

READYLIFT[®]

SUSPENSIONS

69-31301, GM 1500 SUV Magnetic Ride Control 3.0" SST Lift

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 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.

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.

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.

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 285-60/20 tire with 20x9 wheel and a offset of 18. 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 10.5" 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.

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

	Driver Before	Driver After	Passenger Before	Passenger After
Front				
Rear				

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

RECORD HEAD LAMP MEASUREMENTS

Driver Before	Driver After	Passenger Before	Passenger After

BILL OF MATERIALS

Left Hand Upper Control Arm	1
Right Hand Upper Control Arm	1
Front Top Strut Spacer	2
Rear Top Strut Spacer	2
Rear Pre-Load Spacer	2
Laser Cut Washers	4
Magnetic Ride Relocation Bracket	1
Magnetic Ride Relocation Bracket—Passenger	1
Brake Pad Sensor Relocation Bracket	1
M10-1.25 Flange Nut	12
M10-1.5 x 70mm Hex Head Bolt	4
M10-1.5 C-Lock Nut	4
M10 Washer	8
M14-2.00 x 100mm Hex Head Bolt	4
M14-2.00 C-Lock Nut	4
M14 Washer	8
M6-1.0 x 16mm Hex Head Bolt	2
M6-1.0 Locking Nut	2
M6 Washer	4
1/4" Locking Nut	2
1/4" Washer	2



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.

IMPORTANT INFORMATION FOR MAGNETIC RIDE CONTROL EQUIPPED VEHICLES

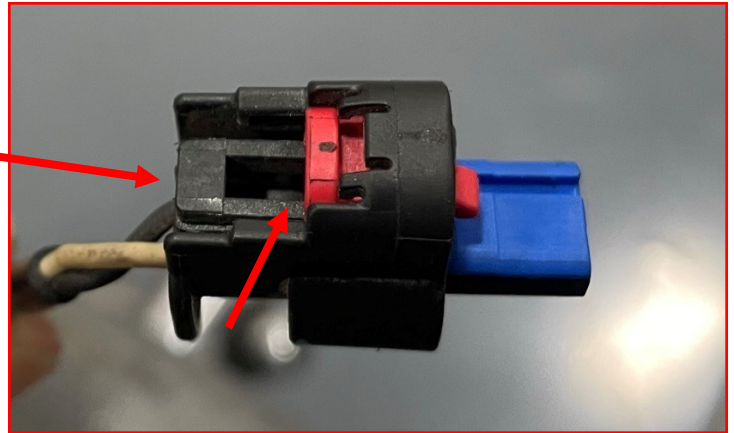
The pins from the plugs for the Magnetic Ride Control must be removed to install the rear preload spacers. It is **IMPERATIVE** that the plugs and pins are removed correctly. Failure to follow the instructions can damage the plug and make the Magnetic Ride Control inoperable. Care **MUST** be taken removing the pins from the plugs as the retaining tabs are easily broken.

PLUG REMOVAL FROM VEHICLE

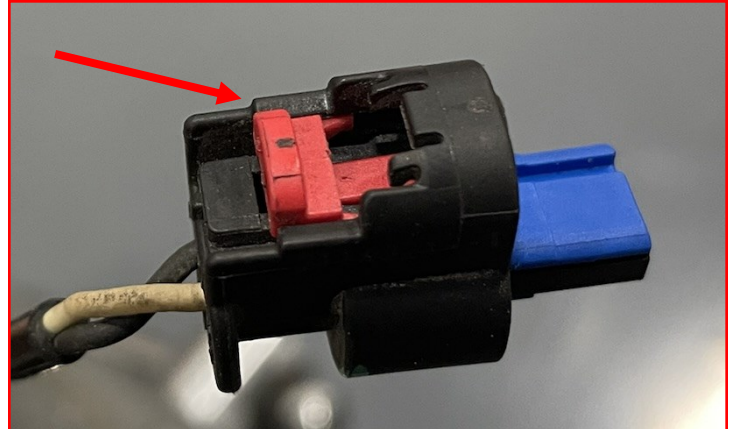
TECHNICIAN: MAKE NOTE OF WIRE ORIENTATION UPON DISASSEMBLY

PIN 1 WIRE COLOR: _____

Pull the red locking slider back (shown in its 'locked' position).

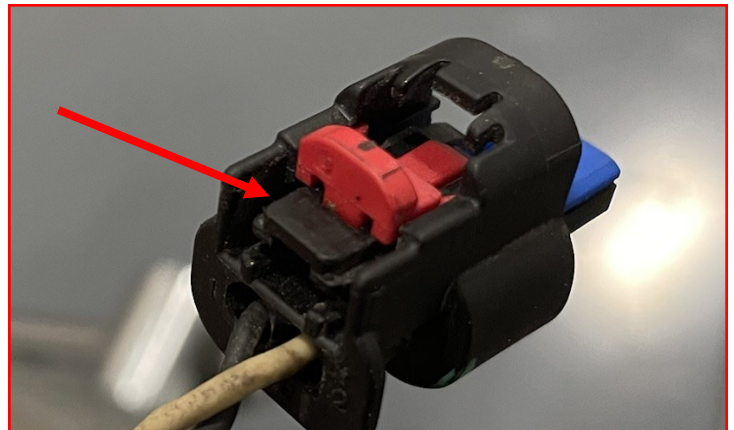


The red locking slider pulled all the way out. Note how it now aligns up with the second step.



Firmly press down on the black tab behind the red locking slider and pull the male plug (shown) from the female side of the plug.

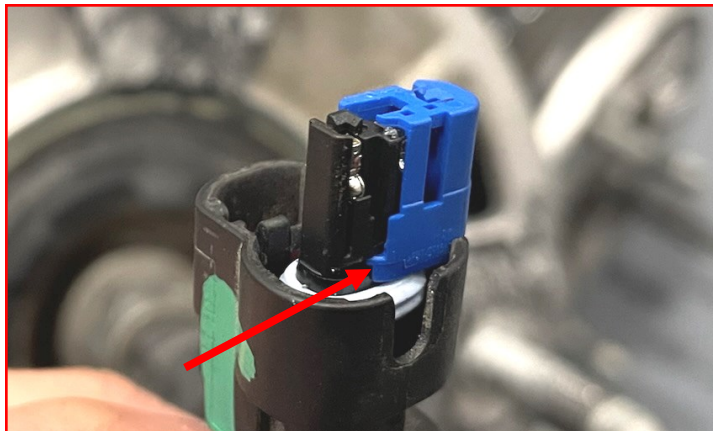
NOTE: It may require moderate force to push down and remove the plug.



