

# READYLIFT<sup>®</sup>

## SUSPENSIONS

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

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

**READYLIFT<sup>®</sup> 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 33" x 11.5" tire with 20" x 9" 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 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.

## **IMPORTANT NOTE:**

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.

The recommended tire and wheel specs are based off proper alignment specs to make sure the tire clears the back fender well. Trimming of the plastic may be necessary to run other wheel and tire combinations. It is up to the end user to verify all clearances before driving.

It is recommended to trial fit one wheel and tire combination for clearances.

### **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>DESCRIPTION</b>	<b>QTY</b>
<b>FRONT STRUT EXTENSION KIT</b>	<b>1</b>
<b>UPPER CONTROL ARM (DRIVER)</b>	<b>1</b>
<b>UPPER CONTROL ARM (PASSENGER)</b>	<b>1</b>
<b>BALL JOINT NUT SPACER</b>	<b>2</b>
<b>CONTROL ARM CRUSH SLEEVE</b>	<b>4</b>
<b>CONTROL ARM BUSHINGS</b>	<b>8</b>
<b>GREASE PACKET</b>	<b>2</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 frame rail behind the lower control arms.

Remove the front wheels.



Remove the brake line bracket at the frame rail. Gently pull the metal brake line through the frame rail to gain slack for the rest of the install. Do not bend the line or disconnect the rubber line.



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 outer tie rod from the knuckle.



Strike the tie rod boss on the knuckle with a dead blow hammer to dislodge the taper.



Remove the upper ball joint from the knuckle.



Strike the ball joint boss with a dead blow hammer to dislodge the taper.



Remove the axle nut.



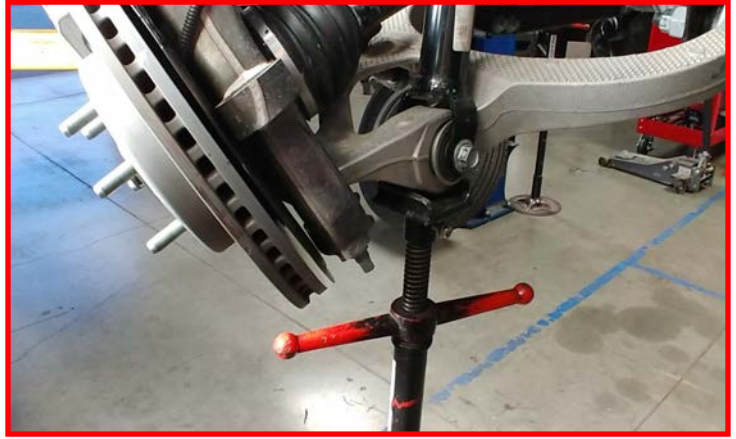
Remove the sway bar from the frame.



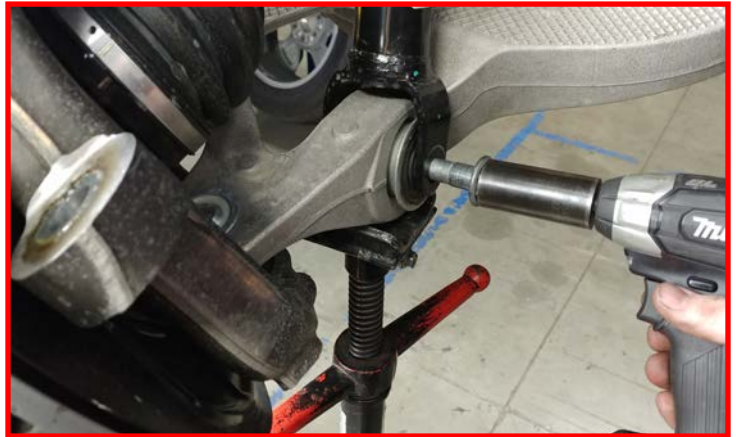
Let the sway bar hang out of the way.



Support the lower control arm with a suitable jack.



Remove the lower strut mounting hardware. Lower the control arm down while supporting the knuckle. Be mindful of the ABS and brake lines to not over extend them.



Remove the upper strut hardware from the frame.



Remove strut from the frame.



Remove the upper control arm from the frame.



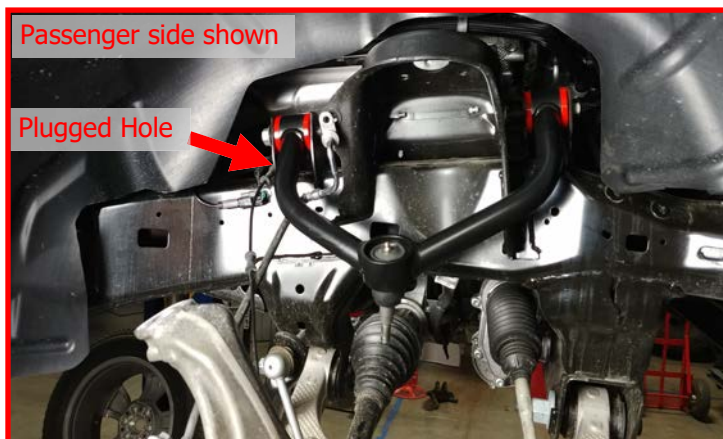
Locate the ReadyLIFT top strut extension and install using the factory hardware. Torque to 30 ft-lbs.



Install the polyurethane bushings into the ReadyLIFT control arm pivots. Use the provided grease pack and lube the crush sleeves and inside the polyurethane bushings. Install the crush sleeves into the polyurethane bushings.



Install the ReadyLIFT appropriate side control arm to the frame rail using the factory hardware. Do not tighten at this time. To determine the correct side arm, there is a plugged hole on the back tube of the near the rearmost pivot.





Install the strut to the frame rail using the provided M10 - 1.25 flange nut. Do not tighten at this time.



Raise the lower control arm up until you can install the lower strut hardware. Do not tighten at this time.



Attach the upper control arm ball joint to the knuckle using the provided hardware. Install the **nut spacer**, then the **castle nut**. Torque to **65 ft-lbs**. Install the provided **cotter pin**. Use a suitable grease gun, fill the upper ball joint with grease until the boot just starts to expand. Do not overfill. Typically 5 to 10 pumps of a hand held grease gun.



Route the ABS wire harness along the rubber brake line. Use a zip tie to attach to the rubber brake line.



Install the metal brake line bracket to the frame rail using the **factory hardware**. Torque to **5 ft-lbs**.



Install the sway bar to the frame rail using the **factory hardware**. Torque to **35 ft-lbs**.



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

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

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

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

Connect the vehicles power source at the negative ground terminal.

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

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

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

# **WARNING**

**FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS.**

## **Final Checks & Adjustments**

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension, adjust as necessary.

**RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.**

## **Vehicle Handling Warning**

Increasing the height of your vehicle raises the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections.

Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

## **Wheel Alignment/Headlamp Adjustment**

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving.

In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

## **RECOMMENDED ALIGNMENT SPECS**

	<b>Driver</b>	<b>Passenger</b>	<b>Tolerance</b>	<b>Total / Split</b>
<b>Camber</b>	<b>+0.15</b>	<b>+0.15</b>	<b>+/- 0.5</b>	<b>+0.0</b>
<b>Caster</b>	<b>+3.0</b>	<b>+3.0</b>	<b>+/- 0.5</b>	<b>+0.0</b>
<b>Toe</b>	<b>+.10</b>	<b>+.10</b>	<b>+/-0.05</b>	<b>+.20</b>