

# **READYLIFT®**

**SUSPENSIONS**

## **44-3980 2019-UP GM 1500 8" Lift Kit**

**IF your ReadyLIFT® 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 ReadyLIFT.**

**(877) 759-9991**

**MON-FRI 7AM-4PM PST**

**OR**

**EMAIL: support@readylift-ami.COM**

**WEBSITE: ReadyLIFT.COM**

**\*\*Please retain this document in your vehicle at all times.\*\***

### **Limited Lifetime Warranty**

This unique product warranty proves our commitment to the quality and reliability of every product that ReadyLIFT manufactures. The ReadyLIFT product warranty only extends to the original purchaser of any ReadyLIFT 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 ReadyLIFT items; bushings, bump stops, ball joints, tie rod ends, heim 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 ReadyLIFT has a 90 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 ReadyLIFT packaging. Please call **(877) 759-9991** to get an RGA# for any return. Customer is responsible for shipping costs back to ReadyLIFT. **Returns without RGA# will be refused.** Contact ReadyLIFT directly about any potentially defective parts prior to removal from vehicle.

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

**READYLIFT® 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 or vehicle rollover 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. ReadyLIFT Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting 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 off-road 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 lifting of their vehicle before the purchase and installation of any ReadyLIFT products.

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

All raised vehicles 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 insure 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.

ReadyLIFT 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 lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

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*A lifted vehicle may have different headlight aim performance. ReadyLIFT recommends marking and recording the headlight beam position before kit installation and then adjusting, if necessary, the headlamps to the same height settings after kit installation. Set the vehicle on a level surface 10' to 15' from a solid wall or garage door. (This is a general distance with some manufacturers requiring different distances.) Note the top height of the low beam's bright spot, the top of the most intense part of the beam, for driver and passenger side. Height may vary from side to side. Repeat this procedure and adjust after lift kit is installed. Adjust if the aim is off by turning the adjusters gradually (a quarter of a turn) and looking to see where the new alignment falls. It may be easier to block one headlamp while adjusting the other. Consult the owner operation manual for procedures to adjust headlights - many automakers offer headlight aiming specs. Some states have their own specifications when it comes to headlight aim, so it's best to follow those rules when aligning headlights.*

This suspension system was developed using a 37" x 12.5" tire with 20" x 9" wheel and a offset of 0. If wider tires are used, offset wheels may be necessary and trimming may be required. Factory wheels with more than a +18 offset can not be used but are not recommended with tires over 11.5" wide. Factory 18" wheels can not be used.

The stock spare rim can be run in an emergency - exercise extreme caution under stock spare tire operating conditions. Please note that, if running the spare factory tire, it is done for short distances and a speed not to exceed 45mph or damage to differentials may occur.

## **IMPORTANT NOTE:**

Kit not compatible with aftermarket lift struts or other lift systems. Use of additional lift components will damage vehicle.

Due to the variations in body designs and wheel openings between Chevrolet and GMC the max tire size will vary.

CAUTION: 2019-UP GM 1500 4WD front CV axle boots are designed by GM to be more resistant to road debris impact during vehicle operation. This 'harder' boot material makes the CV axle inner and outer boots more susceptible to tearing/cracking during kit installation. EXTREME CARE MUST BE TAKEN WHEN REMOVING AND INSTALLING THE CV AXLES TO PREVENT ANY UNINTENDED DAMAGE.

NOTE: If a CV axle boot is torn due to installation error a replacement half shaft assembly should be installed for the repair. Replacement boots are not compatible with this lift kit - replacement boots use a crimp-on boot clamp which can contact the lower control arm further damaging the CV axle.

### **VEHICLE HEIGHT MEASUREMENTS**

	<b>Driver Before</b>	<b>Driver After</b>	<b>Passenger Before</b>	<b>Passenger After</b>
<b>Front</b>				
<b>Rear</b>				
<b>Headlamps</b>				

# **BILL OF MATERIALS**

<b>Driver Knuckle</b>	<b>1</b>
<b>Pass Knuckle</b>	<b>1</b>
<b>Front Cross Member</b>	<b>1</b>
<b>Rear Cross Member</b>	<b>1</b>
<b>Cam Block Off Plate</b>	<b>8</b>
<b>Skid Plate</b>	<b>1</b>
<b>Driver Diff Drop</b>	<b>1</b>
<b>Passenger Diff Drop</b>	<b>1</b>
<b>Passenger Diff Drop Spacer</b>	<b>1</b>
<b>Rear Diff Drop</b>	<b>1</b>
<b>Diff Drop Crush Sleeve</b>	<b>1</b>
<b>Driver Sway Bar Bracket</b>	<b>1</b>
<b>Pass Sway Bar Bracket</b>	<b>1</b>
<b>Driver Strut Extension</b>	<b>1</b>
<b>Pass Strut Extension</b>	<b>1</b>
<b>Strut Thrust Washer</b>	<b>2</b>
<b>Pre-Load Spacer</b>	<b>2</b>
<b>CV Axle Spacer</b>	<b>1</b>
<b>Rear Brake Line Bracket</b>	<b>1</b>
<b>Rear ABS Bracket</b>	<b>1</b>
<b>Driver Lift Block</b>	<b>1</b>
<b>Pass Lift Block</b>	<b>1</b>
<b>Bilstein Rear Shock</b>	<b>2</b>
<b>U-Bolt</b>	<b>4</b>
<b>U-Bolt Hardware Pack</b>	<b>1</b>
<b>M10 x 85mm Head Allen Bolt</b>	<b>2</b>
<b>M10 Nyloc Nut</b>	<b>2</b>

<b>M18 x 120MM Bolt</b>	<b>2</b>
<b>M18 x 130MM Bolt</b>	<b>2</b>
<b>M18 C-Lock Nut</b>	<b>4</b>
<b>M18 Flat Washer</b>	<b>8</b>
<b>M14 x 90MM Bolt</b>	<b>2</b>
<b>M14 x 100MM Bolt</b>	<b>1</b>
<b>M14 x 120MM Bolt</b>	<b>1</b>
<b>M14 C-Lock Nut</b>	<b>4</b>
<b>M14 Flat Washer</b>	<b>8</b>
<b>M12 x 25mm Bolt</b>	<b>4</b>
<b>M12 Flat Washer</b>	<b>4</b>
<b>1/2" x 1.25" Bolt</b>	<b>4</b>
<b>1/2" Flat Washer</b>	<b>4</b>
<b>M10 x 25mm Bolt</b>	<b>10</b>
<b>M10 x 40mm Bolt</b>	<b>4</b>
<b>M10 x 50mm Bolt</b>	<b>8</b>
<b>M10 x 60mm Bolt</b>	<b>4</b>
<b>M10 C-Lock Nut</b>	<b>26</b>
<b>M10 Flat Washer</b>	<b>52</b>
<b>M8 x 25mm Bolt</b>	<b>4</b>
<b>M8 C-Lock Nut</b>	<b>4</b>
<b>M8 Flat Washer</b>	<b>8</b>
<b>M6 x 25mm Bolt</b>	<b>2</b>
<b>M6 C-Lock Nut</b>	<b>2</b>
<b>M6 Flat Washer</b>	<b>4</b>
<b>1/4" Nyloc Nut</b>	<b>2</b>
<b>1/4" Flat Washer</b>	<b>2</b>



***Before starting installation:*** ReadyLIFT Suspension highly recommends that the installation of this product be performed by a professional mechanic 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 ReadyLIFT Suspension Customer Service to find one of our "Pro-Grade" 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.

