

# **READYLIFT**<sup>®</sup>

**SUSPENSIONS**

## **66-3921 2019-UP AT4/ Trail boss Leveling Kit**

**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 our 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 33" x 11" 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 11.5" 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 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.

20x9 0 offset 295/65R-20 - Chevy Max tire size.

20x9 0 offset 275/60R-20 - GMC Max tire size

**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>				

# **BILL OF MATERIALS**

<b>Driver Control Arm</b>	<b>1</b>
<b>Pass Control Arm</b>	<b>1</b>
<b>Top Strut Spacer</b>	<b>2</b>
<b>Bottom Strut Spacer</b>	<b>2</b>
<b>Laser Cut Washers</b>	<b>4</b>
<b>1/4" Locking Nut</b>	<b>2</b>
<b>1/4" Washer</b>	<b>2</b>
<b>M10-1.50 Flange Nut</b>	<b>6</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\*\*\***

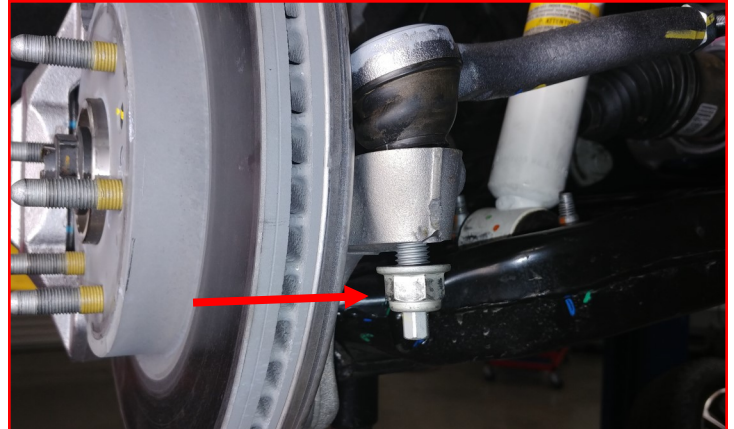
ReadyLIFT recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two post vehicle lift with safety jacks. Otherwise, park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

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



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

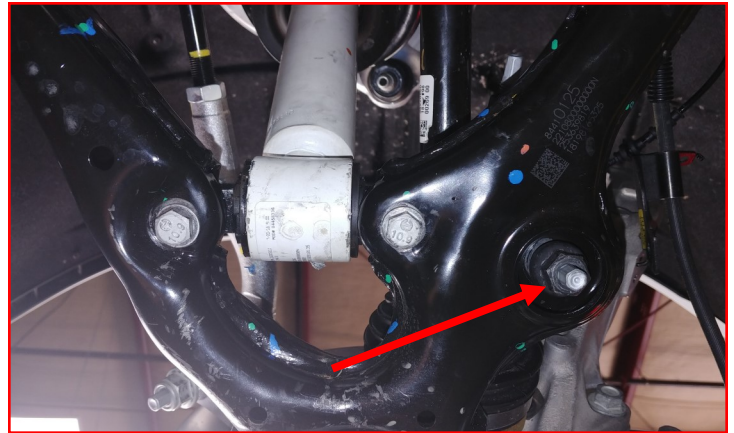




Remove the **ABS bracket** from the Upper Control Arm.



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

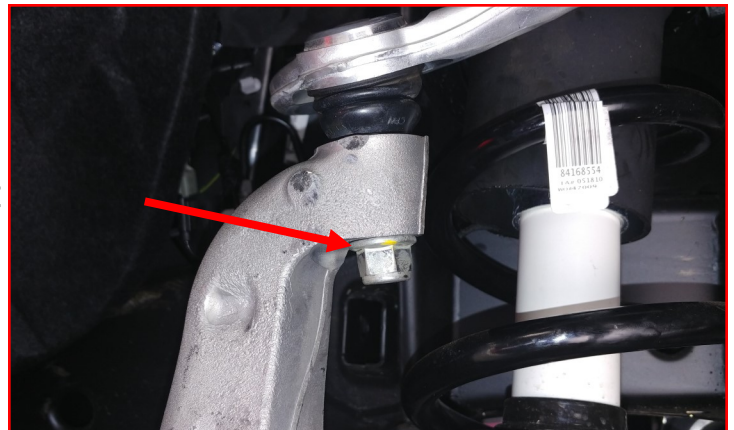


Remove the **CV axle nut**. Press axle back through hub to allow for greater misalignment and ease in the removal/installation process.

