

# **READYLIFT®**

**SUSPENSIONS**

**69-5920 2019 Toyota RAV4 2 "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.\*\***

## **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.

## **IMPORTANT NOTE:**

The front **camber**, and **caster** are **fixed**. The rear camber and toe can be adjusted.

If the front camber is out of spec, the struts and all other components need to be inspected for bent or misaligned parts.

This suspension system was developed using a **245-65R17"** tire with **17" x 8"** wheel and a offset of **+38**. 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.

### **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 Strut Spacer</b>	<b>2</b>
<b>Front Sway Bar Bracket</b>	<b>2</b>
<b>Rear Cradle Spacer</b>	<b>4</b>
<b>Rear Spring Spacer</b>	<b>4</b>
<b>M10 Flange Nut</b>	<b>6</b>
<b>M12 Bolt</b>	<b>2</b>
<b>M12 Washer</b>	<b>4</b>
<b>M12 Nut</b>	<b>2</b>
<b>M16 Bolt</b>	<b>4</b>
<b>M16 Washer</b>	<b>4</b>
<b>Laser Cut Washer</b>	<b>4</b>

## **WARNING**

***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 jack point indicated by the service manual. Remove the front wheels. All steps are to be completed on both sides of the vehicle unless instructed.

Remove the bolt that holds the **brake line**, and **ABS wire** to the strut assembly. move this line, and wire clear from the strut.



Unclip the **ABS plastic bracket** from the lower strut assembly. Remove the fastener that holds the **ABS sensor** to the steering knuckle. Remove the ABS sensor from the steering knuckle, and move the wire assembly to a position where it will not be pulled on when the strut is removed.

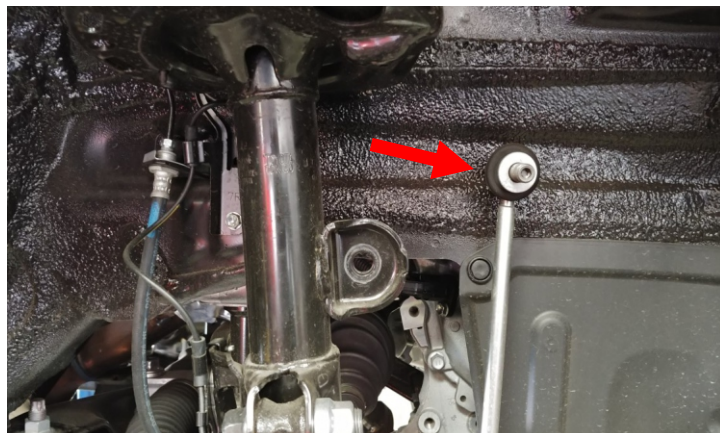




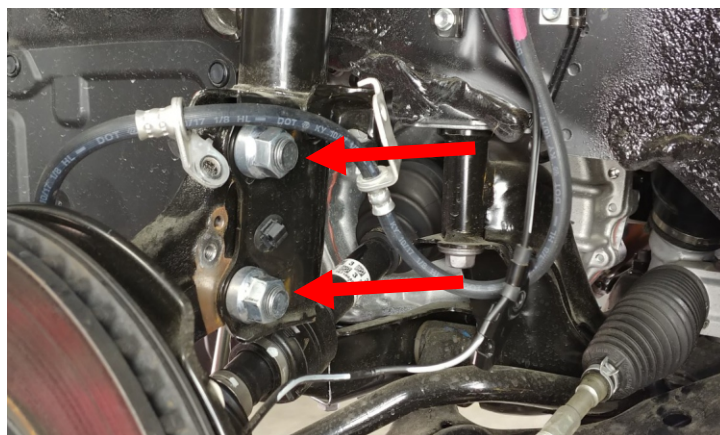
Remove the tie rod end nut. Strike the tie rod end boss with a dead blow hammer to dislodge the taper. Let hang out of the way. This allows you to turn the knuckle free of the rack and pinion to remove the strut.



