K30-PL1030-0 Pro R 2 Seat Fox Shocks Spring kit

INTRODUCTION

PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE

IF your ZBROZ® 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 ZBROZ®.

Business hours are Monday through Friday 8AM-5PM MST.

PHONE: (435) 753-7774

EMAIL: customerservice@zbrozracing.com

WEBSITE: www.zbrozracing.com

LIMITED LIFETIME WARRANTY

ZBROZ® will warranty to the original purchaser any failed ZBROZ® suspension product in the event of failure due to construction or material failure of the product. You will be required to contact ZBROZ® customer service with descriptions and photos that resulted in failure.

ZBROZ® builds suspension products to meet and exceed your expectations in quality, performance and durability. All ZBROZ® suspension products are rigorously tested during development and prototype parts are pushed to the limit by professional industry athletes, backcountry athletes and race teams. ZBROZ® Limited Lifetime Warranty excludes the following wear parts as these parts are considered defective when worn: Ball Joints, Bushings, Bump Stops, Tie Rod Ends, Heim Joints, Shock Absorbers Product purchased directly from ZBROZ® has a 90 day return policy on uninstalled products from the date of purchase (may be subject to restocking fee). Uninstalled product returns must be in the original ZBROZ® packaging. Please call (435) 753-7774 to get an RMA# for any return. Customer is responsible for shipping costs back to Zbroz Racing. Returns without RMA# will be refused. Contact ZBROZ® directly about any potentially defective parts prior to removal from vehicle.

ZBROZ® is NOT responsible for any subsequent damages to any related vehicle parts due to misuse, abuse, improper installation, or lack of maintenance. Furthermore, ZBROZ® reserves the right to change, modify or cancel this warranty without prior notice.

FOLLOW INSTRUCTIONS TO ENSURE PROPER INSTALLATION

READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION. INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED. ZBROZ® IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

TOOLS:

- Floor Jack (1)
- 21mm Socket (1)
- 21mm End Wrench (1)
- Flathead Screwdriver (1)
- Hammer (1)
- 15mm Socket (1)
- 15mm End Wrench (1)
- T40 Torx (1)

PARTS:

- Front Tender Springs 237-1000-350 (2)
- Front Main Springs 237-1200-250 (2)
- Rear Tender Springs 237-1000-225 (2)
- Rear Main Springs 237-1800-250 (2)

Step 1 — Safety Warning

- **MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.** You should never operate your vehicle under the influence of alcohol or drugs. All raised vehicles have increased risk including blind spots; damage, injury and/or death can occur if these instructions are not followed.
- 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. You should never operate your vehicle under the influence of alcohol or drugs.
- Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ZBROZ® does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

- 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 ZBROZ® products.
- It is the responsibility of the driver 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.

Step 2 — Installation Warning

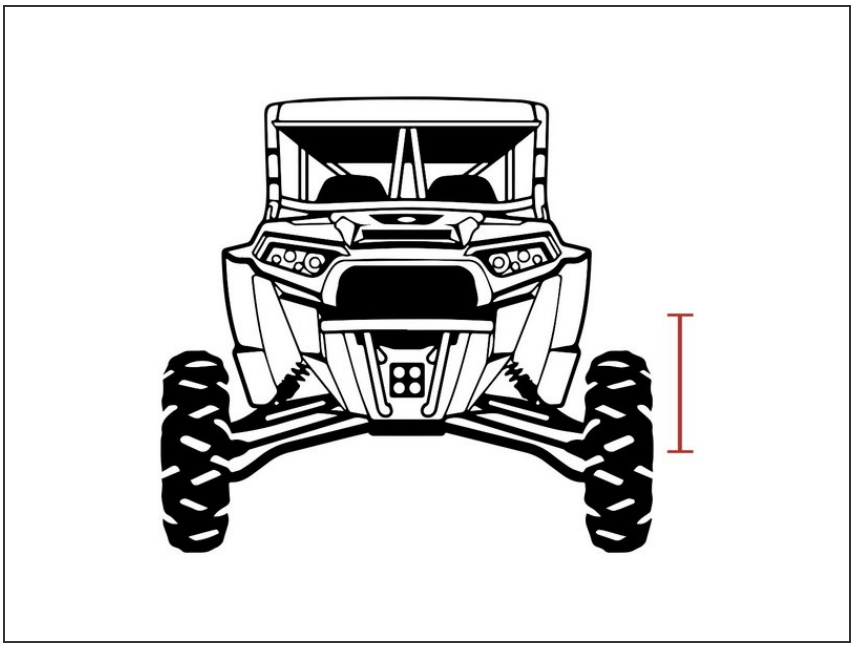
- All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.
- Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle 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.
- ZBROZ® 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.