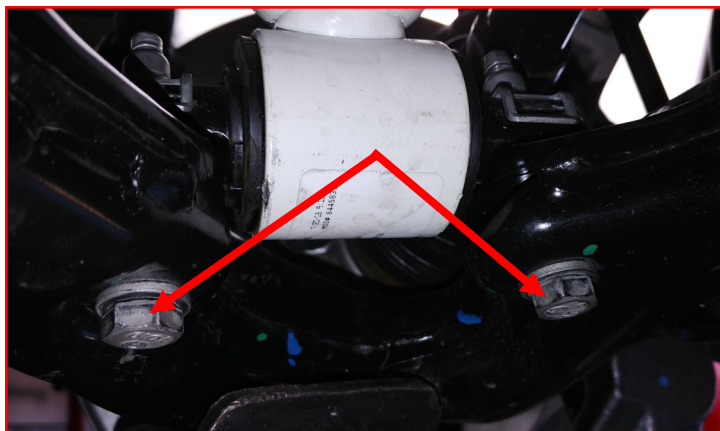
**NOTE:** It is imperative that the axle be pushed back through the hub assembly. Failure to do so can lead to damage to the CV boot or the CV joint itself. Care **MUST** be taken when handling these CV axles.



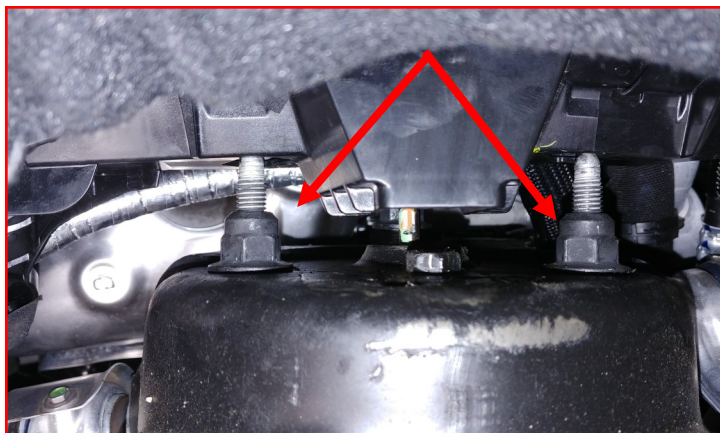
Loosen but do not remove the **upper control arm ball joint nut**. Strike the upper ball joint boss on knuckle with a dead blow hammer to dislodge the taper. Remove the nut and let the knuckle hang out of the way.



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



Remove the (3) **top strut mounting nuts** located on top of the strut tower and discard the nuts. Remove the strut assembly from vehicle.



Remove the **upper control arm bolts** located inside the strut tower. Remove upper the control arm from the vehicle at this time. Discard the control arms.



Ensure you have the proper replacement control arm, they are side specific and need to be installed on the correct side.

