2019 Present GM1500

Rear Lowering kit instructions (CNOTCH KIT) Applies 2019- Present all cabs

Part number **IHC-GM1922-BCN & IHC-GM1922-FK**

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

WEBSITE: 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 MEASURMENTS

	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 the 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.

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 the 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.

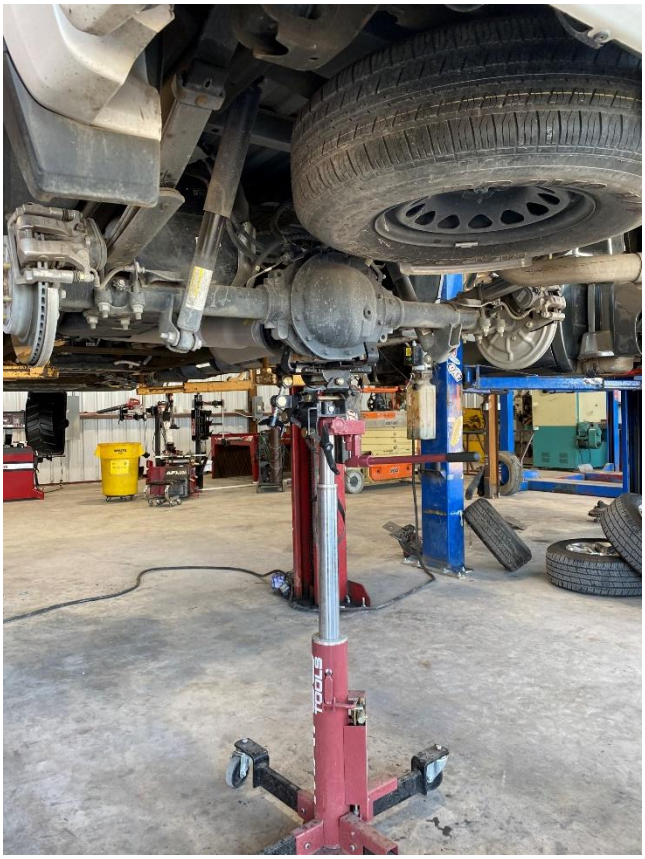
INSTALLATION BY A PROFESSIONAL IS HIGHLY RECOMMENDED

- 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.

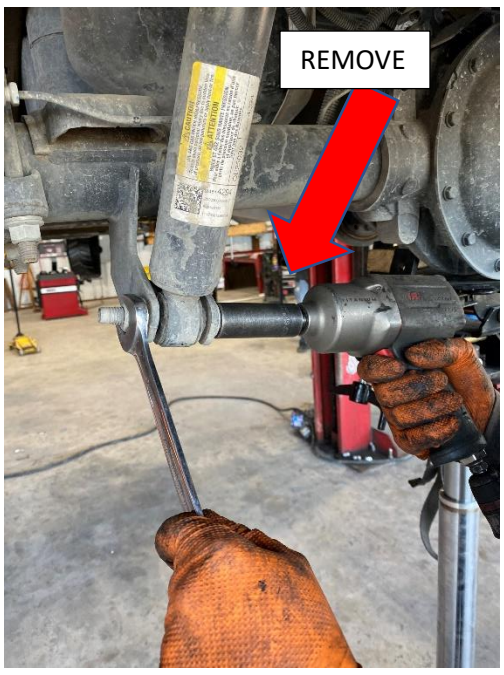
Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation of lowering kit

REAR INSTALLATION

39. Support rear differential with jack. REFER TO PIC
40. NOTE: STRAP DIFFERENTIAL TO JACK TO PREVENT IT FROM FALLING.
41. NOTE: FRONT JACK STAND MUST BE PLACE ON THE ENGINE SIDE TO PREVENT VEHICLE FROM SWAYING.

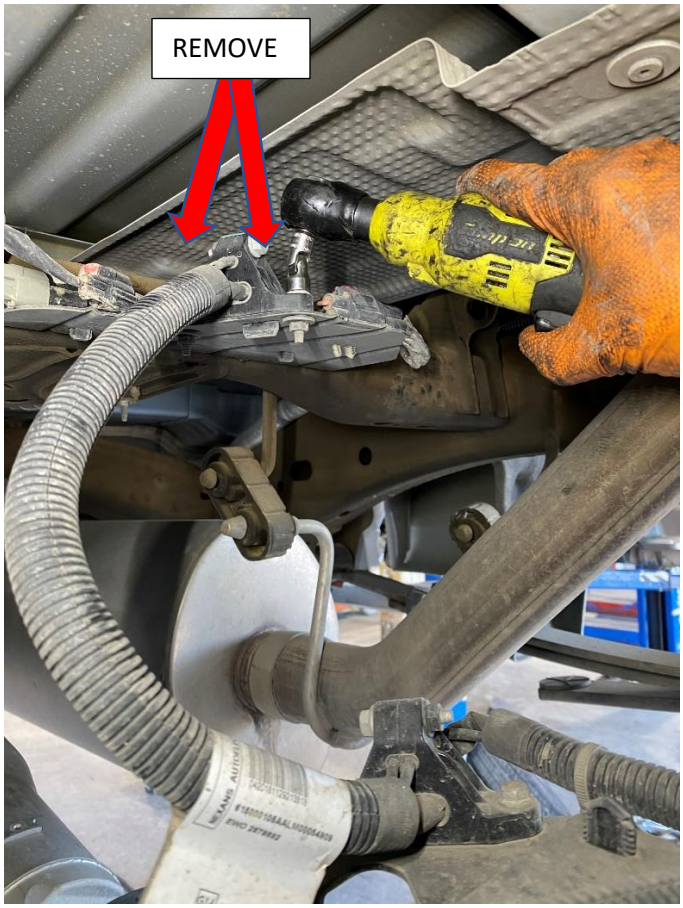


42. Remove both rear shocks. NOTE: oem hardware will be reused. Refer to pic

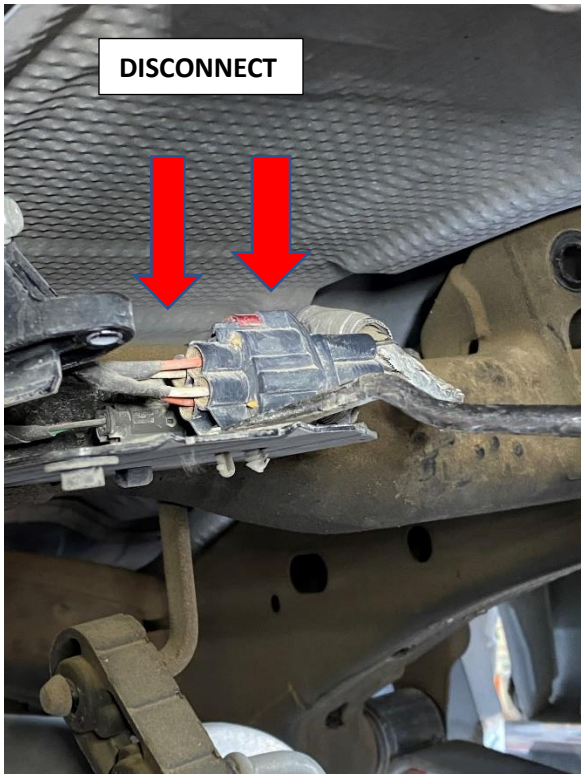


43. Remove brake line bracket. Located on the inside of the frame rail on the driver's side of the vehicle. Remove the two bolts that mount the bracket and retain hardware. Refer to pic