Step 3 — Installation Warning Cont.

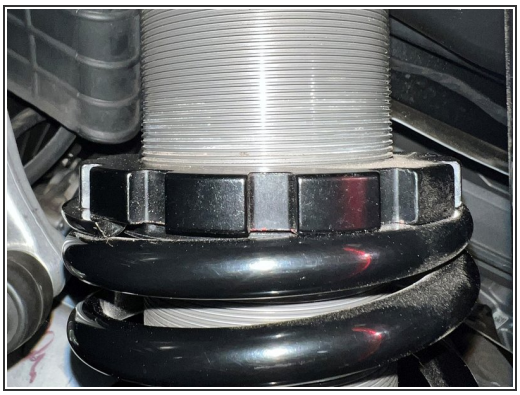
- This spring kit can be installed with shocks on your "VEHICLE" by using a floor jack or lift. Select a flat install location. If using floor jack, always make sure to block tires - work safely! If removing shocks for installation. Back OEM Preload rings on all shocks before removing. Use a solid mounted vice for installation.
- FOLLOW THESE STEPS FIRST
- 1. Measure current ride height at front center frame point and rear center frame point.
- 2. Write down these measurements for before and after installation notes.
- 3. If removing shocks, label each shock to eliminate installation problems with the piggyback reservoirs positioning/clocking when reinstalling.
- 4. Clean shocks! Remove all dirt and mud.

Step 4 — Ride Height Warning



- Due to payload options and initial ride height variances, the amount of preload 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.

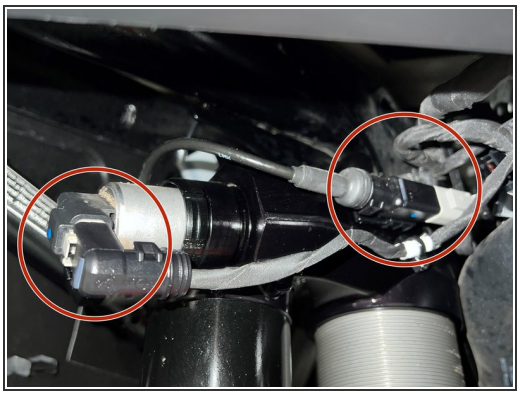
Step 5



- Lift the front of the RZR using a floor jack and remove tires. Make sure the key is in the off position to allow the live valve shocks to extend fully.
- **IMAGE 1** Using a flathead screwdriver, raise the bump stop up around 3 inches.
- **IMAGE 2** Loosen the preload nut then rotate the spring stack and preload nut counter clockwise until all the preload is removed from the springs.
- Repeat the first two steps on the opposite side.
- In order to remove the front shock springs, you must remove the front shocks from the RZR.
- **IMAGE 3** Remove the six screws shown that hold the front fender in place. This is required to provide enough room to remove the shock. Do this on both sides.

