

# **READYLIFT**<sup>®</sup>

**SUSPENSIONS**

**69-5320 2" RAV4**

**IF your ReadyLIFT<sup>®</sup> 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](mailto:support@readylift-ami.COM)**

**WEBSITE: [ReadyLIFT.COM](http://ReadyLIFT.COM)**

**\*\*Please retain this document in your vehicle at all times.\*\***

## **READYLIFT<sup>®</sup> "NO HASSLE" PRODUCT WARRANTY**

This unique "no hassle" product warranty proves out 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.

This suspension system was developed using a 245-65R17" tire with 17" x 8" wheel and a offset of +38. 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" 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:**

The front camber, caster and rear camber and caster are fixed. The alignment will be front and rear toe only and the specs for camber and caster are for reference only.

If needed, the front camber can be adjusted by purchasing alignment cam bolts but should not be necessary. If the camber is out of spec, the struts and all other components need to be inspected for bent or misaligned parts.

### **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>Front Strut Spacer</b>	<b>2</b>
<b>Rear Cradle Spacer</b>	<b>2</b>
<b>Front Cradle Spacer</b>	<b>2</b>
<b>Sway Bar Bracket</b>	<b>2</b>
<b>Laser Cut Washer</b>	<b>2</b>
<b>ABS Bracket Driver</b>	<b>1</b>
<b>ABS Bracket Passenger</b>	<b>1</b>
<b>1/4" Bolt</b>	<b>2</b>
<b>1/4" Nut</b>	<b>2</b>
<b>1/4" Washer</b>	<b>4</b>
<b>M10 Flange Nut</b>	<b>6</b>
<b>M12 Bolt</b>	<b>2</b>
<b>M12 Nut</b>	<b>2</b>
<b>M12 Washer</b>	<b>4</b>
<b>M14 Bolt</b>	<b>2</b>
<b>M14 Washer</b>	<b>2</b>

## **WARNING**

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

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

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

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

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

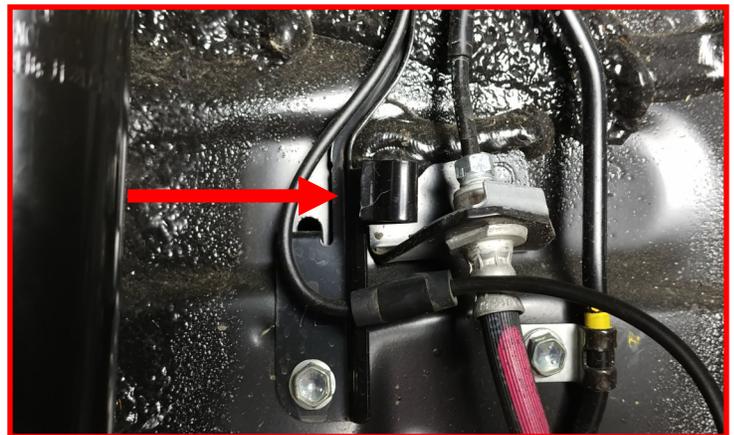
Otherwise, park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

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

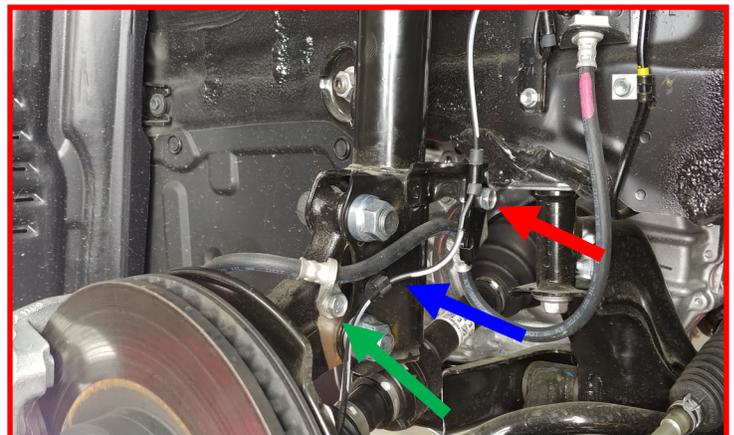
Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

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.

Locate the ABS wire at the frame rail bracket. Gently pry the pinch clip open to release the ABS wire. Let hang out of the way.