PIN REMOVAL FROM PLUG

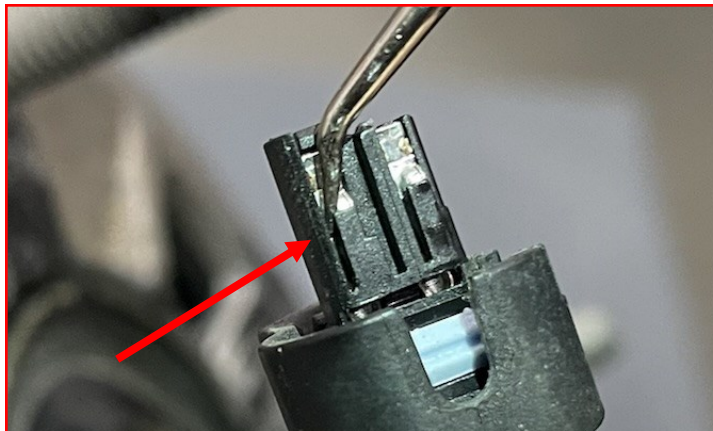
Using a small pick or screwdriver, from the bottom, push the blue clip off of the plug.

NOTE: It may require slowly working each side of the clip to release it.



VERY CAREFULLY separate the retaining tab from the pin while simultaneously pulling down on the coinciding wire to release the pin.

NOTE: The retaining tab DOES NOT need to be separated much from the pin to release it.

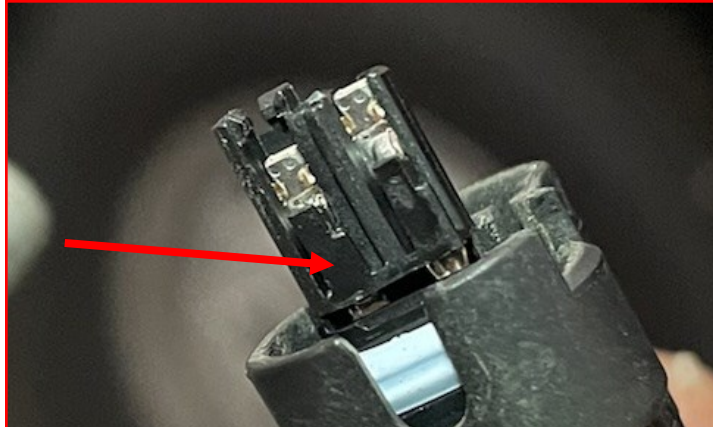


The nub on the pin released from the tab.

The pin can now be pulled out of the plug.

Note how the nub on the right pin is locked above the tab

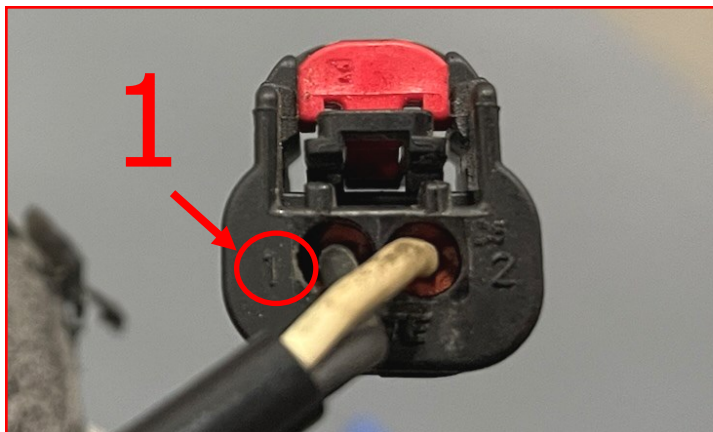
Repeat on the 2nd pin.



PIN INSTALLATION INTO PLUG

Reinstall the noted wire orientation into the correct pins.

Insert the pins with the nub facing AWAY from the red locking slider. Push until the retaining tab 'clicks' on the nub on the pin. Slide the blue clip back onto the plug.



*****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.

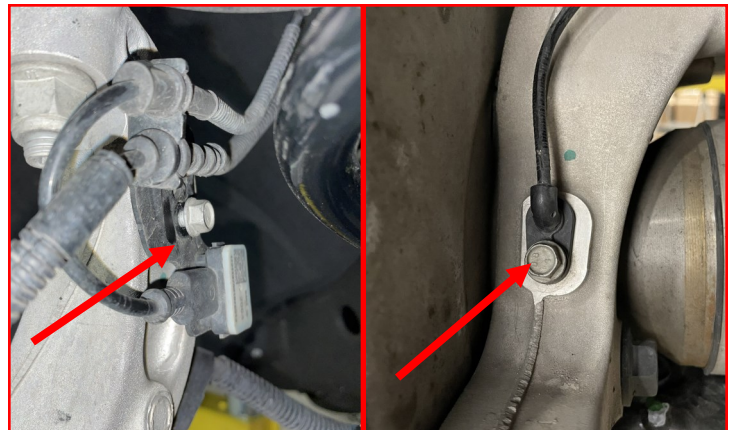
Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

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.

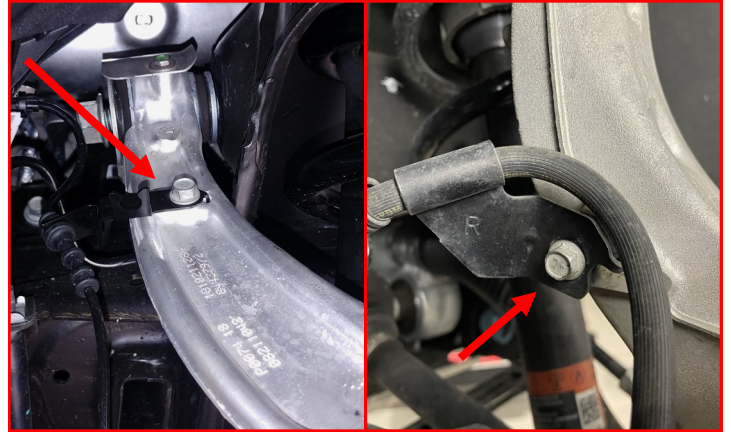


Remove the **wheel speed bracket and sensor** from the knuckle and hang out of the way.

