

# **READYLIFT**<sup>®</sup>

## **SUSPENSIONS**

### **5"-6", 7"- 8" GM 2500**

**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 35"- 12.5" (5"-6" lift), 37"- 12.5" (7"-8" lift) tire with 20" x 9" wheel and a offset of -6. **Trimming of the front valance may be necessary.** 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:**

The truck front suspension is adjustable and the installer must follow the recommended lift heights. Measurements are taken from the center of the wheel straight up to the fender edge above. **DO NOT** measure by going around the lip of the wheel. Use of a straight edge and level may be necessary for deep dish wheels. Trucks running fender flares will need to subtract 1/2" due to thickness of flares.

29" for the 5" lift height (MIN LIFT HEIGHT!!)

30" for the 6" lift height

31" for the 7" lift height

32" for the 8" lift height (MAX LIFT HEIGHT!!)

Make sure that there is a minimum of clearance between the droop limiter on the frame and the upper control arms of 5/8" once the above measurements are taken. This is important for ride quality. Too little a measurement and the suspension will "top out" as the arms hit the droop limiter. This can cause abnormal control arm bushing wear and/or breakage of parts. If there is less than this gap, lower the vehicle until the measurement is achieved. This is reiterated in the last steps of the installation.

### **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**

Front Cross Member	1
Rear Cross Member	1
M18 x 130mm Bolt, Lower control arm	2
M18 x 150mm Bolt, Lower control arm	2
M18 Locking Nut, Lower control arm	4
M18 Washer, Lower control arm	8
Torsion Bar Drop Bracket Assembly	2
9/16" x 4" Bolt, Torsion bar cross member	2
9/16" Locking nut, Torsion bar cross member	2
9/16" Washer, Torsion bar cross member	4
Knuckle, Drivers Side	1
Knuckle, Passenger Side	1
Front Differential Skid Plate	1
3/16" x 1.5" Bolt, Skid plate	4
3/8" Washer, Skid plate	4
Differential Drop, Pass Side	1
Differential Drop, Driver Side	1
M12 x 50mm Bolt, Pass diff drop	2
M12 x 35mm Bolt, Driver diff drop	3
M12 Locking Nut, Diff drops	5
M12 Washer, Diff drops	10

Sway Bar Extension Links Pair	1
M10 Locking Nut, Sway bar end link	4
Flat Washer, Sway bar end link	8
CV Axle Spacer, Driver Side	1
CV Axle Spacer, Pass Side	1
M10 x 60mm Bolt, Driver CV axle	8
M10 x 50mm Bolt, Pass CV axle	8
Bump Stop Extension	4
3/8" x 5.5" Allen Bolt, Bump Stop Extension	4
3/8" Washer, Bump Stop Extension	4
Front Brake line Bracket	2
Rear Brake line Bracket	1
1/4" x 3/4" Bolt, Brake line brackets	3
1/4" Locking Nut, Brake line brackets	3
1/4" Washer, Brake line brackets	6
8" Black Zip Tie, ABS wire	4
Keyways (7" - 8" Lift only)	2
Upper control arm (7" - 8" Lift Only)	2

## **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 frame rail behind the lower control arms.

Remove the front plastic gravel guard. There will be modifications required to reinstall later.



Remove the shock hardware from the frame and lower control arms.



**Take care when working with the torsion bars, as they are under extreme pressure and if handled incorrectly can cause injury and/or death. There are multiple styles of torsion bar tools available. Use the one that is correct for your year model range.**

Locate the torsion bar cross member. Record the amount of adjustment bolt sticking out from the adjuster. Using a torsion bar unloading tool, add pressure by tightening the forcing screw on the tool to the torsion bar keyway. Remove the torsion bar adjustment bolt from the pin.



Add pressure by tightening the forcing screw to the torsion bar until there is enough room to remove the torsion bar adjustment pin from the cross member. Once the pin is removed, release the pressure on the torsion bar by loosening the forcing screw. Repeat for both sides.