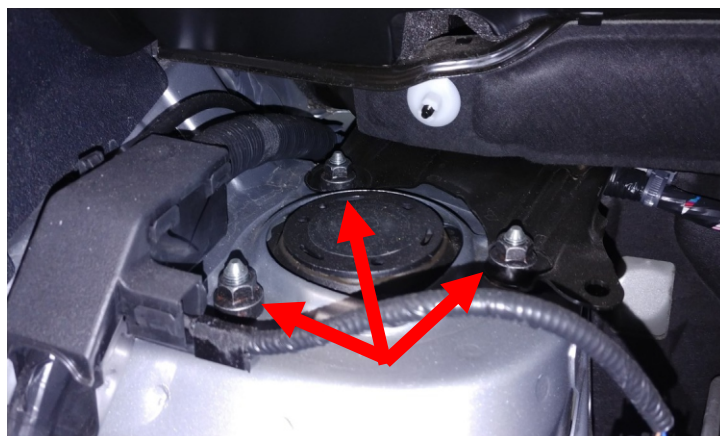
Remove the sway bar end link from the strut. Let hang out of the way.



Support the lower control arm with a suitable jack. Remove the two strut to knuckle bolts.



Remove the 3 upper strut mount hardware on the strut tower in the engine compartment. Use of a helper is recommended to hold the strut while removing from the strut tower.



Remove the strut from the vehicle. Be careful to not dislocate the cv shafts from their housings. If this happens, carefully push the CV axle back into the cup. You may have to rotate the hub at the same time.



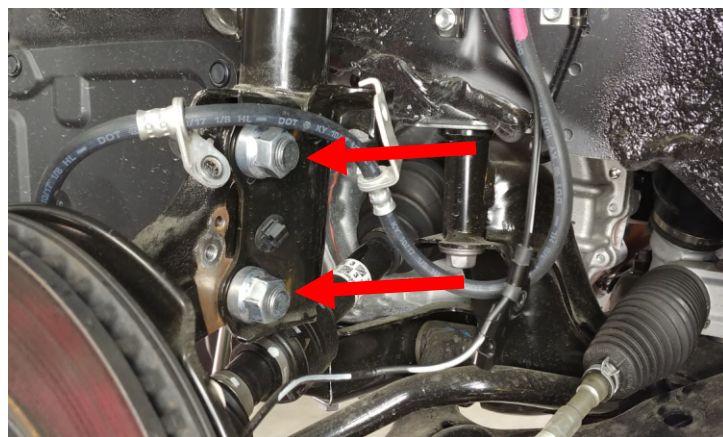
Add the ReadyLift strut spacer to the OEM strut, there is a dot on the OEM strut assembly align the **notches on the spacer with this dot**. Use the provided hardware **M10 flange nuts** to secure the spacer to the strut. Torque to **30 ft-lbs**. This Alignment is very important for camber correction.



Install the completed strut assemblies into the strut tower using the **factory hardware**. When installed the R logo so that it is legible from the wheel. Do not tighten at this time. This Alignment is very important for camber correction.

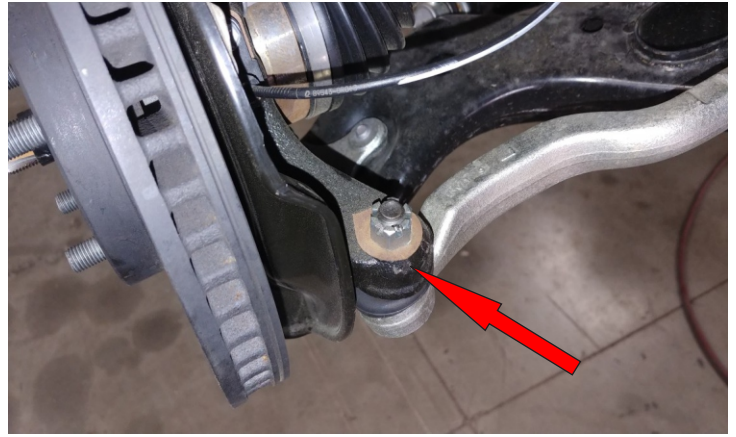


Reinstall the strut to knuckle using the **factory hardware**. Torque to **110 ft-lbs**.