**\*\*\*Parts shown in red for picture clarification only.\*\*\***

ReadyLIFT 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 straight forward position with the column lock or steering wheel locking device.

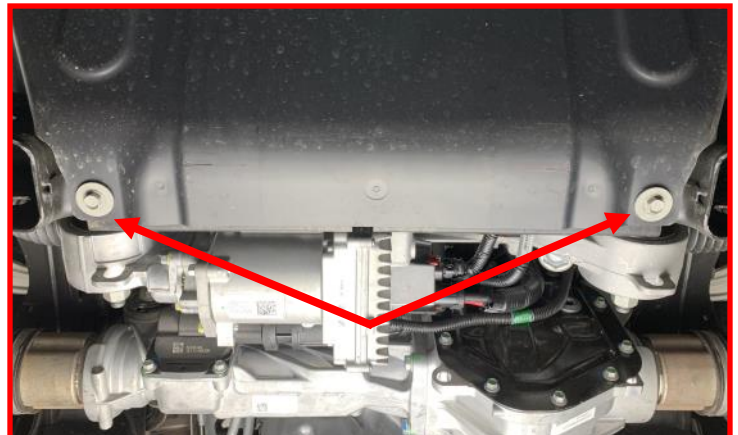
Raise the front of the vehicle and support with safety jack stands at each frame rail behind the lower control arms. Remove the front wheels. Starting with the front of the vehicle, all steps are to be completed on both sides of the vehicle unless instructed.

Remove the (4) front skid plate mounting bolts and discard. Retain (2) of the mounting bolts.



Using (2) of the factory skid plate bolts, install into the two gravel guard bolt holes.

Torque the hardware to 20 ft-lbs.



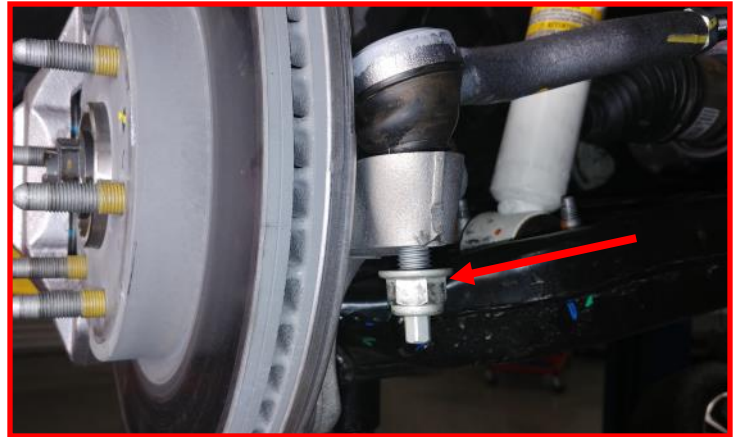


Loosen the top strut nuts but do not remove at this time.

**Note:** This will release the tension on the top hat to prevent the strut popping out toward the CV axle boot when the lower strut bolts are removed.



Remove the outer **tie rod end nut**. Strike the tie rod end on stud with a dead blow hammer to dislodge the taper.



Remove the **ABS bracket** from the upper control arm. Remove ABS sensor harness from bracket and discard bracket.



Remove the **ABS sensor harness and brake line bracket** from the knuckle and hang out of the way. Retain the factory hardware.



Remove the **ABS sensor harness bracket** from the knuckle. Retain the factory hardware.



Remove the **wheel speed sensor** from the knuckle and hang out of the way. Retain the factory hardware.

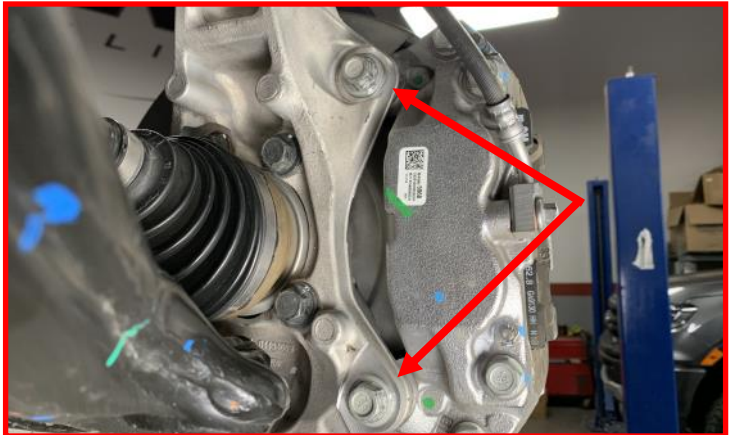


Remove the **axle nut**. Press axle back through hub to allow for greater misalignment and ease in the removal/installation process.

**NOTE:** It is imperative that the axle be pushed back through the hub assembly. Failure to do so can lead to damage to the CV boot or the CV joint itself. Care **MUST** be taken when handling these CV axles.



Remove **brake caliper mounting bolts** and hang caliper out of the way. Do not hang the caliper by the brake line. Retain factory hardware.





Remove **brake rotor retaining bolt** and remove the rotor. Retain the factory hardware.



Remove the **lower sway bar end link** from the lower control arm.



Loosen but do not remove the **upper control arm ball joint nut**. Strike the upper ball joint boss on knuckle with a dead blow hammer to dislodge the taper. Remove nut and let knuckle hang out of the way.



Support the lower control arm with a suitable jack. Remove the **lower strut mounting bolts** from the lower control arm. Discard factory bolts.

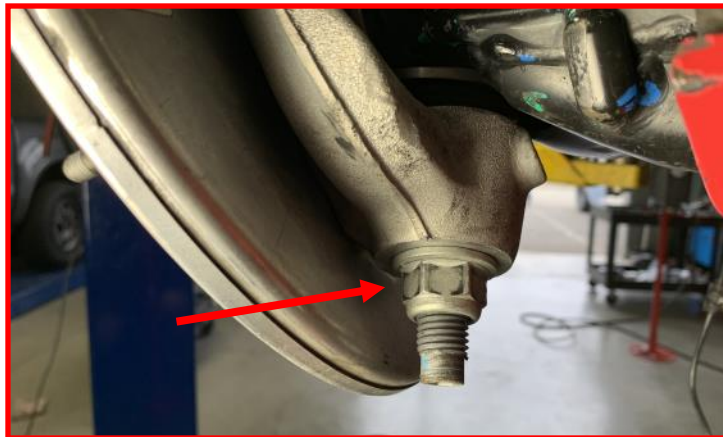




Remove the (3) **top strut mounting nuts** located on top of the strut tower. Remove strut assembly from vehicle. Retain the factory hardware.



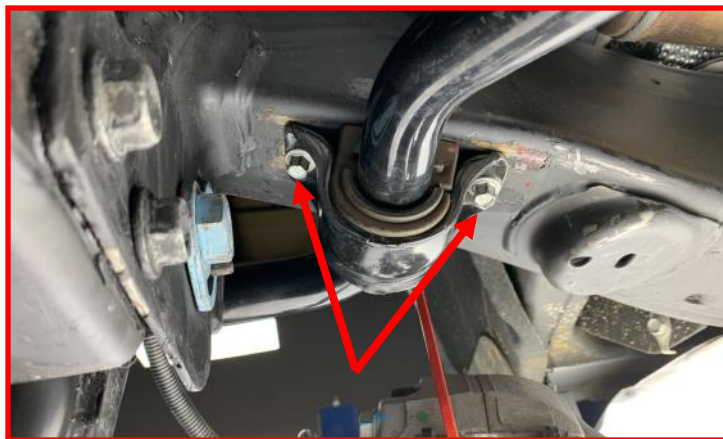
Loosen but do not remove the **lower control arm ball joint nut**. Strike the lower ball joint boss on knuckle with a dead blow hammer to dislodge the taper. Remove nut and then the knuckle from the vehicle.