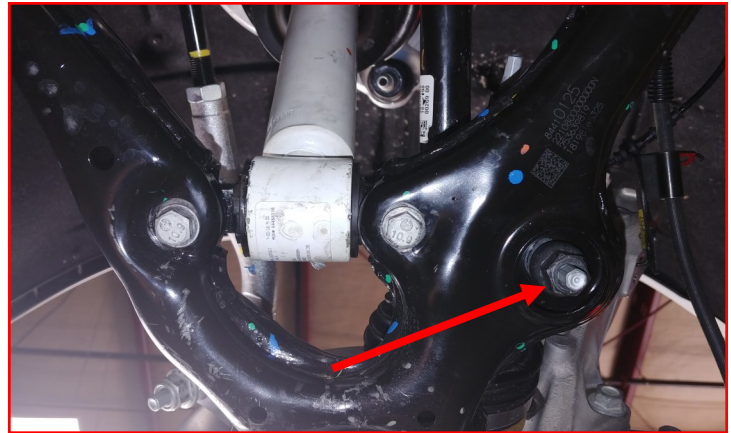


Remove the **ABS bracket** from the Upper Control Arm.

Remove the **brake line bracket** from the knuckle and hang out of the way.



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

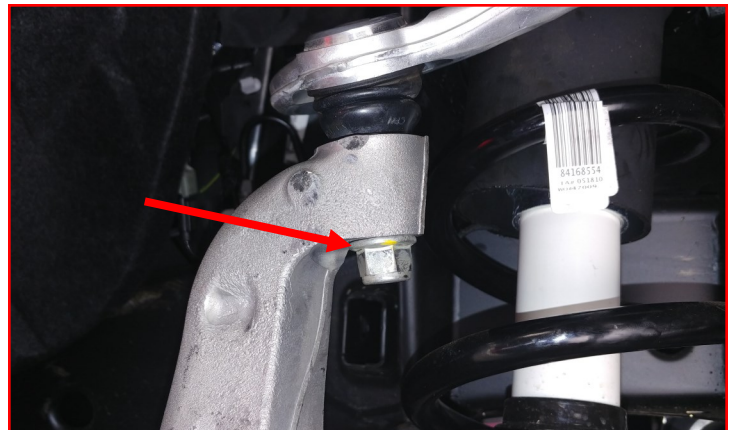


Remove the **axle nut**. Press axle back through hub to allow for greater misalignment and ease in the removal/instillation process.

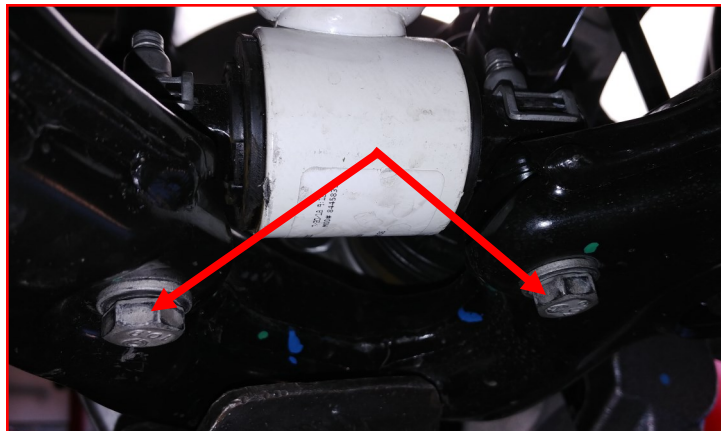
NOTE: It is imperative that the axle be pushed back through the hub assembly. Failure to do so can lead to damage to the CV boot or the CV joint itself. Care **MUST** be taken when handling these CV axles.



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.

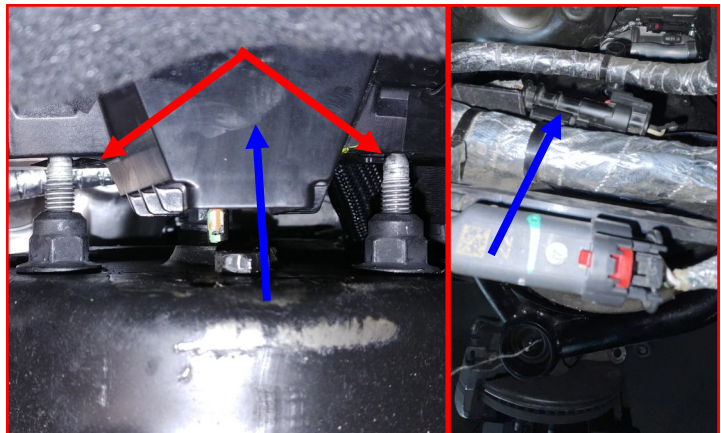


Support the lower control arm with a suitable jack. Remove the **lower strut mounting bolt** from the lower control arm. Discard factory bolts.

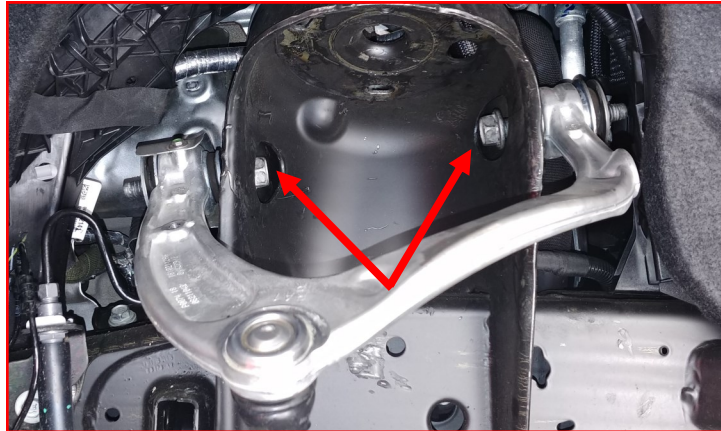


Remove the three (3) **top strut mounting nuts** located on top of the strut tower. Remove strut assembly from vehicle.

NOTE: The plug for **Magnetic Ride Control equipped vehicles** is on the **inboard side of the plastic wire retainer** (blue arrow).



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



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

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

Note: This will be the location where you will trim studs. Use caution when trimming studs to ensure correct length. Use factory nut to determine height.



Install strut top spacer onto strut assembly. Using the **factory 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.



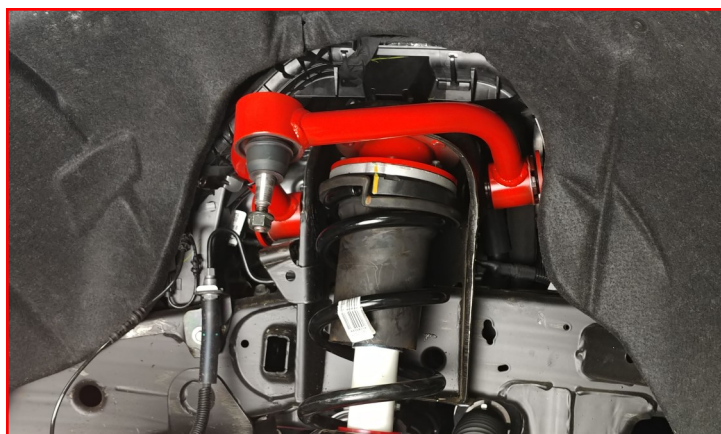
With the upper control arm bolts in place, install the supplied **laser cut washers, the supplied M14 washers and nuts**.

