

# Installation Instructions Rev.02

# **LOAD LEVELING KIT** 88-31190 GM 1500 (2019+)

READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE INSTALLATION.

INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.

LOGIQ<sup>™</sup> IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

#### WARRANTY

LOGIQ<sup>™</sup> provides a limited lifetime warranty to the original purchaser of products, that the product be free from defects in workmanship and materials when used on cars and trucks as specified by LOGIQ<sup>™</sup> and under normal operating conditions. This warranty is subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy that is available at logiqair.com/warranty. Air compressors are a wearing component and are covered by a 2-year warranty from the date of purchase. The warranty does not provide coverage for abuse, operation in a manner not consistent with the product's design, or damage resulting from exposure to the elements.

## **▲ WARNING & DISCLAIMERS**

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.





TOOLS REQUIRED		
3/4" WRENCH		
3/4" CROWSFOOT		
9/16" DEEP SOCKET		
9/16" WRENCH		
7/16" DEEP SOCKET		
3/16" ALLEN SOCKET		
T40 TORX SOCKET		
13MM SOCKET		
DEADBLOW HAMMER		
JACK & JACK STANDS		
TORQUE WRENCH		
5/16" DRILL BIT & DRILL		
AIR LINE CUTTER (OR RAZOR BLADE)		
SAFETY GLASSES		
12MM WRENCH (X2)		
SOCKET DRIVER		
APPLICATION NOTES		

APPLICATION NOTES		
TRUCK COMPATIBILITY		
NOT COMPATIBLE WITH 3.0L DIESEL TRUCKS PAIRED WITH SINGLE EXIT EXHAUST		
5 <sup>TH</sup> WHEEL COMPATIBILITY		
BWGNRK1019	DEMCO DM8552034-71	
BWRVK2504	DEMCO DM8553019-12	
REESE RP56015-53	DEMCO DM8551011	



## Installation Instructions LOAD LEVELING KIT 88-31190 GM 1500 (2019+)

QTY	PARTS INCLUDED
1	DRIVER SIDE AIR SPRING ASSEMBLY
1	PASSENGER SIDE AIR SPRING ASSEMBLY
1	HARDWARE KIT
1	MANUAL INFLATION KIT
	HARDWARE KIT CONTENTS
2	1/2" - 13 1.5" HEX HEAD BOLT GRADE 5
2	1/2" FLAT WASHER
2	1/2" - 13 QUARTER TURN NUT
4	FRAME HOOK
8	3/8" - 16 1.375" HEX HEAD BOLT GRADE 8
8	3/8" - 16 NYLON LOCKING NUT GRADE 8
20	3/8" FLAT WASHER
2	AXLE CLAMP
4	3/8" - 16 5" CARRIAGE BOLT
2	2.5" PROTECTIVE SHEATHING FOR 3/8" CARRIAGE BOLT
4	3/8" - 16 NYLON LOCKING NUT
8	1/4" - 20 1.5" SOCKET HEAD CAP SCREW
8	1/4" - 20 NYLON LOCKING NUT
8	1/4" FLAT WASHER
1	BRAKE LINE RELOCATION BRACKET
2	M8 - 1.25 50MM HEX HEAD BOLT
2	M8 FLAT WASHER
4	8" ZIP TIES
1	2 ML RED THREADLOCKER PACKET
1	HEAT WRAP
2	HOSE CLAMP
	MANUAL INFLATION KIT CONTENTS
16	8" ZIP TIES
2	INFLATION VALVE TO 1/4" PTC FITTING
1	16' ROLL 1/4" AIR LINE

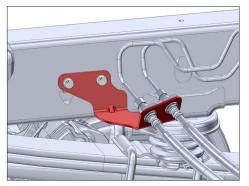


## **STEP 1 PREPARE TRUCK**

Note original ride height measurement from center of rear fender arch to ground.

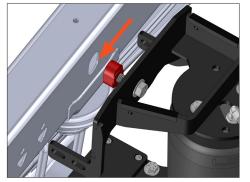
Safely lift truck and support with jack stands under axle. Remove the rear wheels.

## **STEP 2 DETACH BRAKE LINE BRACKET**



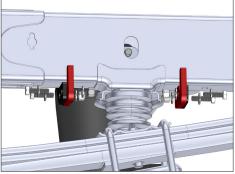
Un-bolt the brake line bracket on the driver side to allow for movement. This makes getting the upper bracket of the assembly in place much easier.

#### **STEP 3 MOUNT AIR SPRING ASSEMBLY**



Insert supplied 1/2" bolt and washer through the hole in the air spring upper bracket and thread on the supplied quarter turn nut. Line up air spring assembly with frame rail and insert quarter turn nut into frame rail hole; snug bolt.

**TIP:** Get the 1/2" bolt hand tightened as much as you can before using a wrench. Ratcheting closed end wrench recommended for easy tightening.

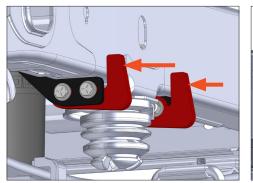


Install frame hooks with 3/8" Grade 8 hardware in the correct orientation. (Hooks on inside faces of bracket).

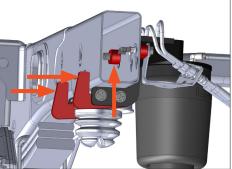
Repeat for passenger side.



