

### 44-19621 2019 RAM 1500 AIR SUSPENSION 6" LIFT

IF your ReadyLIFT<sub>®</sub> 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.



**R**EAD INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.

INSTALLATION BY A <u>CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.</u>

**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 (Off-Road or Rebel Package) Vehicles equipped with springs and struts. Vehicles equipped with EcoDiesel. Vehicles equipped with factory 22" wheels

This suspension system was developed using a 37x12.5" tire with 20x9 wheel and a offset of 0mm. 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 alighting 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 manufactures 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	Driver	Passenger	Passenger
Before	After	Before	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	

# 

**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.

### **BILL OF MATERIALS**

	,
Driver Knuckle	1
Pass Knuckle	1
Front Cross Member	1
Rear Cross Member	1
Cam Block Off Plate	8
Skid Plate	1
Driver Diff Drop, Inside	1
Driver Diff Drop, Outside	1
Driver Diff Spacer	2
Passenger Diff Drop, Front	1
Passenger Diff Drop, Rear	1
Shift Solenoid Harness Bracket	1
Rear Diff Drop	1
Front Driveline Spacer	1
Driver Sway Bar Bracket	1
Pass Sway Bar Bracket	1
Front Air Strut Spacer	2
Front Sensor Relocation Bracket- Right	1
Front Sensor Relocation Bracket- Left	1
Driver Brake Line Bracket	1
Passenger Brake Line Bracket	1
Rear Brake Line Bracket	1
Driver Rear Control Arm Bracket	1
Passenger Rear Control Arm Bracket	1
Control Arm Bracket Crush Sleeve	2
Rear Sway Bar End Links	2
Rear Track Bar Bracket	1
Track Bar Bracket Nut Plate	1
Rear Air Bag Spacer	2
Rear Bump Stop	2
Rear Bump Stop Nut Plate	1
Rear Shock	2

M18 x 150MM Hex Bolt	4
M18 C-Lock Nut	4
M18 Flat Washer	8
M16 x 110MM Hex Bolt	2
M16 C-Lock Nut	2
M16 Flat Washer	4
M14 x 70MM Hex Bolt	1
M14 C-Lock Nut	1
M14 Flat Washer	2
M12 x 30mm Hex Bolt	2
M12 x 35mm Hex Bolt	3
M12 x 60mm Hex Bolt	4
M12 x 60mm Socket Head Allen Bolt	4
M12 x 70mm Hex Bolt	2
M12 C-Lock Nut	12
M12 Flat Washer	21
M12 Fender Washer	2
M10 x 25mm Bolt	4
M10 x 30mm Bolt	6
M10 x 35mm Bolt	4
M10 x 70mm Bolt	2
M10 C-Lock Nut	8
M10-1.25 Serrated Flange Nut	6
M10 Flat Washer	22
M10 Fender Washer	2
M8 x 25mm Bolt	6
M8 C-Lock Nut	5
M8 Flat Washer	11
M6 x 25mm Bolt	3
M6 C-Lock Nut	3
M6 Flat Washer	6
1/4-20 x 1 GR8 Bolt	4
1/4-20 C-Lock Nut	4
1/4 Flat Washer	8

### \*\*\*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 automatic reset in order for all of the settings to return.

## Front Install

Raise the vehicle and remove the front tires.



Unscrew the air line from the pressure relief valve.

NOTE: Use extreme caution when removing the airline as the fitting is sensitive and difficult to replace if broken.



Loosen the three top air strut nuts but do not remove at this time.

NOTE: This will release the tension on the top hat to prevent the strut popping out toward the CV axle boot when the lower strut bolts are removed.



Remove the outer tie rod end nut.

Remove the tie rod end by striking the tie rod end boss on the knuckle with a dead blow hammer to dislodge the taper.

NOTE: Leave the nut on the end of the joint until the tie rod breaks loose from the knuckle.

Remove the ABS wire harness from the upper control arm and frame rails. Cut the Christmas tree clip off the harness. Do not cut the ABS wire.

Remove the axle nut. Retain factory hardware. Press the axle back through the 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 slightly. 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.

Remove brake caliper mounting bolts and hang caliper out of the way. Do not hang the caliper by the brake line. Retain factory hardware.











