

READYLIFT[®]

SUSPENSIONS

66-19150 - 2019-UP RAM 1500 AIR SUSPENSION LEVELING 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.

IMPORTANT NOTE:

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

DOES NOT FIT

Vehicles equipped with factory lifts (Offroad or Rebel Package)

Vehicles equipped with springs and struts.

Vehicles equipped with EcoDiesel.

This suspension system was developed using a 34x11.5" tire with 20" x 9" wheel and a offset of +18mm. 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.

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.

SAEJ2492 Warning

By installing this product, you acknowledge that the suspension of this vehicle has been modified. As a result, this vehicle may handle differently than that of factory-equipped vehicles. As with any vehicle, extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive this vehicle safely may result in serious injury or death. Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state. Consult your owner's manual, the instructions accompanying this product, and state laws before undertaking these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

Pre Installation Measurements

It is imperative that you record the following measurements and factory components. ReadyLIFT test and records as much data from each application as possible. Vehicle manufacturers may change components or add models with different options. By recording and not exceeding the fender to hub center that ReadyLIFT call out will ensure the lift on your vehicle is correct. This measurements and components will effect the completion of this lift kit. Failure to do so may result in over lifting, causing premature failure of axles, CV boots and drivetrain. Over lifting a vehicle will also result in a incorrect wheel alignment. This will wear tires incorrectly inside or outside edge. An Incorrect alignment will cause poor vehicle handling issue such as under steer. Over lifting will also cause a shock top off condition, creating poor ride quality and pops and clunks 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 adjusting to factory position after the completion will ensure a safe and enjoyable experience.

RECORD HEAD LAMP MEASURMENTS

Driver Before	Driver After	Passenger Before	Passenger After

VEHICLE RIDE HEIGHT MEASURMENTS

Measure from the fender edge to the axle hub center

Factory front axle		Factory rear axle	
After Lifted		After Lifted	

BILL OF MATERIALS

FRONT AIR STRUT SPACER	2
BALL JOINT NUT SPACER	2
HARDWARE PACK	1
SENSOR RELOCATION BRACKET- RIGHT	1
SENSOR RELOCATION BRACKET- LEFT	1
UPPER CONTROL ARM- RIGHT	1
UPPER CONTROL ARM- LEFT	1



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.

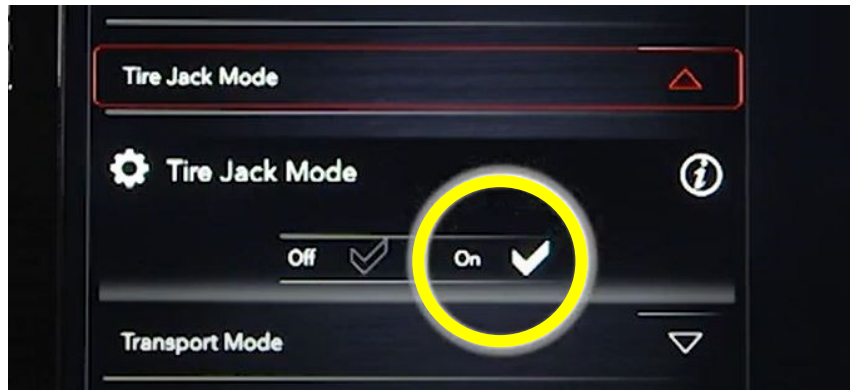
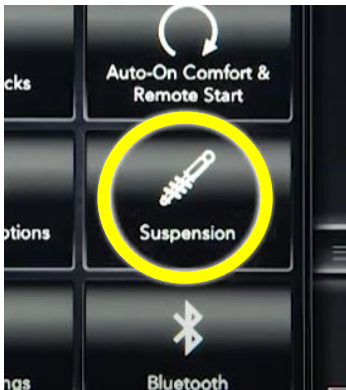
*****Parts shown in red for picture clarification only*****

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.

IMPORTANT NOTE FOR AIR SUSPENSION SYSTEM

- Before working on the vehicle, activate "Tire Jack Mode" using the center infotainment settings. This will prevent the air system from activating while the new components are being installed.



Disconnect the vehicle power source at the ground terminal on the battery. Note, if the battery is left disconnected for an extended period of time, the infotainment system may require a 24 hour reset in order for all of the settings to return.

