

# **READYLIFT**<sup>®</sup>

## **SUSPENSIONS**

**READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.**

**INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.**

**READYLIFT IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.**

### **Safety Warning**

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers.

Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers.

Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ReadyLIFT Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your vehicle under the influence of alcohol or drugs.

Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ReadyLIFT products.

It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle.

All raised vehicles have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

### **Installation Warning**

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

ReadyLIFT Suspension recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

This suspension system was developed using a 37-12.5" tire with 20" x 9" wheel and a offset of +25. 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 12.5" 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. This kit is designed primarily for low speed 4WD usage and the vehicle should be kept in 2WD mode on the street. Speedometer calibration is necessary.

## **IMPORTANT NOTE:**

Rotation of the factory top hat on the coil over assembly must be done while keeping the factory coil in their original orientation for all clearances and proper handling.

2019 and UP with Fox Live Valve coil overs require a re-routing of the driver side electrical harness to clear the CV shaft.

All steps are to be followed for 2017 and UP, while specific steps for 2019 with Fox Live Valve coil overs called out.

### **VEHICLE HEIGHT MEASUREMENTS**

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

# **BILL OF MATERIALS**

<b>TOP STRUT EXTENSION</b>	<b>2</b>
<b>SPRING SPACER (2.5" LIFT KITS ONLY)</b>	<b>2</b>
<b>M10 FLANGE NUTS</b>	<b>6</b>
<b>CONTROL ARM BUMP STOP</b>	<b>2</b>
<b>BUMP STOP CLIP NUT</b>	<b>2</b>
<b>LIFT BLOCK (69-2755 ONLY)</b>	<b>2</b>
<b>U-BOLTS (69-2755 ONLY)</b>	<b>4</b>
<b>U-BOLT FLANGE NUT (69-2755 ONLY)</b>	<b>8</b>

## **WARNING**

### ***Before starting installa-***

tion: ReadyLIFT Suspension highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact ReadyLIFT Suspension Customer Service to find one of our "Pro-Grade" Dealers.

### **INSTALLATION BY A PROFESSIONAL IS HIGHLY RECOMMENDED.**

- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- All lifted vehicles may require additional driveline modifications and / or balancing.
- A vehicle alignment is REQUIRED after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- A vehicle lift or hoist greatly reduces installation time. Installation time estimates are based on an available vehicle hoist.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

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

ReadyLIFT recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two post vehicle lift with safety jacks.

Otherwise, park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Disconnect the vehicle power source at the ground terminal on the battery.

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

Raise the front of the vehicle and support with safety jack stands at each jack point indicated by the service manual. Remove the front wheels. All steps are to be completed on both sides of the vehicle unless instructed. Starting with the front of the vehicle, all steps are to be completed on both sides of the vehicle unless instructed.

Remove the ABS wire from the frame rail, brake line bracket, rubber brake lines clamps, and knuckle. Remove the brake line bracket from the knuckle.

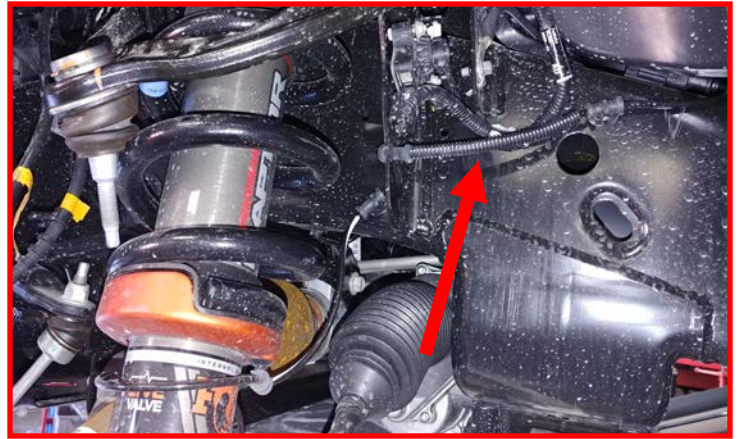


Remove the vacuum hose from the vacuum actuator on the knuckle.





**2019 and UP Models:** Passenger side, locate the electrical harness on the coil over and follow it up onto the frame rail behind the plastic wheel liner.



Disconnect the electrical connector and remove all clips from the frame rail.



Driver side, locate the electrical harness on the coil over and follow it up onto the frame rail and into the engine bay. The wire follows the ABS harness.



Disconnect the electrical connector and remove the wire from all other points on the frame. Picture is of the top of the inner fender well plastic showing the harness clip for the electrical connection. This can be accessed from under the hood or reaching up behind the plastic. Remove this clip from the plastic liner as it will need to be relocated in a later step.