Mark the torsion bar end for reassembly. It is very important that they go back into the vehicle the way they came out. Slide the torsion bar forward through the lower control arms while holding onto the keyways. Remove the keyways from the cross member. Let the torsion bars hang from the lower control arm.



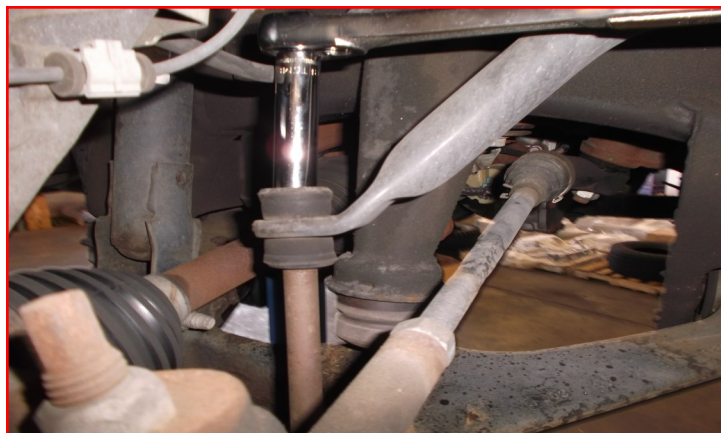
With the torsion bar slid forward, remove any wire harness that is attached to the cross member. Remove the torsion bar cross member from the frame.



Once the cross member is removed, pull the torsion bars out of the lower control arms and set aside. Make sure to have the bars marked for re-assembly. It is best to lay the bars down on the ground under the vehicle in the same orientation/side as they are removed.



Remove the sway bar end links from the sway bar and lower control arm. Make sure to save all the rubber ends. If they are worn or bad, replace with new. You will have to remove the capture nut and any washers inside the rubber ends. They will be replaced.



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



Remove all ABS wire clips and brake line brackets at the frame and knuckle.



Disconnect the ABS connector at the frame and tuck the harness out of harms way.



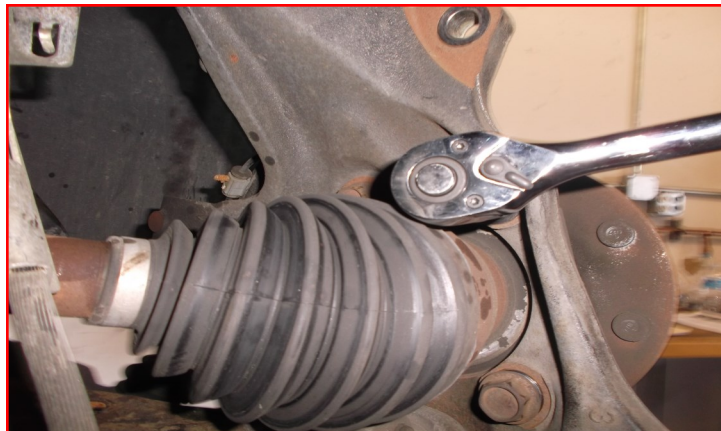
Remove the axle dust cover using a chisel or other suitable tool. Remove the brake caliper from the knuckle. Use a suitable device and hang the caliper out of the way. DO NOT let the caliper hang by the rubber brake line.



Remove the axle nut.



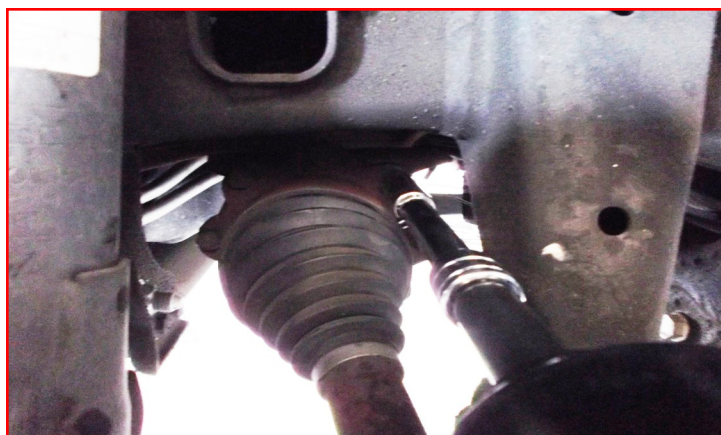
Remove the hub bearing mounting hardware from the knuckle. Make sure to not drop the hub assembly. Remove the dust shield with the assembly.