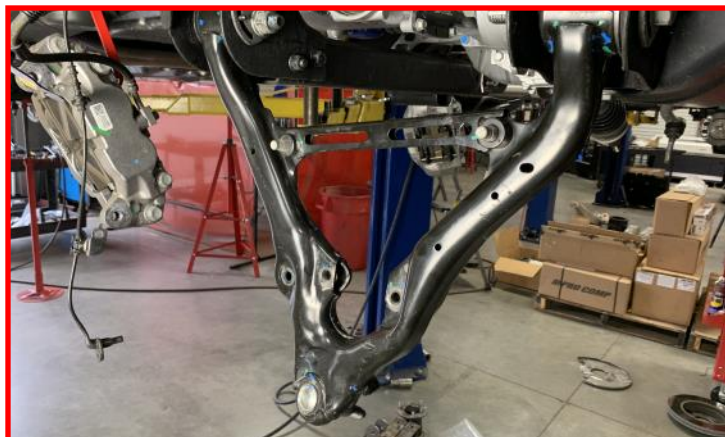
Remove **upper control arm bolts** located inside strut tower. Retain the factory pivot hardware. Discard factory upper control arm.



Remove (4) **sway bar mounting bolts** from the frame. Remove sway bar from the vehicle and retain factory hardware.



Remove the **lower control arm** from the frame. Be sure to retain factory alignment cam bolts, cams and nuts.



Mark the driveshaft to pinion flange location. Remove the front driveshaft hardware from the flange. Let driveline hang out of the way. Retain the factory hardware.



Unplug **differential shift actuator**. Ensure all clips are removed and clear of the differential.

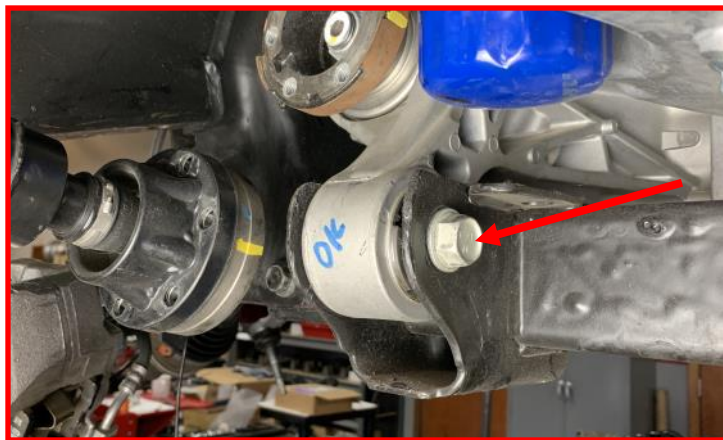


Remove **differential vent line** from the top of the differential.

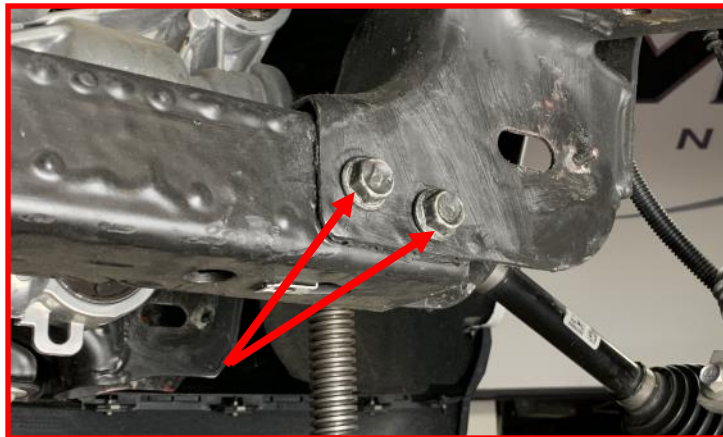




With an appropriate jack stand, support the front differential and remove the rear **differential mounting hardware**. Discard the factory hardware.



Remove the (4) rear **crossmember mounting bolts**. Remove crossmember from the vehicle and discard. Retain (3) of the crossmember mounting bolts and nuts.

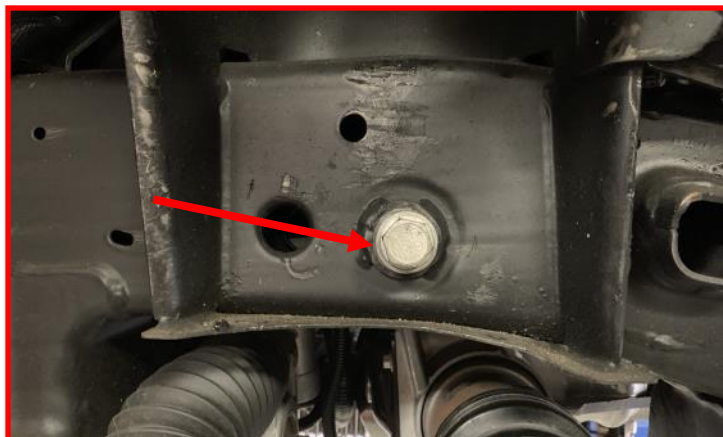


Remove **passenger side differential mounting hardware**. Discard the hardware.

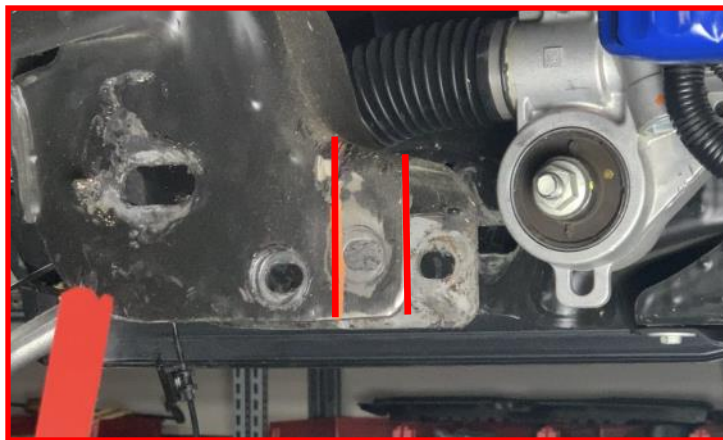


Remove **driver side differential mounting hardware**. Retain the factory hardware.

Ensure all the differential mounting hardware is removed, slowly lower the differential and remove from vehicle.



Using the inside edge of the rear control arm/ rear crossmember pocket, measure towards the outside of the vehicle frame **1.625"** and make a vertical mark on both sides of the frame. Connect the two lines across the top of the frame rail. Using an appropriate cutting tool, cut through marked line. Sand the cut surface to remove any sharp edges. Paint the cut surface to prevent any corrosion.