Raise the vehicle and support with safety jack stands at each frame rail behind the lower control arms then remove the front tires.



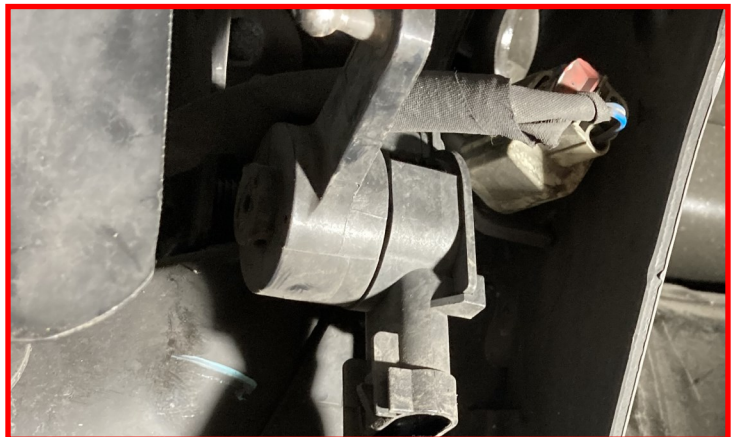
Unplug the front ride height level sensor by releasing the red safety clip followed by squeezing the plug and gently pulling down.



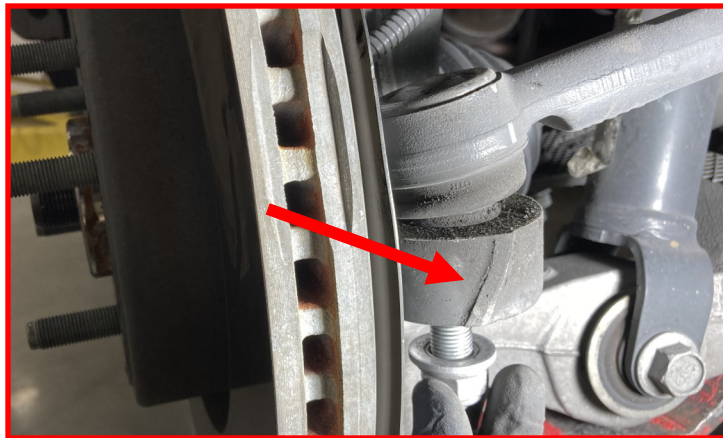
Remove the ride height sensor link from the control arm using a small pry bar or similar tool.

Note: It is not necessary to remove the link from the sensor.

Remove the bolt holding the sensor to the frame. **SAVE THE BOLT AND SENSOR FOR LATER!**



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



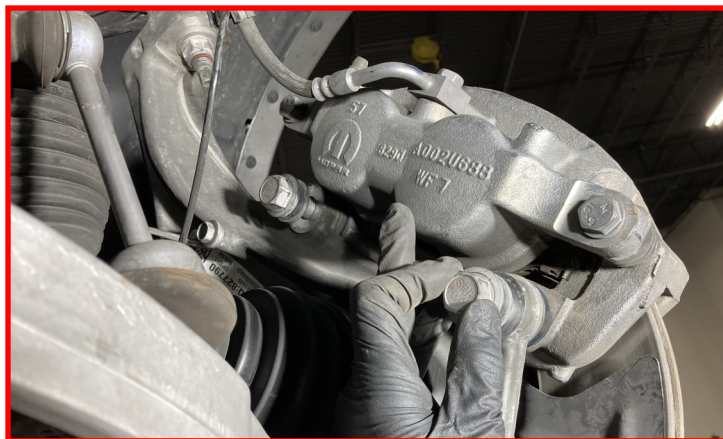
Remove the ABS wire harness from the upper control arm and the brake line. Cut the Christmas tree clip off the harness.

DO NOT CUT THE ABS WIRE.



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 FACTORY HARDWARE.



Remove the axle nut.

RETAIN FACTORY HARDWARE.

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 slightly through the hub assembly. Failure to do so can lead to damage of the CV boot or the CV joint itself.

