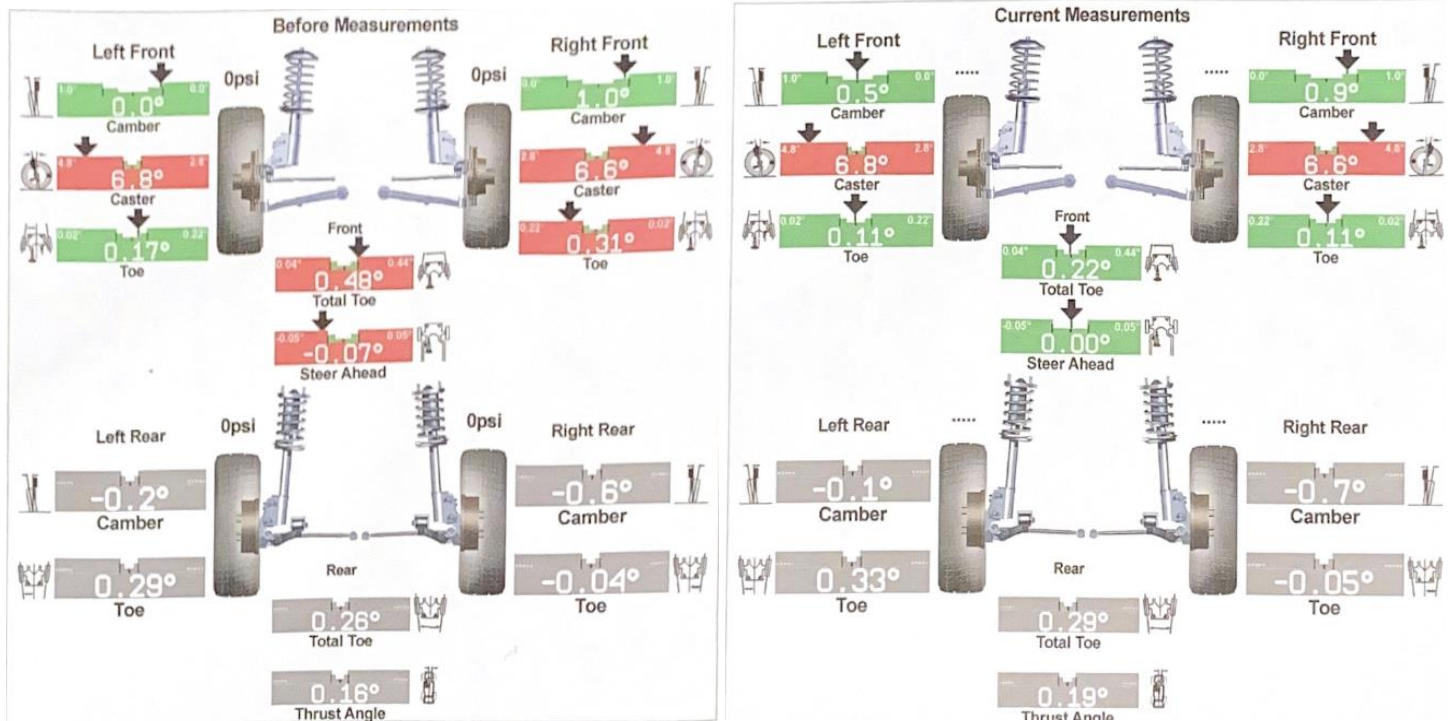
48. NOTE: The camber and toe are the most important alignment angles that need to be in green. Caster will be in RED due to the vehicle coming down and the wheel staying centered to fender wheel. Caster needs to be set relatively close to each other. Attached is a sheet as reference for actual alignment that was performed on the truck.

## RECOMMENDED ALIGNMENT SPECS

	DRIVER	PASSENGER	TOLERANCE	SPLIT
CAMBER	<b>+0.5</b>	<b>+0.5</b>	<b>+/- 0.5</b>	<b>0.0</b>
CASTER	<b>7.0</b>	<b>7.0</b>	<b>+/- 0.5</b>	<b>0.0</b>
TOE	<b>.10</b>	<b>.10</b>	<b>+/- 0.05</b>	<b>+ .20</b>

Attached is a sheet as reference for actual alignment that was performed on the truck.

Chevrolet : Pickup (Full Size) 1947-1998 : 4X2 : 1988-98 : C1500/C2500/C3500  
ExpressAlign Total Alignment





## **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.

### **Vehicle Handling Warning**

Lowering the height of your vehicle lowers the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections. Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

### **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 IHC Recommended specifications. It is recommended that your vehicle alignment be checked after any race/drag race 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. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