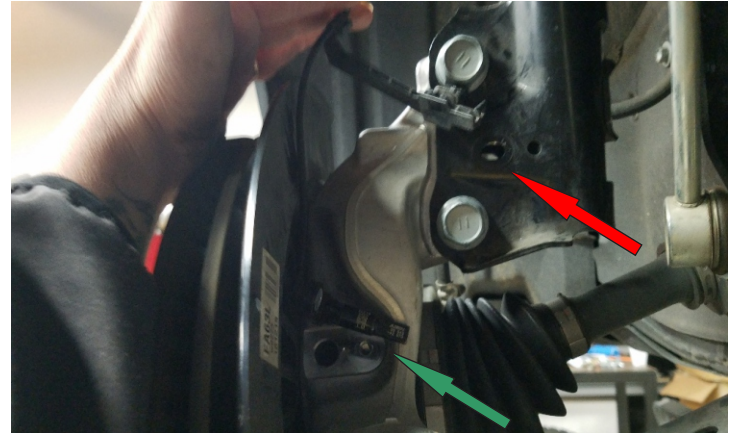
Install the **tie rod** end to the knuckle using the **factory hardware**. Torque to **65 ft-lbs**. Line up the cotter pin hole with the slots in the castle nut. Install the cotter pin.



Attach the **ABS wire** and the **brake line** to the strut bracket in their original location using **factory hardware** torque to **10 ft-lbs**.



Reinstall the **ABS sensor** to the steering knuckle, use the **factory hardware** torque to **5 ft-lbs**. Push to clip the **ABS plastic bracket** to its original location on the lower strut assembly.



Install the ReadyLIFT sway bar bracket to the strut using the provided M12 bolts, washers, and nuts. Install the sway bar end link to the bracket using the **factory hardware**. Torque all to **45 ft-lbs**.





Install the wheels and lower the vehicle to the ground.

Torque the lug nuts to the wheel manufacturer's specs. Torque the upper strut hardware to **30 ft-lbs**.

Jack the rear of the vehicle up and place safety stands under the jack points indicated by the service manual. Remove the rear wheels.

Support the rear suspension cradle using a suitable **jack**.



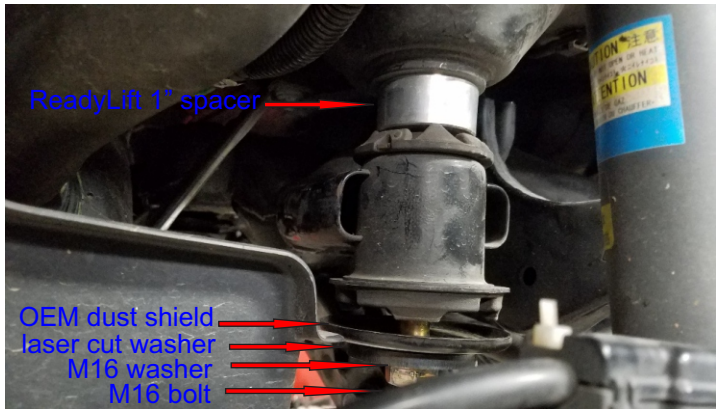
Remove the bolt that holds the **brake line** to the control arm.



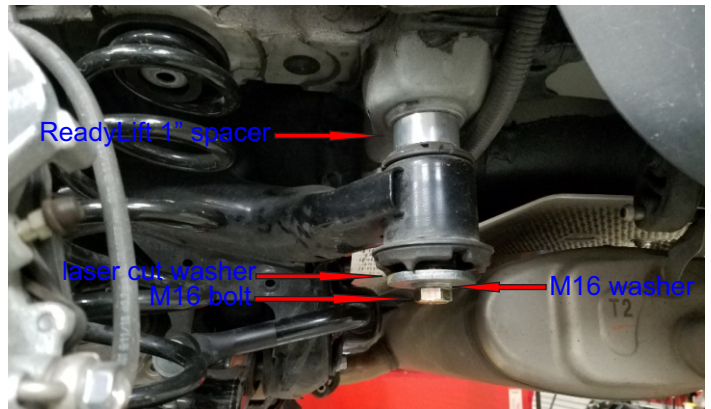
With the suspension cradle supported, remove the front two cradle bolts and the rear cradle nuts. Lower the cradle 1" using the **rear cradle studs** as an alignment guide.