Loosen but do not remove the upper and lower ball joint nuts. Strike the ball joint boss on the knuckle to dislodge the tapers. Remove the knuckle from the upper and lower control arms.



Mark the CV axle flange to the differential flange and driver / passenger side for reinstallation later. Remove the CV axle hardware.



Remove the CV axle from the vehicle.





Remove the lower control arms from the frame. (Remove the upper control arms if installing the 7-8" lift.) Remove the control arm bump stops from the frame by twisting them out of their mounts.



Remove the rear cross member from the frame.



Remove the electrical connectors and vent tube from the differential.



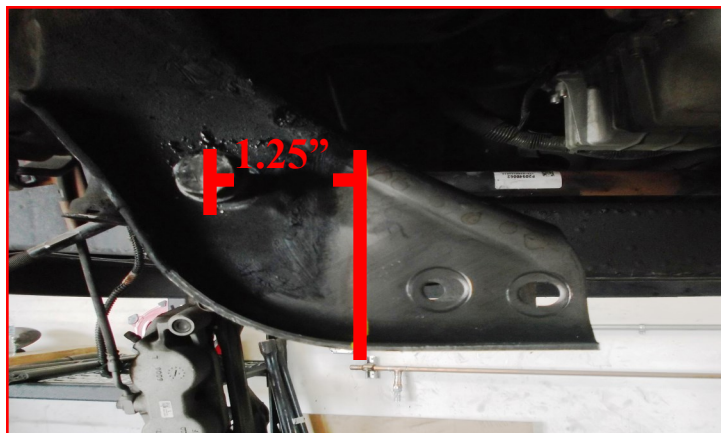
Mark the front drive shaft to pinion orientation for reinstallation later. Remove the front drive shaft from the differential. Let hang out of the way.



Support the differential with a suitable jack / stands, remove the driver and passenger side hardware. Mark the hardware locations as the bolts must be reinstalled in specific spots. Carefully lower the differential out of the vehicle and set aside.



Clean the driver side rear control arm pocket. Measure from the center of the control arm mounting bolt to the inside of the frame pocket **1.25"**, mark a line vertically across the back and front side of the pocket. Connect the two lines across the top of the pocket.



Using a suitable cutting tool, cut along the previous made marks. Remove and discard the outer portion of the control arm pocket. Paint the exposed metal with a quality rust preventative paint.



Check your front lower control arm pockets. If there is any material hanging below the frame rail from the control arm pocket, use a suitable cutting device and notch the painted section flush with the frame rail weld. Do not cut the weld off the pocket. If your truck does not have this piece hanging under, ignore.



Install the ReadyLIFT passenger side diff drop to the original hanger using the provided **M12 nuts and washers**. Install the differential to the hanger using the provided **M12 bolts, washers and factory nuts**. Do not tighten at this time.



Install the ReadyLIFT driver side diff drop to the original hanger using provided **M12 bolts and washers** to the forward two locations. Install the last mount using the **factory bolt** and a provided **M12 washer and nut**. Install the differential to the ReadyLIFT bracket using the **factory bolts** in their proper location and provided



**M12 washer and nut** in the forward two holes. Install the last mounting location using a provided **M12 bolt and washer**. Torque all diff hardware **95 ft-lbs** starting with the driver and passenger side upper hardware first. Then driver lower hardware. When tightening the passenger side lower hardware, make sure to "center" the bracket in the diff's slotted mount. Verify that the diff clears the frame cut made earlier. If not, trim more frame material out until a minimum 1/4" clearance is gained. The frame should rest right inside the divot in the diff housing between the middle and last bolt

Install the front drive shaft using the **factory hardware** and a drop of thread locker for each bolt. Torque to **15 ft-lbs**. Reconnect the electrical connector, install the wire harness to the original locations, attach the vent tube.