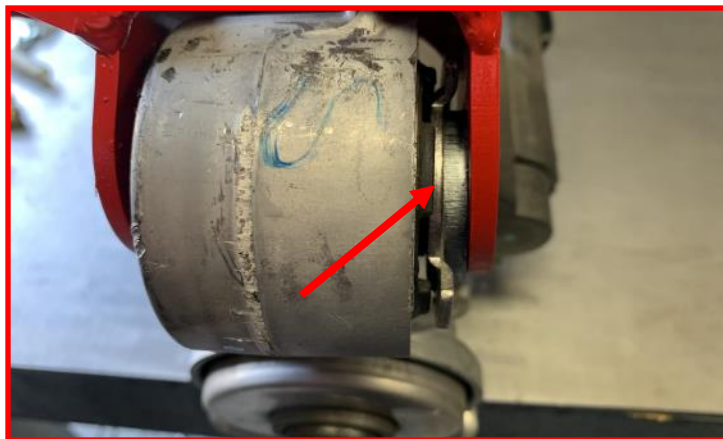
Measure from the pinion seal forward 6" and mark location. Measure from the outside of the fin inward approximately **.375"** and mark the location. Connect the two marks. Using an appropriate cutting tool cut away the material while following the marked line. Repeat steps for the bottom fin as well.



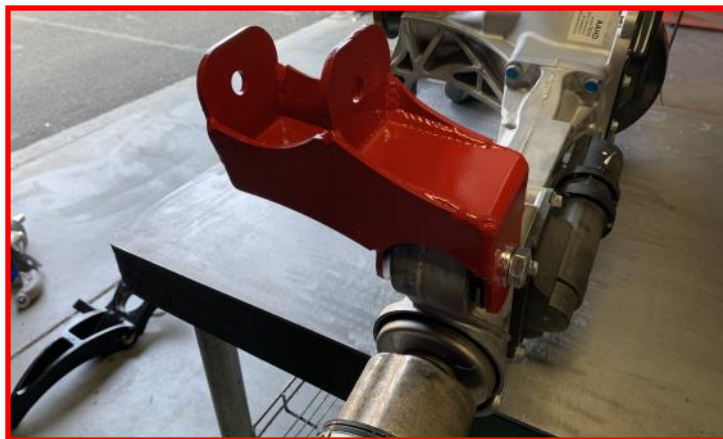
**Note: This is necessary to make clearance between the differential and the driver side lower control arm pocket.**

**\*\*\*Parts shown in red for picture clarification only\*\*\***

Prior to installing the passenger differential drop ensure the **3/16" passenger differential drop spacer** is installed between the factory mounting surface and the passenger differential drop bracket.

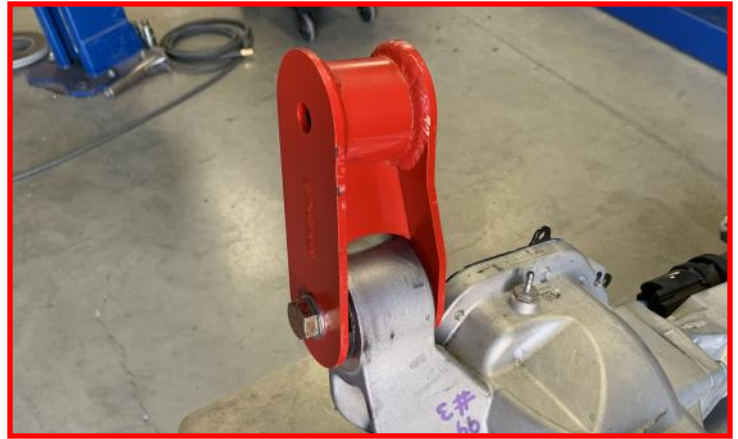


Install **passenger side differential drop** on factory differential mounting point using the supplied **M14 x 100mm bolt, washers and nut**. Do not tighten at this time.





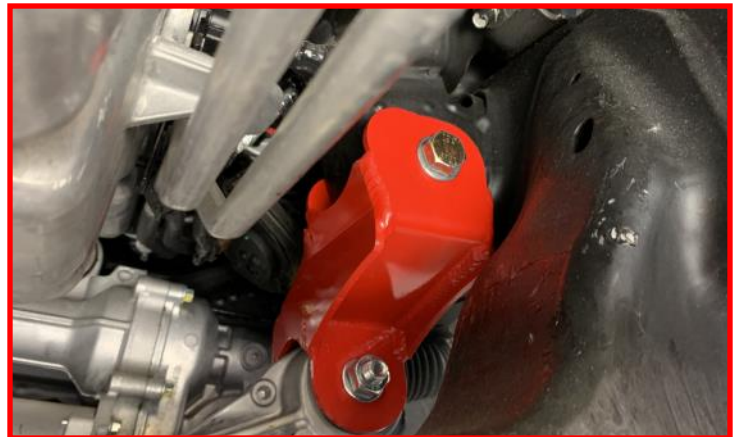
Install **driver side differential drop** on factory differential mounting point using the supplied **M14 x 90mm bolt, washers and nut**. Do not tighten at this time.



Install **differential drop bracket crush sleeve** in the factory differential frame mount located on the passenger side. Make sure the crush sleeve is fully inserted prior to installing the differential.



Raise differential into place. Be sure to use a helper to aid in the installation process. With the differential in place, install provided **M14 x 110mm Bolt, washers and nut** through the passenger differential drop bracket. Do not tighten at this time.

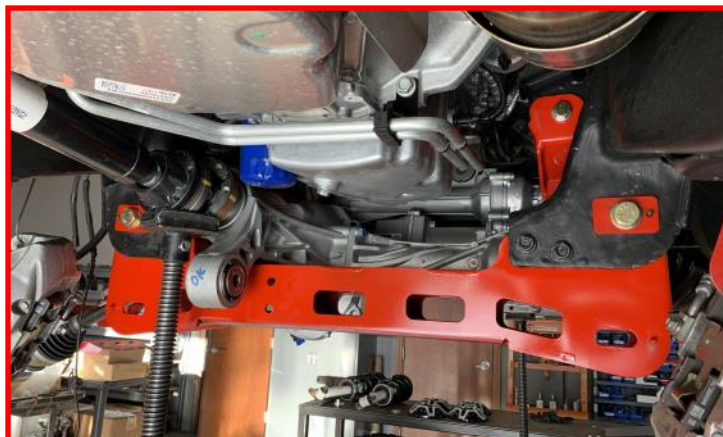


Install passenger differential drop bracket using **factory hardware**. Do not tighten at this time.



Install **rear crossmember** using the supplied **cam block off plates, M18 bolts, washers, and nuts**. Do not tighten at this time.

**Note:** To aid in installation of the rear crossmember, jack the differential up at the pinion. This will roll the differential and offer the clearance that is needed to install the crossmember.



Install the **(2) factory rear crossmember bolts and nuts** and supplied **cam block off plates, M18 bolt, washers and nut** through the passenger side factory mount and replacement crossmember. Do not tighten hardware as this time.



Install the **(1) factory rear crossmember bolt and nut** and supplied **cam block off plates, M18 bolt, washers and nut** through the driver side factory mount and replacement crossmember. Do not tighten hardware as this time.



Install **rear differential drop** onto rear crossmember using the **(4) supplied 1/2" bolts, washers** and a drop of thread locker.

Torque 1/2" hardware to **95 ft-lbs**.

With **rear differential drop bracket** in place, install the supplied **M14 x 90mm bolt, washers and nut** through the differential rear mount. Do not tighten at this time.





Install **front crossmember** using the supplied **cam block off plates, M18 bolts, washers, and nuts**. Do not tighten at this time.