44. Remove ABS sensor harness bracket from top of rear differential. Retain factory hardware will be re-used.

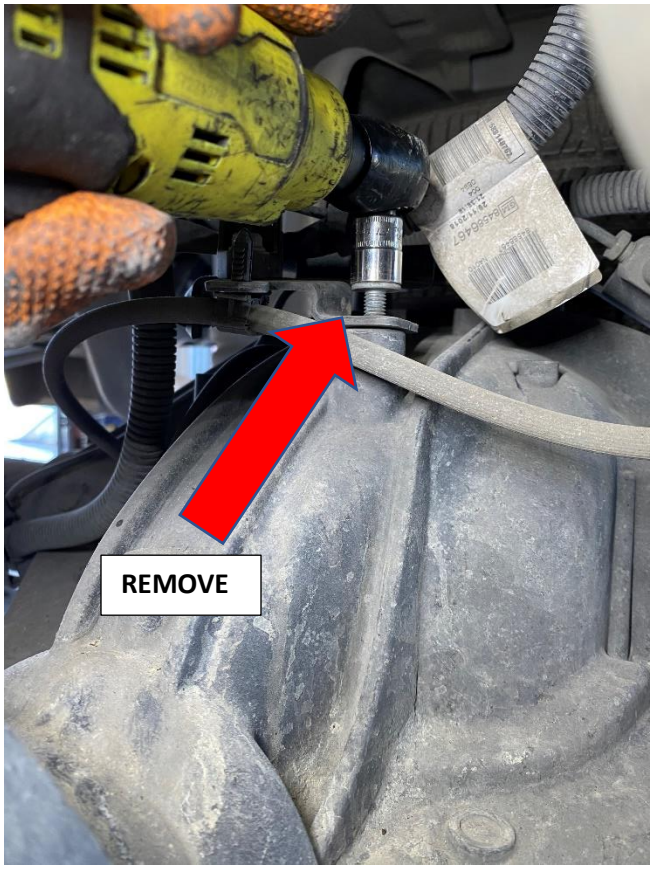


45. Disconnect ALL ABS WIRING CONNECTORS FROM BRACKET

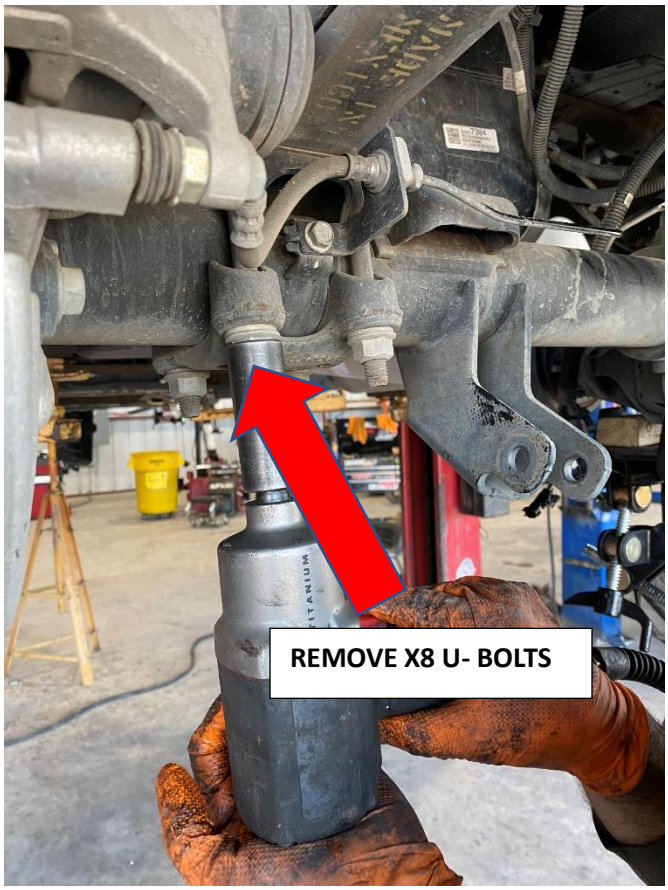


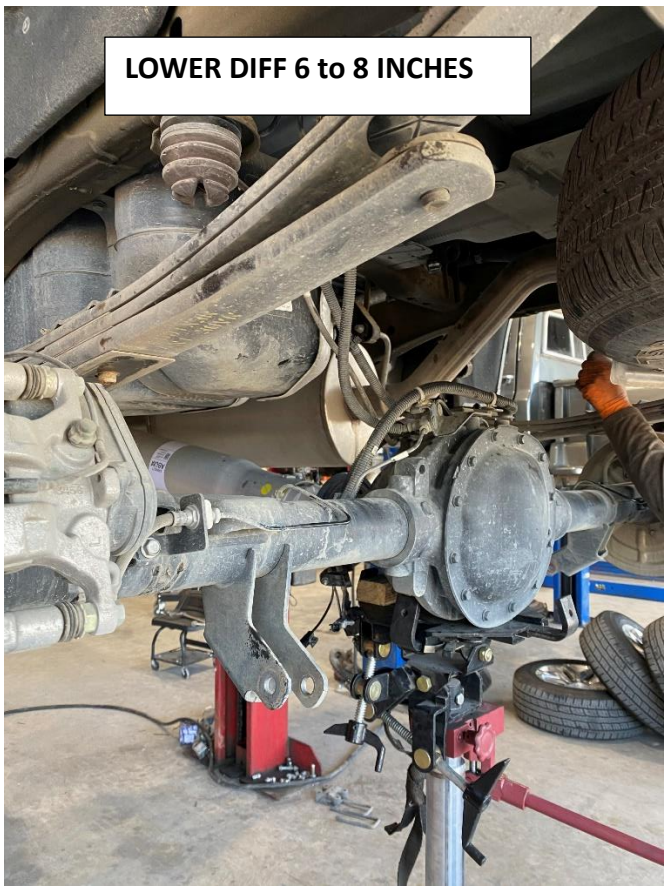
46. REFER to PIC. NOTE: MAKE SURE ALL WIRING IS CLEAR!

47. Remove both ABS/BRAKE line brackets from differential. Refer to pic



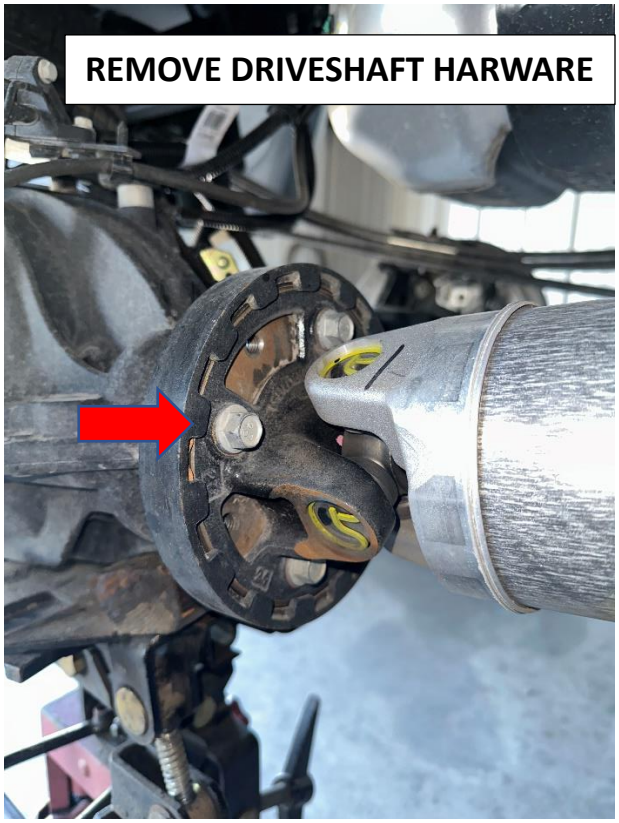
48. Remove U-bolts and lower differential. Refer to pic





49. Mark driveshaft and remove from differential side. Refer to pics

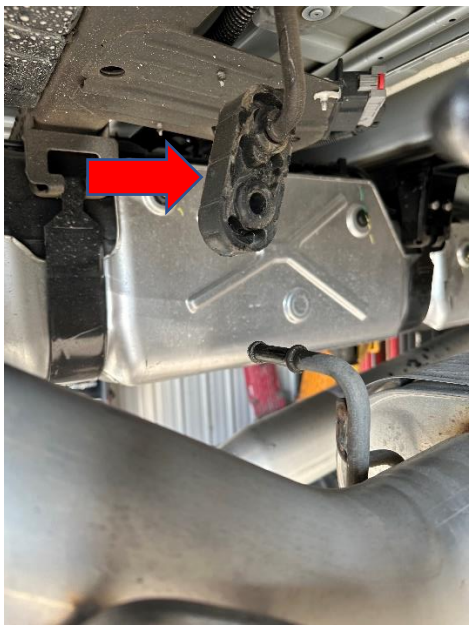
NOTE: FAILURE TO MARK DRIVESHAFT AND RE-INSTALL ON SAME POSITION MAY LEAD TO DRIVELINE VIBRATION. DO NOT SKIP THIS STEP!



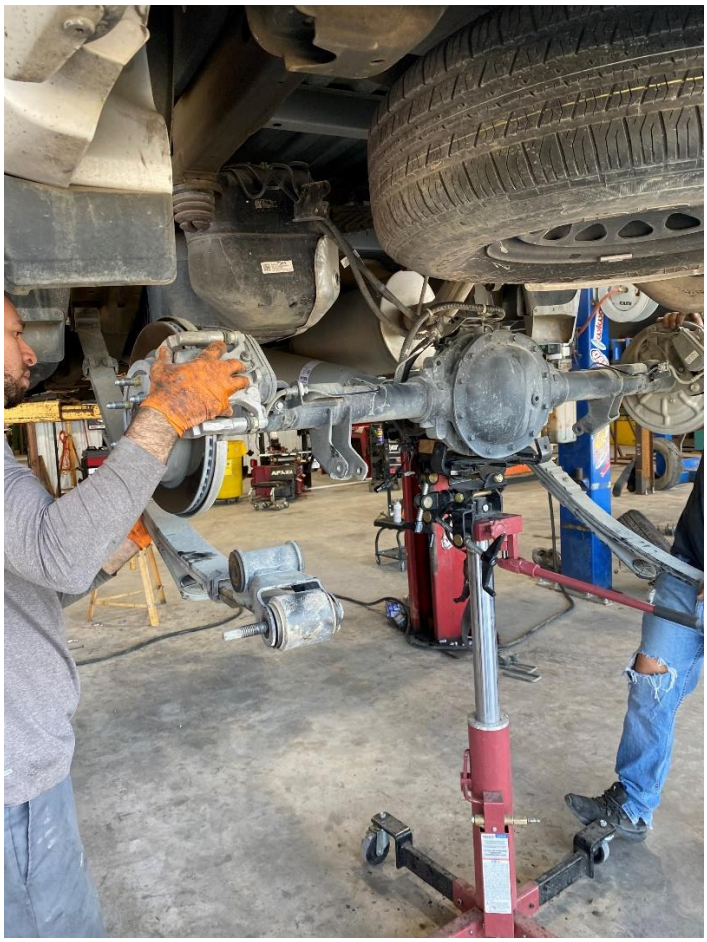
50. Remove REAR shackles from rear hanger. Refer to pic

51. Both leaf packs should be removed from the rear hangers.
52. Passenger side exhaust hanger grommet will need to be removed to have access. Refer to pic.