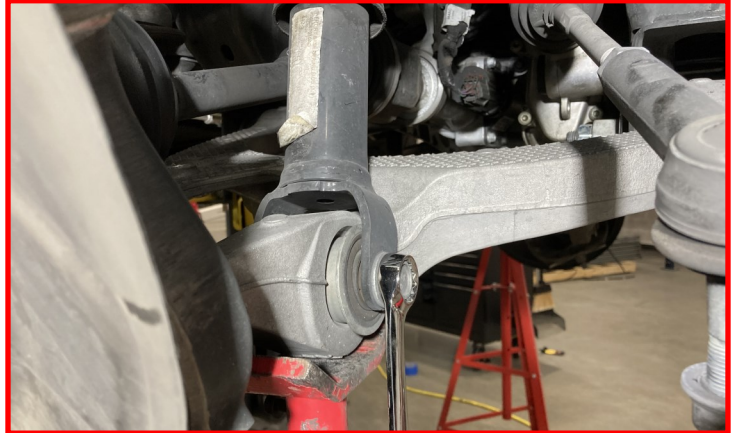


With the front suspension drooped, remove the air line and fitting (TOGETHER) from the pressure relief valve on the top of the air strut.

NOTE: THIS FITTING IS VERY DELICATE AND DIFFICULT TO REPLACE IF BROKEN. TO AVOID DAMAGE, IT IS SUGGESTED THAT THE FITTING AND AIR LINE BE REMOVED AS SEEN IN THE PHOTO.



With the lower control arm supported, loosen the lower control arm bolts at the frame. This will allow the suspension to droop once the Air Strut is removed.



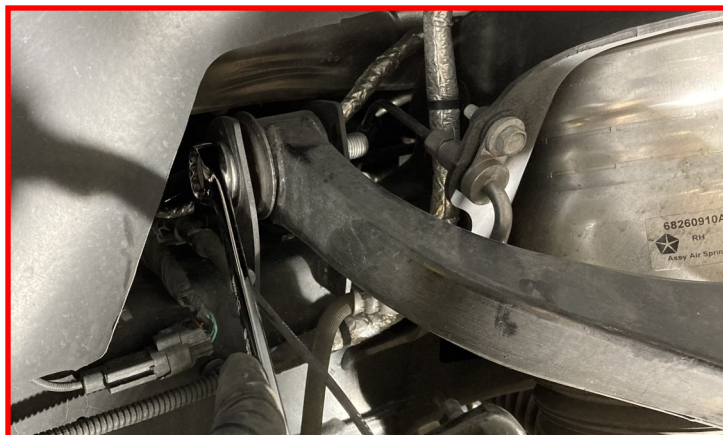
Remove the nut at the upper control arm ball joint. Strike the upper ball joint boss on the steering knuckle with a dead blow to break the ball joint loose.



Remove the two bolts and nuts securing the upper control arm at the frame.

RETAIN FACTORY HARDWARE.

The upper control arm may now be removed.



Remove the three nuts securing the air strut to the frame.

RETAIN FACTORY HARDWARE.



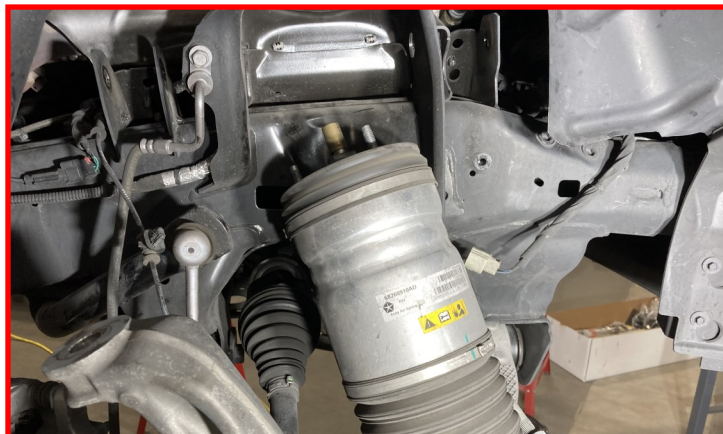
Remove the lower air strut nut and bolt from the control arm.

RETAIN FACTORY HARDWARE.



Remove the air strut from the vehicle.