Using the **factory cam bolts, cams and nuts**, install the **lower control arms** in the factory orientation. Do not tighten at this time.



Plug in **differential shift actuator**. Ensure the retainer clip is locked into place.



Install vent line. It is necessary to pull down on the vent line to gain the slack needed for installation.



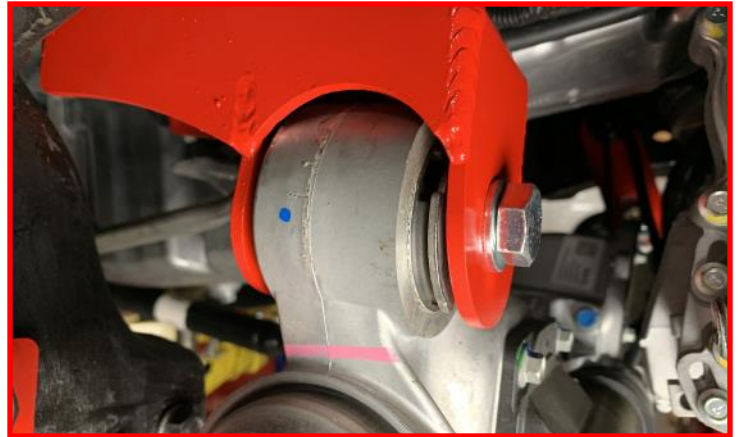
Tighten rear differential drop hardware.

Torque M14 hardware to 120 ft-lbs.



Tighten passenger differential drop bracket hardware.

Torque hardware to 120 ft-lbs.



Tighten driver differential drop bracket hardware.

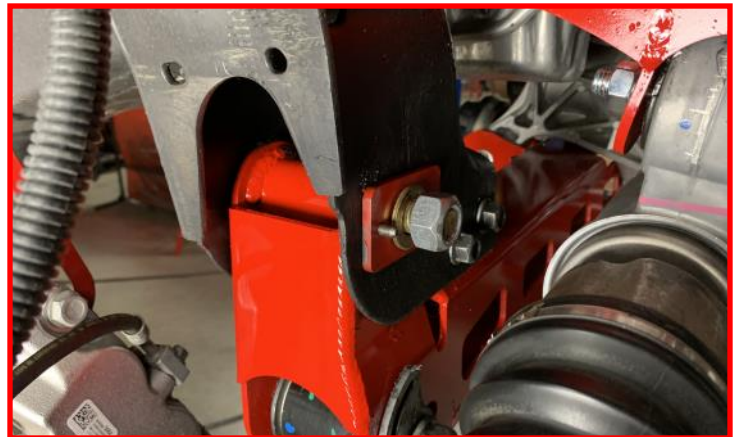
Torque hardware to 120 ft-lbs.



Tighten rear crossmember mounting hardware.

Torque M18 hardware to 250 ft-lbs.

Torque factory crossmember hardware to 90 ft-lbs.





Tighten **front crossmember** mounting hardware.

Torque M18 hardware to **250 ft-lbs.**



Install the **heavy duty skid plate** using the provided **M10 bolts, washers and nuts.**

Torque hardware to **45 ft-lbs.**



Using the factory hardware and thread locker, install the drive shaft to the pinion flange lining up the previous marks.

Torque factory hardware to **35 ft-lbs.**



Install **sway bar drop brackets** using the factory hardware.

Torque factory hardware to **35 ft-lbs.**



Install **sway bar** using the supplied M10 bolts, washers and nuts hardware.

Torque M10 hardware to **45 ft-lbs.**



**CAUTION: TAKE SPECIAL CARE WHEN DISASSEMBLING AND ASSEMBLING THE STRUT ASSEMBLIES. DAMAGE TO THE STRUT CAN OCCUR IF DONE INCORRECTLY.**

Mark the orientation of the strut assembly, spring to strut, and spring to top hat. These will be needed to be assembled in the same orientation as factory.



**CAUTION: THE SPRING IS UNDER EXTREME PRESSURE AND CAUSE BODILY INJURY AND/OR DEATH IS HANDLED IMPROPERLY.**

Using a spring compressor, relieve spring pressure from the strut top hat. Remove the factory top hat. Be sure to retain factory hardware.



**\*\*\*Parts shown in red for picture clarification only\*\*\***

With the shock on a bench, remove factory shock jounce.

Remove factory plastic spring perch isolator and discard.





Install the **billet pre-load spacer** on top of factory spring perch. The spacer should nest onto the factory spring perch.

Install factory shock jounce.



Install shock into to spring. Using the spring compressor, Compress spring and install the factory shock nut. Tighten and torque to **30 ft-lbs.**

**Note: Ensure orientation of the strut assembly is as factory.**



If the strut still has the lower clip nuts attached, remove and discard.



Locate the front clamshell strut extensions and hardware. (**M12 x 25mm bolts, washers, M10 x 40mm bolts, M10 x 50mm bolts, washers and locking nuts**) You will see the lower strut extensions are labeled with a "D" and "P". This is to identify the location the extension is to be installed. "D" corresponds with the driver and "P" corresponds with the passenger side. This orientation is important to prevent damage to other suspension and driveline components. **Passenger side shown.**



Bolt the two halves together using the provided **M12 x 25mm bolts and washers**.

Do not tighten at this time.

(Passenger side shown. The hardware of the extension will face the front of the truck when done.)



Using the provided **M10 x 40mm bolts, washers and locking nuts**, Install the strut bolts from bottom up through the strut extension and factory cross pin.

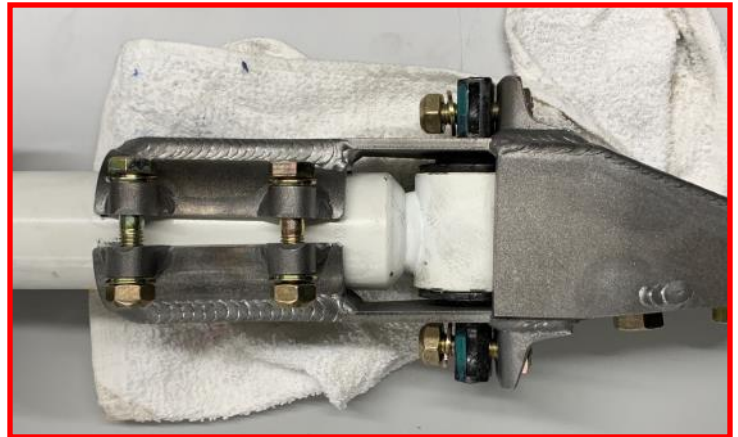
Do not tighten at this time.



Install the **M10 x 50mm bolts, washers and locking nuts** from back to front.

Torque the M12 hardware to **45 ft-lbs**.

Using a criss cross pattern between the two sides torque all M10 hardware to **35 ft-lbs**.



Prior to installation, ensure you have the proper replacement control arm, they are side specific and need to be install on the correct side.

**Note:** **Stud** on control arm should be toward the rear of the vehicle.

Install replacement upper control arms placed into factory location, install factory bolts. Do not install factory nuts at this time.





With the upper control arm bolts in place, install the supplied **laser cut washers**, the **factory nuts** and a drop of thread locker.

Torque the factory nuts to **90 ft-lbs**.



