

# **READYLIFT**<sup>®</sup>

**SUSPENSIONS**

**69-19450 2019-UP RAM 2500 4.5" SST Lift**

**IF your ReadyLIFT<sup>®</sup> 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](mailto:support@readylift-ami.COM)**

**WEBSITE: [ReadyLIFT.COM](http://ReadyLIFT.COM)**

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

## **READYLIFT "NO HASSLE" PRODUCT WARRANTY**

This unique "no hassle" product warranty proves out commitment to the quality of every product the ReadyLIFT produces. ReadyLIFT product warranty only extends to the Original Purchaser of any ReadyLIFT product. If it breaks, we will give you a new part.

### **READYLIFT "NO HASSLE" WARRANTY PROCEDURES**

Any ReadyLIFT products containing missing or defective components will be covered under warranty by ReadyLIFT. Please call 800-549-4620 to initiate a warranty claim. Rest assured our customer service team will urgently address the matter and expedite the replacement parts. In the event of a defective product, ReadyLIFT may request a return of the defective product (at ReadyLIFT's expense) so the quality team can analyze the nature of the defect. Returning defective product will not delay the replacement part delivery.

ReadyLIFT leveling kit, block kits, and lift kit products are NOT intended for off-road abuse. Any abuse or damage as a result of off-road use voids the warranty of the ReadyLIFT product. Exception: ReadyLIFT Jeep SST and Terrain Flex Lift Kits are designed for normal off-road use to compliment the Jeep vehicle's off-road capability. All Jeep Lift Kit products are covered under warranty when used in recreational off-road environments.

Warranty does not apply to discontinued, clearance or outlet products. Wearable components including but not limited to, shocks, ball joints, heim joints, bushings, and steering extensions, are covered for up to 1-year. Labor, installation, surcharges or any other applicable fees from the original purchase are non-refundable. ReadyLIFT is not responsible for any consequential damage to the vehicles.

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.

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 can be used but are not recommended with tires over 11" wide.

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 springs or other lift systems. Use of additional lift components will damage vehicle.

### **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>  |                      |                     |                         |                        |

# **BILL OF MATERIALS**

|  |          |
|--|----------|
| <b>Front Spring Spacer</b>                 | <b>2</b> |
| <b>Front Bump Stop</b>                     | <b>2</b> |
| <b>Front Shock Extension</b>               | <b>2</b> |
| <b>Front Track Bar Bracket</b>             | <b>1</b> |
| <b>Rear Shock Extension</b>                | <b>2</b> |
| <b>Rear Spring Spacer</b>                  | <b>2</b> |
| <b>Rear Bump Stop Extension</b>            | <b>2</b> |
| <b>Sway Bar End Link Kit</b>               | <b>1</b> |
| <b>Radius Arm Drop, Driver</b>             | <b>1</b> |
| <b>Radius Arm Drop, Passenger</b>          | <b>1</b> |
| <b>Front Brakeline Bracket</b>             | <b>2</b> |
| <b>Rear Track Bar Bracket</b>              | <b>1</b> |
| <b>Rear Track Bar Bracket Crush Sleeve</b> | <b>1</b> |

|                          |           |
|--------------------------|-----------|
| <b>M12 Bolt</b>          | <b>4</b>  |
| <b>M12 Washer</b>        | <b>4</b>  |
| <b>M12 Fender Washer</b> | <b>4</b>  |
| <b>M12 Locking Nut</b>   | <b>4</b>  |
| <b>M14 Bolt</b>          | <b>3</b>  |
| <b>M14 Washer</b>        | <b>8</b>  |
| <b>M14 Locking Nut</b>   | <b>5</b>  |
| <b>M16 Bolt</b>          | <b>4</b>  |
| <b>M16 Flat Washer</b>   | <b>8</b>  |
| <b>M16 Locking Nut</b>   | <b>4</b>  |
| <b>M18 Bolt</b>          | <b>2</b>  |
| <b>M18 Washer</b>        | <b>4</b>  |
| <b>M18 Locking Nut</b>   | <b>2</b>  |
| <b>3/8 Bolt</b>          | <b>6</b>  |
| <b>3/8 Washer</b>        | <b>11</b> |
| <b>3/8 Locking Nut</b>   | <b>5</b>  |
| <b>5/16 Bolt</b>         | <b>2</b>  |
| <b>5/16 Washer</b>       | <b>4</b>  |
| <b>5/16 Locking Nut</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.