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

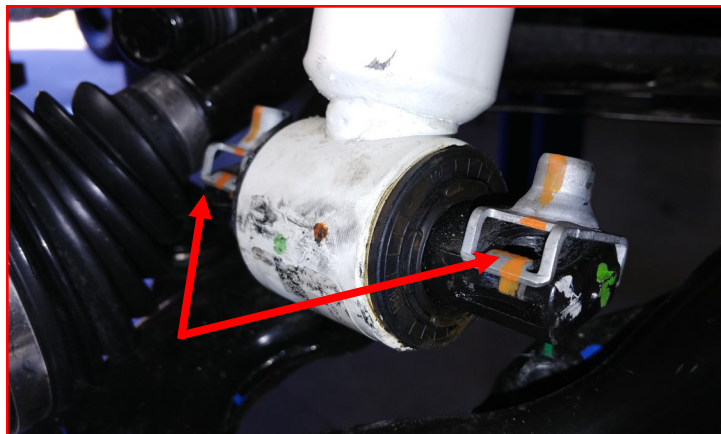


Once upper control arms have been properly torqued, install completed strut assembly. Install with supplied **M10 nuts**.

Start the nuts but do not tighten at this time.

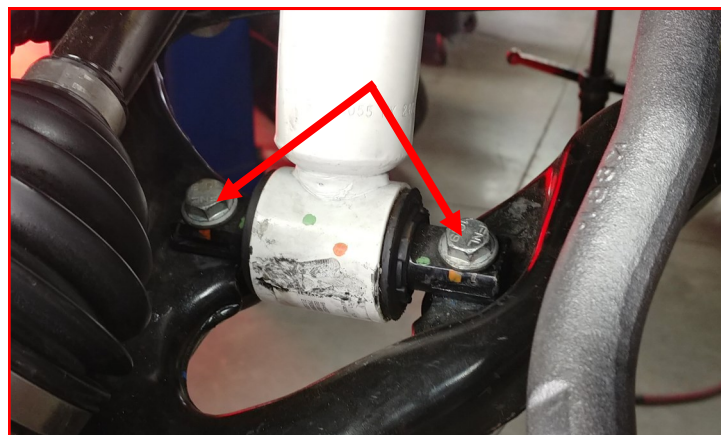


Remove the **lower nut clip** from the strut and discard.



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).



Slide the CV axle into the hub assembly.

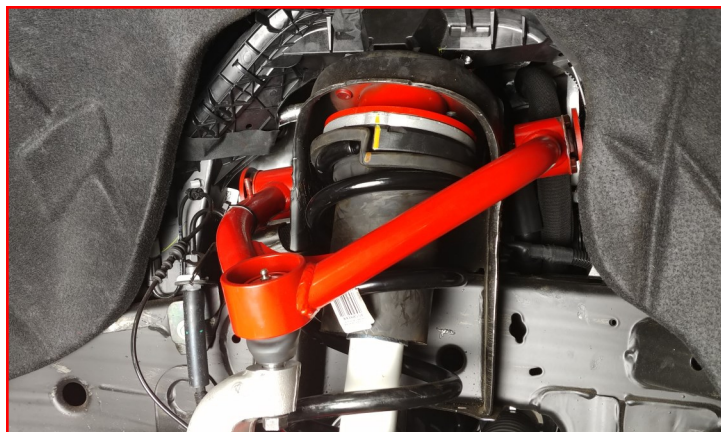
DO NOT TIGHTEN AT THIS TIME!

DO NOT LET THE KNUCKLE HANG OFF OF THE CV NUT!



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

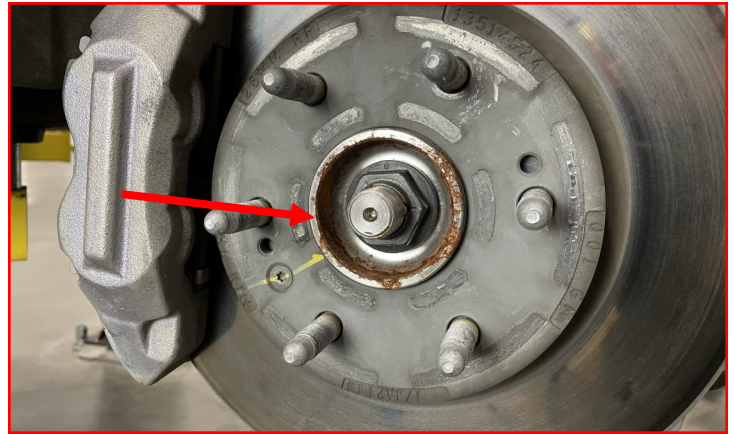
DO NOT TIGHTEN AT THIS TIME!



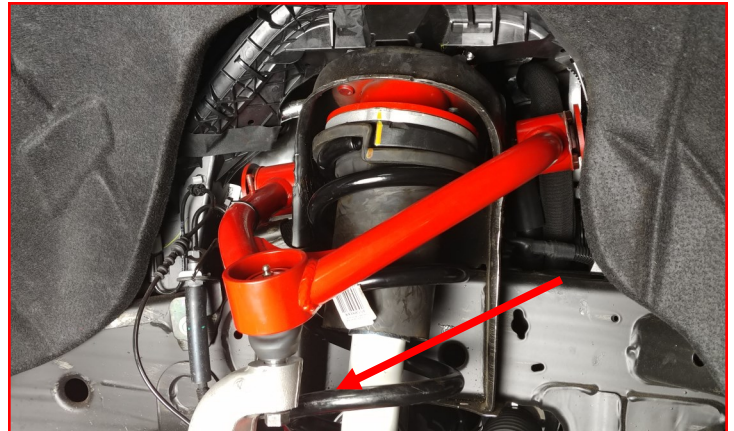
Ensure the CV Axle is properly inserted and tighten **axle nut**.

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.