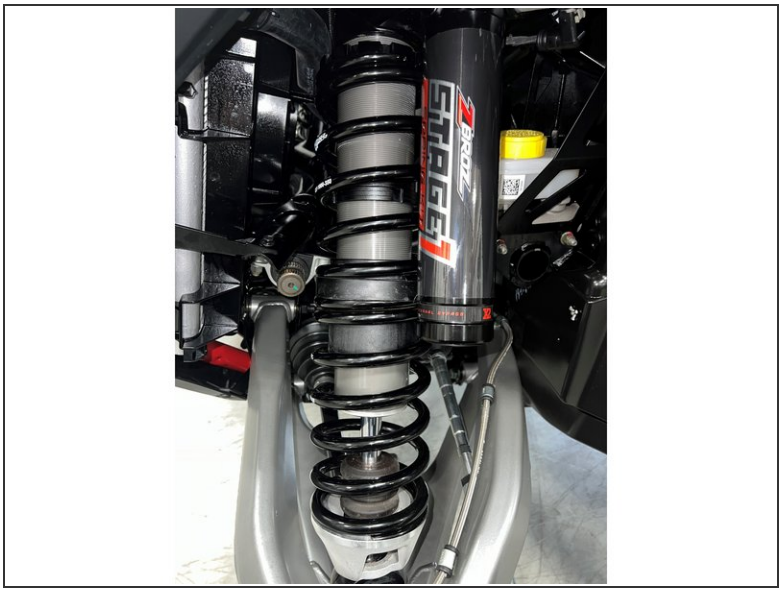
Step 6





- **IMAGE 1** Using a 15mm end wrench and socket, remove the upper ball joint bolt and lift up on the arm and the ball joint should fall free. This is also required to provide room to remove the shock.
- **IMAGE 2** Using a 21mm wrench and socket, remove the lower shock mount on each side. Removing both of them at the same time allows the lower arms to extend further to provide clearance to remove the shock.
- **IMAGE 3** Before you remove the upper shock mount bolt remove the connectors for the live valve shocks. They are located near the top of the shock.

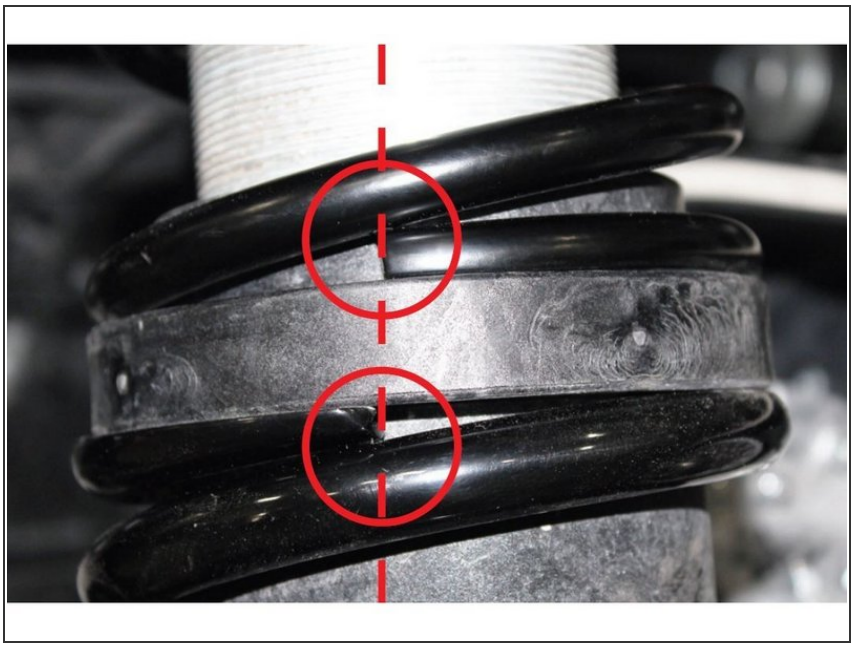
Step 7



- **IMAGE 1** Use your 21mm tools to remove the upper shock mount bolt.
- At this point it is time to remove the front shocks. This may be difficult the first time and will require quite a bit of maneuvering in order to get the shock free.
- Once you have the shock off, remove the lower spring retainer and set the stock springs aside but hang on to the stock spring divider and spring retainer, they will be used in reassembly.