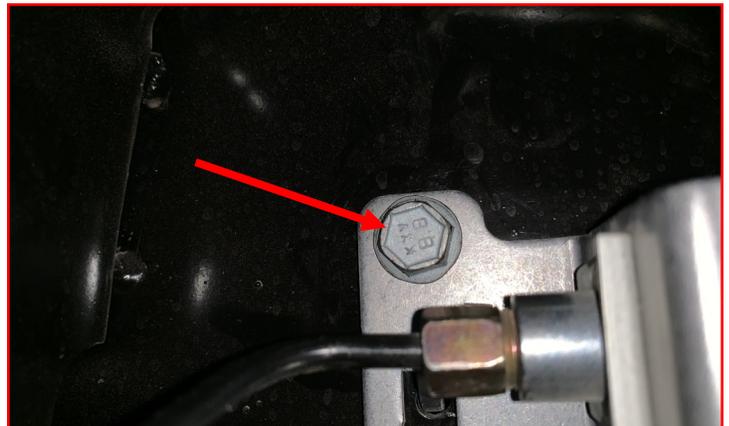
Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

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 (2) **brake line/ABS brackets** attached to the axle and radius arm.



Locate the **brake line/ABS bracket** on the inside of the frame rails and remove.



Loosen but do not remove the **lower shock mounting bolts**.



Place a jack under the axle for support. Remove the **radius arm bolts**. Retain factory hardware.



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



Rotate the axle to release radius arms from the mounting location.

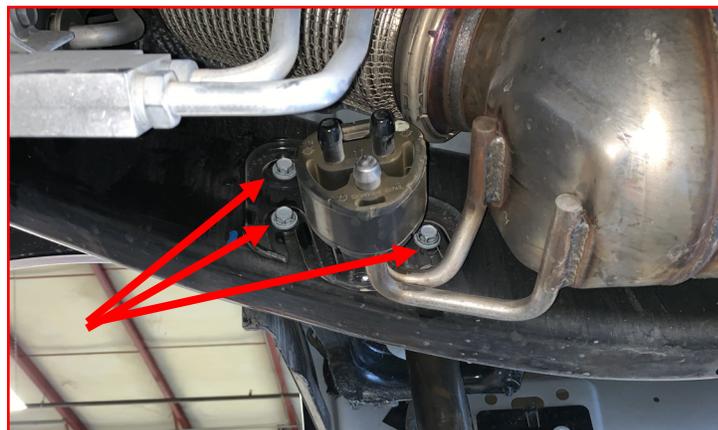


Support the transmission crossmember with a suitable jack stand. Working on one side at a time, Loosen and remove two **transmission crossmember bolts**.



Note: Vehicles that are equipped with optional diesel engines, It will be necessary to raise the DPF (Diesel Particulate Filter) to remove passenger side transmission crossmember bolts. The following steps will instruct you on how to proceed.

Remove the (3) **front exhaust hanger mounting bolts**.



Remove the (2) **center exhaust hanger mounting bolts**.



Remove the (2) Diesel Exhaust Fluid (DEF) tank **crossmember exhaust hanger mounting bolts**.

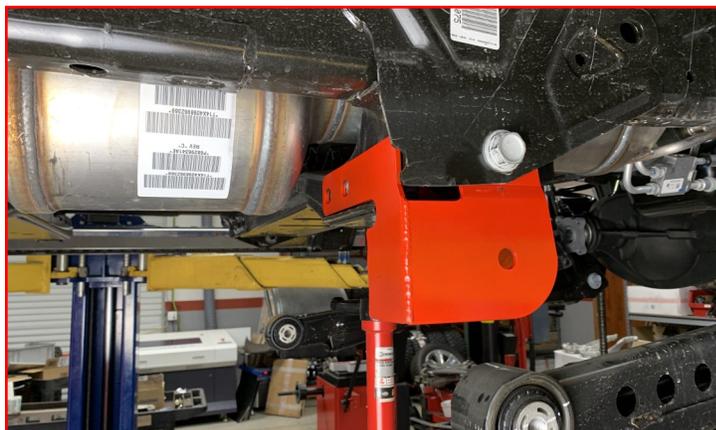


Raise the DPF with a suitable jack and remove the (2) passenger transmission crossmember bolts. Discard factory hardware.