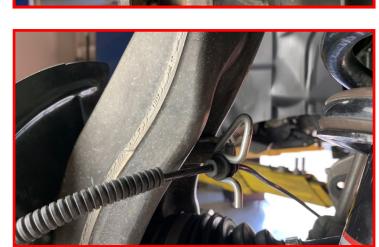
Remove brake rotor retaining bolt and remove the rotor. Retain the factory hardware.

Remove the wheel speed sensor from the knuckle and hang out of the way. Retain the factory hardware.

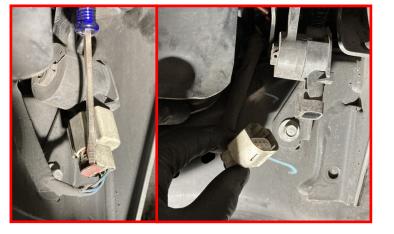
Remove rubber isolator from the ABS bracket on the inside of the knuckle.

Unplug the Ride Height Position Sensor.

NOTE: Take care not to damage the red retaining clip.







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. Retain the factory hardware.

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

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 torqued to 8 ft-lbs.

Reattach the plug and insert the red safety clip.

NOTE: Do not attach rod to control arm at this time.

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.









Loosen the upper control arm bolts located inside the strut tower.



Loosen but do not remove the lower control arm ball joint nut. Strike the lower ball joint boss on knuckle with a dead blow hammer to dislodge the taper. Remove nut and then the knuckle from the vehicle.

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



Remove (4) sway bar mounting bolts from the frame and retain the factory hardware. Remove sway bar from the vehicle.



Support the lower control arm with a suitable jack.

Loosen but do not remove the lower

control arm pivot bolts.

Remove the lower air strut mounting bolt from the lower control arm. Retain the factory bolt.

Swing lower control arm down and out of the way. Remove the (3) top strut nuts and carefully remove the strut from the vehicle.

NOTE: Take care not to damage the Pressure Relief Valve on the top of the air strut.







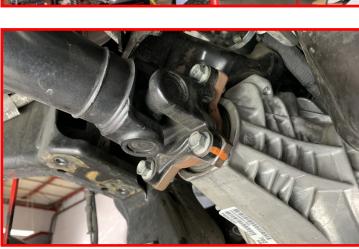
Remove the lower control arm from the frame. Be sure to retain factory alignment cam bolts, cams and nuts.

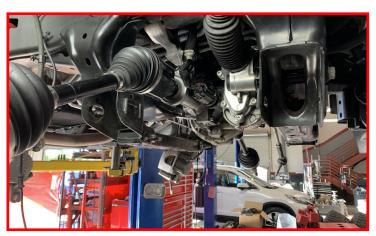
Remove the (4) rear crossmember mounting bolts. Remove crossmember from the vehicle. Discard the crossmember and mounting hardware.

Mark the driveshaft to pinion flange location. Remove the front driveshaft hardware from the flange. Let driveline hang out of the way. Discard the factory hardware.

Unplug the differential shift actuator. Ensure all clips are removed and clear of the differential.









Remove the harness retaining clip from the retaining bracket attached to the differential mount.

Remove the actuator harness retaining clip from the inside the frame rail.

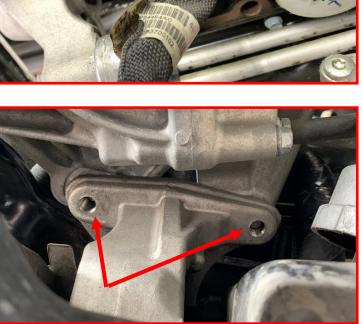
With an appropriate jack stand, support the front differential and remove the (2) driver side differential mounting bolts. Retain the factory hardware.

Remove (2) passenger side differential mounting bolts. Retain the factory hardware.

Discard the actuator harness retaining bracket.









Remove the (3) driver side rear differential mounting hardware. Retain the factory hardware.



Ensure all the differential mounting hardware is removed, slowly lower the differential and remove from vehicle.

Using the inside edge of the rear control arm/rear crossmember pocket, measure towards the outside of the vehicle frame 2.75" and make a vertical mark on both sides of the frame. Connect the two lines across the top of the frame pocket. Using an appropriate cutting tool, cut through marked line.

Sand the cut surface to remove any sharp edges. Clean and paint the cut surface to prevent any corrosion.