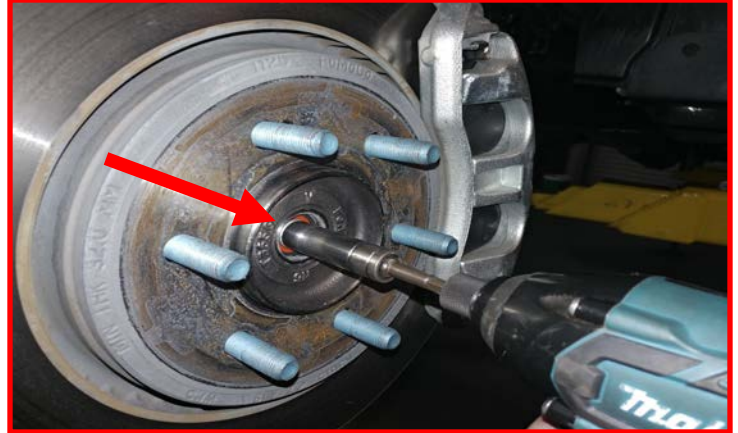
**All models:** Remove the sway bar end link from the sway bar.



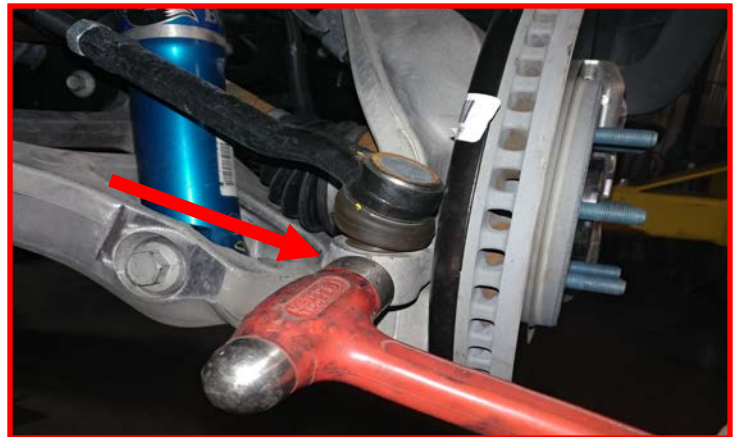
Remove the CV axle nut cover.



Remove the CV axle nut.



Remove the outer tie rod end from the knuckle. Use a dead blow hammer to strike the tie rod end boss to dislodge the taper.





Remove the caliper from the knuckle.



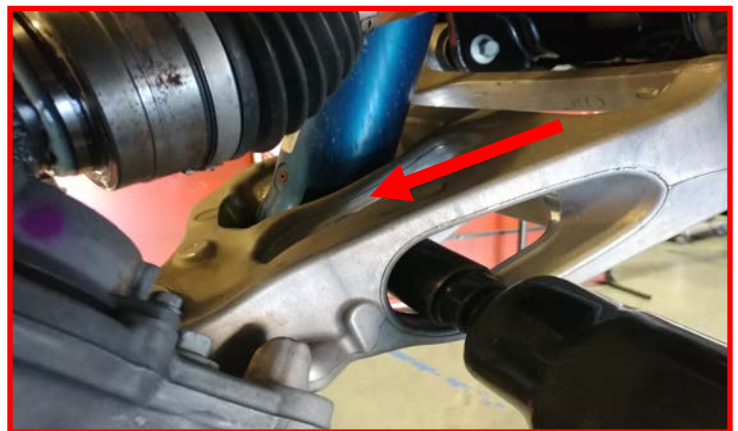
Use a suitable hanger, hang the caliper out of the way. Never let the caliper hang from the rubber line. Remove the rotor from the hub.



Loosen but do not remove the upper ball joint nut at the knuckle. Strike the ball joint boss with a dead blow hammer to dislodge the taper. Remove the ball joint from the knuckle. Support the knuckle as to not let it fall to protect the vacuum hub. Loosen but do not remove the upper control arm bolts at the frame rail.



Support the lower control arm with a suitable jack. Loosen but do not remove the lower control arm bolts at the frame rail. Remove the lower coil over bolt.



Remove the upper strut mount at the frame and remove the strut from the vehicle. Mark the top hat and lower spring perch in relation to the strut body. This is very important to keep the spring to upper control arm clearances for full droop.



**2019 and UP Models:** be careful not to damage the electric motor and harness when removing from the vehicle.

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



**2.5" kit Spring spacer:** Using a suitable spring compressor, release the tension on the factory top hat.



**2.5" kit Spring spacer:** Remove the factory top hat. Pull the rubber isolator and dust shield out and replace onto spring.





**2.5" kit Pre-load spacer:** Install the Ready-LIFT spring spacer into the top hat.



**2.5" kit Pre-load spacer:** Install the factory top hat onto the strut assembly **180 degrees** from the factory orientation using the previous marks made as a guide. This is very important for spring to control arm clearances once the strut assembly is installed back into the vehicle.



**1.5" kit top extension only:** If you are only installing the top extension kit, Put the strut assembly into a suitable spring compressor and release the tension. Rotate the factory top hat **180 degrees** from the factory orientation using the previous marks made as a guide. Remove the strut from the compressor.