  ⓘ Now is the best time to add your new reservoir decals.
- Rotate the preload ring all the way to the top of the shock then loosen the crossover ring and rotate it up until it is about 4.5 inches from the bottom of the preload ring.
- **IMAGE 2** Locate your new front springs and place them on the shock. place the tender spring on first followed by the spring divider (Long side facing down). Next place the main spring on the shock and put the spring retainer back into place.
- Once you have the springs back on the shock, repeat the process and reinstall the front shocks.

Step 8



⚠ Due to an internal spring in the shock itself, preload must be set while putting downward pressure on the hub. If you do not keep constant downward pressure on the hub your preload and crossover settings will be incorrect resulting in poor ride height and ride quality. Preload and crossover must also be set when the vehicle is at full droop.

- To set the preload, tighten the preload ring down until you have a 3/4" gap between the top of the shock and the top of the preload ring. **Keep in mind** this is a basic starting point, you may need to add more preload depending on added weight and accessories to your vehicle.
- Once your preload is set, next the crossover can be set. Crossover settings in the front should be 4.5" This measurement should be taken from the bottom of the crossover ring to the top of the spring divider. Remember this is a starting point and more adjustment may be needed later.
- Once you have the preload and crossover in place , tighten the crossover nut.

- **(IMAGE 2)** Align or clock lower coil end of new tender spring to upper coil end of new main spring. This reduces spring deflection.
- Repeat the above steps on the opposite side. Double check torque settings and replace your wheels and tires. Lower the jack and move it to the rear of the vehicle.

Step 9

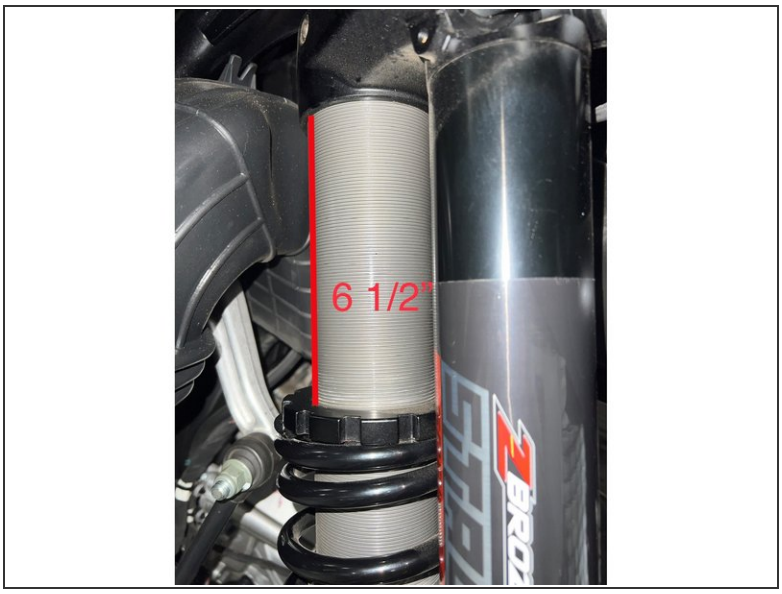
- **IMAGE 1** With the rear of the vehicle off the ground and the wheels and tires removed, Use a flathead screwdriver to raise the bump stop up roughly 3 inches.
- Remove all the preload from the spring stack the same way you did in the front.
- Using an 21mm end wrench and socket, remove the lower shock mount bolt.