Install the ReadyLIFT rear cross member using the **factory control arm and cross member hardware**. Do not tighten at this time.



Install the ReadyLIFT front cross member using the **factory control arm hardware**. Do not tighten at this time.



Install the lower control arms to the ReadyLIFT cross members using **M18 bolts, washers, and nuts**. Do not tighten at this time. **If you are installing the 7-8" lift kit, Install the ReadyLIFT upper control arms now.**



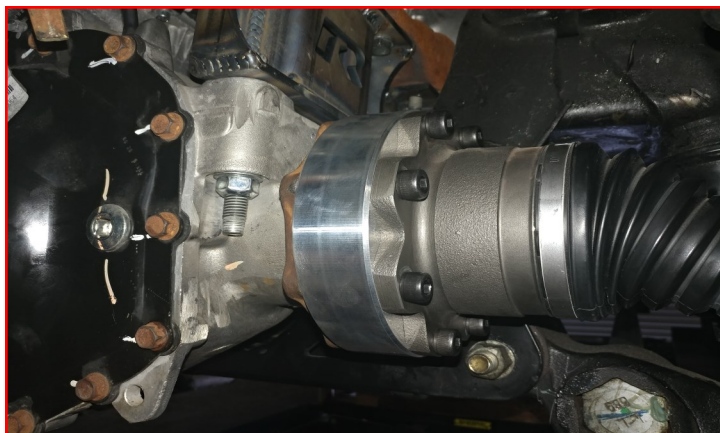
Raise the lower control arm up and support with a suitable stand. Install the ReadyLIFT knuckle to the lower and upper ball joint using the **factory nuts**. Torque the upper ball joint to **65 ft-lbs**, and the lower ball joint to **85 ft-lbs**. Transfer the o-ring from the inside of the factory knuckle to the ReadyLIFT knuckle.



Install the hub assembly and dust shield to the ReadyLIFT knuckle using the **factory hardware** and a drop of thread locker. Torque to **120 ft-lbs**.



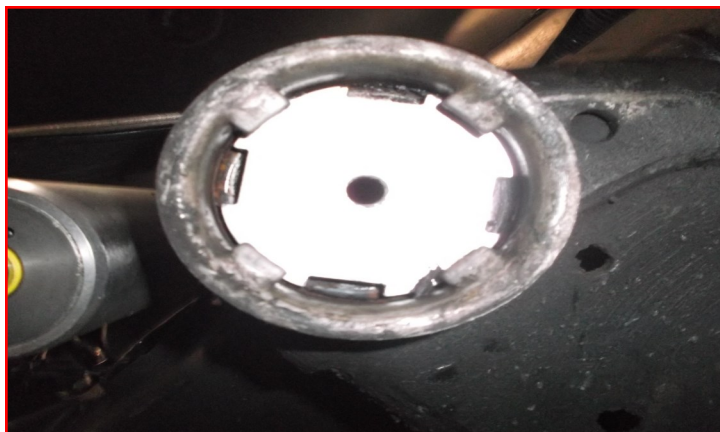
Install the CV axles to the hub assembly using the factory hardware. Torque to **200 ft-lbs**. Install the ReadyLIFT driver side CV (**1.5" thick**) spacer in between the CV flange and differential flange using provided **M10 x 60mm Allen bolts, washers** and a drop of thread locker. Make sure to line up the previous marks on the flanges.