\*\*\*Parts shown in red for picture clarification only\*\*\* Install the driver side differential drops

Install the driver side differential drops onto factory differential mounting point using the factory bolts. Do not tighten at this time.

NOTE: The plate with the larger off set is to be installed on the inside, closest to the center of the vehicle.

Install the passenger side front differential drop onto factory differential mounting point using the factory mounting bolts. Do not tighten at this time.

The passenger side front differential drop is identified by a small notch on one edge.

Before tightening the passenger side front differential drop, ensure the small notch is orientated up and against the factory differential mounting point.

Ensure the offset is toward the front of the vehicle.

Torque the factory bolts to 80 ft-lbs.

Install the passenger side rear differential drop onto the rear factory differential mounting point using the using the supplied M12 locking nuts and M12 washers.

Do not tighten at this time.

The passenger side rear differential drop is identified by a large notch on one edge.

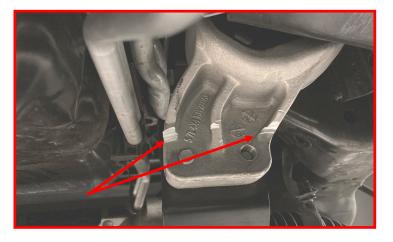








NOTE: Due to minor differences between trucks, it may be necessary to grind the webbing on the mount to clear the new drop bracket.



Before tightening the passenger side rear differential drop, ensure the large notch is orientated up and against the factory differential mounting point.

Ensure the offset is toward the front of the vehicle.

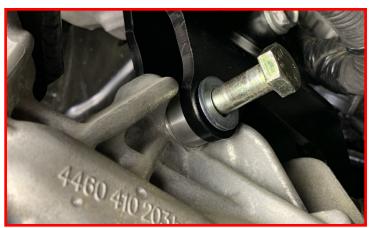
Install the rear differential drop onto the rear factory differential mounting point using the using the supplied M12 x 35mm bolts, nuts and washers.

Do not tighten at this time.



Raise differential into place. Be sure to use a helper to aid in the installation process. With the differential in place, install the provided M12 x 60mm bolt, washers and nut through the driver side inner differential drop bracket, the diff drop spacer, the differential housing, then the driver side outer differential drop bracket.

Do not tighten at this time.



Install the (3) factory mounting bolts through the rear differential drop bracket and into the differential.

Do not tighten at this time.

Install the provided M12 x 60mm bolt and washers through the passenger side rear differential drop bracket, the differential housing, then the passenger side front differential drop bracket.

Install shift solenoid harness bracket onto the (2) M12 bolts used to mount the passenger side differential in the previous step. Install the supplied M12 locking nuts and washers.

Torque all M12 hardware to 95 ft-lbs.

Plug the differential shift actuator in.







Install the top harness retaining clip into the shift solenoid harness bracket.



NOTE: Due to minor differences in frame production, it may be necessary to trim the bottom edge of the front control arm pivot pocket.

Install front crossmember using the supplied cam block off plates, M18 bolts, washers, and nuts.

Do not tighten at this time.

Ensure the cam block off plates are orientated with the notches facing up and out.

Ensure the bolts are installed from the front of the vehicle.



Install rear crossmember using the supplied cam block off plates, M18 bolts, washers, and nuts.

Do not tighten at this time.



Ensure the cam block off plates are orientated with the notches facing up and out.

Ensure the bolts are installed from the rear of the vehicle.

Using the factory cam bolts, cams and nuts, install the lower control arms in the factory orientation. Do not tighten at this time.



Install the heavy duty skid plate using the provided M10 bolts, washers and nuts.

Torque the M10 hardware to 45 ft-lbs.

With the lower control arms installed and the skid plate torqued in place.

Torque M18 crossmember hardware to 250 ft-lbs.



Using the supplied M12 socket head bolts, front driveline spacer and thread locker, install the drive shaft to the pinion flange lining up the previous marks.

Torque the M12 hardware to 80 ft-lbs.

NOTE: Due to variation in vehicle models, you may need to trim the plastic bracket on the side of the transmission due to contact with the driveshaft.

Mark the bracket being sure to remove enough material the driveline will not touch the bracket. Using an appropriate cutting tool, cut through marked line.

Mark the factory brake line bracket on the upper strut mount as shown.