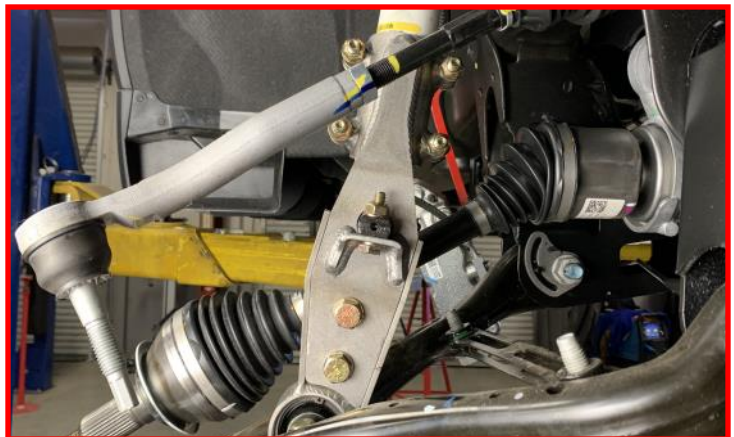
Install strut assembly into vehicle using the factory nuts.

Do not tighten at this time.



**Note the installation orientation.** The mounting bolts are facing toward the front of the vehicle and extension offset toward the center of the vehicle.

**Note: Proper installation is very important. Failure to do so will cause damage to the CV axle and other suspension components.**



Install provided **strut thrust washer** on the backside of the strut extension cross pin.

**Note: The strut thrust washer needs to be installed per the instruction to prevent possible damage to the CV axle boot.**



Swing lower control arm up, Install supplied **M10 bolts** through strut cross pin and lower control arm. Install **M10 washers, and nuts** on to bolts.

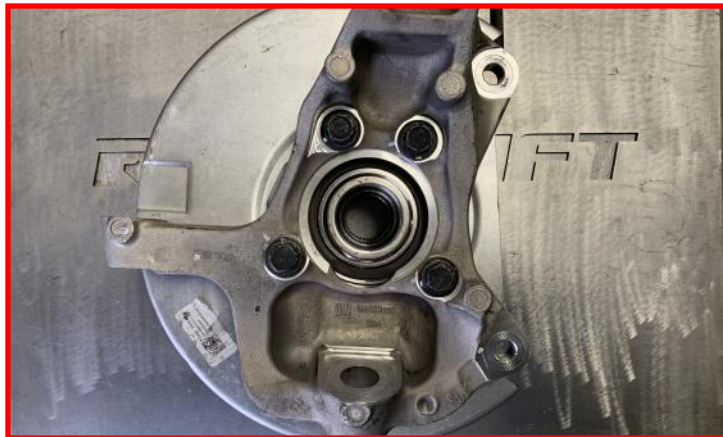
Torque the M10 hardware to **50 ft-lbs.**

Tighten the **top strut nuts.**

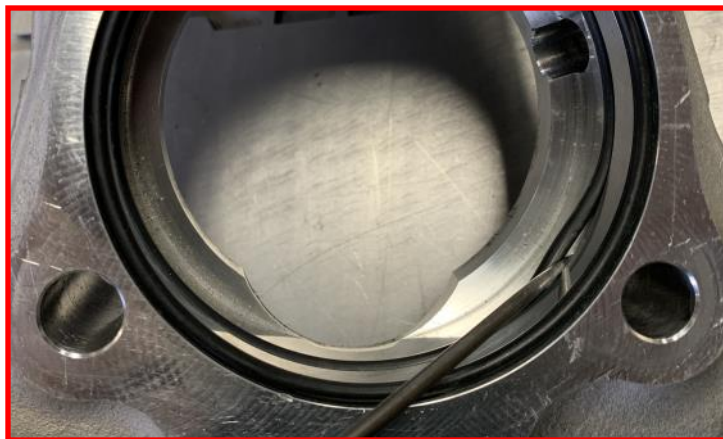
Torque the factory hardware to **35 ft-lbs.**



Locate the factory knuckle and hub assembly. Remove the (4) hub assembly mounting bolts. Remove hub assembly from factory knuckle.



Remove the O-rings from factory knuckle, be careful not to tear the O-rings when removing.



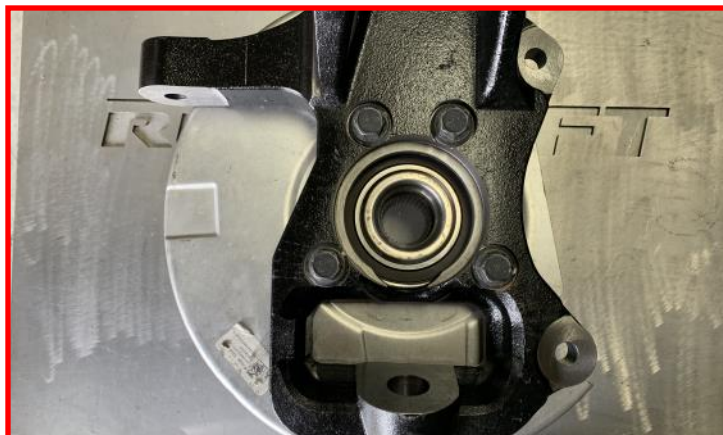
Install the O-rings from the factory knuckle into the replacement knuckle, take care when installing not to tear the O-rings.





Install rotor dust shield and hub assembly into replacement knuckle using the (4) factory hub bolts and thread locker.

Torque the hub bolts to **100 ft-lbs.**



Install the completed knuckle assembly to the lower ball joint using the **factory hardware** while guiding the CV axle through the hub.

Torque the ball joint nut to **110 ft-lbs.**



**Note:** driver side CV axle will receive a 1/4" aluminum spacer. Install the spacer onto the CV axle with the chamfered side towards the axle.



Ensure the CV axle is properly inserted into the hub assembly. Install and tighten **axle nut.**

Torque the axle nut to **160 ft-lbs.**

**Note:** It is important that the axle nut is fully seated and tightened prior to tightening the upper control arm ball joint. Non-compliance will potentially pinch the outer CV boot causing damage and/or failure to the half shaft assembly.





Install the upper ball joint to the knuckle using the provided hardware.

Torque the ball joint nut to **85 ft-lbs.**



Install the brake rotor to the hub assembly using the factory hardware.

Torque the factory hardware to **5 ft-lbs.**



Install the brake caliper to the knuckle using the **factory hardware** and a **drop of thread locker.**

Torque hardware to **100 ft-lbs.**



To gain the length needed to reach the ABS sensor mounting location it is necessary to remove the ABS sensor harness from the clip located passenger side inner fender.



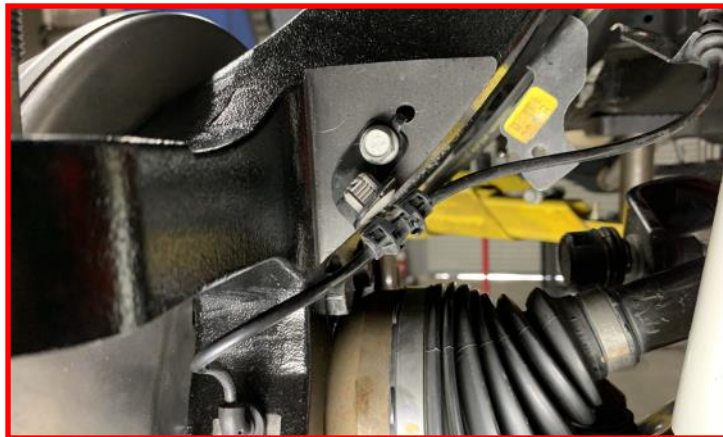
Route the ABS wire under the tie rod end boss on the knuckle and over the CV axle. Install **ABS sensor** into knuckle using the **factory hardware**.