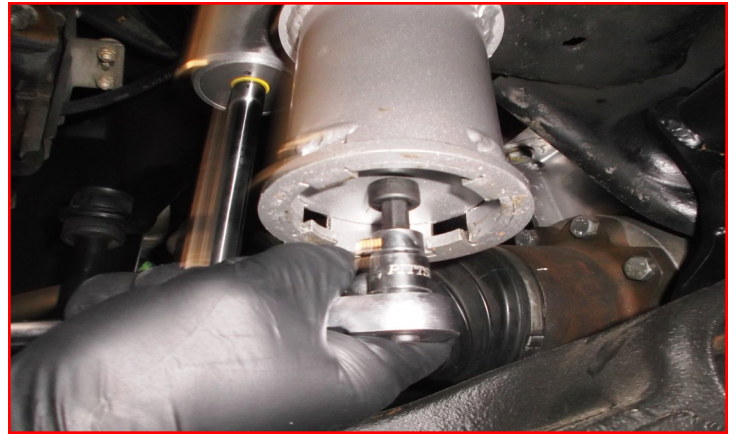
Install the ReadyLIFT passenger side CV (**1" thick**) spacer in between the CV flange and differential flange using the provided **M10 x 50mm Allen bolts, washers** and a drop of thread locker. Make sure to line up the previous marks on the flanges. Torque all CV bolts to **50 ft-lbs**.



Install the ReadyLIFT bump stop extension nut plate into the frame by inserting into the frame pocket and rotating until the locks on the frame are under the plate keys.



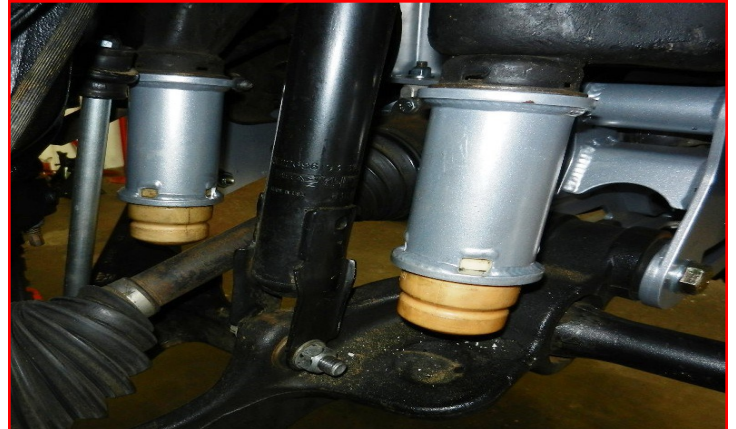
Install the ReadyLIFT bump stop extension using provided **3/8" x 5.5" long Allen head bolt and washer**. Torque to **35 ft-lbs**.



Take the factory bump stops and grind the top edge at a slight angle to aid in installation later. Drill out the top of the bump stop with a 1/2" drill bit 3/4" deep.



Use a soap and water solution to aid in installation, push the bump stops into the ReadyLIFT extensions with a twisting motion. Make sure they fully seat.



Install the rotors and calipers using **factory hardware** and a drop of thread locker. Torque to **120 ft-lbs**. Install the factory axle nut cover by tapping it back on, take a mallet and tap around the outer edge until it seats all the way onto the flange.



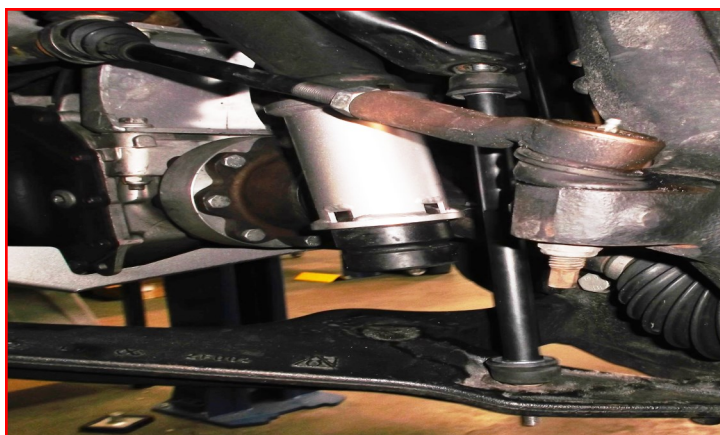
Remove the factory brake line bracket from the rubber line. Cut a relief cut into the back of the bracket where it clamps around the rubber line to aid in removal. DO NOT cut into the rubber line. Discard the bracket.