NOTE: TAKE CARE NOT TO DAMAGE THE PRESSURE RELIEF VALVE THAT PROTRUDES FROM THE TOP CENTER OF THE AIR STRUT.



Install the air strut spacer and torque the factory nuts to **30 ft-lbs.**



Install the air strut by inserting the studs through the upper mount. Loosely install the supplied nuts on the air strut spacer studs.

Raise the lower control arm and install the lower control arm bolt and nut. Leave loose at this time.

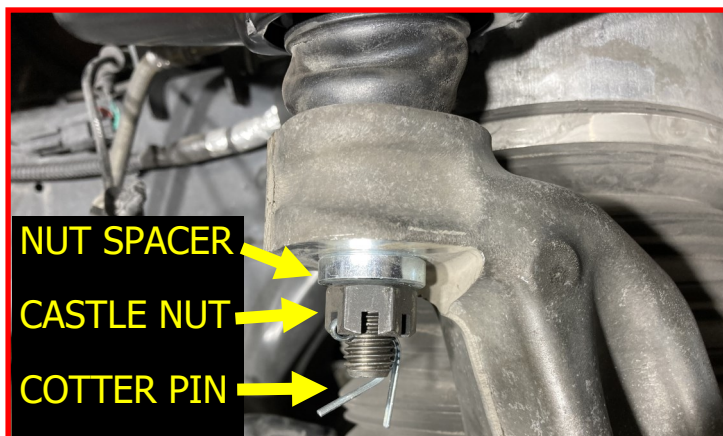


Install the supplied ReadyLIFT upper control arm using the factory hardware at the frame. Leave the hardware loose.

Note: Sticker should be toward the front of the vehicle.



Install the upper ball joint to the knuckle using the supplied nut spacer followed by the castle nut. Torque the nut to **65 ft-lbs** and install the cotter pin.

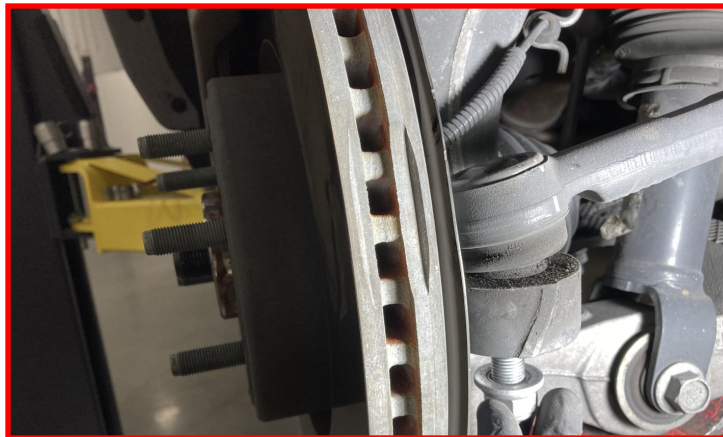


Grease the upper ball joint. Most grease guns will take 3-6 pumps.

Note: Do not over grease. Over grease can cause pre-mature wear.



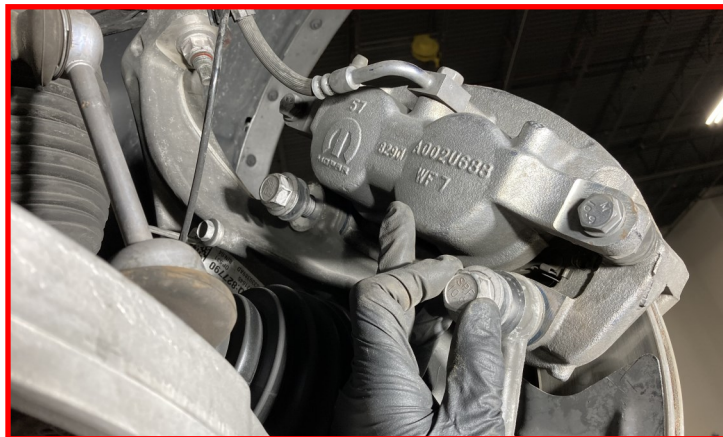
Install the outer tie rod and torque the nut to **60 FT-LBS.**



Install the rotor and torque the factory retaining bolt to **7 FT-LBS.**



Install the caliper using the factory hardware with some medium strength thread locker and torque to **100 FT-LBS.**