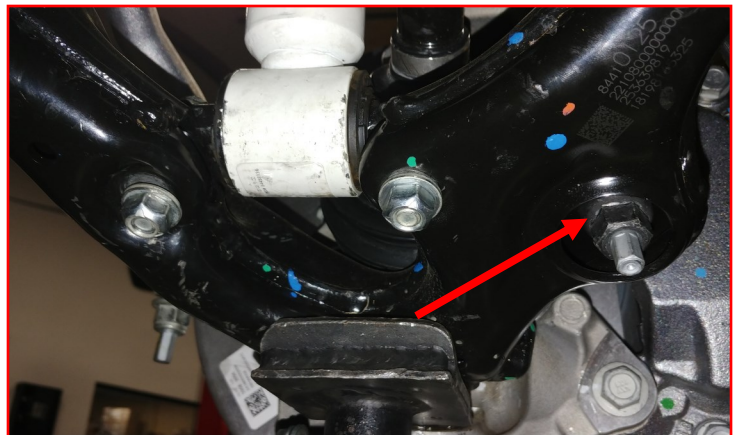


Torque the upper ball joint nut to **65-ft/lbs**.



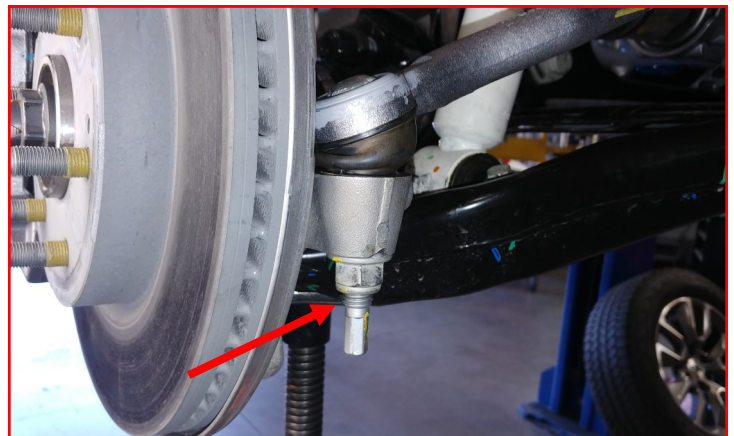
Install the **sway bar drop link** into the lower control arm using factory nut.

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**.

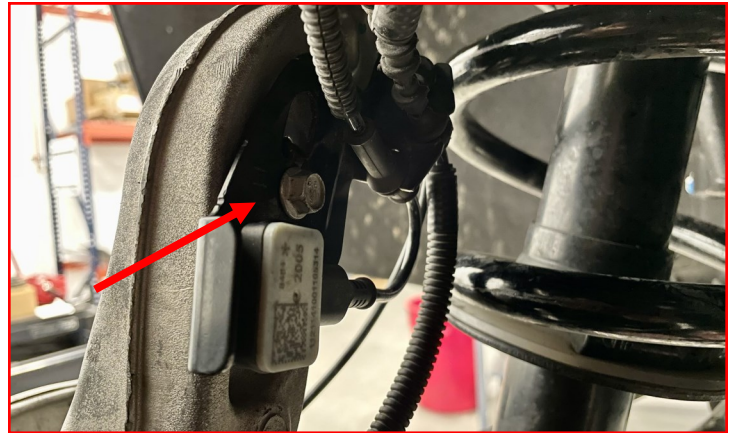


Install the **ABS bracket** to the Upper Control Arm using supplied **1/4" nut and washer**.



DRIVER SIDE ONLY

Remove the factory ABS & Magnetic Ride Control sensor harness bracket and cables from the backside of the knuckle.



Install the **Magnetic Ride Relocation Bracket** to the backside of the knuckle using factory hardware.



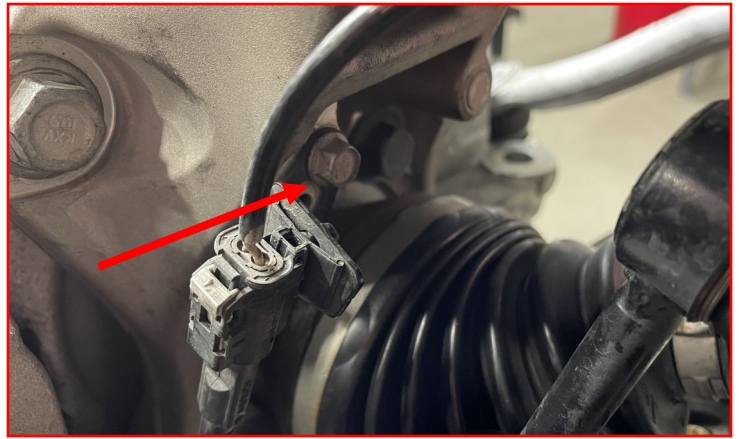
Install the factory harness bracket to the **Magnetic Ride Relocation Bracket** using the **supplied M6 bolt, nut, and washers**

REPEAT PROCESS ON OPPOSITE SIDE

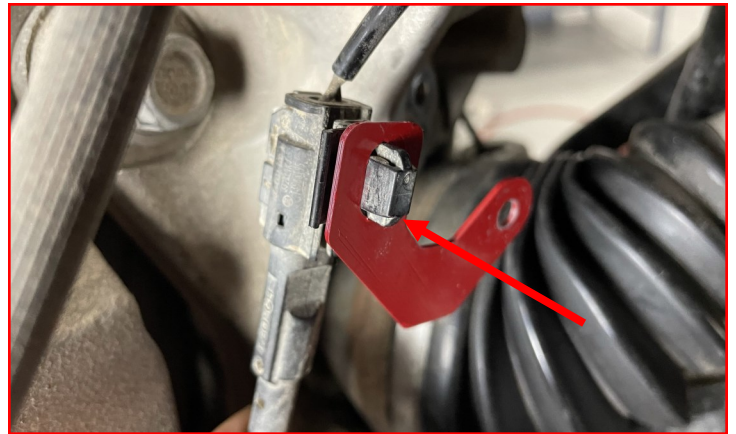


Remove the factory brake pad sensor bracket from the knuckle.

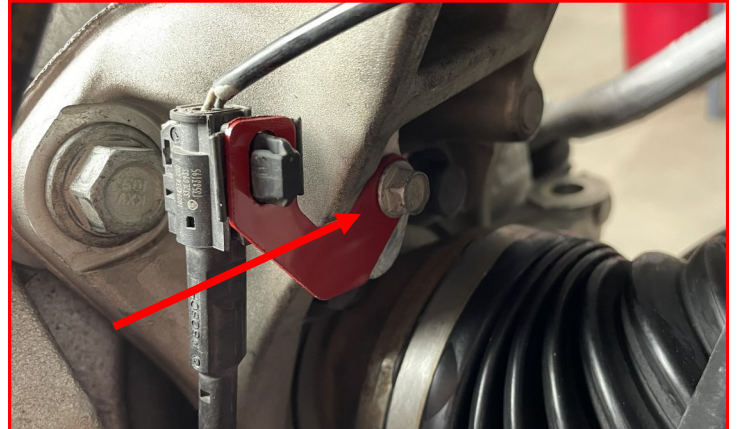
Remove the bracket from the sensor cable.