Install the ReadyLIFT brake line bracket to the frame using the factory hardware and to the factory brake line bracket using the provided **1/4" bolt, washers and nuts**. Torque all to **5 ft-lbs**. Reconnect the ABS electrical connection and install onto the frame rail. Run the ABS wire along and zip tie to the rubber brake line behind the knuckle.



Install the outer tie rod ends to the ReadyLIFT knuckles using the factory hardware. Torque to **65 ft-lbs**.



Install your extended length shocks to the frame using the hardware that either came with the shocks or the factory hardware. Install the lower shock mount to the lower control arm using the **factory hardware**. Torque to **60 ft-lbs**.



Install the ReadyLIFT sway bar end links to the lower control arm and sway bar using the factory rubber isolators, provided **M10 fender washers and M10 nuts**. Torque to **15 ft-lbs**.



Install the torsion bars for the appropriate sides into the lower control arms and let hang. Make sure to install in the same orientation as previously removed or marked as in the prior steps for removal.

This is very important as torsion bars are springs and have a specific rotation for load bearing. If installed incorrectly, the bar can become weak and break from the improper load and may not hold the vehicles weight properly.

Install the ReadyLIFT torsion bar cross member drops to the cross member using the **factory hardware**. Install the ReadyLIFT torsion bar cross member drops to the frame using the provided **9/16" bolts, washers, and nuts**. Torque all to **110 ft-lbs**.

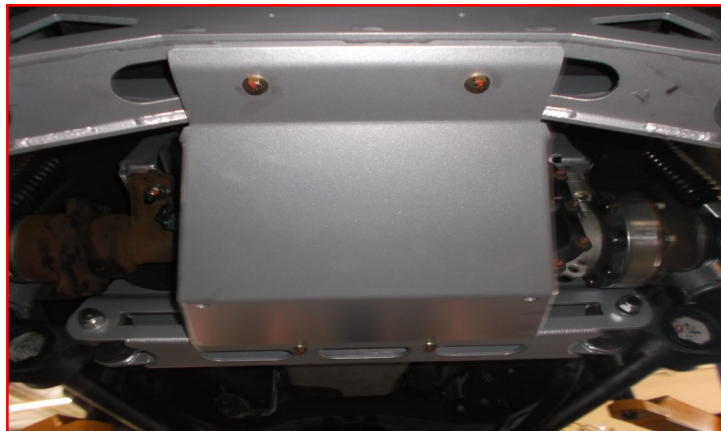


Install the torsion bars into the factory keyways for the 5-6" lift kit, and the ReadyLIFT keyways for the 7-8" lift. Using the torsion bar tool, load the torsion bar enough to install the cross pin and **factory adjusting bolt**. Set the adjustment bolt to the recorded lengths from the previous step for the initial setting.





Install the ReadyLIFT front skid plate using the provided **3/8" bolts and washers**. Torque to **30 ft-lbs**. Torque the front and rear cross member to frame hardware to **150 ft-lbs**.



Trim the lower corners of the factory plastic gravel guard as shown. (You are removing the stepped area for the original lower bolts.)



Install the gravel guard between the ReadyLIFT cross member and the factory cross member. As you raise the guard to the core support bar, make sure to guide the lower radiator hose clamp into the guard mounting hole. Press into place. Install the front edge to the factory core support bar using the **factory hardware**. Tighten down by hand.



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

Block the front tires and raise the rear of the vehicle using a suitable jack.

Support with jack stands at each frame rail in front of the rear leaf spring hangers.

Remove the ABS wires from the frame rails and disconnect the electrical connectors.

Remove the brake line bracket at the frame rail. Gently pull down on the metal lines to gain slack.