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

Install radius arm drop bracket using the **factory hardware**. Do not tighten at this time. Repeat for the opposite side.



Install supplied M16 bolts and washers through crossmember and radius arm drop bracket mounting holes and attach with supplied washers and lock nuts. Installing them in the opposite direction from factory (From front to rear). This will aid in removal if service needs to be performed.



**Note: Picture shown using factory hardware, use supplied hardware instead**

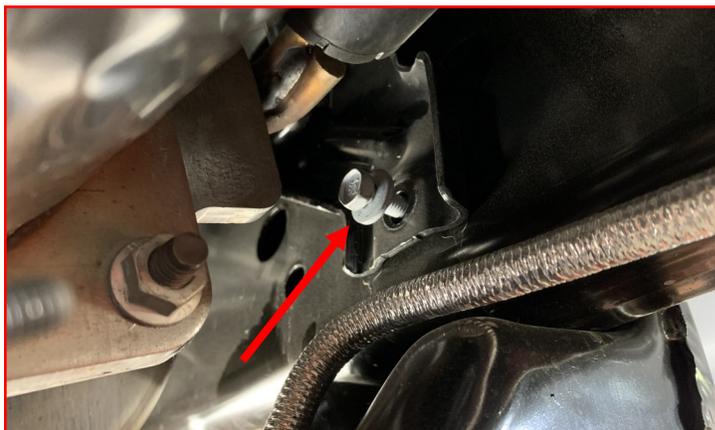
Lower jack and install the (2) Diesel Exhaust Fluid (DEF) tank **crossmember exhaust hanger bolts**.

Torque to **15 ft-lbs.**



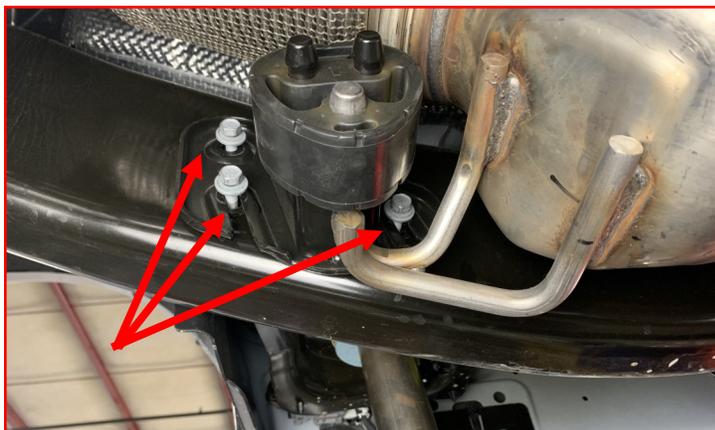
Install the (2) center exhaust hanger mounting bolts.

Torque to 15 ft-lbs.



Install the (3) front exhaust hanger mounting bolts.

Torque to 15 ft-lbs.



Rotate the axle and install the radius arms into the drop brackets using the provided 18mm, washers and c-lock nuts. Do not tighten at this time.



Torque the crossmember bolts to 100 ft-lbs.

Torque the factory 18mm hardware to 200 ft-lbs.

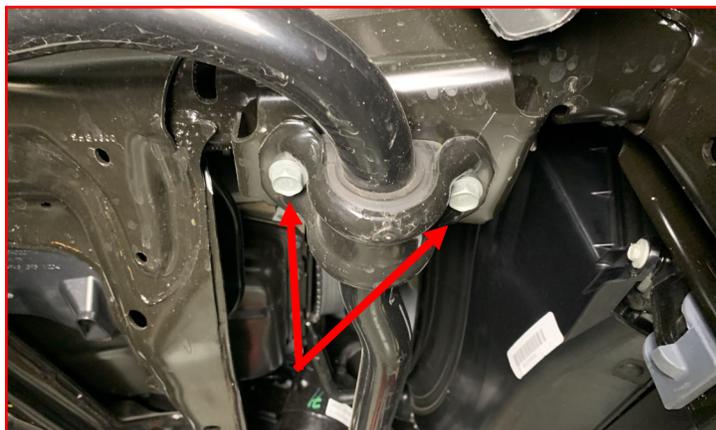
Leave the radius arms loose. They will be torqued once the vehicle is on the ground.



With the axle fully supported, remove the lower shock bolts. Retain factory hardware.



Remove the **sway bar mounting hardware** from the frame. Lower sway bar and let hang out of the way.