Install the sensor into the **Brake Pad Sensor Relocation Bracket**.

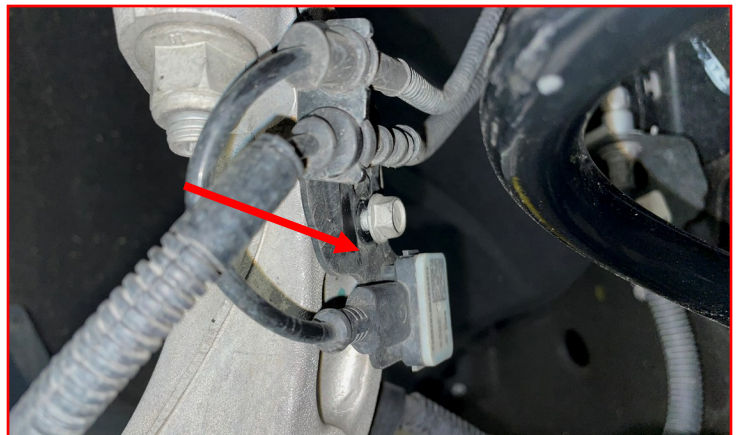


Install the **Brake Pad Sensor Relocation Bracket** on to the knuckle using factory hardware.

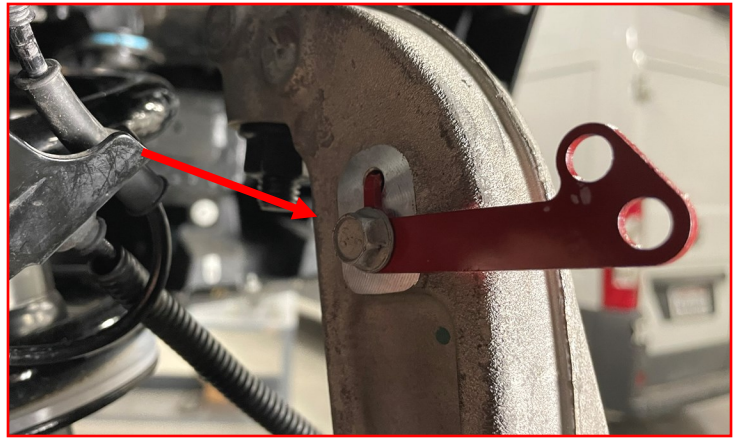


PASSENGER SIDE ONLY

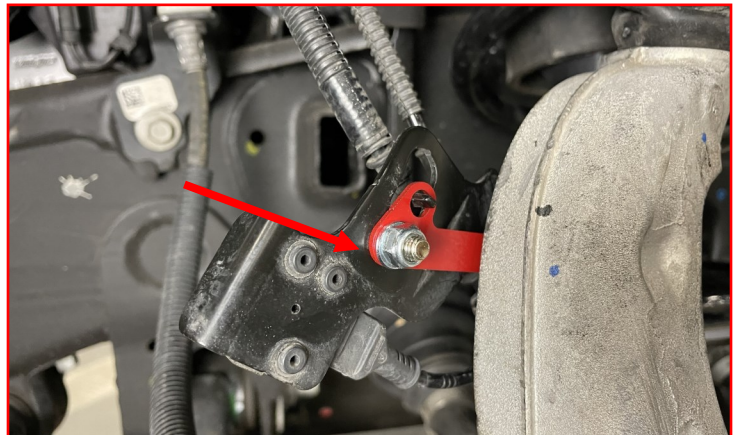
Remove the factory ABS & Magnetic Ride Control sensor harness bracket and cables from the backside of the knuckle.



Install the **Magnetic Ride Relocation Bracket** to the backside of the knuckle using factory hardware.



Install the factory harness bracket to the **Magnetic Ride Relocation Bracket** using the **supplied M6 bolt, nut, and washers**



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 instructions continued on following page.

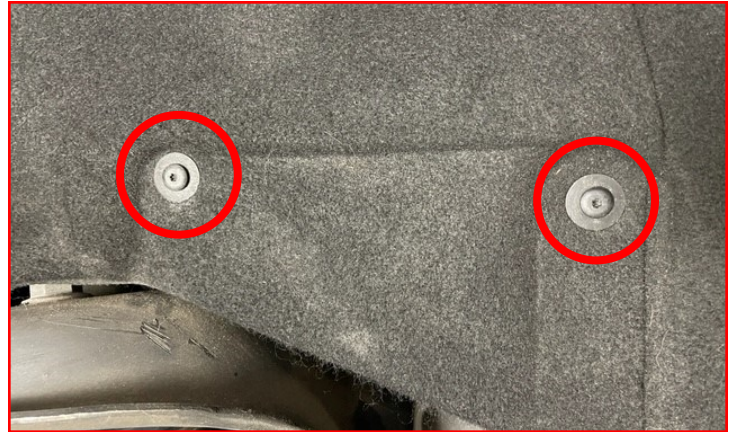
Rear Installation

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 bumper.

Remove the rear wheels.

Remove the two (2) circled **fender liner screws**.

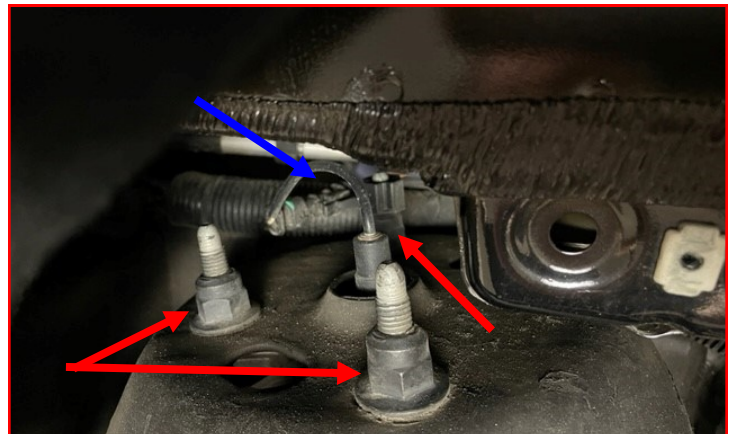


Remove the **brake line brackets** from the lower control arm. Let the brake line hang out of the way.