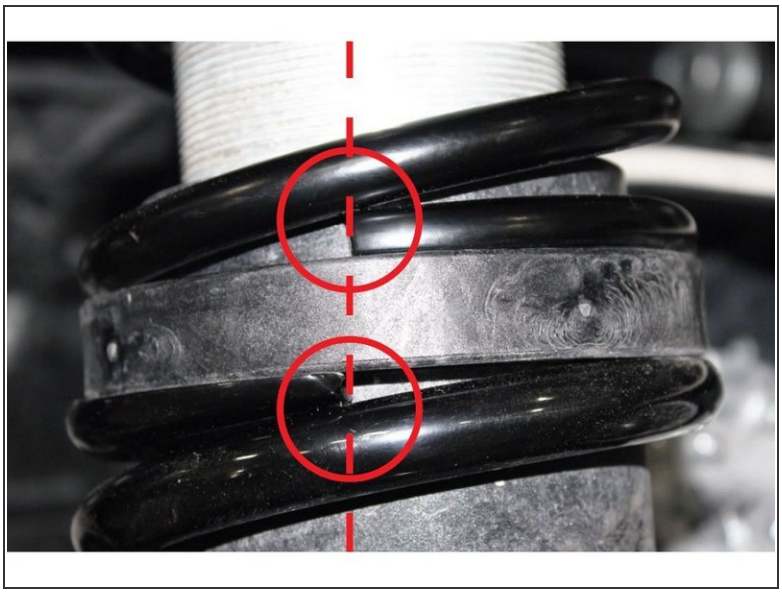
  ⓘ **NOTE:** You do not need to remove the upper shock mount bolt, just the lower.
- Lift up on the springs and remove the spring retainer. Set the old springs aside but hang on to the spring retainer and spring divider they will be used in reassembly.

Step 10

- Leave the stock crossover ring on the shock, it will be adjusted after preload is set.
- **IMAGE 1** Install the rear front tender spring and OEM spring divider, then place the main spring on the shock and replace the stock spring retainer.
- **IMAGE 1** Replace the lower 21mm shock mount bolt and torque to factory specifications.

Step 11

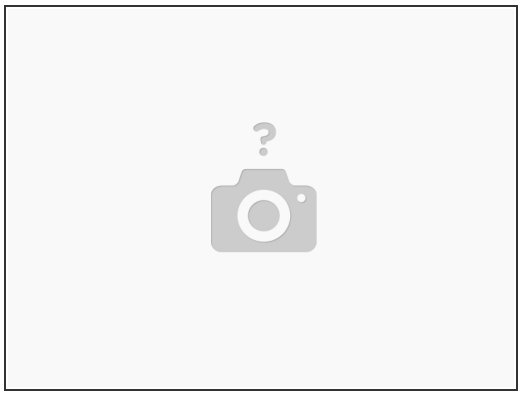




⚠ Due to an internal spring in the shock itself, preload must be set while putting downward pressure on the hub. If you do not keep constant downward pressure on the hub your preload and crossover settings will be incorrect resulting in poor ride height and ride quality. Preload and crossover must also be set when the vehicle is at full droop.

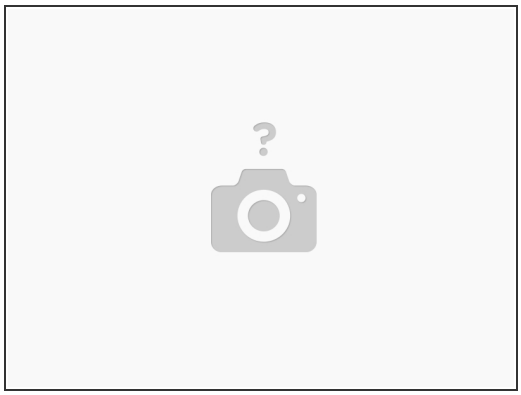
- **IMAGE 1** To set the preload, tighten the preload ring down until you have a 6 1/2" gap between the top of the shock and the top of the preload ring as shown in the image. Keep in mind this is a basic starting point, you may need to add more preload depending on added weight and accessories to your vehicle.
- Once your preload is set, next the crossover can be set. Crossover settings in the rear should be 4.25" This measurement should be taken from the bottom of the crossover ring to the top of the spring divider. Remember this is a starting point and more adjustment may be needed later.
- Once you have the preload and crossover in place, tighten the crossover nut.
- **(IMAGE 1)** Align or clock lower coil end of new tender spring to upper coil end of new main spring. This reduces spring deflection.
- Repeat the above steps on the opposite side. Double check torque settings and replace your wheels and tires.