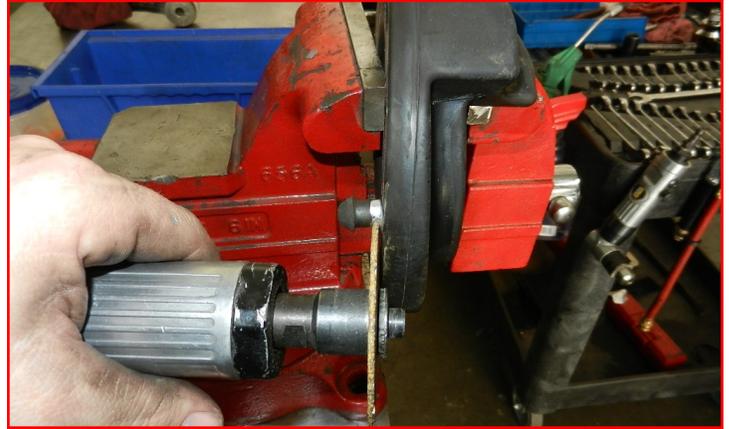
Loosen **track bar mounting bolts** at both the axle and the frame. Do not remove at this time.



Lower the axle enough to remove the front springs. Make sure to not over extend the brake/ABS lines.



Using an appropriate cutting tool remove the alignment tab. It is necessary to trim the tab off of the coil spring isolator for reinstall.



Install the rubber isolator onto the coil springs. Install the coil spring spacers between the springs and frame with the offset of the spacer towards the frame and the springs and rubber isolators pointed as shown in the picture. The passenger side will be clocked to the front of the vehicle and the driver side will be clocked towards the rear. Raise the axle until the springs are held in place. This step is important for the coil spring bow to be correct with suspension movement.



Install the supplied **shock extensions** onto the shock using **14mm bolts, washers, c-lock nuts**. Raise the axle enough to install the extension onto the axle using the **factory hardware**. Do not tighten factory hardware at this time.



Torque M14 hardware to **90 ft-lbs**.

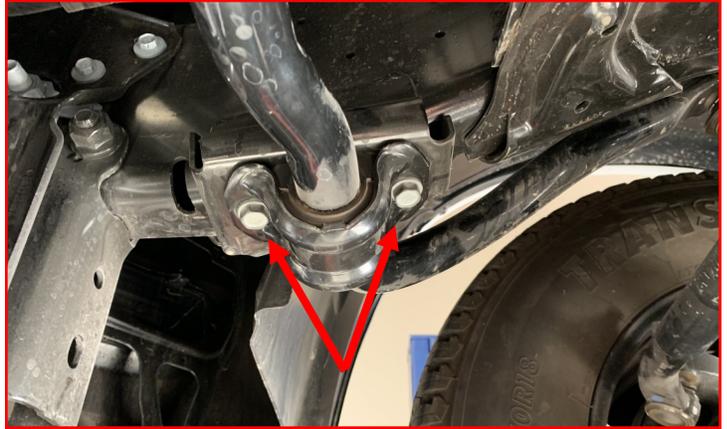
Using the factory hardware and thread locker, install the drive shaft to the pinion flange lining up the previous marks.

Torque to **35 ft-lbs**.



Install the sway bar to the frame using the **factory hardware**.

Torque to **45 ft-lbs**.



Install brake line drop brackets to the factory brake line bracket using **5/16" bolts, washers and c-lock nuts**. Do not tighten at this time. Attach brake line and drop bracket to the inside frame rail using the **factory hardware**. It will be necessary to gently pull down on and bend the metal brake line on the driver side to gain the slack needed. The passenger side bracket will angle around the frame gusset. Torque all hardware to **10 ft-lbs**.



Remove the factory bump stops.



Install **extended bump stops**. To aid in install, lube the mounting end with a soap and water mix.



Remove the frame side **track bar mounting bolt** and lower the track bar out of the way.



Remove the **(5) factory mounting bolts** from the factory track bar bracket and remove from vehicle. Retain factory hardware.

**Note:** Only **(4) bolts** visible in photograph.



Install **replacement track bar drop bracket** using factory hardware and provided **M14 nuts and washers**.

Torque to **110 ft-lbs**.



Install track bar using factory hardware. Do not tighten at this time.



