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DODGE RAM 2500/3500 2 & 4WD (NEW RADIUS-ARM SUSPENSION) 2.5" LEVELING LIFT KIT INSTALLATION INSTRUCTIONS 2013-2015 KIT# DL232PA

⚠ WARNING

Installation of a Performance Automotive Group suspension lift kit will change the vehicle's center of gravity and handling characteristics both on- and off-road. You must drive the vehicle safely! Extreme care must be taken to prevent vehicle rollover or loss of control, which could result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers and always make sure all vehicle occupants have their seat belts fastened.

⚠ CAUTION

Proper installation of this kit requires knowledge of the factory recommended procedures for removal and installation of original equipment components. We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this kit.

⚠ WARNING

This kit should only be installed on a vehicle that is in good working condition. Before you install the kit, thoroughly inspect the vehicle for corrosion or deformation of the sheet metal. If the vehicle is suspected to have been in a collision or misused, do not install this kit. Off-road use of your vehicle with this kit installed may increase the stress applied to the factory components. Failure to observe this warning may result in serious personal injury and/or severe damage to your vehicle.

⚠ WARNING

Many states and municipalities have laws restricting bumper heights and vehicle lifts. Consult state and local laws to determine if the changes you intend to make to the vehicle comply with the law.

⚠ WARNING

The installation of larger tires may reduce the effectiveness of the braking system.

⚠ WARNING

Always wear eye protection when operating power tools.

⚠ WARNING

Before you install this kit, block the vehicle tires to prevent the vehicle from rolling.

⚠ WARNING

We strongly recommend using the Performance Automotive Group shocks that were engineered to be used with this system. If you use other shocks, they must match the full extended and full collapsed lengths of the Performance Automotive Group units exactly. The use of longer or shorter shocks than recommended may cause damage to the vehicle suspension and could result in sudden loss of control of the vehicle and personal injury. Contact Performance Automotive Group for the lengths of the front and rear shocks that must be used with this suspension system.

NOTE

Performance Automotive Group recommends using the Loctite® supplied in the kit on the threads of all kit nuts and bolts unless specified otherwise in these instructions.

NOTE

Installation of a suspension lift will change the driveline angles which may cause a noticeable vibration in the vehicle. See the troubleshooting section at the end of these instructions.

⚠ WARNING

DO NOT combine suspension, body, or other lift devices. Use of vehicle with combined lifts may result in unsafe and/or unexpected handling characteristics.

NOTE

Lift height may vary depending on vehicle configuration, engine size, additional accessories, the factory suspension package, and vehicle's condition.

⚠ WARNING

Before you install this kit, read and understand all instructions, warnings, cautions, and notes in this instruction sheet and in the vehicle owner's manual.

Before Starting Installation

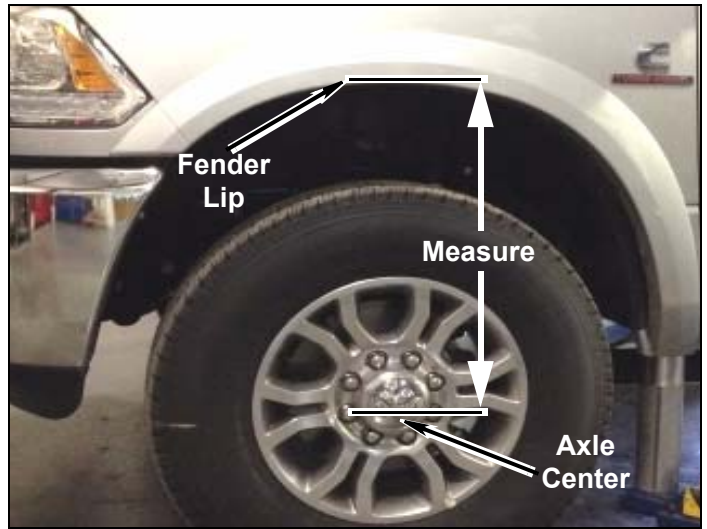
NOTE
 Kit parts are prefaced by the word *kit* and appear in **bold print**.

1. Carefully read all warnings and instructions completely before beginning.
2. Verify all parts have been received in this kit by checking the parts list at the end of this document.
3. **Only install this kit on the vehicle for which it is specified.** If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at: (928) 636-7080.
4. Park vehicle on a clean, dry, flat, level surface and block tires so vehicle cannot roll in either direction.

