

# **READYLIFT**<sup>®</sup>

**SUSPENSIONS**

**69-39400, GM 1500 4.0" 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**

**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 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.

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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 35" x 11.5" 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 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 295/55R-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.**

# **PRE-INSTALLATION MEASUREMENTS:**

It is imperative that you record the following measurements and factory components in the tables below. ReadyLIFT tests and records as much data from each application as available at the time of product development. Vehicle manufacturers may change components or add models with different options. Recording and not exceeding the fender-to-hub-center ReadyLIFT calls out will ensure the lift on the vehicle is correct.

These measurements will affect the performance of this lift kit. Failure to ensure proper stock conditions may result in over lifting, causing premature failure of axles, CV boots and drivetrain. Over lifting a vehicle will also result in an incorrect wheel alignment. This will wear tires incorrectly. Incorrect alignment will cause poor vehicle handling issues including but not limited to under steer. Over lifting will also cause a shock top off condition resulting in poor ride quality accompanied by pops and clunks which are symptoms of prematurely wearing components.

Failure to adjust head lamps may cause dangerous driving conditions for you and other drivers on the road. Record the head lamp position before the installation of this lift or leveling kit and adjust to original factory position after the completion to ensure a safe and enjoyable experience.

## **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>				

**\*\*MEASUREMENT IS TO BE PERFORMED FROM CENTER OF HUB TO FENDER EDGE STRAIGHT UP FROM HUB.\*\***

## **RECORD HEAD LAMP MEASUREMENTS**

<b>Driver Before</b>	<b>Driver After</b>	<b>Passenger Before</b>	<b>Passenger After</b>

# **BILL OF MATERIALS**

<b>Left Hand Control Arm</b>	<b>1</b>
<b>Right Hand Control Arm</b>	<b>1</b>
<b>Left Hand ARC Bracket</b>	<b>1</b>
<b>Right Hand ARC Bracket</b>	<b>1</b>
<b>Pre-Load Spacer</b>	<b>2</b>
<b>Strut Spacer</b>	<b>2</b>
<b>Rear Lift Block</b>	<b>2</b>
<b>U-bolt</b>	<b>4</b>
<b>U-bolt Hardware Pack</b>	<b>1</b>
<b>Rear Shock Extension</b>	<b>2</b>
<b>Laser Cut Washers</b>	<b>4</b>
<b>Rear Bump Stop Extension</b>	<b>2</b>
<b>1/4" Locking Nut</b>	<b>2</b>
<b>1/4" Washer</b>	<b>2</b>
<b>M10 Socket Head Allen Bolt</b>	<b>2</b>
<b>M10 Bolt</b>	<b>4</b>
<b>M10 Washer</b>	<b>8</b>
<b>M10 locking Nut</b>	<b>4</b>
<b>M14 Bolt</b>	<b>2</b>
<b>M14 Washer</b>	<b>4</b>
<b>M14 Locking Nut</b>	<b>2</b>
<b>M10-1.25 Flange Nut</b>	<b>6</b>
<b>M10-1.50 Flange Nut</b>	<b>6</b>
<b>M5-0.8 Button Cap Screw</b>	<b>2</b>
<b>M6-1.0 Nyloc Nut</b>	<b>2</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 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 brake-line bracket** from the knuckle and hang out of the way.



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



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



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

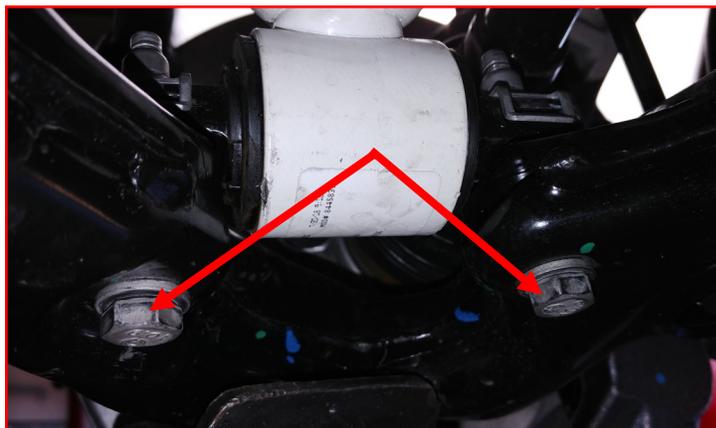
**NOTE:** It is imperative that the axle be pushed back through the hub assembly. Failure to do so can lead to damage to the CV boot or the CV joint itself. Care **MUST** be taken when handling these CV axles.