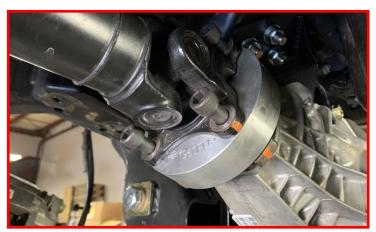
Using an appropriate cutting tool, cut through marked line.

CAUTION: Use caution and care while cutting, the brake line is in close proximity.

Remove brake line from factory mounting area.

Sand the cut surface to remove any sharp edges. Paint the cut surface to prevent any corrosion.







Using care, carefully pull down on the brake line. While pulling the brake line down into place you'll need to rotate the bulkhead fitting so the hardline is aimed toward the rear on the vehicle.

Install the brake line drop bracket onto the factory brake line bulkhead fitting using the supplied M6 bolt, locking nut and washers.

Do not tighten at this time.

Using the factory brake line mounting hardware, install the brake line drop bracket onto the factory brake line mounting location.

Parts in this picture are not used for the air suspension kit and may be discarded.

- 2 STEEL SPACERS WITH ROUND TUBE - 2 ALUMINUM PRELOAD SPACERS











Locate the top strut extension and install using the factory hardware.

Torque the factory hardware to 35 ft-lbs.

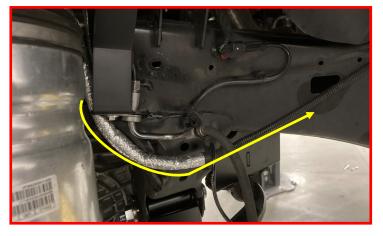


Remove the clips retaining the air supply line.

NOTE: Route the air line through the gap in the spacer from the backside as the spacer is installed. The line can be tightened once the strut is installed.

Install the completed air strut assembly using the supplied M10 serrated flange nut.

To aid in the installation process be sure to just start the M10 nuts, the strut will need to move around during installation.





Swing the lower control arm up and install the factory lower strut bolt through the lower control arm.

Do not tighten the lower strut bolt at this time.

Tighten the top strut nuts.

Torque the M10 hardware to 35 ft-lbs.



With the strut installed, use the supplied cable ties to secure the air line to the steel portion of the brake line.

NOTE: Ensure that the air line is routed such that there is not stress at the fitting/ pressure relief valve interface or any tight bends as this may kink or crack fittings/ lines.

Remove the ABS wire bracket on the inside of the knuckle. Pay close attention to the orientation of the wire bracket.

Retain the bracket and hardware.

Locate the factory knuckle and hub assembly. Remove the (3) hub assembly mounting bolts.

Retain the factory mounting bolts.

Remove hub assembly from factory knuckle.

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24

Install rotor dust shield and hub assembly into replacement knuckle using the (3) factory hub bolts and thread locker.

Torque the hub bolts to 100 ft-lbs.

Install the completed knuckle assembly to the lower ball joint while guiding the CV axle through the hub.

Install the factory ball joint hardware. Torque the ball joint nut to 110 ft-lbs.

Install the upper ball joint into the knuckle using the factory ball joint hardware.

Torque the ball joint nut to 50 ft-lbs







Install the opposite side ABS wire bracket on the inside of the knuckle using the factory hardware (i.e. Driver will be installed on passenger side).

NOTE: It may be necessary to trim the end of the ABS wire bracket to allow the bracket to sit flush on the knuckle.

Torque the factory hardware to 10 ft-lbs.

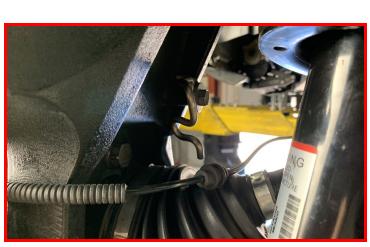
Remove the ABS wire harness retaining clips that are attached to the frame rail. This will allow additional length that is required to install the ABS sensor into the knuckle.

Install the ABS harness connector into the preexisting hole located on the side of the frame rail.

Route the ABS wire between the knuckle and the strut. Ensure the ABS wire is routed over the CV axle as well.

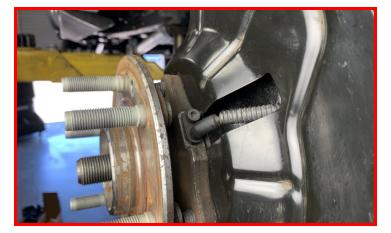
Install ABS sensor into knuckle using the factory hardware.