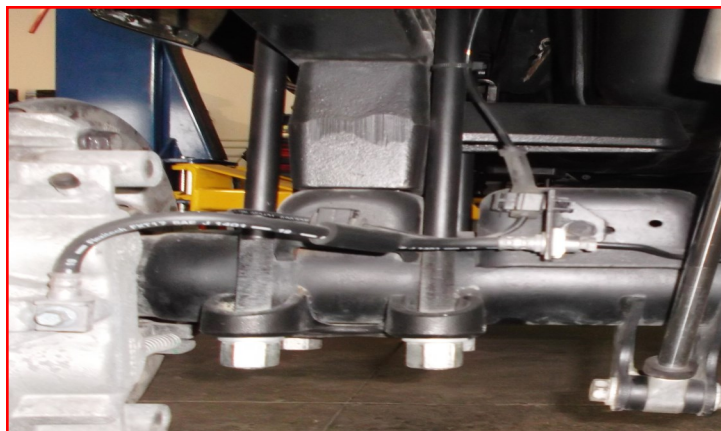
Locate the parking brake cable at the frame rail ahead of the driver side leaf spring mount. Pull on the cable and pop the adjuster out of the cable clamp. Pull the driver side cable out of the frame rail. Reposition under the leaf spring mount and reinstall to the original holes. Push the cable until the clips lock into place. Install the cable end back into the cable clamp.



Support the axle with a suitable jack, loosen but do not remove the u-bolts on the opposite side you are working on just enough to allow slack. Remove the u-bolts on the side you are working on completely and discard. Lower the axle just enough to install the ReadyLIFT lift block. Raise the axle until the block is seated in the locating pins.



Install the **provided u-bolts and nuts**. Snug up but do not tighten at this time. Repeat for the opposite side. When tightening, use a criss-cross pattern. Alternate between sides of the vehicle.



Install your extended length shocks to the frame and axle using the **factory hardware**. **MAKE SURE TO INSTALL THE SHOCK AS IT IS RECOMMENDED**. If you are using the SST 3000 ReadyLIFT shocks, the body of the shock goes towards the axle. Picture shows an upgraded inverted style shock. Do not tighten at this time.



Install the ReadyLIFT brake line bracket to the frame and metal factory bracket using the **factory hardware** and **1/4" bolt, washer and nuts**. Torque to **5 ft-lbs**. Reconnect ABS electrical connectors. Make sure there is enough slack for full droop, adjust as necessary. Zip tie to u-bolts at full droop.



Install the wheels. Torque the lug nuts to the wheel manufacturers specs. Torque the upper and lower shock mount to **60 ft-lbs**, and u-bolt hardware to **120 ft-lbs**. Reattach the vehicle power source at the ground terminal.



Move to the front of the truck. Set the ride height of the vehicle by measuring from the center of the wheel to the fender edge straight above. Make sure that if you have deep dish wheels, that you use a straight edge and level to find center of the wheel and straight edge at the fender. DO NOT measure by going around the lip of the wheel. Use of a straight edge and level may be necessary for deep dish wheels.

For lift heights of 7-8", you will need the ReadyLIFT upper control arms with droop limiters and ReadyLIFT keyways installed for proper alignment.

Using the adjustment bolts at the torsion bars set the vehicle height to:

29" for the 5" lift height (MIN LIFT HEIGHT!!)

30" for the 6" lift height

31" for the 7" lift height

32" for the 8" lift height (MAX LIFT HEIGHT!!)

Make sure that there is a minimum of clearance between the droop limiter on the frame and the upper control arms of 5/8". Less than 5/8" clearance could result in in a "Top Out" condition (control arms contacting the droop limiter during normal operation.) This is important for ride quality. This can cause abnormal control arm bushing wear and/or breakage of parts. If there is less than this gap, lower the vehicle until the measurement is achieved. If there is less than this gap, lower the vehicle until the measurement is achieved.

Once height is finalized, torque the lower control arm bolts to **150 ft-lbs**.

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



**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 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.

### **RECOMMENDED ALIGNMENT SPECS**

	<b>Driver</b>	<b>Passenger</b>	<b>Tolerance</b>	<b>Total / Split</b>
<b>Camber</b>	<b>-0.3</b>	<b>-0.3</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>+.07</b>	<b>+.07</b>	<b>+/-0.05</b>	<b>+.14</b>