Add the ReadyLift 1" **aluminum spacers** to the front cradle mounting locations, use the provided hardware **M16 bolts, washers, laser cut 2" washer**, and the **OEM dust shield**. Snug these bolts but do not tighten.



Use a 10mm wrench to remove the driver side rear cradle stud. Add one of the Readylift 1" **aluminum spacers**. Use the provided hardware **M16 bolt, washer, and laser cut 2" washer** to reattach. After one side is complete, repeat this same steps on the passenger side. Snug these bolts but do not tighten. After all four bolts are installed torque the M16 bolts to **90 ft-lbs**.

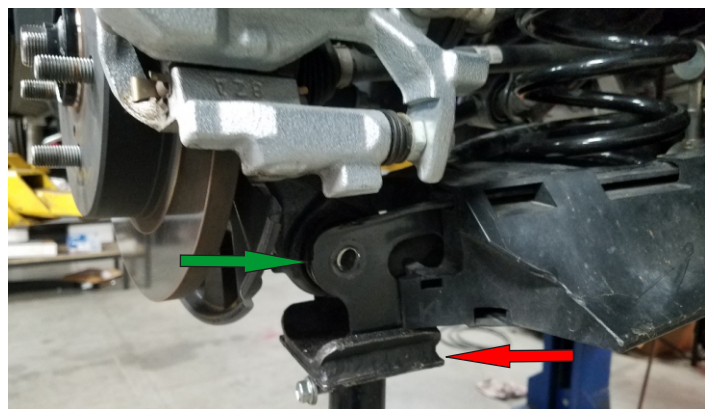


Loosen the rear **alignment cam bolts**. Remove the **bolts** that connect the rear sway bar end links to the lower control arm.



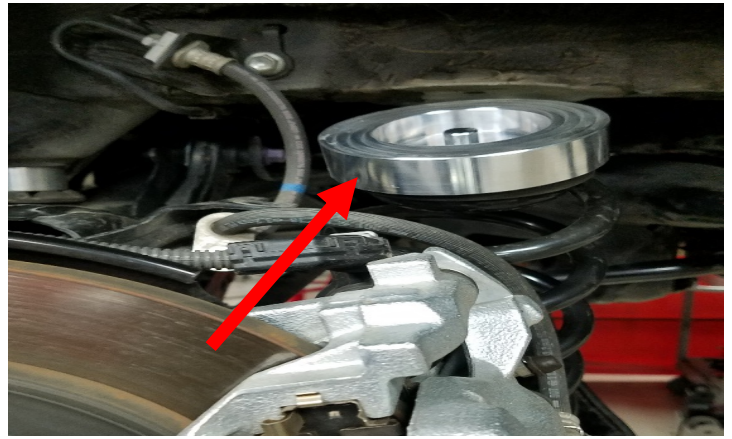
**Use extreme caution during this process**

Use a suitable **jack** to support the lower control arm. Remove the **bolt** that connects the lower control arm to the knuckle. Slowly lower the jack releasing the spring tension. Once the spring tension is released, the spring may fall from the vehicle.

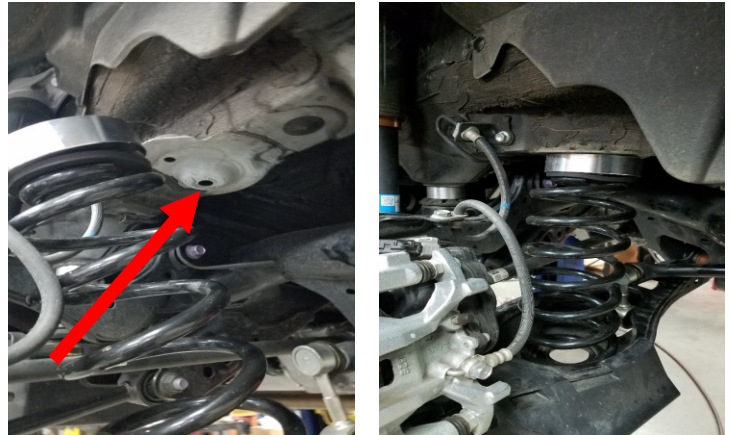




Add the ReadyLift **spring spacer** to the top of the spring. Use the rubber isolator between the spring and spacer.