Torque the factory hardware to 80 in-lbs.







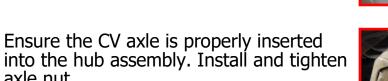


Install the ABS wire mounting grommet into the ABS wire bracket .



Install the brake rotor to the hub assembly using the factory hardware.

Torque the factory hardware to 5 ft-lbs.



Torque the axle nut to 160 ft-lbs.

axle nut.

Install the brake caliper to the knuckle using the factory hardware and a drop of thread locker.

Torque the factory hardware to 100 ft-lbs.



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

Torque the factory nut to 60 ft-lbs.



Install sway bar drop brackets using the factory hardware.

Torque the factory hardware to 35 ft-lbs.



Install sway bar using the supplied M10 x 25mm bolts, washers and nuts hardware.

Torque the M10 hardware to 45 ft-lbs.



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

Torque end link nut to 45 ft-lbs.



Using a couple wire ties, secure the ABS sensor harness to the brake line.



Connect the ride height sensor link to the upper control arm.



### Rear Install

Block the front tires and raise the rear of the vehicle using a suitable jack.

Place jack stands on the frame rail in front of the lower trailing arms.

Place a jack under the axle for support. Remove the rear wheels.

Remove the rear wheels and the plastic inner fender liners.



Release the air pressure in the rear air bags by loosening the line at the top of the air bag.

NOTE: Ensure the rear of the vehicle is supported as loosening the air line will remove all pressure from the rear air bag!

The air bag may be pried away from the axle mount and compressed at this point.

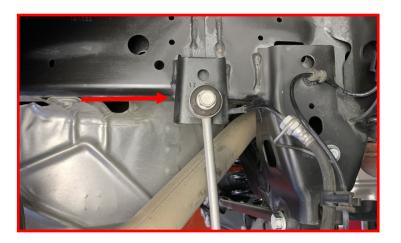
NOTE: It is not necessary to remove the bag from the upper mount.

TIP: After compressing the bag, reattach the air line at the top- this will prevent the air bag from extending while working.



Remove the upper sway bar end link at the frame rail.

Discard the factory hardware.



Remove the lower sway bar end link at the sway bar.

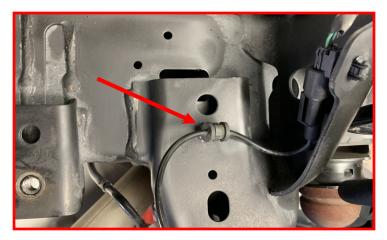
Discard both the sway bar end link and the factory hardware.

Locate and remove the passenger brake line bracket mounted on the frame rail.

Retain the factory hardware.

Remove the passenger ABS retaining clip at the frame rail.





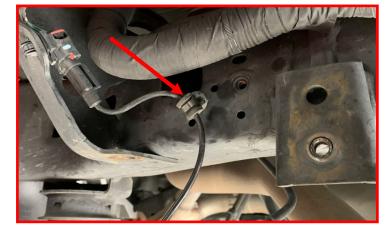
Locate and remove the driver brake line bracket mounted on the frame rail.

Retain the factory hardware.



Remove the driver ABS retaining clip at the frame rail.

Remove the harness retaining clip from the top of the rear differential.





Remove the harness retaining clip from the stud on the rear differential cover.



Support the axle with a suitable jack. Remove the lower shock bolt.

Retain the factory mounting hardware.



Remove the shock top mounting hardware. Remove shock from the vehicle and dispose of the shock in an appropriate manor.

Loosen but do not remove the upper and lower trailing arm hardware.





Loosen the track bar mounting bolt at the axle.



Loosen the frame side track bar mounting bolt.

Remove both the rear upper control arm pivot bolt at the axle. Retain the factory mounting hardware.

NOTE: Be gentle with the arms as the ride height sensor is attached near the front side of the arm.

Install the supplied passenger upper control arm bracket to the axle using the supplied M10 x 35mm bolts, nuts and washers. Do not tighten at this time.