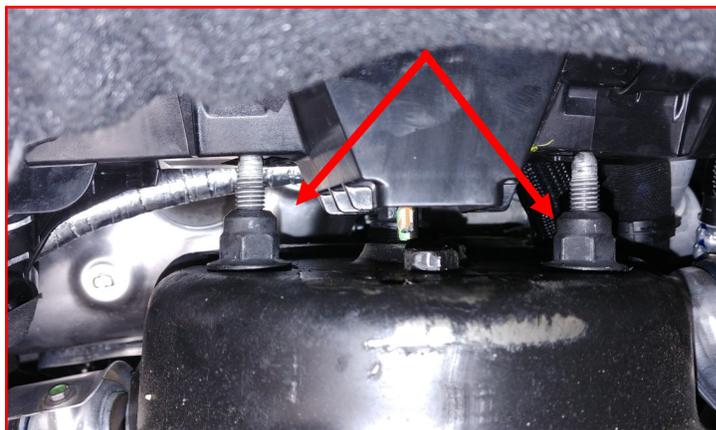
Loosen but do not remove the **upper control arm ball joint nut**. Strike the upper ball joint boss on knuckle with a dead blow hammer to dislodge the taper. Remove nut and let knuckle hang out of the way.



Support the lower control arm with a suitable jack. Remove the **lower strut mounting bolt** 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.



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



**Caution, the spring is under extreme pressure and can cause bodily injury and/or death if handled improperly.**

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.



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



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

Remove factory plastic spring perch isolator and discard.

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



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.



Ensure orientation of the strut assembly is as factory, install the shock. Using the spring compressor, Compress spring and install factory shock nut. Tighten and torque to **30-ft/lbs.**



Install factory strut hardware on top hat studs. Mark studs at top of nuts.

**Note:** This will be the location where you will trim studs. Studs are trimmed to allow clearance for installation of the top strut spacer.



With studs marked, use appropriate cutting tool to trim studs to the proper height.

**Note:** Use caution when trimming studs to ensure correct length. Use factory nut to determine height.



Install strut top spacer onto strut assembly. Using the supplied M10 nuts, install, tighten and torque nuts to 35-ft/lbs.

**Note:** Be sure to install tapered strut spacer so the narrow side is inboard of the strut assembly.



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 the replacement upper control arms in the factory location, install the supplied M14 bolts and M14 washers. Do not install nuts at this time.



With the upper control arm bolts in place, install the supplied **laser cut washers, the supplied M14 washers and nuts.**

Torque the M14 nuts to **90 ft-lbs.**

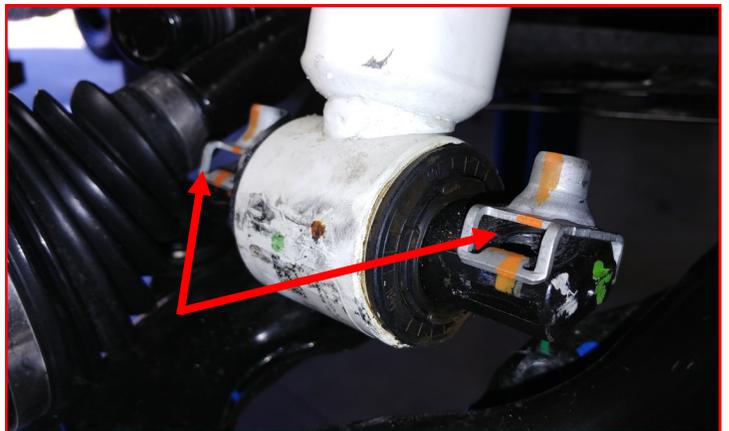


Once upper control arms have been properly torqued, install completed strut assembly. Install with supplied M10 nuts.

Start the nuts but do not tighten at this time.



Remove the **lower nut clip** from the strut and discard.



Install supplied **M10 bolts** through strut cross pin and lower control arm. Install **M10 washers, and nuts** on to bolts. Tighten and torque M10 nuts to **45-ft/lbs.** Tighten upper strut nuts at this time. Torque nuts to **35-ft/lbs.**

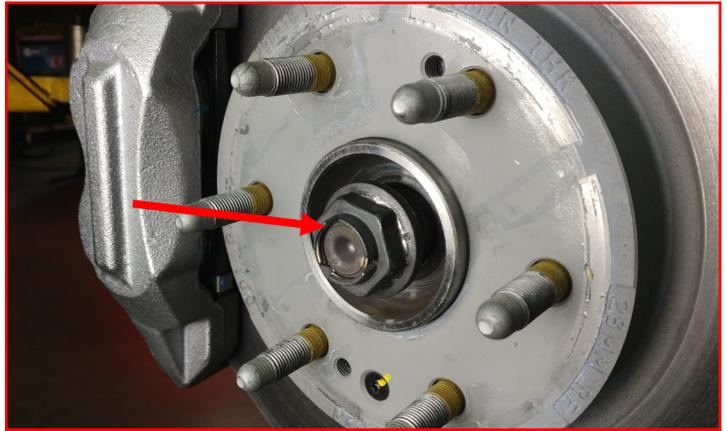
**NOTE:** Installation of supplied bolts is required and must be done with the bolts facing down (i.e. bolt head on top and nut on bottom).