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

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





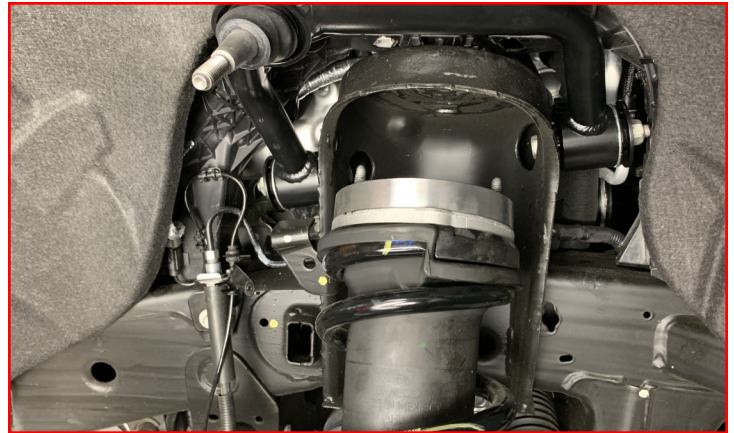
With the upper control arm bolts in place, install the supplied **laser cut washers**, the **factory nuts** and a drop of thread locker.

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



Once upper control arms have been properly torqued, install the supplied **top strut spacer** on the top of the strut assembly. Install completed strut assembly into the vehicle using the supplied **M10 serrated flange nuts**.

Start the nuts but do not tighten at this time.



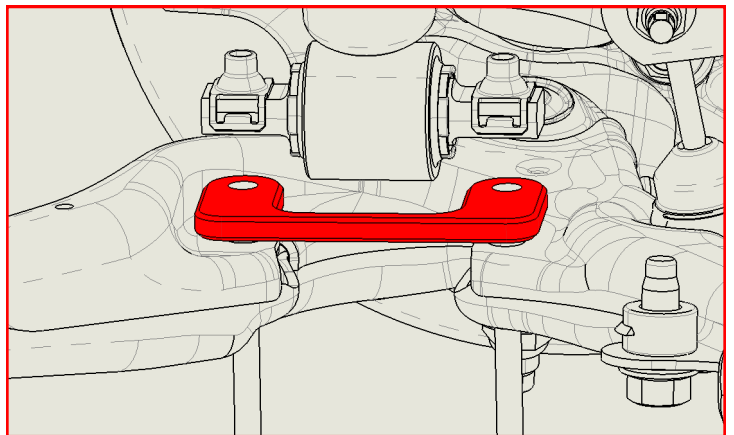
Install the supplied **lower strut spacer** between the strut cross pin and the lower control arm

Install the factory lower strut bolts.

Torque the factory bolts to **45 ft-lbs.**

Tighten upper strut nuts at this time.

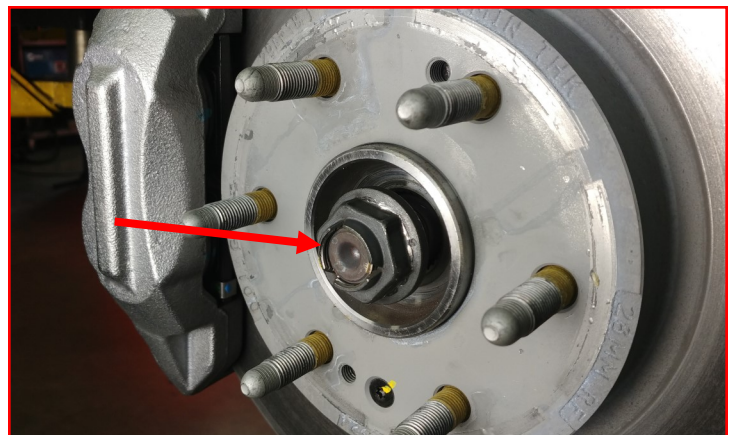
Torque nuts to **35 ft-lbs.**



Ensure the CV Axle is properly inserted and tighten **axle nut**.