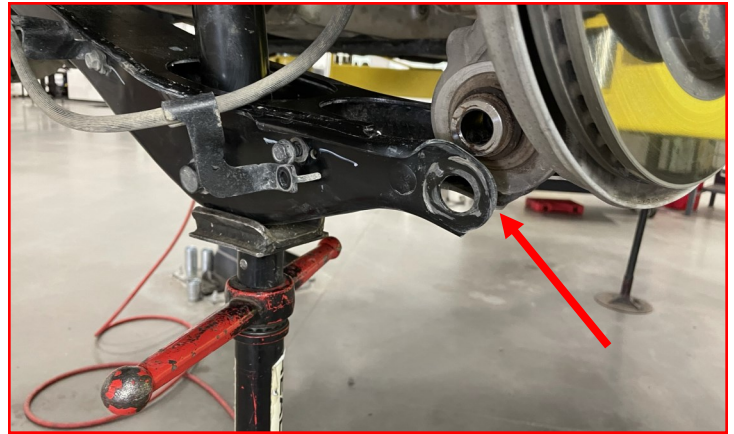
Support the lower control arm with a suitable jack. Peel back the fender liner to remove the three (3) **upper strut bolts**.

Unplug the **Magnetic Ride Control plug**



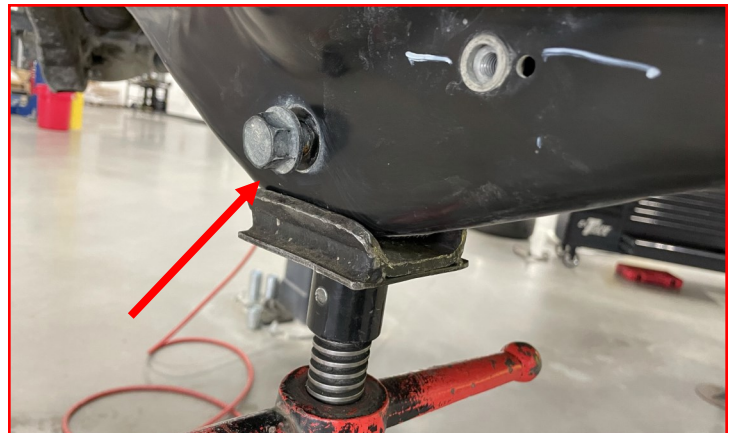
Remove the **lower knuckle bolt**. Lower the jack enough to allow for the knuckle to release from the lower control arm.

Retain factory hardware.

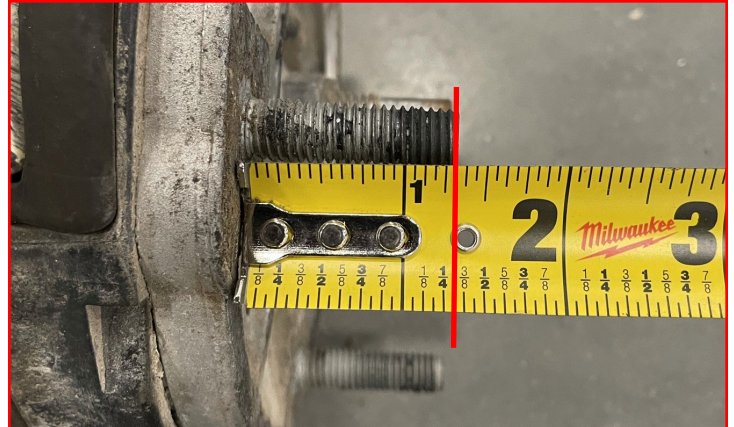


Remove the **strut nut and bolt**. Retain factory hardware.

Remove the jack and push down on the lower control arm enough to remove the strut. Let the corner package hang freely.



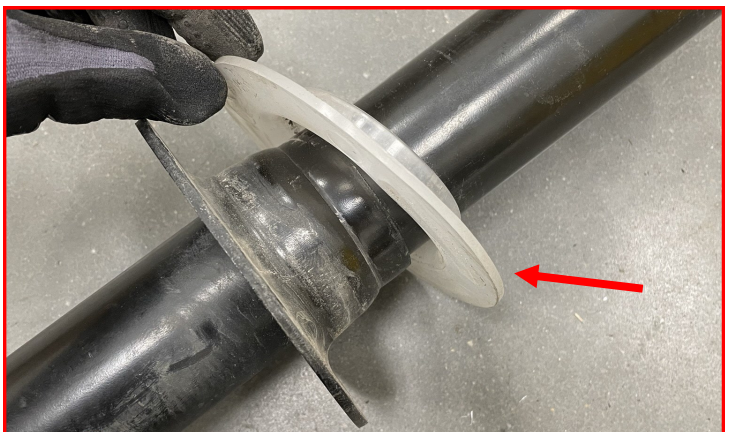
Measure the strut studs to 1.25" from the top of the strut. Use an appropriate cutting tool to trim studs to the measured height.



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

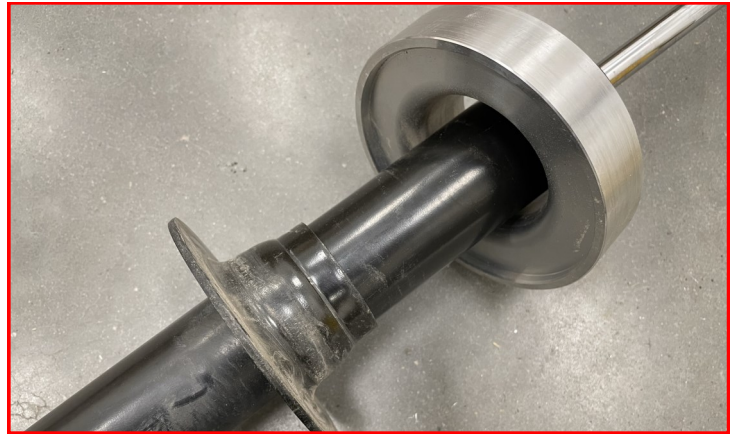
Using a spring compressor, relieve spring pressure from the strut top hat. Remove the strut from the top hat/ spring assembly. Be sure to retain factory hardware.

Remove and discard the factory spring isolator.