Torque the factory hardware to **80-in/lbs**.



Install **ABS sensor harness bracket** to the front of knuckle using the **factory mounting hardware**.

Torque the factory hardware to **80-in/lbs**.



Install **ABS sensor harness bracket** to the back of knuckle by flipping bracket over and mounting bracket with the **factory mounting hardware**.

Torque the factory hardware to **80-in/lbs**.

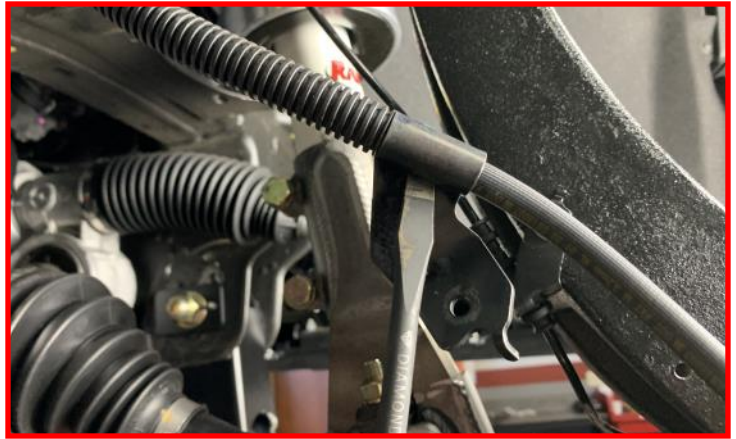


Install **brake line bracket** to the back of knuckle using the **factory mounting hardware**.

Torque the factory hardware to **80 in-lbs**.







Using a couple wire ties, secure the **ABS sensor harness** to the brake line.



**Note:** Driver side ABS sensor harness/brake line bracket installation instructions vary. Please follow the next few steps to ensure proper installation.

Route the ABS wire under the tie rod end boss on the knuckle and over the CV axle. Install **ABS sensor** into knuckle using the **factory hardware**.

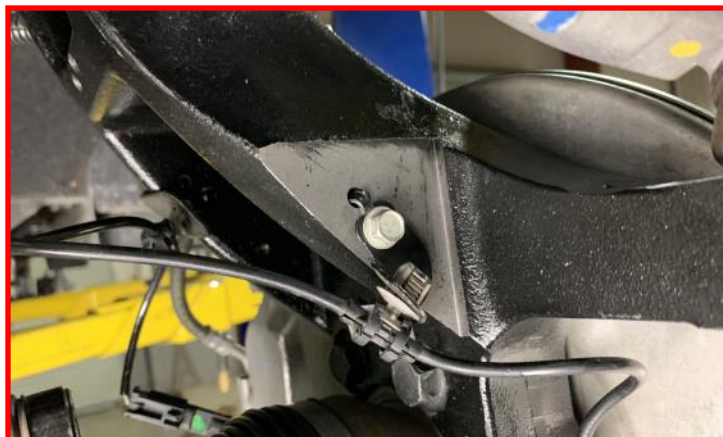
Torque the factory hardware to **80 in-lbs.**





Install **ABS sensor harness bracket** to the front of knuckle using the **factory mounting hardware**.

Torque the factory hardware to **80 in-lbs.**



Install **brake pad sensor bracket** to the back of knuckle by flipping bracket over and mounting bracket with the **factory mounting hardware**.

Torque the factory hardware to **80 in-lbs.**



Install **brake line bracket** to the back of knuckle using the **factory mounting hardware**.

Torque the factory hardware to **80 in-lbs.**

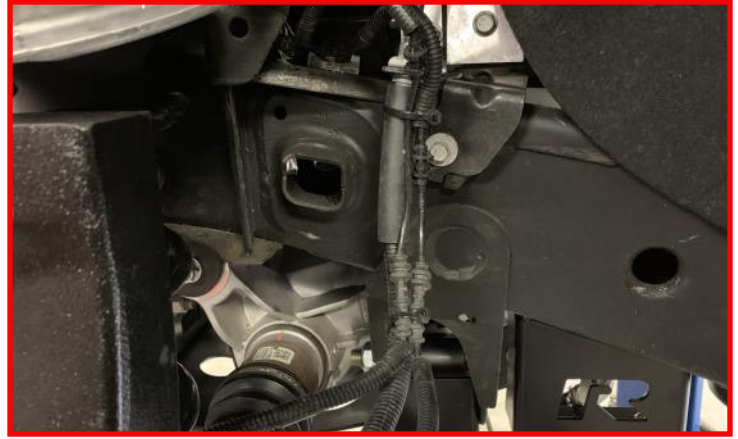


Install **ABS sensor harness/ brake pad sensor bracket** to the inside of knuckle. It is necessary to remove rubber grommets from bracket and rotate 180 degrees. Ensure the bracket points down and install using the **factory mounting hardware**.

Torque the factory hardware to **80 in-lbs..**



Using a couple wire ties, secure the **ABS sensor harness/ brake pad sensor** to the brake line.



Install the **sway bar drop link** into the lower control arm using factory nut.

Torque end link nut to **45 ft-lbs**.



Install the **outer tie rod end** to the knuckle using factory hardware.

Torque nut to **65 ft-lbs**.



With everything tightened and torque to the specified specifications, install front tires and lower vehicle. Jounce the suspension to settle it to the new ride height.

With the steering wheel centered, turn the tie rod ends until the tires are straight. If the steering wheel is not centered properly, the ABS/traction control lights may activate. Turn the wheels from lock to lock and make sure the brake lines and ABS routing clears all suspension components adequately. Reposition if necessary.

Torque the lower control arms to **150 ft-lbs**, and (while centering the alignment cams in their slots) upper control arms to **110 ft-lbs**. Final torque to be set by alignment tech.



## Rear Install

Block the front tires and raise the rear of the vehicle using a suitable jack.

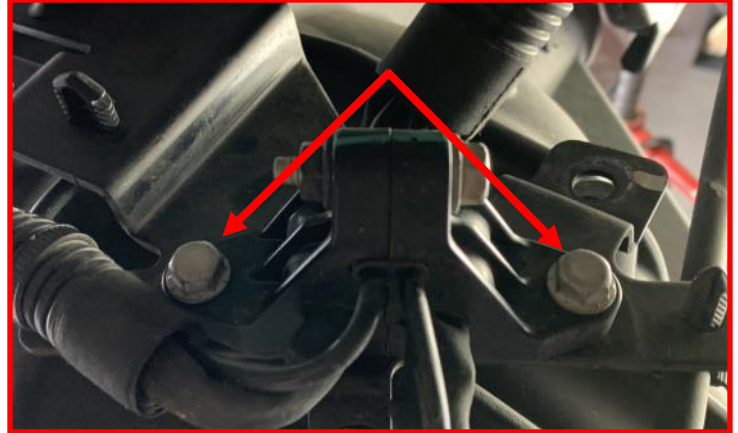
Support with jack stands at each frame rail in front of the rear leaf spring hangers.

Place a jack under the axle for support. Remove the rear wheels.

The brake line bracket is located on the inside of the frame rail on driver side of the vehicle. Remove the two bolts that mount the bracket and retain hardware.