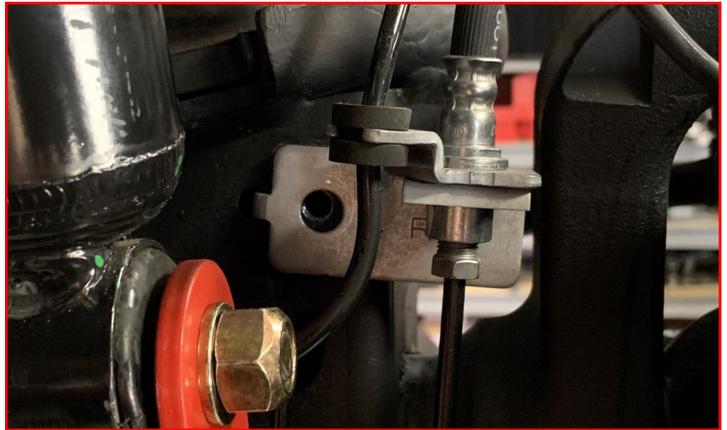
Install the **ABS sensor harness and brake line bracket** to the radius arm.

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



Install the **ABS sensor harness and brake line bracket** to the axle.

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



Install the front wheels. Lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturers specs. Torque the lower shock hardware to **90 ft-lbs.**, the radius arms and track bar hardware to **200 ft-lbs.**

With everything tightened and torqued to specifications, Set the wheels straight. Do so by loosening the tie rod pinch bolt. Rotate the adjuster until the steering wheel is straight with the wheels and tighten. 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.

## Rear Installation

Block the front wheels for safety and raise the rear of the vehicle. Place jack stand under the frame rails in front of the rear lower control arm links.

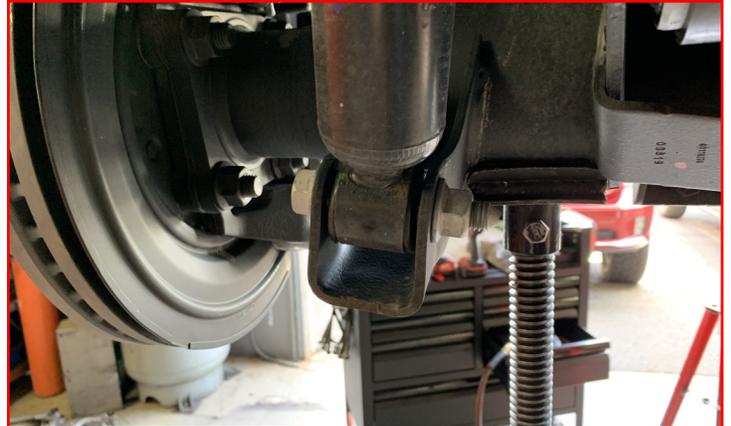
Place a jack under the axle for support. Remove the rear wheels.

Remove the sway bar end links. Discard both end links and hardware.



**Note: Ensure axle is supported properly.**

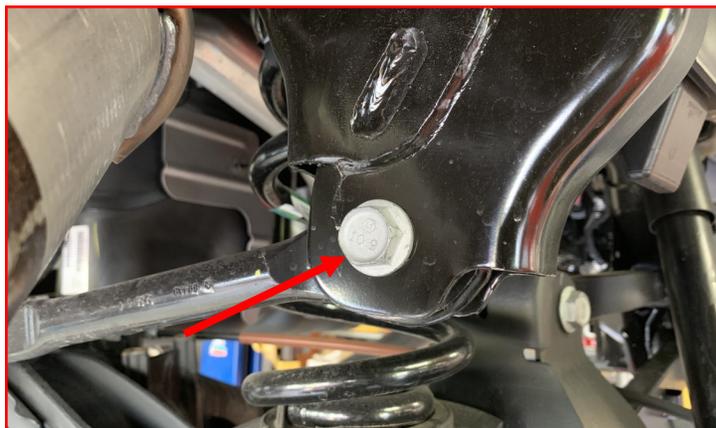
Remove both frame and axle shock mounting bolts. Remove shock from vehicle. Retain factory hardware.