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

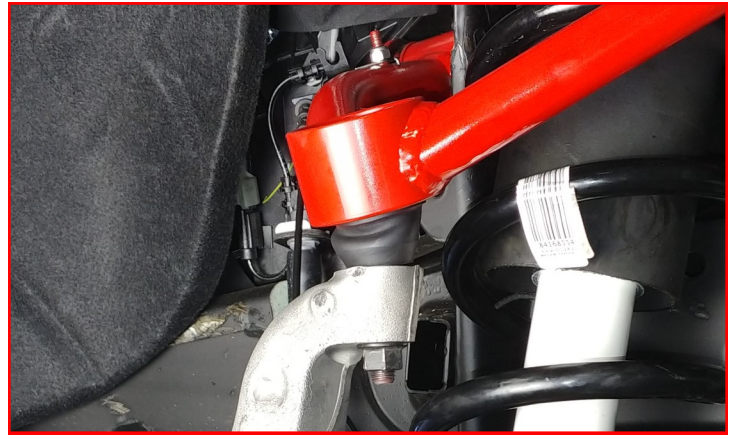
**Note:** It is important that the axle nut is fully seated and tightened prior to tightening the upper control arm ball joint. Non-compliance will potentially pinch the outer CV boot causing damage and/or failure to the half shaft assembly.





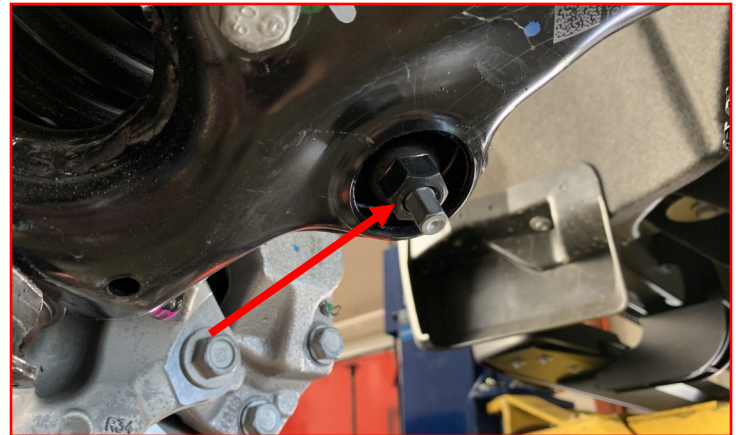
Insert ball joint stud into knuckle taper and attach the upper ball joint to the knuckle using provided hardware.

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



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

Torque the nut to **45 ft-lbs.**



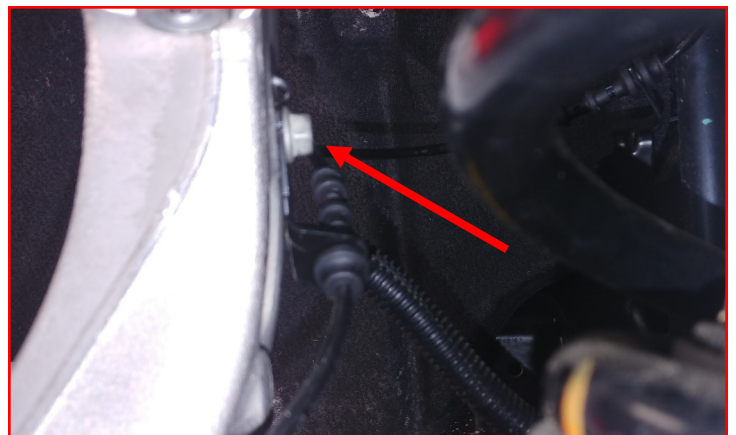
Install the **outer tie rod end** into the knuckle using the factory hardware.

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



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

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



Install the **ABS bracket** to the Upper Control Arm using supplied **1/4" nut and washer**.



With everything tightened and torque to the specified specifications, install front tires and lower vehicle.

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.

Using the appropriate tool, grease the upper ball joint just until the boot just starts to expand. **Do not over grease. Over grease can cause pre-mature wear.**

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>-.1</b>	<b>+.1</b>	<b>+/- 0.5</b>	<b>+0.0</b>
<b>Caster</b>	<b>+3.0</b>	<b>+3.0</b>	<b>+/- 0.5</b>	<b>+0.0</b>
<b>Toe</b>	<b>+.05</b>	<b>+.05</b>	<b>+/-0.05</b>	<b>+.20</b>