Remove the **ABS wire and brake line bracket** from the strut body. The ABS bracket sits in front of the brake line bracket. Open the **plastic clip** on the strut to remove the ABS wire from this point. Let all hang out of the way. Remove the **brake line bracket** at the knuckle.



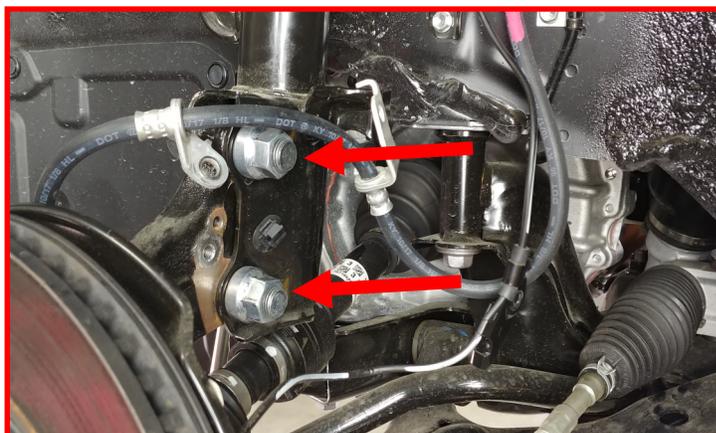
Remove the tie rod end nut. Strike the tie rod end boss with a dead blow hammer to dislodge the taper. Let hang out of the way. This allows you to turn the knuckle free of the rack and pinion to remove the strut.



Remove the sway bar end link from the strut. Let hang out of the way.



Support the lower control arm with a suitable jack. Remove the two strut to knuckle bolts.



Remove the 3 upper strut mount hardware on the strut tower in the engine compartment. Use of a helper is recommended to hold the strut while removing from the strut tower.



Remove the strut from the vehicle. Be careful to not dislocate the cv shafts from their housings. If this happens, carefully push the CV axle back into the cup. You may have to rotate the hub at the same time.



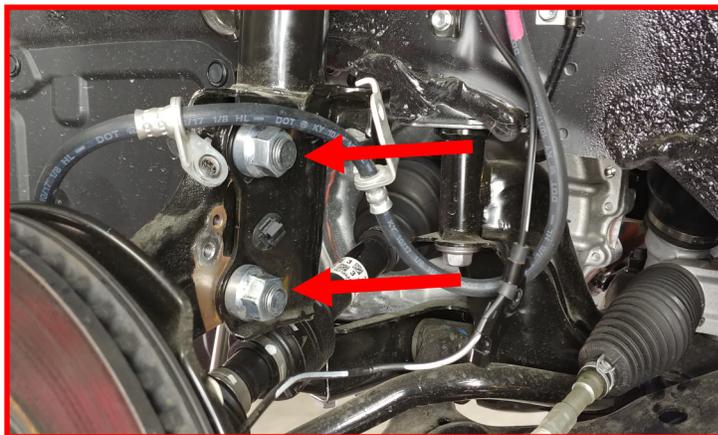
Install the ReadyLIFT strut extensions to the strut using the provided **M10 flange nuts**. Torque to **30 ft-lbs**.



Install the completed strut assemblies into the strut tower using the **factory hardware**. When installed the R logo so that it is legible from the wheel. Do not tighten at this time.



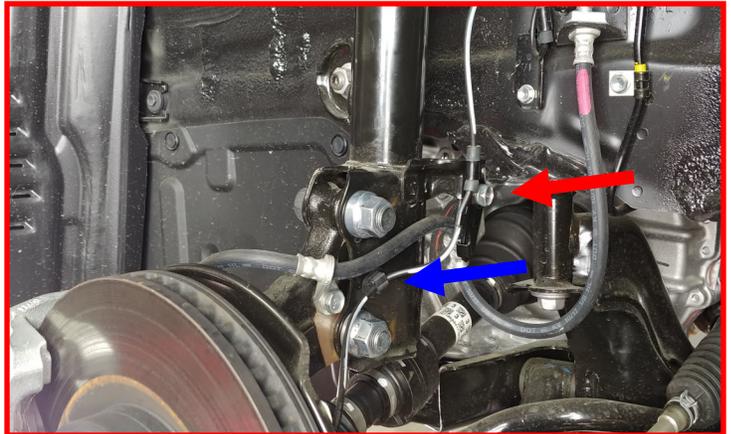
Reinstall the strut to knuckle using the **factory hardware**. Torque to **110 ft-lbs**.