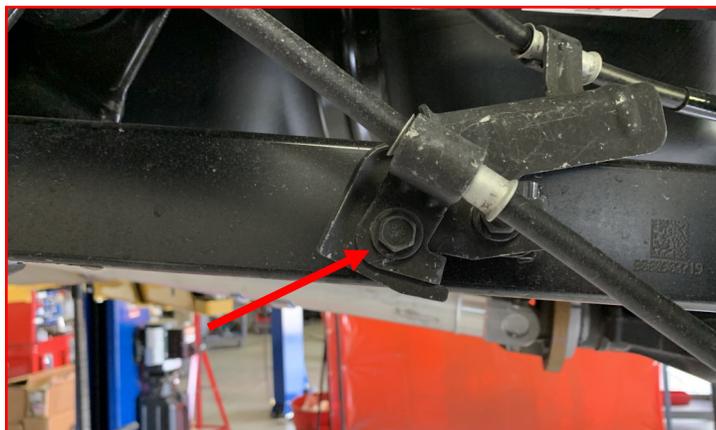
Remove the rear bump stops. Retain factory hardware.



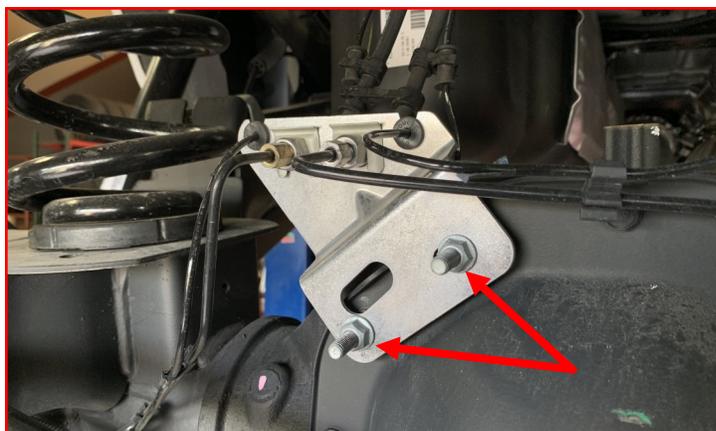
Loosen the track bar at the axle and frame mounts but do not remove.



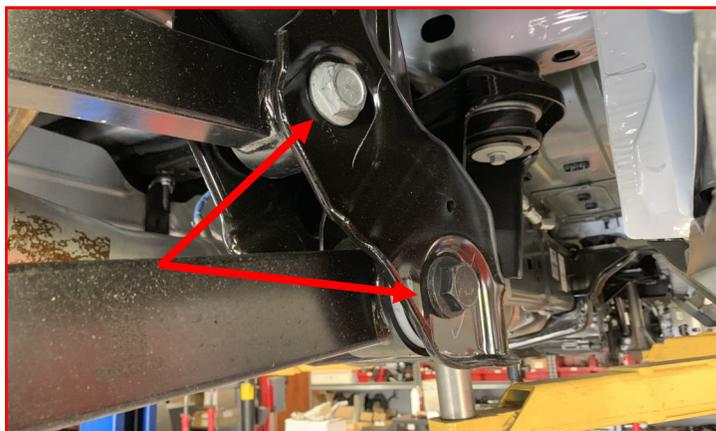
Remove **parking brake bracket mounting bolts** from the lower control arm on the driver side. Retain hardware.



Remove brake line bracket from axle. This will allow the ABS sensor harness and brake line to have slack when lowering the axle.



Loosen but do not remove the **upper and lower control arm bolts** on the axle and the frame pockets.



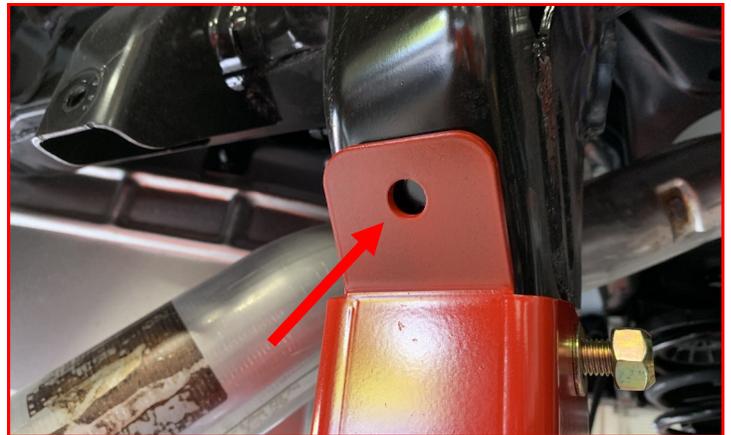
Install track bar bracket using the **14mm x 110mm bolt, washers, and c-lock nut** and **crush sleeve** in the track bars original location.