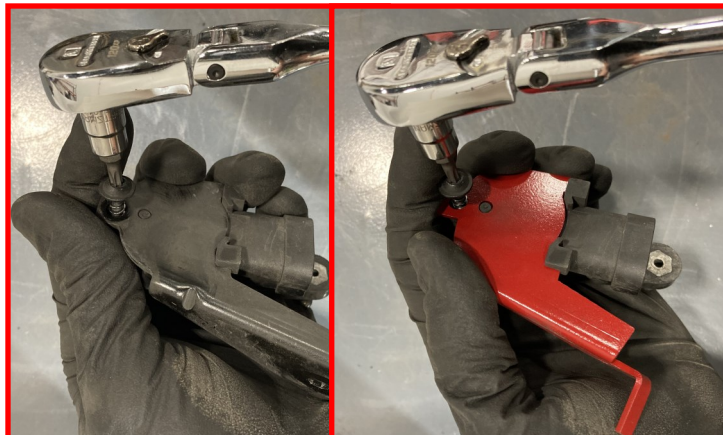
Install the nut on the cv shaft and torque to **185 FT-LBS.**



Remove the factory ride height sensor bracket by removing the small torx head screw.

Install the supplied relocation bracket using the factory torx head screw.

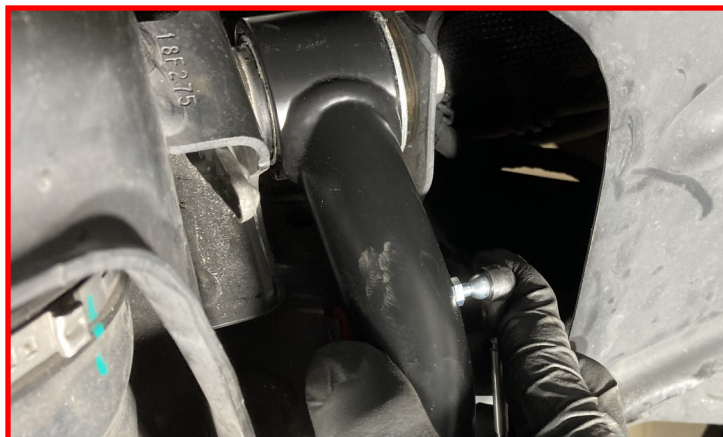
NOTE: DO NOT OVERTIGHTEN THIS SCREW.



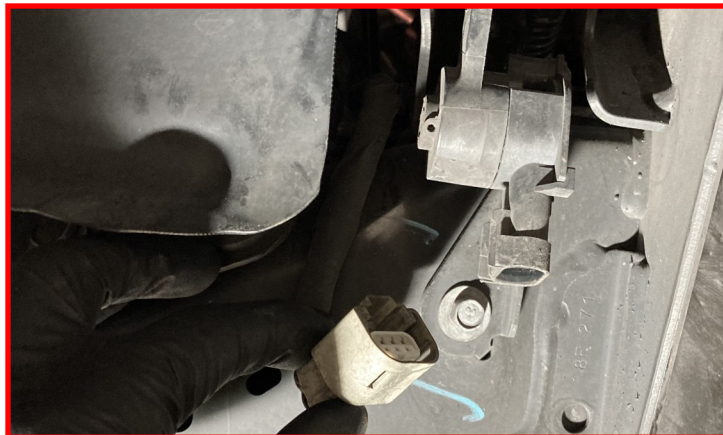
Install the ride height sensor and relocation bracket using the factory bolt using **8 FT-LBS.**



Attach the ride height sensor link to the ball stud on the ReadyLIFT upper control arm.