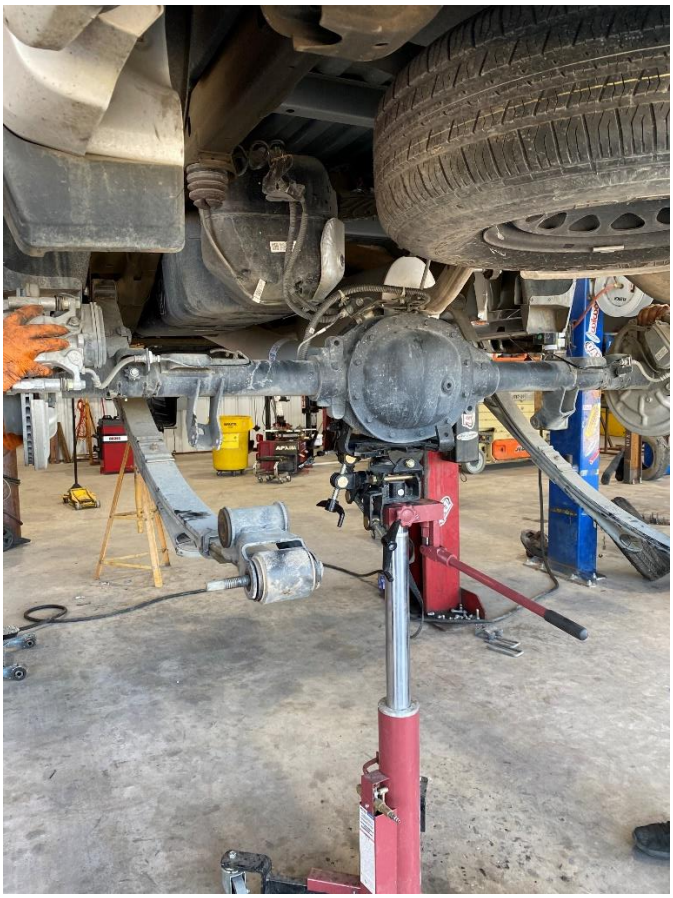




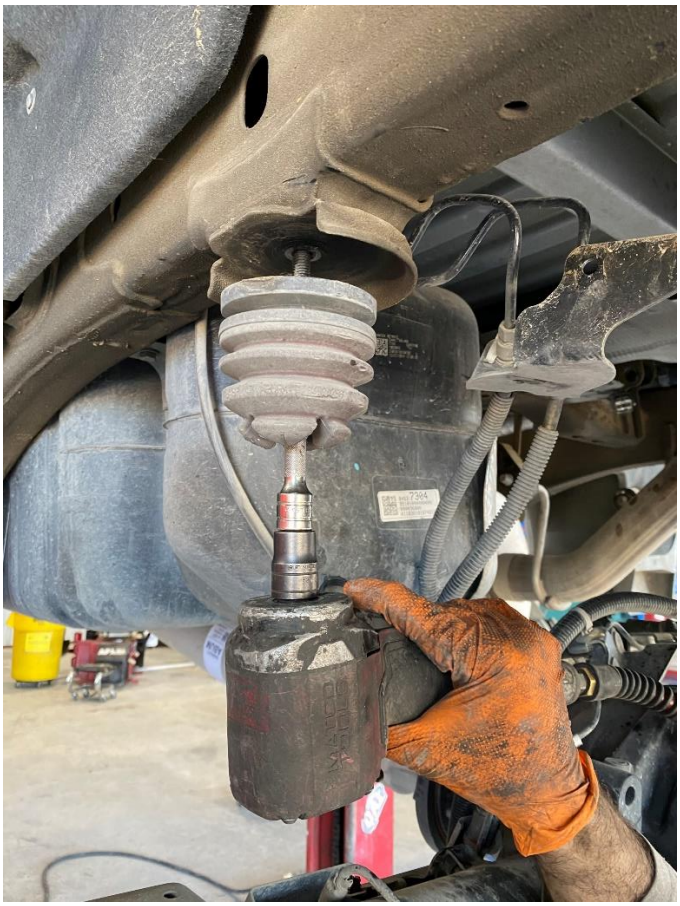
53. Continue to flip leaf pack under differential.
54. NOTE: 2 TECHNICIANS ARE REQUIRED
55. Have 1 tech slide differential away from leaf pack that is going to be flipped and 2nd tech flip the leaf pack. Refer to pic.

56. The rear differential should now be flipped. Leaf pack under DIFF. REFER TO PIC



57. Remove REAR bump stops. Refer to pic.



C NOTCH & CROSS MEMEBER INSTALLATION – MUST READ

C NOTCH installation must be performed while the rear suspension is unloaded.

Due to the design of the included Frame Notch Supports, pickup box removal is not required with this kit. However, some installers may prefer to remove the box to facilitate access to the frame. If it is decided to remove the vehicle's bed assembly, please refer to the appropriate General Motors Service Manual for recommendations regarding Pickup Box Removal Procedures.

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

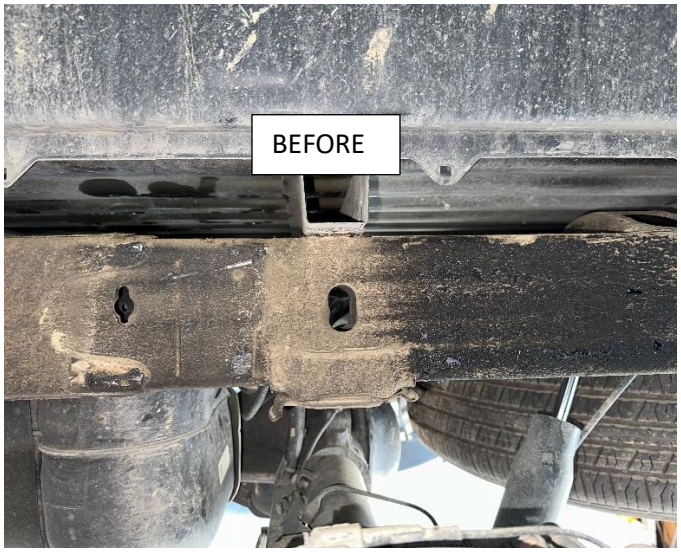
Check the backside of the frame rail to be sure that all lines, electrical wiring, control cables and other components are cleared from this area to avoid damaging them in the following steps. Be sure to wear proper safety protection when using power tools! DO NOT create sparks near flammable or explosive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

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

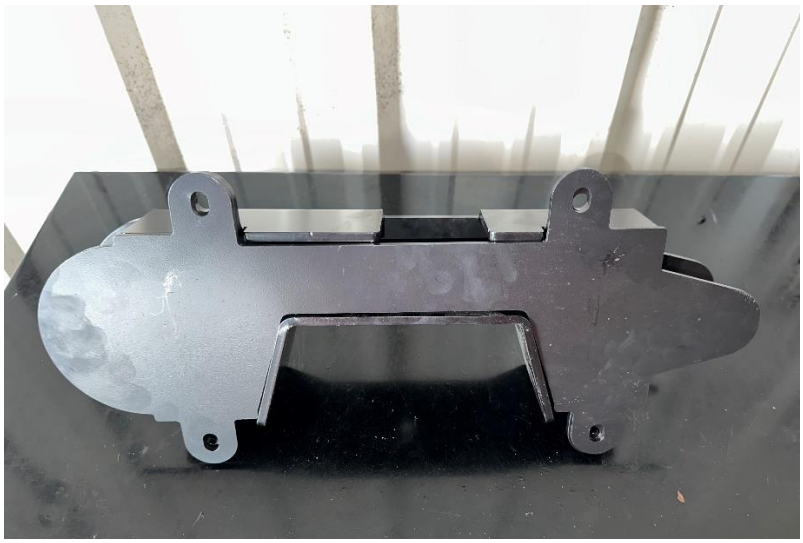
Safety Recommendation: Due to the proximity of the fuel tank to this area, we DO NOT recommend using a flame cutting torch or plasma cutter when performing these operations. Also, excess heat can easily damage the frame rail and other adjoining components.

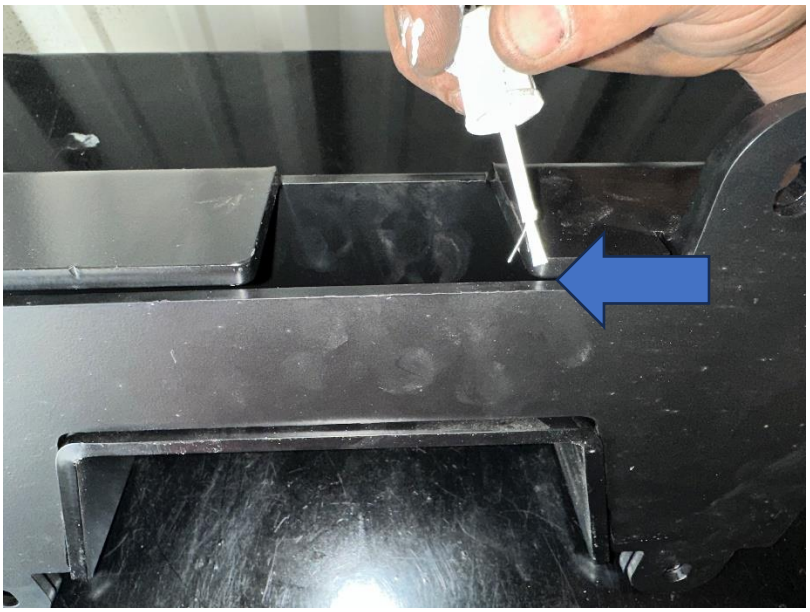
NOTE: ALWAYS CUT WITH FLAMES GOING AWAY FROM FUEL TANK. RECOMMEND COVERING TANK WITH FIREPROOF BLANKET.