**1.5" and 2.5" kit top extension:** Install the factory nuts onto the strut hat studs running them down until they bottom out. Using a suitable cutting tool, cut the studs off just above the nut. Remove the nuts and clean any off any burrs. Paint the exposed metal with a quality rust preventative paint.



**1.5" and 2.5" kit top extension:** Install the ReadyLIFT strut extension using provided **10mm flange nuts**. Torque to **15 ft-lbs**.



Install the completed strut into the side of the vehicle they came out of using provided **10mm flange nuts**. Do not tighten at this time.



Raise the lower control arm up while guiding the axle and lower strut into place. Install the lower strut mount **factory hardware**. Do not tighten at this time.



Raise the upper control arm up. Mark the frame in the center between the pocket walls  $3/4$ " down from the edge.





Drill out the mark with a 1/2" drill bit. Install the ReadyLIFT capture nut onto the frame.



Install the ReadyLIFT provided **urethane bump** stop by screwing into the capture nut until fully seated.



Install the axle into the vacuum actuator assembly making sure to not damage the internal components. As you guide the axle into the hub, slowly rotate the hub flange until the internal gears mesh. You will be able to tell if they mesh once the axle shaft extends all the way through the hub. The shoulder of the axle will appear just below the hub surface by a few millimeters. If this is not done correctly, you risk breaking the internal components. Once the gears mesh, you will be able to install the **factory axle nut**. Torque to **18 ft-lbs**. Install the axle nut dust cap.



Jack the lower control arm up to add pressure to the strut. Putting a suitable jack stand at the rear of the vehicles frame will aid in keeping the load transfer from picking the front end up while jacking the lower control arm up.





Lower the upper control arm while lining the upper ball joint into place. Install the upper ball joint to the knuckle using **factory hardware**. Torque to **65 ft-lbs**.



Install rotor and brake caliper assembly to hub assembly and knuckle using **factory hardware**. Apply a drop of thread locker to threads and torque to **148 ft-lbs**.



Install the outer tie rod end to the knuckle using **factory hardware**. Torque to **85 ft-lbs**.



Install the brake line bracket to the knuckle using **factory hardware**. Torque to **5 ft-lbs**. Install the ABS line back to the frame, to the rubber brake line clamps, and knuckle using **factory hardware**. Torque to **165 in-lbs**. Install the vacuum lines to the vacuum actuator.



Install the sway bar end link onto the sway bar. Torque to **30 ft-lbs.**



**2019 and UP Models:** Driver side, make a mark on the frame rail behind the coil over 1.25" back from the strut tower lip and 1.25" up from the bottom of the frame rail and use a 7/16" drill to make a hole. Paint all exposed metal with a quality rust preventative paint. Install the previously removed shock harness clip into the hole. Make sure to route the harness behind the coil over.



Route the coil over harness up along the control arm sensor harness on the frame rail and behind the plastic wheel liner using the factory clips along the way. Plug the electrical connector back in.



Mark another hole location in the plastic wheel liner in line with the original mounting hole but on the lower portion closest to the engine bay. Use a 7/16" drill bit and suitable drill to make the hole. Make sure to only drill through the plastic liner and not anything else. Move any wire harness that may be in the way to drill the hole. Install the coil over electrical connector clip into the new hole.





**2019 and UP Models:** Passenger side, re-install the coil over harness to the frame rail with the original clips and reconnect the electrical connector. Jounce the vehicle a few times to get it to settle to the new ride height, with this type of vehicle you may need to pull it out of the shop and hit the brakes a few times and rotate the wheel from lock to lock.



Torque the upper control arms to **120 ft-lbs**, the lower control arm bolts to an initial **120 ft-lbs** (final torque to be done by alignment technician at **150 ft-lbs**), lower strut mount to **230 ft-lbs**, upper strut mount to **15 ft-lbs**, and sway bar end link to **45 ft-lbs**.

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

**69-2755 Rear Block Kit Installation:** Block the front tires and jack the rear end up. Place jack stands under the frame rail in front of the rear leaf spring hangers.

Slightly loosen but do not remove the driver side u-bolts. Remove the passenger side u-bolts completely. Lower the axle just enough to remove the factory block and install the lift block.



Locate the passenger side lift block, making sure the tapered end points to the front of the vehicle. Install the lift block on the axle pad aligning the pins. Raise the axle and the block up to the spring while aligning the center pins. Install the provided **u-bolts, washers and nuts**. Snug the U-bolt nuts but do not fully tighten at this time. Repeat steps for driver side. Lower the vehicle to the ground and torque the U-bolts to **110 ft-lbs**.







**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 recommended 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	-0.3	-0.3	+/- 0.5	+0.0
Caster	+3.5	+3.5	+/- 0.5	+0.0
Toe	+0.10	+0.10	+/- 0.5	+0.20