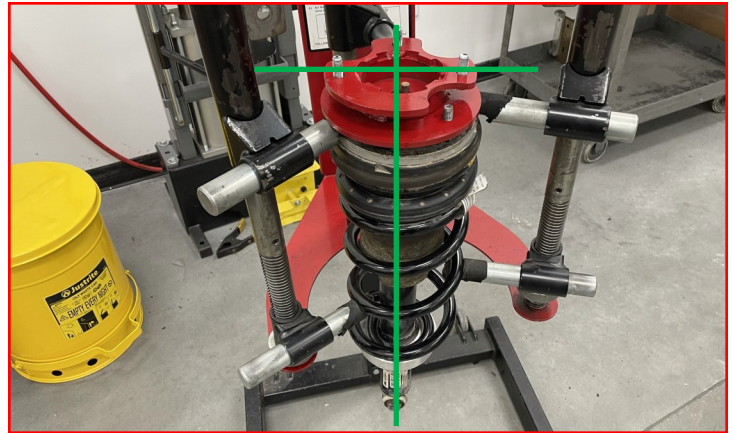


Install the **ReadyLift Rear Preload Spacer**.

Reinstall the strut into the top hat/ spring assembly.



Using the **ReadyLift Rear Strut Spacer** as a guide, align the strut so the lower strut bolt hole is **perpendicular** to the two studs in the **Rear Strut Spacer**.



Using factory hardware, install and tighten the **Rear Strut Spacer** onto the strut.

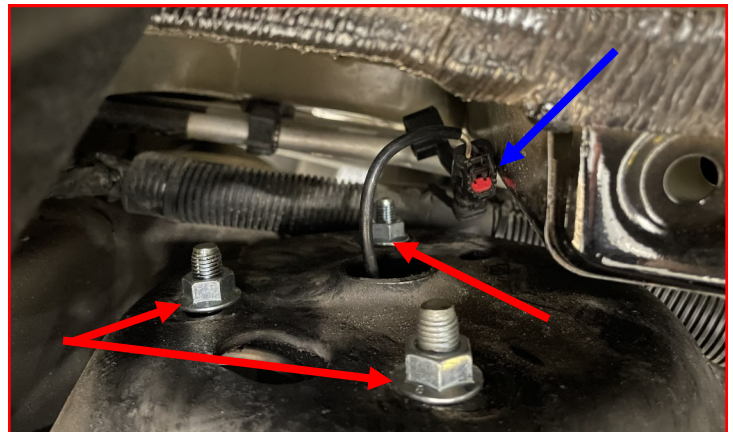
Torque to **35 ft/lbs**.



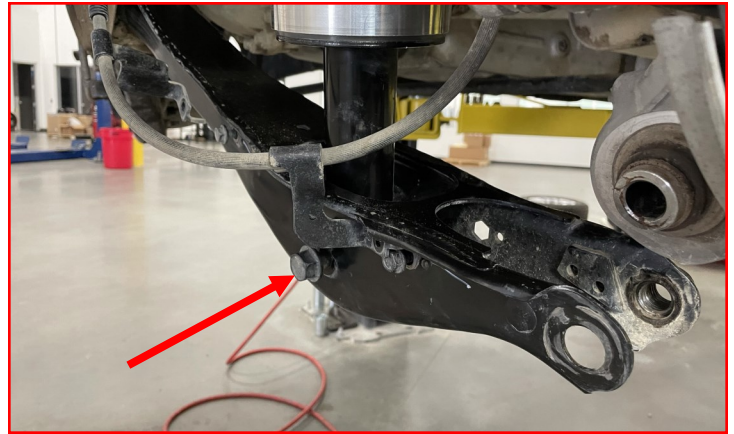
Using the supplied **M10-1.25 Serrated Flange nuts**, install the rear strut assembly into the strut tower.

Plug the **Magnetic Ride Control** back into the vehicle.

Do not tighten at this time.



Install but do not tighten the **lower strut bolt**.

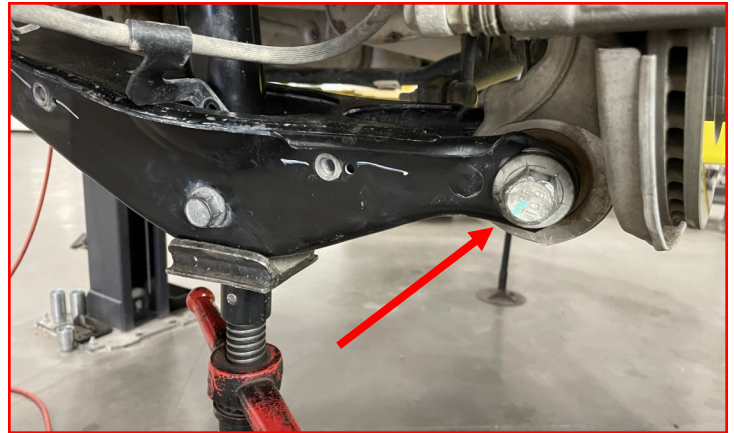


Using a suitable jack, raise the lower control arm enough to install the **lower knuckle bolt**.

Torque the upper strut bolts to **35 ft/lbs**.

Torque the lower strut bolt to **110 ft/lbs**.

Torque the lower knuckle bolt to **160 ft/lbs**.



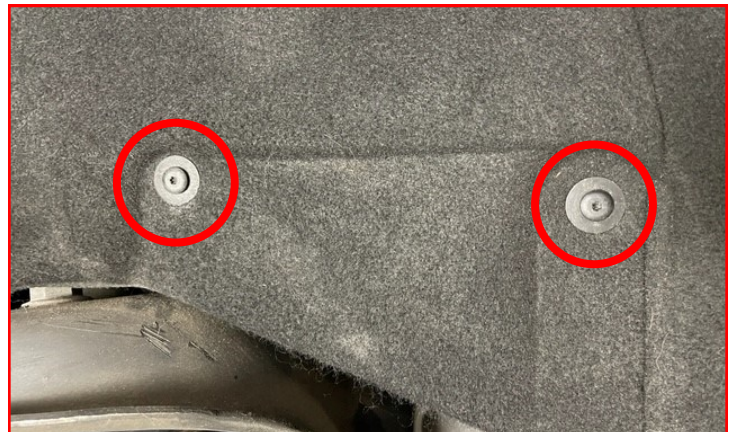
Install the **brake line brackets** to the lower control arm.



Install the two (2) **fender liner screws**.

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

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

Front	Driver	Passenger	Tolerance	Total / Split
Camber	+0.0	+0.0	+/- 0.5	+0.0
Caster	+4.1	+4.1	+/- 0.5	+0.0
Toe	+0.05	+0.05	+/- 0.05	+0.10
Rear	Driver	Passenger	Tolerance	Total / Split
Camber	-0.4	-0.4	+/- 0.5	-0.8
Toe	+0.05	+0.05	+/-0.05	+0.20