58. To avoid chassis damage, perform the following procedures to only ONE frame rail at a time.
59. Continue to clean the frame surface and wipe down. Refer to pic



60. Present C notch on table and mark inner plate bed frame notch. Refer to pic





61. Present inner cnotch plate to frame rail. This will be your guide/template on where to trace cut out of frame. NOTE: MAKE SURE FRAME BRACKET IS PRESSED FIRMLY AND LEVELED WITH BED FRAME RAIL. Refer to pic

62. Refer to pics for reference.


Lufkin
25FT

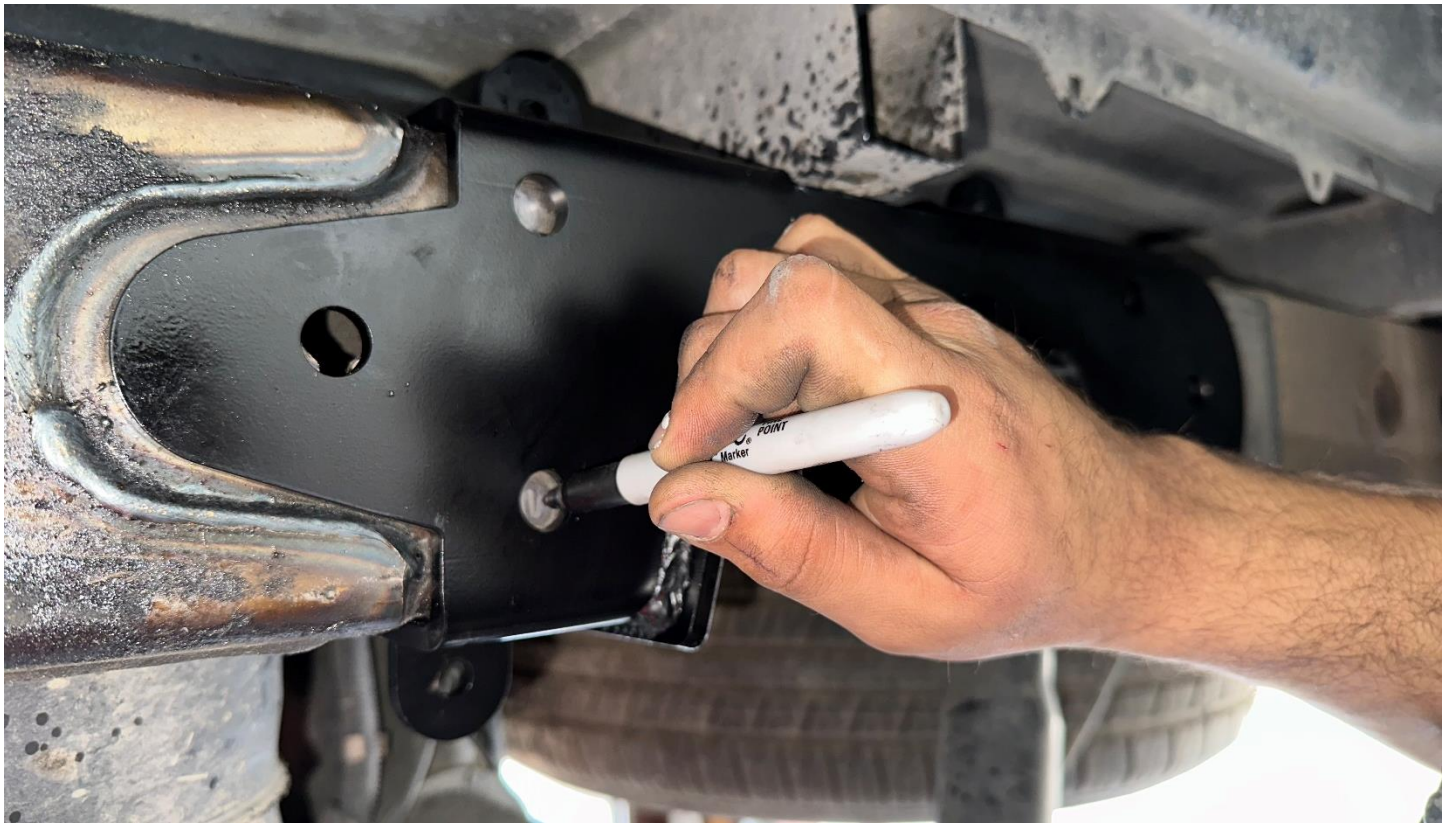

Lufkin
25FT

63. With care Cut along the marked lines. **DO NOT** remove any material from the frame rail that is not shown or described here.
64. Deburr all cut edges, paint cut edges and bare metal to prevent rust.

NOTE: * Some adjustments may be made to the frame after using the template as some frames vary from vehicle to vehicle and adjust accordingly until the C Notch shell fits over the frame. **

65. With the C-Notch installed against the outside face of the frame rail and use a paint marker, or center punch, to mark all the holes onto the frame using the C-Notch to locate the holes. Refer to following pics.