Install the tie rod end to the knuckle using the **factory hardware**. Torque to **65 ft-lbs**. Line up the cotter pin hole with the slots in the castle nut. Install the cotter pin.



Install the ABS and brake line brackets to the knuckle in the same order they were removed using the **factory hardware**. Torque to **5 ft-lbs**. Install the **ABS wire** into the plastic clip.



Rotate the ABS wire 180 degrees and re-insert into the bracket on the frame rail. Gently close the pinch clamp with a pair of pliers. This makes sure there is enough slack in the line for suspension travel.



Install the ReadyLIFT sway bar bracket to the strut using the provided M12 bolts, washers, and nuts. Install the sway bar end link to the bracket using the **factory hardware**. Torque all to **45 ft-lbs**.



Install the wheels and lower the vehicle to the ground.

Torque the lug nuts to the wheel manufacturer's specs. Torque the upper strut hardware to **30 ft-lbs**.

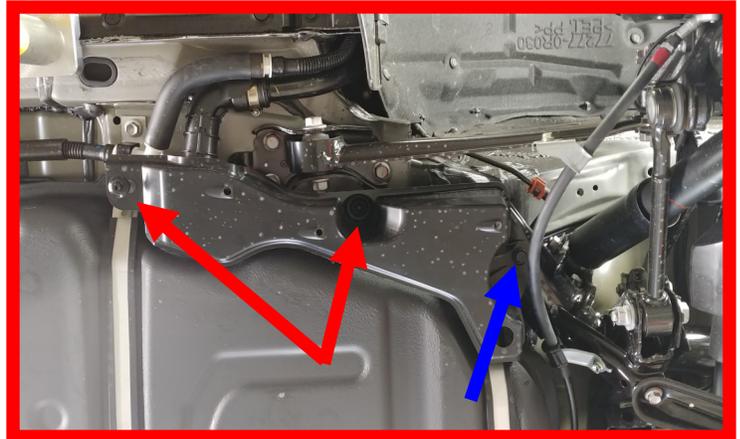
Jack the rear of the vehicle up and place safety stands under the jack points indicated by the service manual.

Remove the rear wheels.

Remove the ABS bracket from the frame rail. Let hang out of the way.



Under the driver side locate the fuel filler shield. Remove the **2 nuts** and one **plastic rivet**. Set cover aside.



Support the rear suspension cradle using a suitable jack.



Locate the cradle stud inside the rear spring.



Unscrew the nut until it reaches the end of the stud. Do not fully remove. Do this for both sides of the vehicle.



Locate the front cradle bolts. Remove these completely and discard hardware.



Locate the ReadyLIFT cradle spacers. The round will go in the front location and the square slotted spacers will go in the rear location above the springs.



Install the square spacer in between the cradle and frame. Rotate the spacer so that the opening of the slot is towards the outside of the frame and the stud bottoms out on the inside of the slot.



The side edges will line up with the cradle tubing as shown. Do not tighten at this time.



Install the round spacer in between the cradle and frame using the provided **M14 bolts, washers, and large laser cut washer**. Add a drop of thread locker to the threads of the bolt. Once all spacers are installed, raise the cradle up into place using the jack. Torque all hardware to **65 ft-lbs**.



Install the ReadyLIFT ABS drop bracket to the frame using the **factory hardware**. Install the ABS factory bracket to the drop bracket using the provided **1/4" bolts, washers, and nuts**. Torque to **5 ft-lbs**.



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

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

Turn the steering wheel from lock to lock making sure that all clearances between wheels/tires, suspension, body, brake lines, and ABS are good. Adjust as necessary.

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

The front camber, caster and rear camber and caster are fixed. The alignment will be front and rear toe only and the specs for camber and caster are for reference only.

If needed, the front camber can be adjusted by purchasing alignment cam bolts but should not be necessary. If the camber is out of spec, the struts and all other components need to be inspected for bent or misaligned parts.



**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	+/- 0.75	0.0
Toe	+0.3	+0.3	+/- 0.5	+0.6
Rear	Driver	Passenger	Tolerance	Total / Split
Toe	+.07	+.07	+/- .20	0.0