Step 12 — Check Ride Height Setup



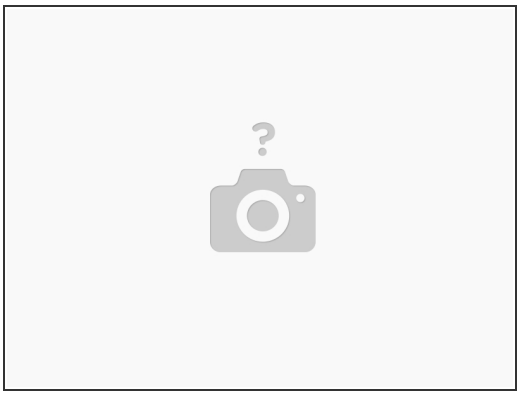
- Drive your vehicle around at slow speed, turning left and right to settle the spring kit. Coast to stop, do not apply brakes to ensure spring kit is naturally settled. Measure and compare ride height measurements with pre-install measurements. Adjust by adding or removing Preload.
- How to Adjust: With tires on, use a floor jack or lift so that shocks are fully extended and adjust as follows:
- If Ride Height is too TALL: Rotate OEM Preload ring 2 full counterclockwise rotations, settle spring kit and check.
- If Ride Height is too LOW: Rotate OEM Preload ring 2 full clockwise rotations, settle spring kit and check.
- Be sure to reset crossover distance if preload is changed.

Step 13 — Final Results



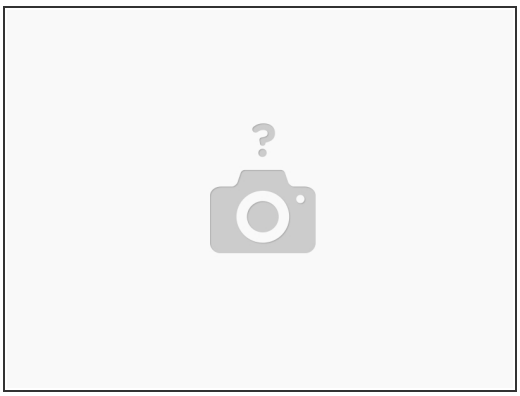
- Ride Height Gain: average ride height increase is 2”.
- Aggressive Stance: allows fitment of larger tires.
- Tune-able Progressive Spring Setup: soaks up small bumps better before initiating main springs.
- Bottoming resistance: increased bottoming resistance with tune-able cross-over rings.
- Reduced body roll: tuned spring setup delivers increased control when turning and cornering.
- Race-inspired durability: premium quality / high tensile / light weight / springs that won’t sag.

Step 14 — Final Checks & Adjustments



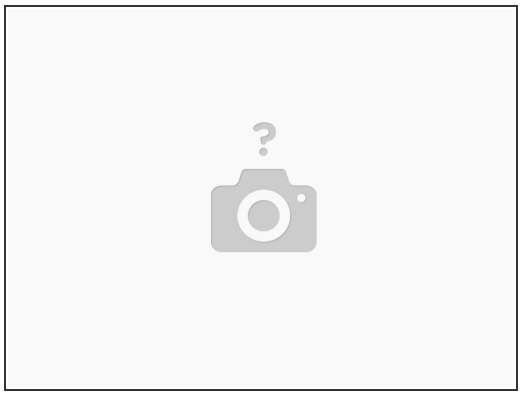
- Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust.
- Turn the front wheels completely left then right and verify adequate tire, wheel, brake line clearance. Test and inspect steering, brake and suspension components for tightness and proper operation.
- RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.

Step 15 — 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.

Step 16 — Wheel Alignment, Headlight, and Safety/Security Systems 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.

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.