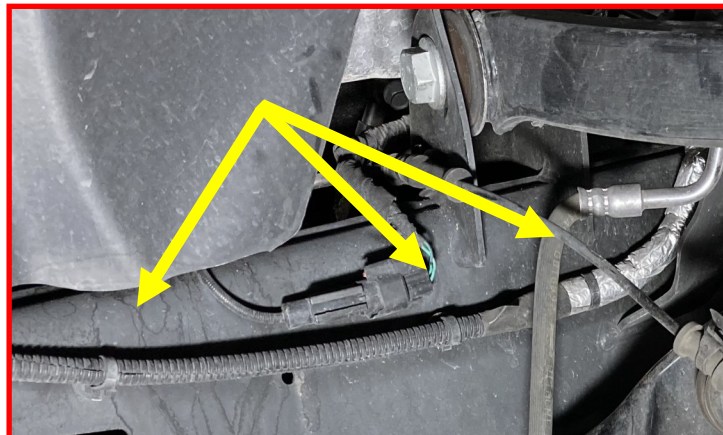


Plug the factory harness into the ride height sensor and replace the red safety clip.



Remove the three push-in zip ties holding the air line to the frame and cut them off the air line.

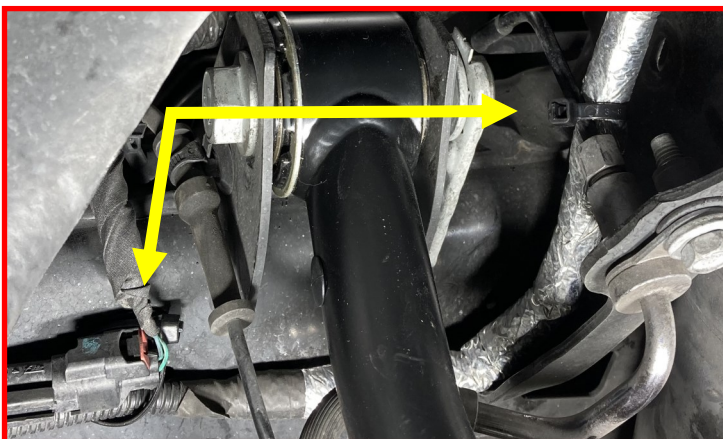
NOTE: DON'T CUT THE AIR LINE!



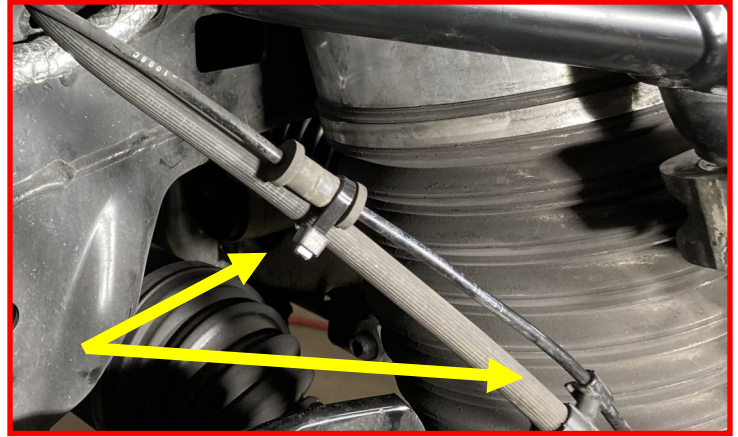
With the air line loose, screw the fitting into the pressure relief valve in the top of the air strut.



Use a couple cable ties to secure the air line and remove stress at the fitting/pressure relief valve interface.



Use a cable tie to attach the abs sensor wire to the brake line and reattach the wire to the plastic clip on the brake line.



Install the front wheels and lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturers specs.

Jounce the vehicle to get the suspension to settle to the new ride height.

Torque the upper control arm hardware to **125 ft-lbs**, the upper strut hardware to **30 ft-lbs**, the lower strut hardware to **150 ft-lbs**.

Center the lower control arm cam bolts and torque to **125 ft-lbs** initial torque (final torque to be done by alignment technician).

Connect the vehicles power source at the negative ground terminal.

Rotate the wheels from lock to lock and verify all clearances between the tire, body, ABS, brake line, air line, and suspension components. Adjust as necessary.

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

Make sure to have any and all electronic systems calibrated as indicated by the manufacturer for the features of your vehicle. This includes but not limited to the steering wheel angle sensors, yaw sensors, cruise control, lane departure, etc.



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 the recommended alignment specifications below. 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

	Driver	Passenger	Tolerance	Total / Split
Camber	0.0	0.0	+/- 0.2	0.0
Caster	4.5	4.5	+/- 0.2	0.0
Toe	0.17	0.17	+/-0.05	0.3