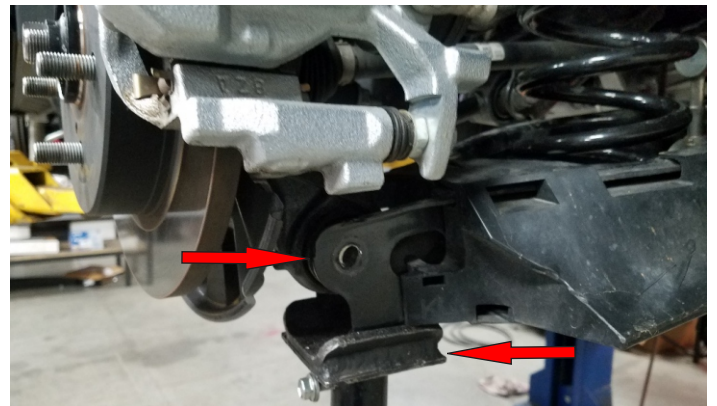


Reposition the spring assembly, so the spring spacer nipple aligns with the **hole on the vehicle frame**.

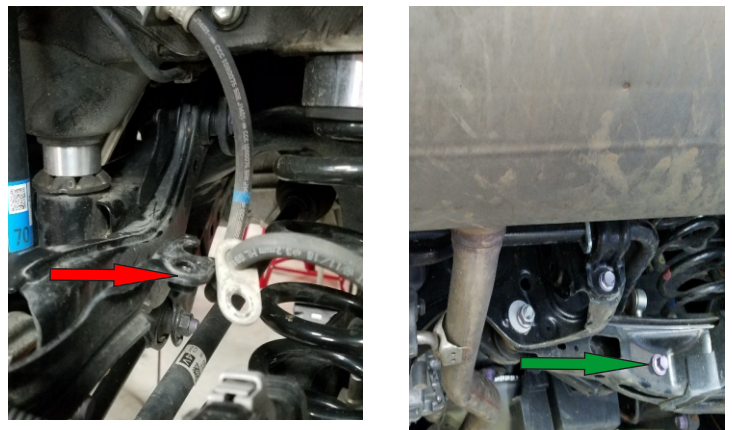


**Use extreme caution during this process**

Use a suitable **jack** to raise the lower control arm. Reconnect the lower control arm to the knuckle using the **factory hardware** torque to **65ft-lbs**.



Reattach the **brake line** using the **factory hardware** torque **10 ft-lbs**.  
Reattach the **sway bar end links** using the **factory hardware** torque **65 ft-lbs**.





Install the wheels and lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturer's specs.

Tighten the Rear alignment cams bolts. The alignment tech will properly torque these at time of alignment.

Reconnect the vehicle power source at the ground terminal on the battery.

Turn the steering wheel from lock to lock making sure that all clearances between wheels/tires, suspension, body, brake lines, and ABS are good. Adjust as necessary.

Have the alignment set to the recommended specs on the last page of this booklet by a reputable alignment shop.

The front camber, and caster are fixed. The alignment will be front toe only. Front camber is for reference only.

If needed, the front camber can be adjusted by purchasing alignment cam bolts but should not be necessary. If the camber is out of spec, the struts and all other components need to be inspected for bent or misaligned parts.



**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**

Front	Driver	Passenger	Tolerance	Split/Total
Camber	-0.1	-0.3	+/- .8	0.2
Toe	+0.05	+0.05	+/- 0.06	0.34
Rear	Driver	Passenger	Tolerance	Split/Total
Toe	+.08	+.08	+/- .06	.34
Camber	-1.4	-0.12	+/- 0.3	+0.1