

# 66-32150 GM 1500 ZR2/AT4X Leveling Kit

IF your ReadyLIFT® product has a damaged or missing part, please contact customer service directly and a new replacement part will be sent to you immediately. For warranty issues, please return to the place of installation and contact ReadyLIFT.

(877) 759-9991

MON-FRI 7AM-4PM PST OR

EMAIL: support@readylift-ami.COM

WEBSITE: ReadyLIFT.COM

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

#### READYLIFT "NO HASSLE" PRODUCT WARRANTY

This unique "no hassle" product warranty proves out commitment to the quality of every product the ReadyLIFT produces. ReadyLIFT product warranty only extends to the Original Purchaser of any Ready-LIFT 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 out 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 <u>CERTIFIED PROFESSIONAL MECHANIC</u> 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 33x11.50-20 tire with  $20'' \times 9''$  wheel and a offset of +0. 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:**

This vehicle has fixed 4 piston calipers and require a concave style spoke designed wheel for clearance.

MAX 33x11.50-20 on 20x9 0 offset

Minor trimming to felt liner may be required on some applications.

GMC Sierra 1500's have narrower diameter fender well openings than Chevys. Some trimming may be required depending on the tire design.

Due to the length of the strut and angle of the strut tower, a pry bar or an assistant may be necessary to align the lower strut into place to install the strut extension hardware.

#### **VEHICLE HEIGHT MEASURMENTS**

|       | Driver<br>Before | Driver<br>After | Passenger<br>Before | Passenger<br>After |
|-------|------------------|-----------------|---------------------|--------------------|
| Front |                  |                 |                     |                    |
| Rear  |                  |                 |                     |                    |

# **BILL OF MATERIALS**

| Front Strut Spacer           | 2 |
|------------------------------|---|
| Front Preload Spacer Half    | 4 |
| Upper Control Arm LH         | 1 |
| Upper Control Arm RH         | 1 |
| Control Arm Laser Cut Washer | 4 |
| M10-1.5 flange nut           | 6 |
| M14x100mm Bolt               | 4 |
| M14 Lock Nut                 | 4 |
| M14 Washer                   | 8 |
| 1/4 Nyloc Nut                | 2 |
| 1/4" Flat Washer             | 2 |

# **AWARNING**

**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.

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. Vehicles with secondary start/stop batteries need to be disconnected as well.

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.

Loosen the axle nut, but do not remove it.



Using a dead blow sledgehammer, strike the end of the axle until it moves back and forth freely. Remove axle nut at this time.

#### RETAIN FACTORY HARDWARE.



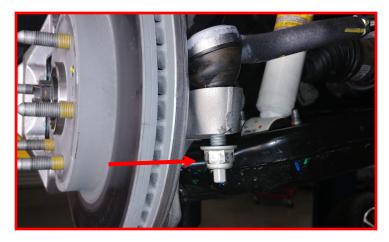
Place a suitable jack under the lower control arm.

Remove the ABS bracket from the upper control arm.



Remove the outer tie rod end nut. Strike the tie rod end on stud with a dead blow hammer to dislodge the taper.

#### RETAIN FACTORY HARDWARE.



Loosen the upper control arm to knuckle nut but do not remove. Using a dead-blow sledgehammer, strike the upper ball joint boss to loosen the taper joint. When taper joint is loosened, remove nut and let knuckle hang. **Discard factory hard-ware**.



Loosen but do not remove the lower control arm pivot bolts.

Loosen but do not remove the lower strut bolts.



Remove lower sway bar end link nut.

#### RETAIN FACTORY HARDWARE.

Lower control arm should now be able move freely enough to remove the strut assembly from the vehicle.



Remove the **nuts** that connect the **strut top mount** to the frame of the truck.

**Disscard factory hardware.** 



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

#### RETAIN FACTORY HARDWARE.

Remove strut assembly from vehicle.



Remove factory upper control arm from vehicle and **discard factory arm.** 



Ensure you have the proper replacement control arm, they are side specific and need to be install on the correct side.

Note: **Stud** on control arm should be toward the rear of the vehicle.

Install the replacement upper control arms in the factory location, install the supplied M14 bolts and M14 washers. **Do not install nuts at this time.** 

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

Torque the M14 nuts to 90 ft-lbs.





Using a spring compressor, compress the bottom of the spring until there is enough room under the spring to install the preload spacer. Ensure that the shock body does not rotate in relation to the top mount during this process.

CAUTION: Spring is under extreme load. Improper use of spring compressor can result in severe injury or death.

When there is enough room, install the two halves of the preload spacer, combining them together around the shock body. Plastic spring seat should be above the preload spacer.





Relieve the spring pressure and remove from spring compressor.

Install the shock assembly into the truck with the front spring spacer installed. Wait to install the top mount nuts until the lower bolts are installed.

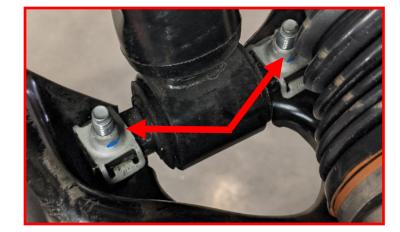
(Note: Spacer shown in image is not ZR2/AT4X spacer.)



Install the shock to lower control arm bolts.

# Do not tighten at this point.

Using the jack under the lower control arm, raise the arm up until the top strut studs are protruding through the frame holes in the strut tower.



Install the provided M10x1.5 nuts to the top strut studs.

Torque nuts to 35 ft-lbs.



Torque strut to lower control arm bolts to 45 ft-lbs.



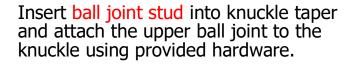
Install the factory nut on the sway bar end link. Torque sway bar end link lower nut to 45 ft-lbs.



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

Torque the axle nut to 160-ft/lbs.

Note: It is important that the axle nut is fully seated and tightened prior to tightening the upper control arm ball joint. Non-compliance will potentially pinch the outer CV boot causing damage and/or failure to the half shaft assembly.



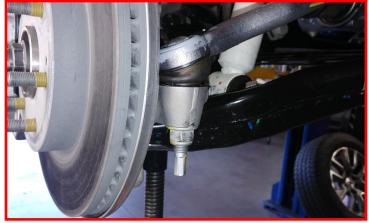
Torque the nut to 65-ft/lbs.





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

Torque the tie rod end nut to 65-ft/lbs.



Install the brake line bracket from the upper control arm using the factory hardware. 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.

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

Center the lower cam bolts and torque to 165 ft-lbs (final torque to be done by the alignment technician). Have the alignment set to the recommended specs on the last page of this instruction booklet by a reputable alignment shop.

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 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 | +0.0   | +0.0      | +/- 0.5   | +0.0          |
| Caster | +3.0   | +3.3      | +/- 0.5   | -0.3          |
| Toe    | +0.05  | +0.05     | +/- 0.05  | +0.10         |