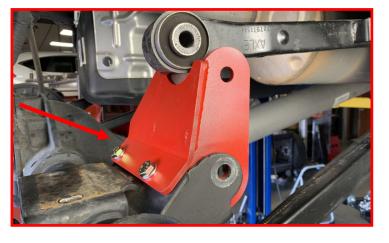
Install the upper control arm crush sleeve between the upper control arm bracket and the control arm axle mount.

Install the supplied M16 bolt, locking nut and washers. Do not tighten at this time.











Install the supplied M8 bolt and washer through the upper control arm bracket and into the axle. Do not tighten at this time.

NOTE: Some vehicles it may be necessary to drill a hole to place mounting bolt. Using an appropriate tool, mark, remove the bracket, and drill a 3/8" hole for mounting.

Install the upper control arm into the upper control arm bracket using the factory pivot hardware. Do not tighten at this time. With the upper control arm installed. Tighten all bracket mounting hardware in order.

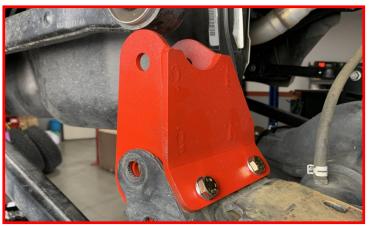
Torque the M10 axle bolts to 55 ft-lbs. Torque the M16 hardware to 200 ft-lbs. Torque the M8 hardware to 30 ft-lbs.

Install the supplied driver upper control arm bracket to the axle using the supplied M10 x 35mm bolts, nuts and washers. Do not tighten at this time.

Install the upper control arm crush sleeve between the upper control arm bracket and the control arm axle mount.







Install the supplied M16 bolt, locking nut and washers. Do not tighten at this time.

Install the supplied M8 bolt, nut and washer, through the axle mount and the upper control arm bracket. Do not tighten at this time.

As previously noted, some vehicles require drilling the hole for the M8 bolt.



Install the upper control arm into the upper control arm bracket using the factory pivot hardware. Do not tighten at this time. With the upper control arm installed. Tighten all bracket mounting hardware in order.

Torque the M10 axle bolts to 55 ft-lbs. Torque the M16 hardware to 200 ft-lbs. Torque the M8 hardware to 30 ft-lbs.

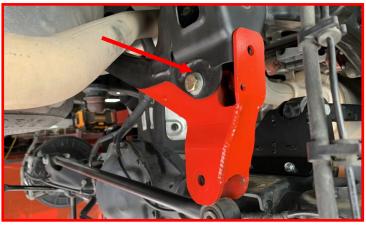
Remove the frame side track bar mounting bolt.

Retain the mounting hardware.

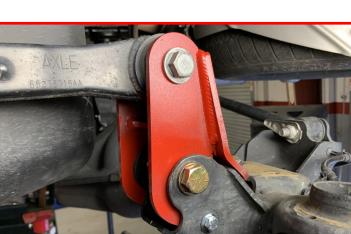
Install track bar bracket using the 14mm x 70mm bolt, washers, and c-lock nut in the track bars original location. Do not tighten at this time.

With the track bar bracket in place install the supplied M12 x 35mm bolt, nut and washers through the track bar bracket and the factory track bar mount brace. Do not tighten at this time.









Attach the track bar bracket support tab to the factory track bar mount using the track bar bracket nut plate, the supplied M12 x 35mm bolt and washers and tread locker. Tighten all mounting hardware at this time.

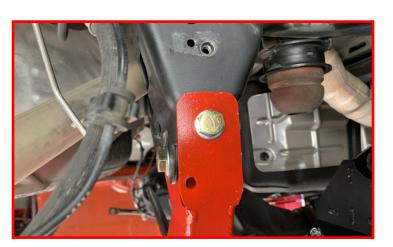
Torque the M12 hardware to 90 ft-lbs. Torque the M14 hardware to 120 ft-lbs.

Note the location and orientation of track bar bracket nut plate.

Install the track bar into the track bar bracket using the factory hardware. Do not tighten at this time.

If necessary, gently compress the air bag to make room for the air bag spacer.

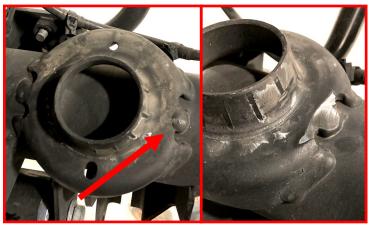








Ensure the welds that bond the bag mount to the axle housing do not rise above the mounting surface. If necessary, grind this weld flush and use paint or another type of sealer to protect against corrosion.