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.

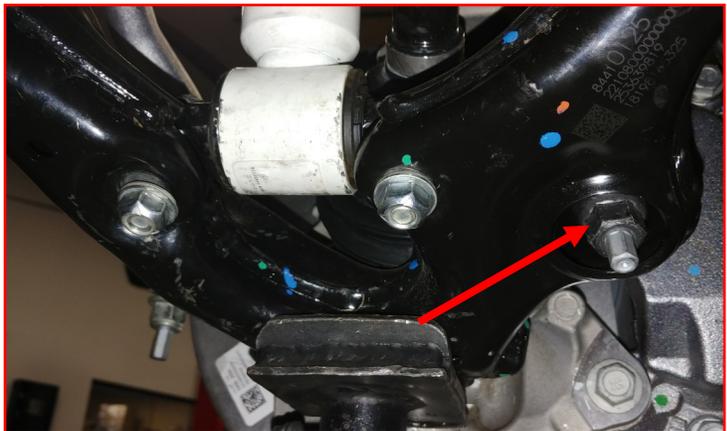
Torque the nut to **65-ft/lbs**.

**NOTE:** If your vehicle feature Adaptive Ride Control shocks, please see the addendum on pages 17-18 for ARC Bracket install instructions.



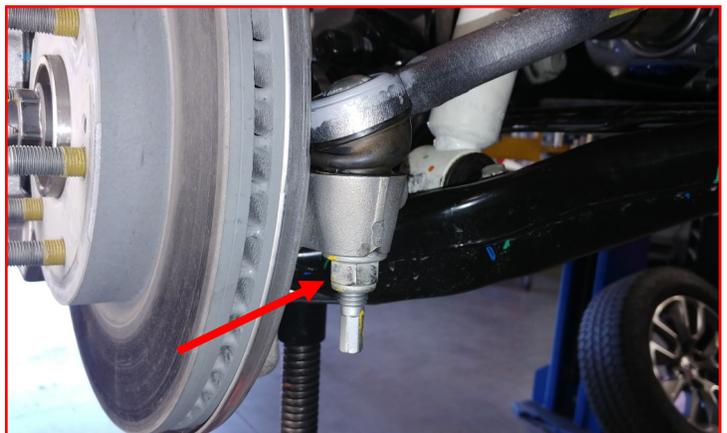
Install the **sway bar drop link** into the lower control arm using factory nut.

Torque the drop link nut to **45-ft/lbs**.



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

Torque the tie rod end nut to **65-ft/lbs**.



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



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.**

## Rear Installation

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.

Remove the brake lines from the inner frame rail.

The brake line bracket is located on the inside of the frame rails on driver side of the vehicle. Remove the two M8 bolt that mount the bracket and retain hardware.



Support the axle with a suitable jack. Remove both **Driver and Passenger shocks** from vehicle.

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 remove the factory lift block making sure that all brake lines and ABS lines do not get over extended.



**\*\*\*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 passenger side.



Install the shock extension using the provided M14 bolts, washers, and nuts to the top of the factory shock.



Install the ReadyLIFT shock extension to the frame using factory hardware

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



Remove factory bolt that attaches the rear bump stop to frame and discard the bolt.



Install **rear bump stop extension** between frame rail and jounce stop using supplied M10 Bolts and washers. Tighten and torque to **35 ft-lbs.**



Install brake line bracket using factory bolts.



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.

# **ADDENDUM: Adaptive Ride Control Bracket Install Instructions**

(Required if vehicle is equipped with Adaptive Ride Control shocks.)

Remove **5mm button cap screw** from provided control arm; screw will be installed on the forward side of the arm. **RETAIN SCREW.**



Install the ARC bracket on the on the arm using the provided button cap screw.

Torque to **5 ft-lbs.**



Insert the ball stud from the ARC sensor into the hole on the bracket. Use the provided 6mm nyloc nut to attach the ball stud to the bracket.

Torque to **5 ft-lbs.**



# **WARNING**

**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</b>	<b>+ .0</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>