66. Mark holes with paint marker

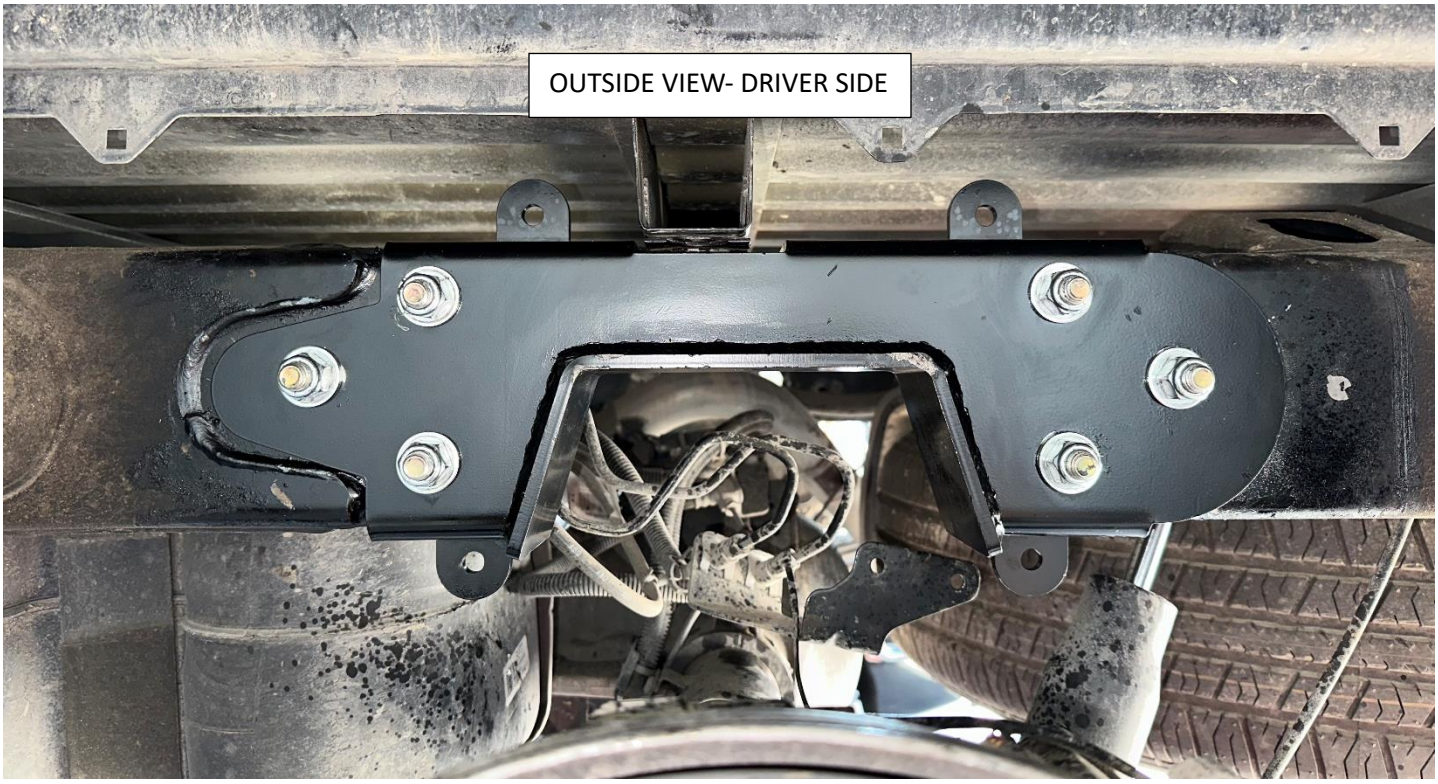


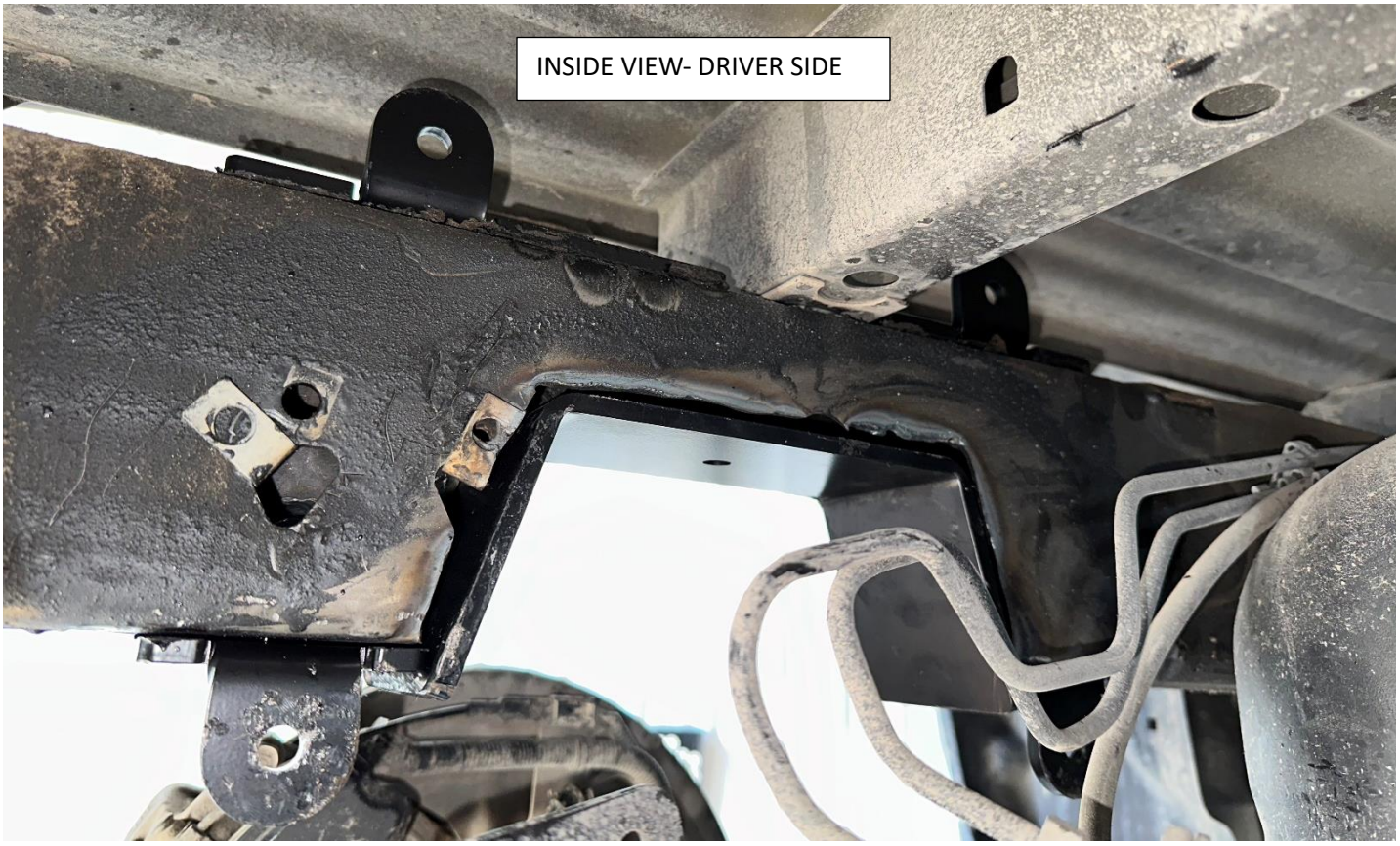
67. Picture showing holes marked.

68. Drill the holes using a 1/2” (50.2mm) drill bit. ONLY DRILL OUTER SECTION OF FRAME. Refer to pic

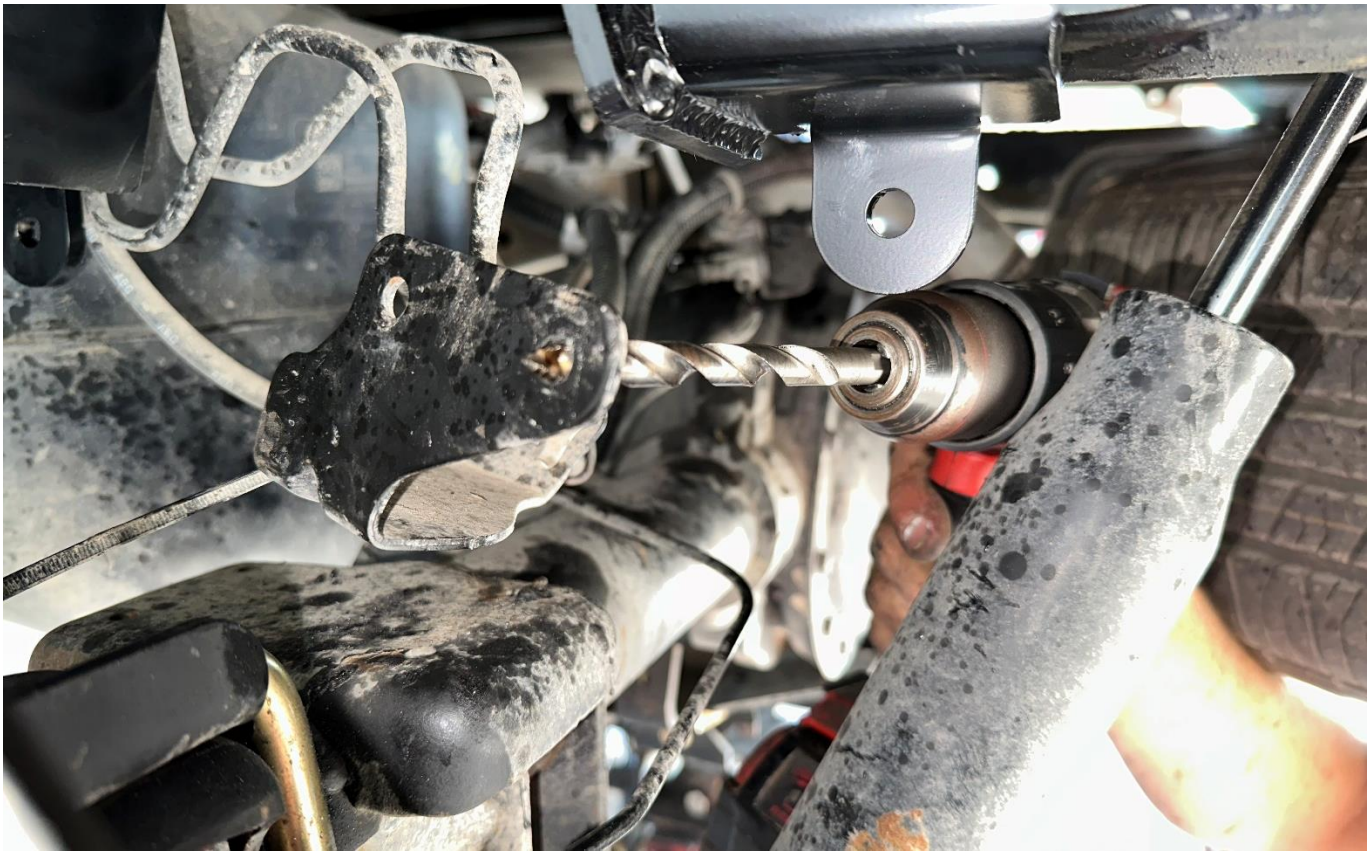
69. After drilling use C notch stud hardware to check for fitment and clearance