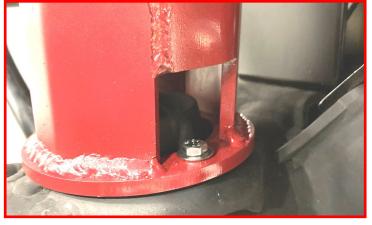
Install the air bag spacer using the  $1/4-20 \times 1''$  bolts, washers, and lock nuts. Orient the oval mounting hole toward the front of the vehicle.

NOTE: The top of the spacer should sit relatively flat in relation to the ground.

Using the factory mounting hardware, install the aftermarket shock per the manufacture's suggested installation instructions.

Shock brand will vary with kit P/N

Install the rear bump stop extension on the axle pad.







On the driver side only, Install the bump stop nut plate.



Install the supplied M8 bolts, nuts and washers through the bump stop extension and axle pad.

Torque the M8 hardware to 30 ft-lbs.

Install the driver rear brake line bracket onto the spring tower using the supplied M6 x 25mm bolt, nut and washers. Do not tighten at this time.



While gently pulling down on the brake line, install the factory brake line bracket onto the driver rear brake line bracket using the factory hardware and supplied M8 nut and washer.



Install the ABS retaining clip into the driver rear brake line bracket in the bottom hole. Tighten the bracket at this time.

Torque the M8 hardware to 30 ft-lbs.

Torque the M6 hardware to 15 ft-lbs.

While gently pulling down on the brake line install the factory brake line bracket onto the rear track bar bracket using the factory hardware and supplied M8 nut and washer.

Torque the M8 hardware to 30 ft-lbs.

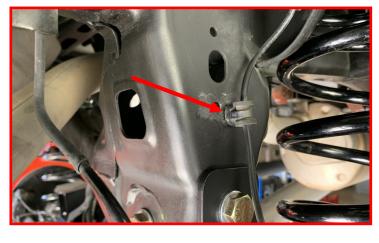
Install the ABS retaining clip into the factory brake line bracket location.

Install the sway bar end link assembly onto the frame using the supplied M10 x 70mm bolt and M10 fender washer. Do not tighten at this time.











Install the completed sway bar end link assembly onto the sway bar using the supplied M12 x 70mm bolt, nut, flat washer and fender washer. Do not tighten at this time.



Note: Ensure the fender washer is installed on the bushing side.



Install the harness retaining clip on the top of the rear differential.



Install the harness retaining clip the stud on the rear differential cover.



To seat the air bag on the lower air bag spacer, gently extend the air bag with one hand while supporting the top of the bag with the other hand.



Install the air line fitting at the top of the bag.

Install the inner fender liner using the factory hardware.

Install the tires and slowly lower the truck. Ensure that the air bag seats on the spacer properly as the truck is lowered.



If disconnected, reconnect the ground cable at the battery.

With the weight of the vehicle resting on the tires, start the vehicle and turn off "Tire Jack Mode" in the settings.

NOTE: The air system should activate at this time filling the front and rear air bags.



Torque the wheels to manufacture's spec.

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

Torque the upper and lower trailing arm hardware to 160 ft-lbs, the lower shock hardware to 45 ft-lbs, the sway bar end link hardware to 35 ft-lbs, and the track bar hardware to 125 ft-lbs.

NOTE: The vehicle may need to be driven a few miles before the ride height sensors will return to their pre-lift positions.

Rotate the wheels from lock to lock and verify all clearances between the tire, body, ABS, brake 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, land departure, etc. Jounce the vehicle to get the suspension to settle to the new ride height.

Torque the upper and lower trailing arm hardware to 160 ft-lbs, the lower shock hardware to 45 ft-lbs, the sway bar end link hardware to 35 ft-lbs, and the track bar hardware to 125 ft-lbs.

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 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, land 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 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.

	Driver	Passenger	Tolerance	Total / Split
Camber	-0.3	-0.3	+/- 0.5	+0.0
Caster	+3.0	+3.0	+/- 0.5	+0.0
Тое	+.07	+.07	+/-0.05	+.14

### **RECOMMENDED ALIGNMENT SPECS**