## **STEP 4 SECURE UPPER BRACKET**



Make sure the hooks are pushed up against the frame and snug the hardware.

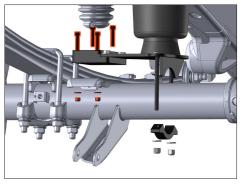


Check fitment of the quarter turn nut by looking through the other side of the frame hole. The quarter turn nut should be horizontal and seated. Hooks should be tight against the frame rail.

#### **STEP 5 ATTACH LOWER BRACKET**

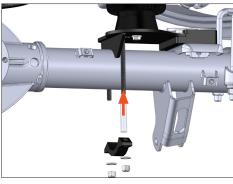


Un-bolt the 3 T40 Torx bolts holding the brake line shield to the axle to get clearance for lower bracket installation.



Install the 3/8" carriage bolts into the holes on the lower bracket, then apply downward force to extend the air springs and bring the lower bracket near the axle.

Mount the lower bracket to the bump stop pad first using supplied 1/4" hardware. Snug all 4 bolts.

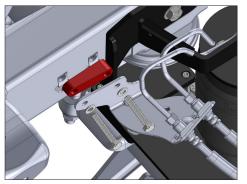


Slide the provided protective sheathing onto the carriage bolt that is on the side of the axle with the brake hard line.

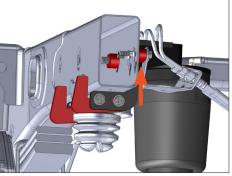
Once sheathing is installed, attach the axle clamp. Make sure the carriage bolts are parallel with the lower bracket leg before snugging.

Repeat for passenger side.

#### **STEP 6 BRAKE LINE RELOCATION BRACKET**



Install the brake line relocation bracket in orientation shown with supplied M8 bolts and washers.

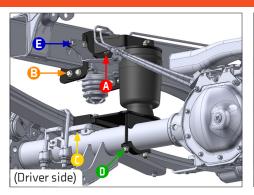


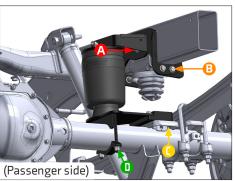
Check fitment of the brake line relocation bracket.



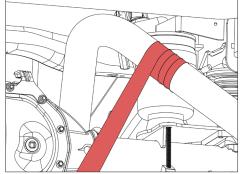
## **STEP 7 TORQUE HARDWARE**

- Torque Upper bracket first. Torque the 1/2" bolt to 75 FT. LB. using a 3/4" crowsfoot.
- Orrest Torque the 3/8" frame hook hardware to 44 FT.LB.
- Torque lower bracket 1/4" hardware to 7 FT.LB.
- Torque the 3/8" lower bracket hardware to 20 FT.LB.
- Torque the M8 hardware for the brake line bracket to 8 FT.LB.
- Reinstall the brake line shield to the axle using the factory T40 bolts and torque to 16 FT.LB.

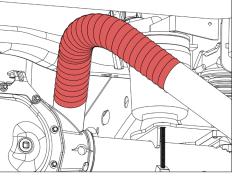




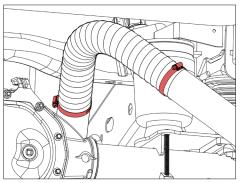
### **STEP 8 APPLY HEAT WRAP**



Begin 12 inches behind the air spring and wrap toward the front of the vehicle.



Ensure you have overlap that is about half the thickness of the heat wrap like shown.



Once the **whole roll** has been wrapped onto the exhaust, attach the provided hose clamps to each end of the wrap as shown.

Ensure the wrap extends at-least 12 inches in front and behind the air spring (more is better if there is enough wrap).

Trim any excess clamp stick-out with a pair of metal snips.

### **STEP 9 AIR LINE ROUTING**

When used with an on-board air management system, refer to the on-board air management system installation instructions before routing the air lines.

When not using an on-board air management system, mount inflation valves at desired location using 5/16" drill bit.

Route air line from each inflation valve to each air fitting on both of the air spring assemblies. Avoid hot exhaust and sharp edges. Cut air line square and free from burrs with air line cutter or razor blade!

## **STEP 10 FINAL SAFETY CHECKS**

Check for leaks at fittings with soapy water.

Verify all fasteners are torqued properly.

Verify at least 10psi in air spring before driving.



## \Lambda WARNING & DISCLAIMERS CONTINUED

#### **Safety Warnings**

#### 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 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.

Driver and passengers must **ALWAYS** wear seat belts, avoid quick sharp turns and other sudden maneuvers. LOGIQ<sup>™</sup> 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 offroad 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 LOGIQ<sup>™</sup> products.

Raised vehicles have altered viewing angles than stock vehicles. This can lead to larger or different blind spots than the driver is accustomed. It is the responsibility of the driver to be aware of this and check their surroundings at all times while the vehicle is in motion and immediately prior to operating vehicle. Failure to do so can lead to damages, injury, or death.

#### 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 ensure 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.

LOGIQ<sup>™</sup> 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/lower 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.



## **WARNING & DISCLAIMERS**

#### SAEJ2492 Warning

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#### Headlamp Warning

A lifted or lowered vehicle may have different headlight aim performance. LOGIQ<sup>™</sup> 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 aligning headlights.

## FAILURE TO PERFORM THE POST INSPECTION CHECKS MAYRESULT 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 PERIODICALLYAT EACH SERVICE INTERVAL THEREAFTER.

#### 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.