70. With the hardware provided. Bolt up outer section of C notch to the frame and torque to 50 FT-LBS. Refer to pic.

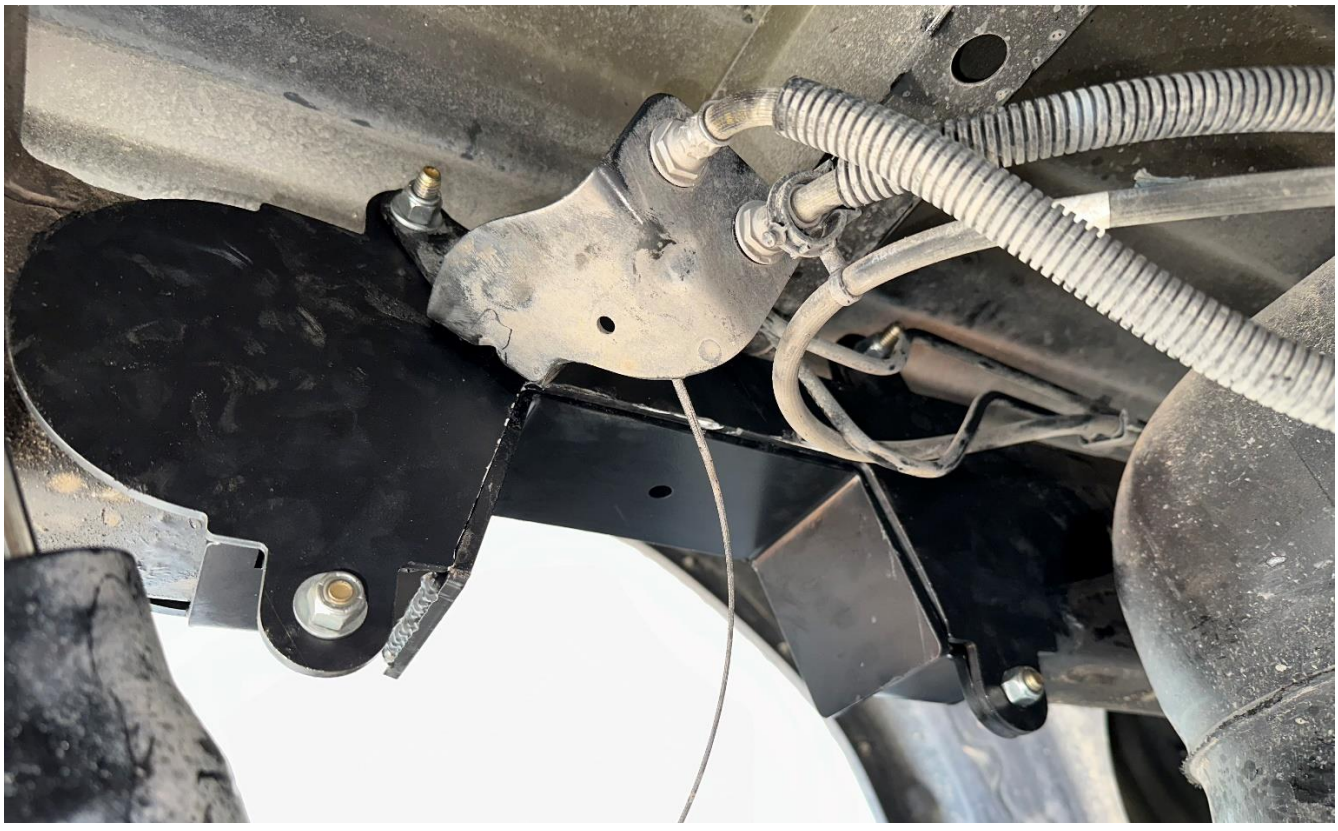




71. Drill brake line bracket with 3/8” drill bit. Refer to pic



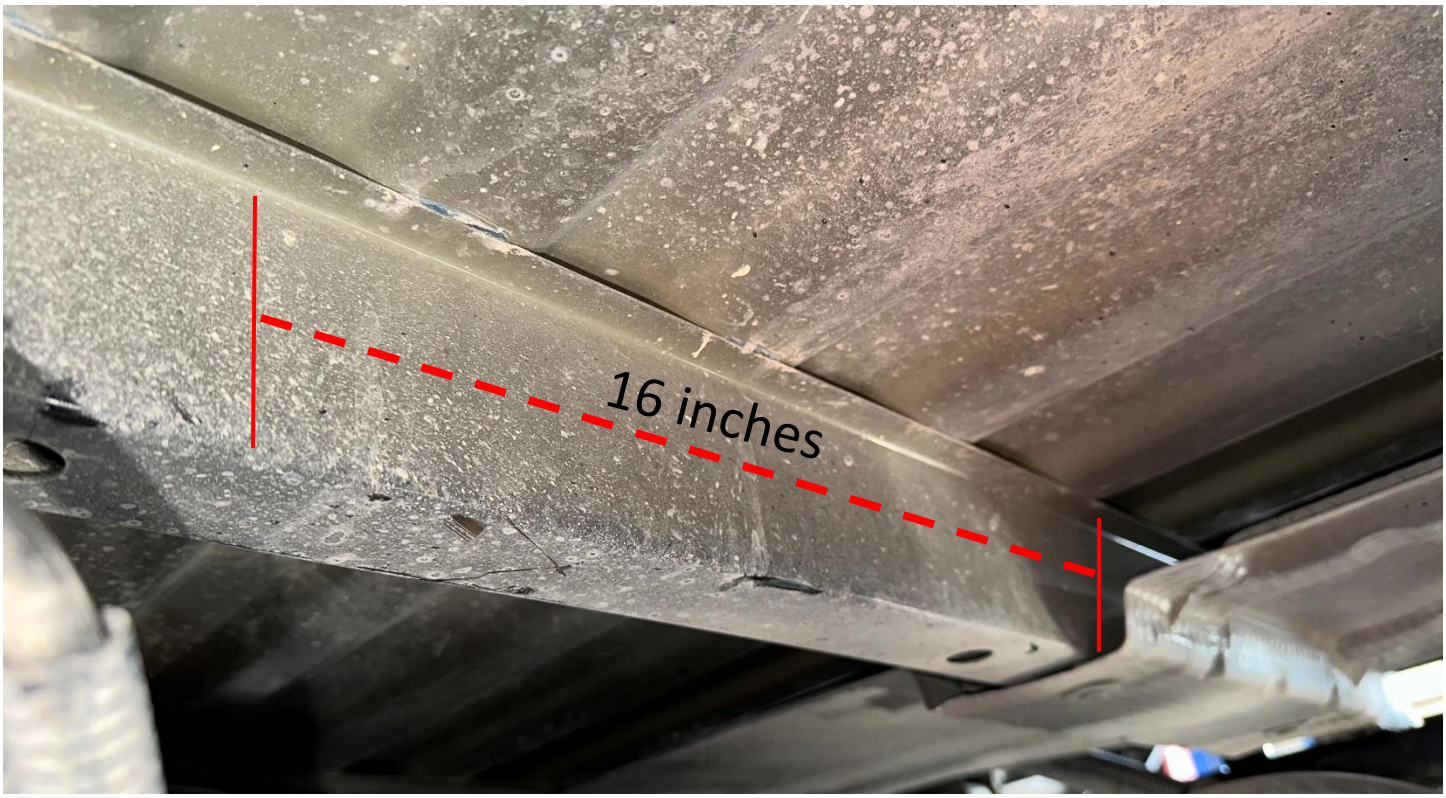
72. Install inner notch bracket with provided hardware and torque to 30 ft -lbs. Refer to pic



73. Repeat steps 59-72 for the other side.

BED RAIL NOTCH

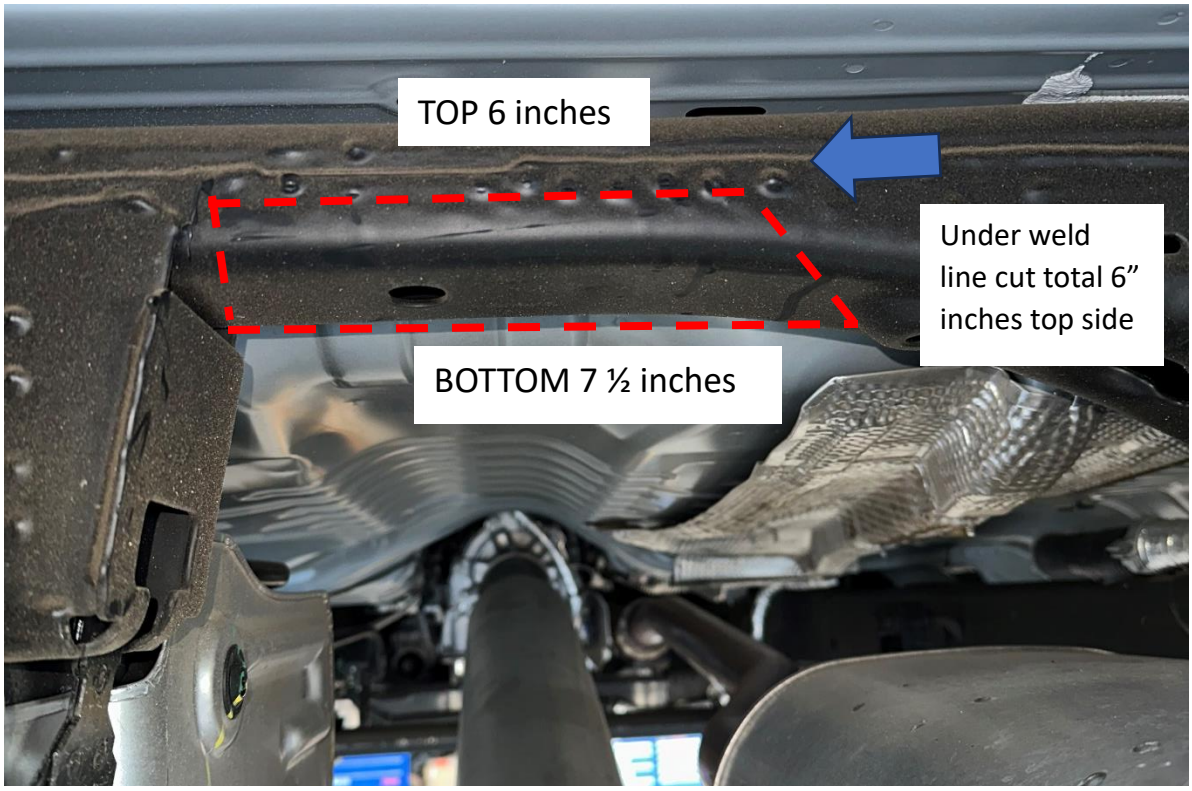
74. You will need to notch bed cross member to allow travel for top of differential. From heat shield mark 16 inches across. Refer to pic