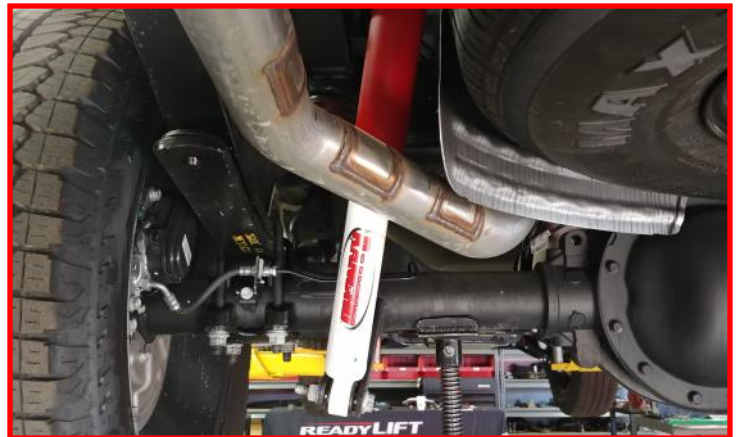


Remove **ABS sensor harness bracket** from top of rear differential. Retain the factory hardware.



Support the axle with a suitable jack. Remove both **driver and passenger shocks** from vehicle and discard.

Slightly loosen but do not remove the Passenger side U-bolts.





Remove the driver side U-bolts completely and discard. Lower the axle enough to ensure clearance to install lift block making sure that all brake lines and ABS lines do not get over extended.



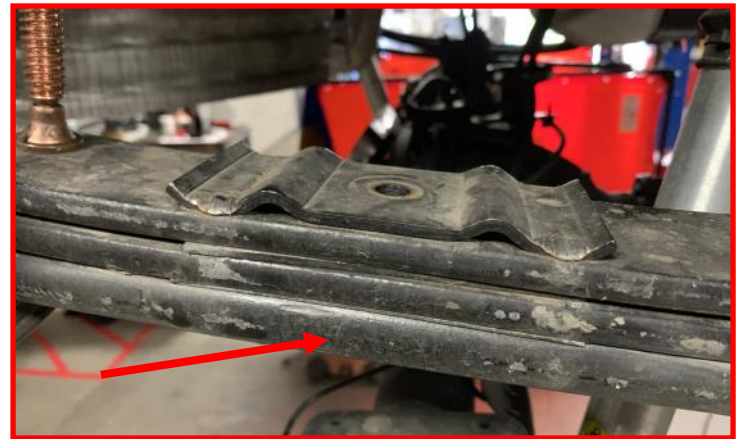
**Note:** Take care as you are working with a spring that is under pressure.

Using a suitable tool, clamp around the leaf pack to hold the spring pressure.

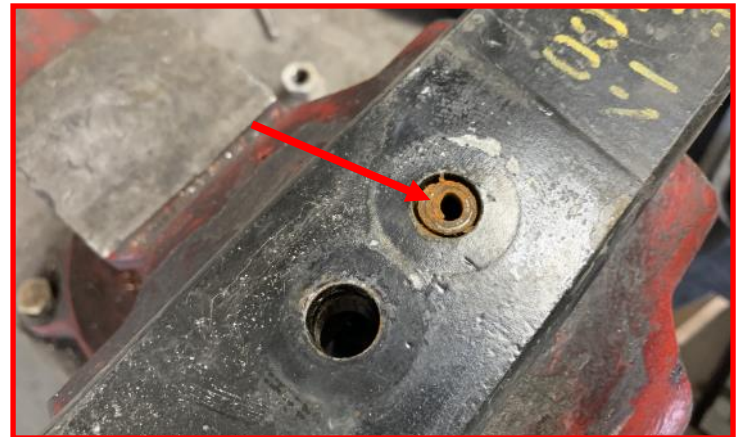


Remove the center pin holding the leaf pack together. Discard center pin.

Release the clamp to remove the **lower overload** from the pack.



With the overload spring removed from the vehicle, remove the **alignment pin** from the spring by driving it out using a drift punch and hammer. Discard the alignment pin.



Install the add-a-leaf in ascending order in between the overload and leaf pack. Use a suitable clamp to bring the leaf pack together.

**Note:** Apply a coat of anti-seize to the ends on the topside of the add-a-leaf. This will help prevent any squeaking.



Install the provided **center pin**.

Torque the center pin nut to **55 ft-lbs**.



**\*\*\*Parts shown in red for picture clarification only\*\*\***

Install lift block making sure the small end of the block is facing the front of the vehicle. Raise the axle and the block up to the spring while aligning the center pin.



Install the provided U-bolts, and nuts. Snug the U-bolt nuts but do not fully tighten at this time. Repeat steps for other side.





Install the performance aftermarket shock into the frame using factory hardware. Do not tighten at this time.

Install the lower shock bushing to the axle using factory hardware. Do not tighten at this time.

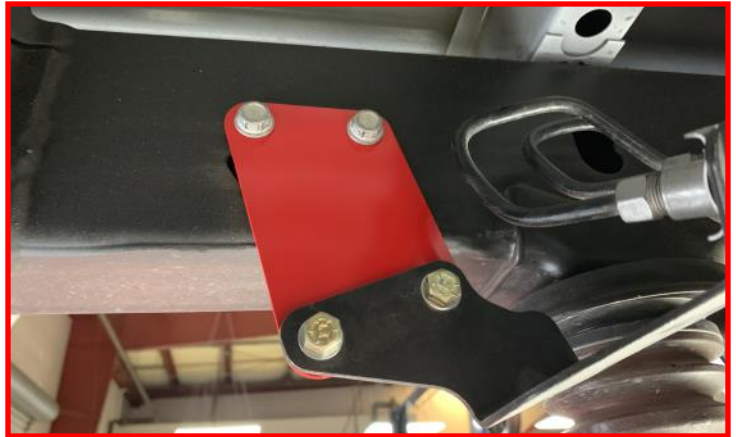


Install the **brake line drop bracket** to the factory brake line bracket using the supplied M8 bolts, washers and nuts.

Torque the M8 hardware to **20 ft-lbs.**

Install **brake line drop bracket** to the factory mounting location on the inside of the driver side frame rail using the factory hardware.

Torque the factory hardware to **10 ft-lbs.**



Install ABS harness drop bracket to the axle using the factory hardware.

Torque the factory hardware to **10 ft-lbs.**

Install the factory ABS harness bracket to the drop bracket using the supplied M6 bolts, washers and nuts.

Torque the M6 hardware to **10 ft-lbs.**



Install the rear wheels and lower vehicle to the ground. Torque the lug nuts to the wheel manufacturer specs, the U-bolts to **110 ft-lbs** and all shock hardware to **65 ft-lbs.**

Attach the vehicle negative power source. Have the alignment set to the recommended specs at the end of the instructions.





**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 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.

**RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.**

### **Vehicle Handling Warning**

Increasing the height of your vehicle raises 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 factory specifications. It is recommended that your vehicle alignment be checked after any off-road 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.

## **RECOMMENDED ALIGNMENT SPECS**

	<b>Driver</b>	<b>Passenger</b>	<b>Tolerance</b>	<b>Total / Split</b>
<b>Camber</b>	<b>-0.1</b>	<b>-0.1</b>	<b>+/- 0.5</b>	<b>+0.0</b>
<b>Caster</b>	<b>+2.8</b>	<b>+2.8</b>	<b>+/- 0.5</b>	<b>+0.0</b>
<b>Toe</b>	<b>+.05</b>	<b>+.05</b>	<b>+/-0.05</b>	<b>+.14</b>