Install the **3/8" bolt, washer** in the inside hole.



Drill hole on outside of factory track bar mount using 3/8" drill. Install the **3/8" bolts, washers and c lock nut** on the outside hole. Tighten 3/8" hardware and torque to **45 ft-lbs**. Torque the factory hardware to **100 ft-lbs**.



Install rear track bar into track bar bracket using factory hardware. Do not tighten at this time.

The properly installed track bar bracket should look like the picture shown to the right.



Lower the axle just enough to remove the springs.



Install the coil spring with **coil spring spacers** and isolators. Raise the axle high enough to keep springs and spacers in place.



Remove **factory shock bushing and washer**. Be sure to retain the bushings and washers.



Using a liberal amount of thread locker, install the **supplied shock extensions** on to the top of the shock shaft.

Torque to **30 ft-lbs**.



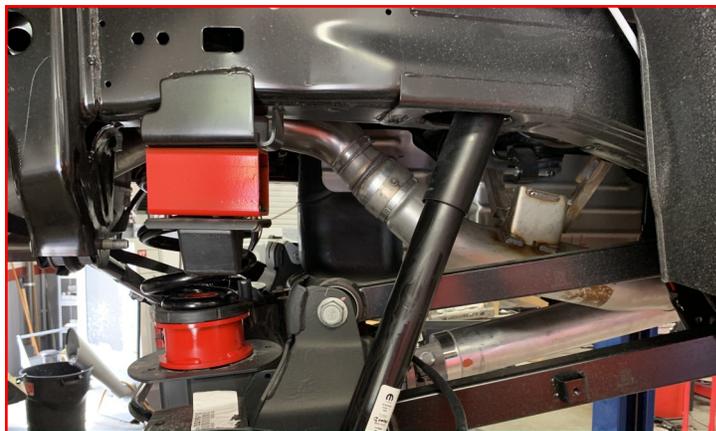
Install factory shock washer and bushing on to the **shock extension** in a factory orientation.



Install the bump stop and extensions onto the frame using **factory hardware**. Install the bump stop using **3/8" bolts, washers, and c-lock nuts**.



Install the shocks onto the frame using factory hardware.



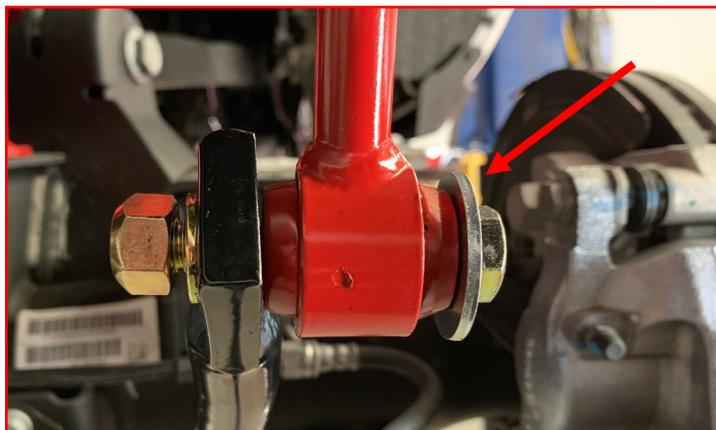
Install the shocks onto the axle using factory hardware. Do not tighten at this time.



Install the sway bar end links using **M12 x 70mm bolts, washers, and c-lock nuts**. In-  
sure the fender washer is installed on the  
outside of the bushing.



Install the sway bar end links using **M12 x 70mm bolts, washers, and c-lock nuts**. In-  
sure the fender washer is installed on the  
outside of the bushing.



**\*\*\*Note: Some models have a torque  
shock located on the differential. This will  
need to be removed for the function of  
this kit. \*\*\***



Install the rear wheels and lower vehicle to the ground. Torque the lug nuts to the  
wheel manufacturer specs. Torque the upper shock stem to **30 ft-lbs**, lower shock  
bolts to **90 ft-lbs**, sway bar end links to **45 ft-lbs**, bump stop extension to **30 ft-lbs**,  
parking brake bracket **10 ft-lbs**, track bar mounting bolts to **100 ft-lbs** and the upper  
and lower control arm bolts to **200 ft-lbs**.

With everything tightened and torqued to specifications, attach the vehicle negative  
power source.



**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.