75. Cut bed rail. Refer to pic.

Fuel Tank Cross member Notch

76. Fuel tank cross member will require notching to allow driveshaft clearance. Clean cross member area to allow ease of cutting. You will cut right underneath the weld. The top side will be cut 6.0 inches. Bottom side will be cut 7 ½ inches. Refer to pic

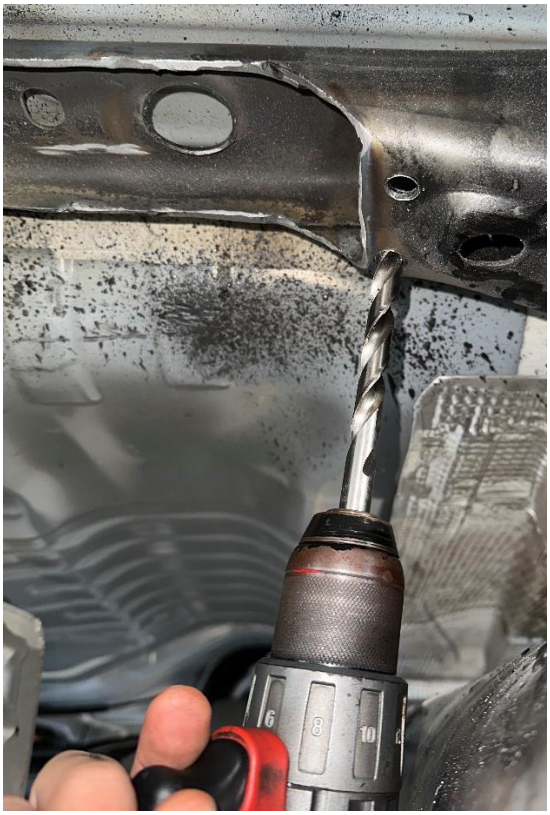


77. Cut cross member ¼” away from fuel tank bracket and under cross member weld line. Refer to pics for guidance.

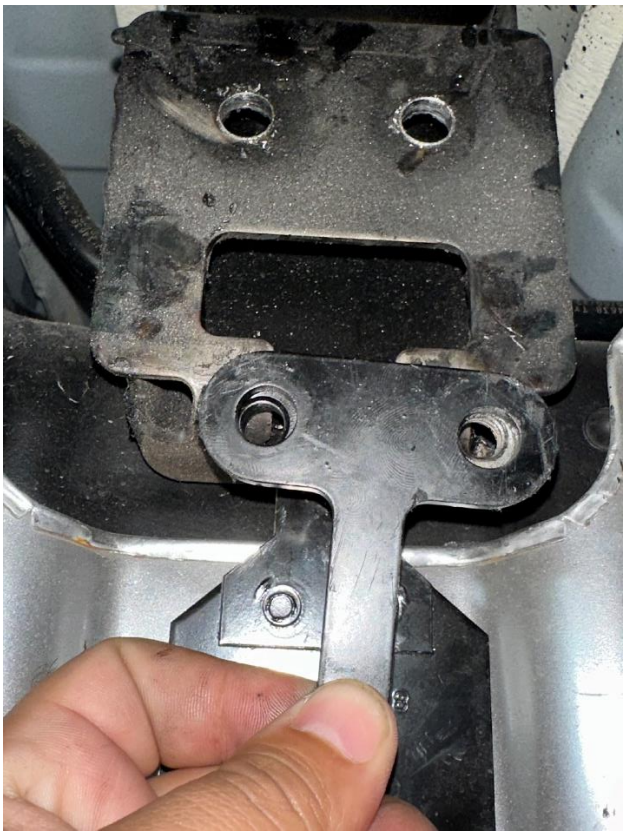
78. Cut bottom side 7 ½” inches. Refer to pic for guidance.

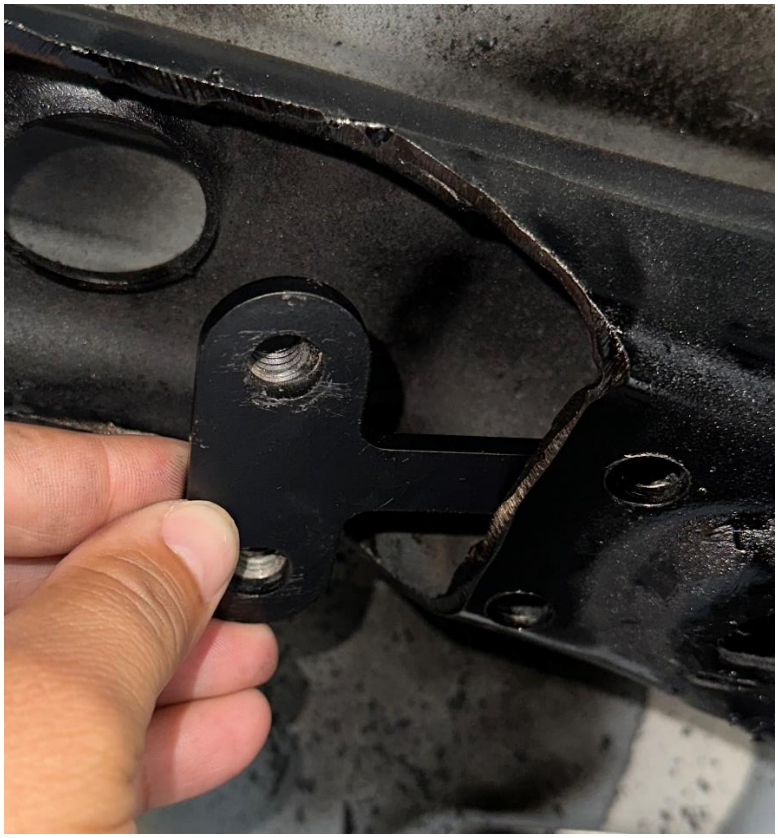
79. Mount cross member bracket and mark holes. Refer to pic

80. Drill holes with 3/8” drill bit. Refer to pic.



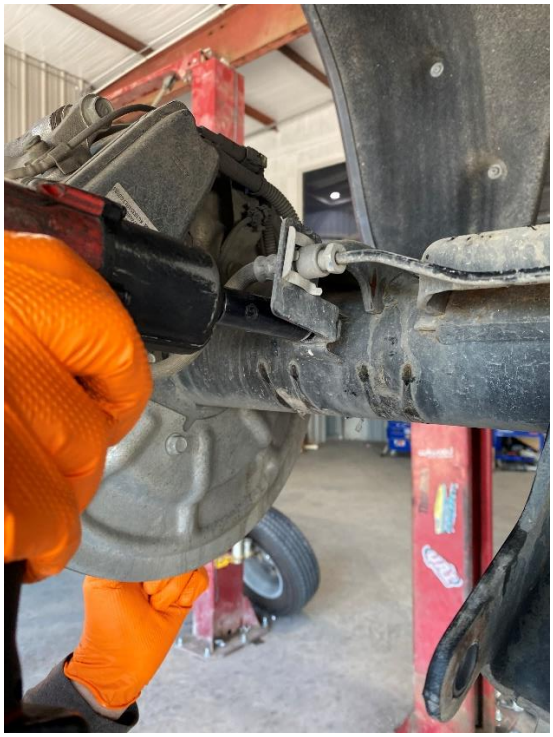
81. Insert IHC hardware and bolt up cross member notch.



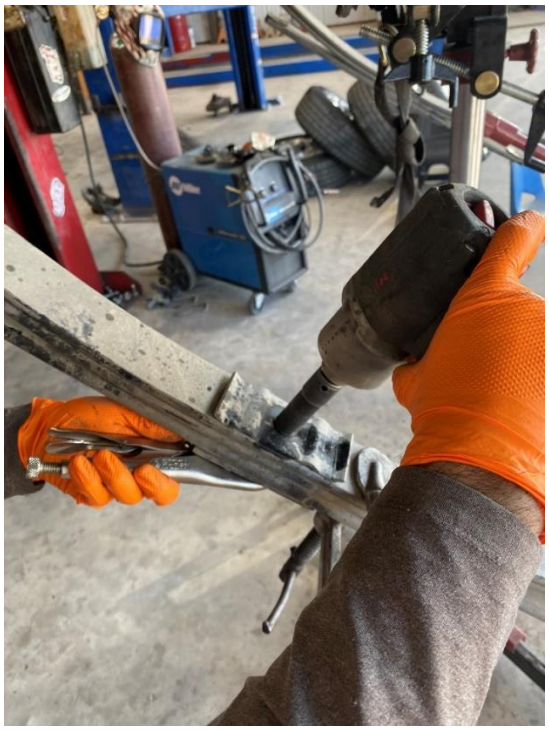
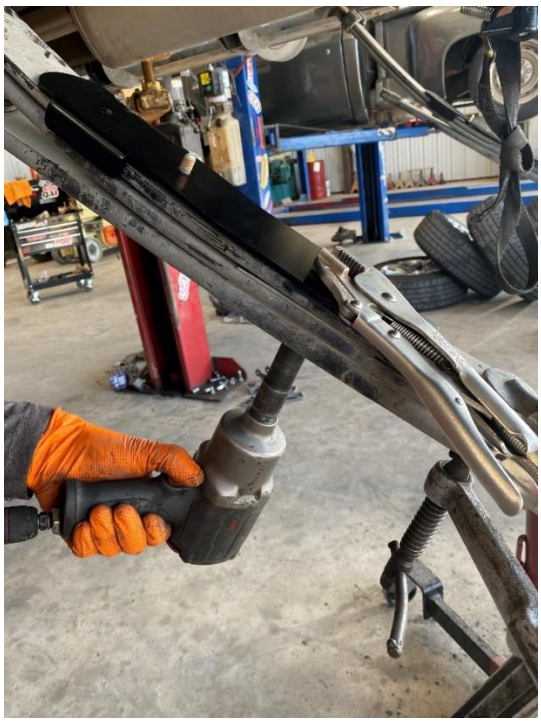


82. Torque to 30 ft -lbs. refer to pic

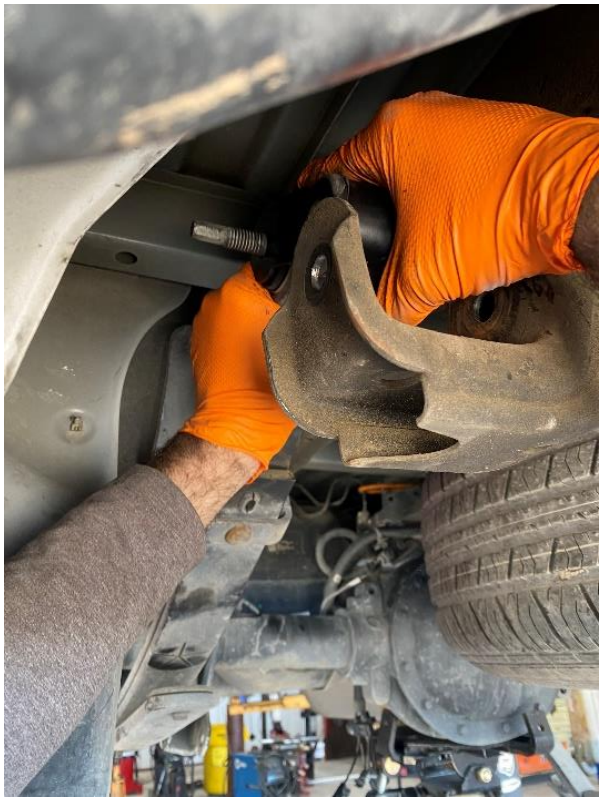
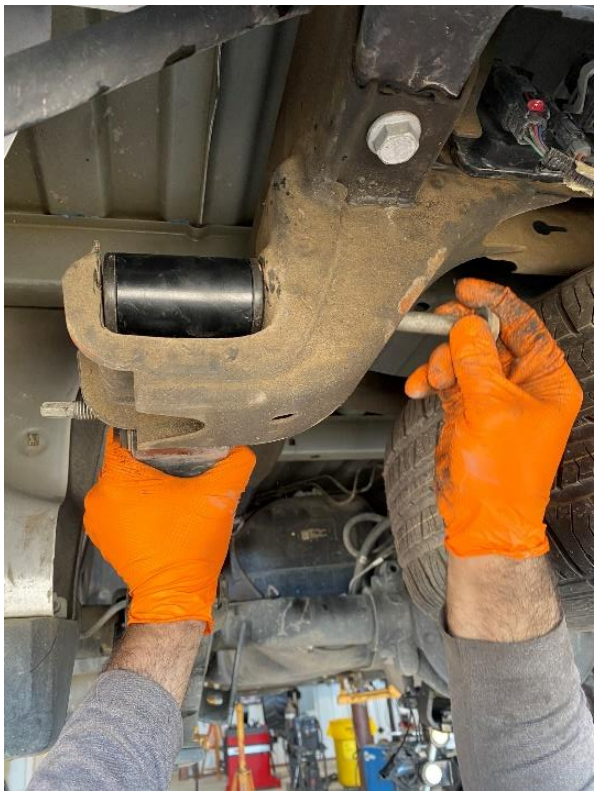
83. Continue with the installation of rear lowering kit.
84. Remove REAR BRAKE LINE bracket move out of the way.
85. Cut off DIFFERENTIAL brake line bracket. Refer to pic
86. NOTE: DO NOT CUT INTO DIFFERENTAIL!




87. Clamp leaf pack with C CLAMP.
88. Continue to remove center pin bolt.
89. With Vise Grip hold head of bolt. Refer to pic
90. NOTE: DISCARD STOCK U BOLT PLATE
91. NOTE: DISCARD STOCK PINION SHIM

92. Raise differential upward.
93. Install IHC shackles onto leaf pack.
94. Install IHC shackles into rear hanger. Refer to pic.

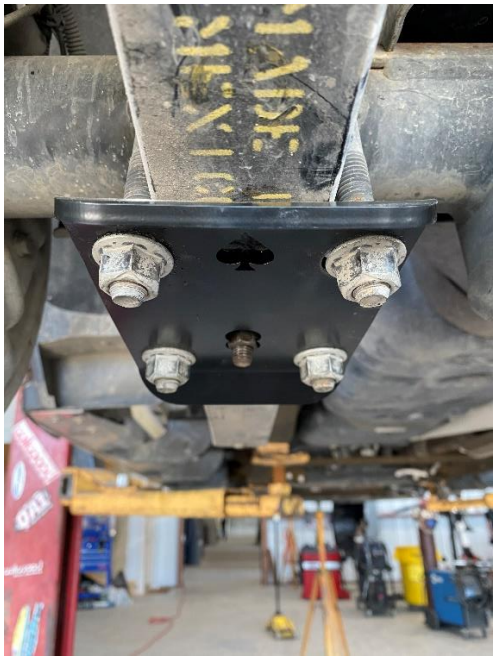
95. Continue to install FLIP KIT SADDLES.
96. Lower Diff onto flip kit saddles. Refer to pic.
97. NOTE: SADDLE ARE DIRECTIONAL. WELDED NUT TO REAR OF VEHICLE!!!
98. Bolt up bracket line bracket to saddle using OEM hardware. TORQUE 80 INCH-LBS

99. Install IHC provided U-BOLTS.

100. BOTTOM PLATE is directional. Spade facing rear of vehicle. Leaf pack center pin bolt goes on furthest hole to front. Refer to pic.

101. Start by tightening 2 u- bolts towards rear then tighten front till all are even. Continue to TORQUE 80 FT-LBS.

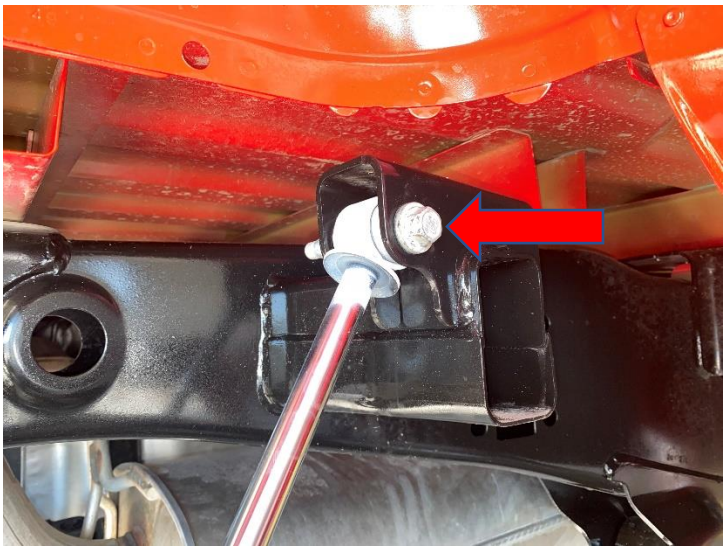
NOTE:DO NOT TIGHTEN FRONT 2 U BOLTS FIRST!

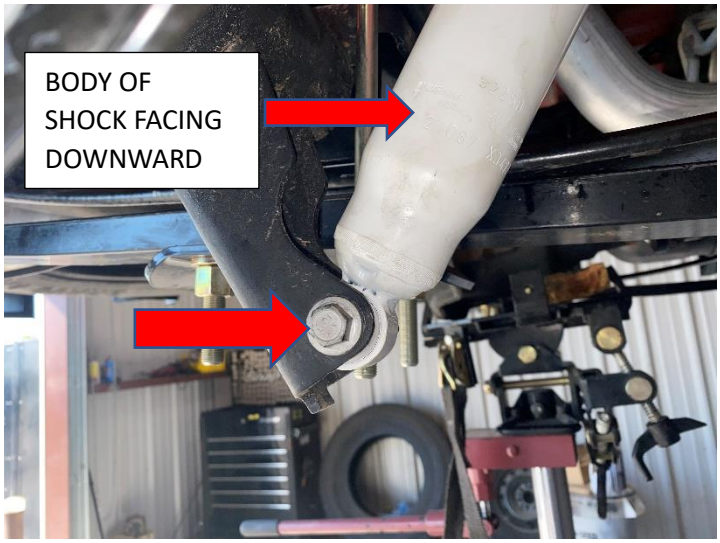


102. Install inner sleeve into shocks.

103. Install shocks using OEM hardware. TORQUE TO 60FT-LBS

104. NOTE: BODY OF SHOCK GOES FACING DOWNWARD!!!





105. Reconnect all ABS wiring and brake line brackets from steps 44-47

106. 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.

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.

Questions or concerns email tech@ihcsuspension.com or call 956-424-6901 M-F 8am-5pm PST