NOTE
 Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the factory service manual. When re-assembling the vehicle it is recommended by the vehicle manufacturer that certain fasteners are replaced in order to maintain proper retention characteristics. This system may not include all replacement hardware as recommended by the factory service manual. Additional replacement hardware should be obtained prior to installation of this system to meet the requirements of the factory service manual.

Ride Height

1. Measure ride height with the vehicle supporting its own weight on level ground. To settle the suspension, the vehicle should be driven forward at least 10 feet immediately prior to taking these measurements. Ride height is the measurement from the center of the axle straight up (vertical) to the fender lip. Record this measurement for all four wheels.



Wheel & Tire Requirements

The factory wheel and tire combination will fit once this kit is installed. The following are specifications for choosing a proper wheel tire:

Maximum tire diameter = 35 x 12.50 R18 or equivalent diameter and width

NOTE
 Minor trimming of the inner fender liner may be required for proper clearance of the above mentioned tire dimensions.

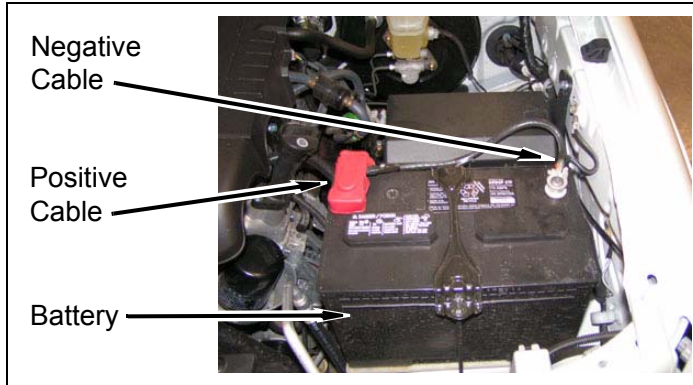
Torque Specifications

1. See factory service manual for torque values when re-using OE fasteners.

<u>Bolt Size</u>	<u>Grade 5 (ft.-lbs.)</u>	<u>Grade 8 (ft.-lbs.)</u>
1/4"-20	10	10
1/4"-28	10	12.5
5/16"-18	17	22.5
5/16"-24	20	25
3/8"-16	30	40
3/8"-24	35	45
7/16"-14	50	65
7/16"-20	55	70
1/2"-13	75	100
1/2"-20	55	70
9/16"-12	105	135
9/16"-18	115	150
5/8"-11	150	195
5/8"-18	160	210
3/4"-16	175	225

Engine Compartment

1. Disconnect both battery cables. Disconnect negative cable first, then positive cable.



Prepare to Install Front Suspension

Front Suspension

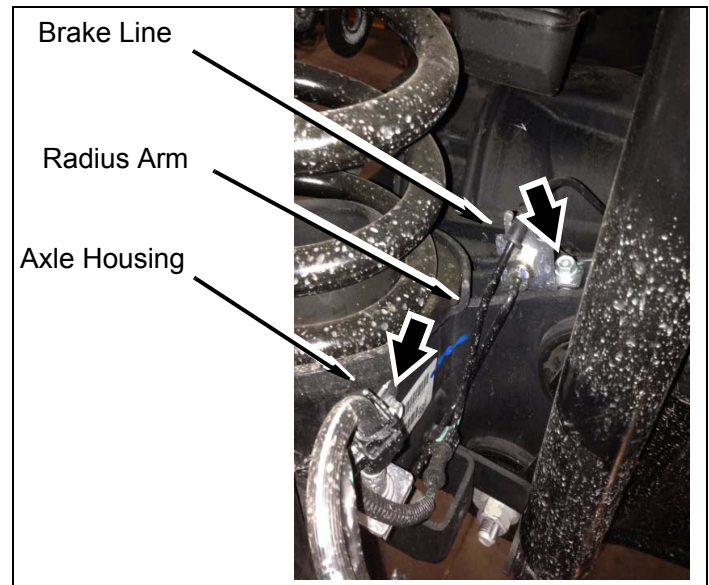
1. Loosen, but do not remove, lug nuts on each front wheel.
2. Remove the front trackbar bolt from the frame. Do this while the vehicle is on the ground and there is a small amount of side load on the hardware.
3. Using a hydraulic floor jack, slowly lift front of vehicle until front tires are 3-5" off ground. Position jack stands under frame. Lower vehicle onto jack stands while maintaining hydraulic jack pressure underneath front axle.

⚠ WARNING

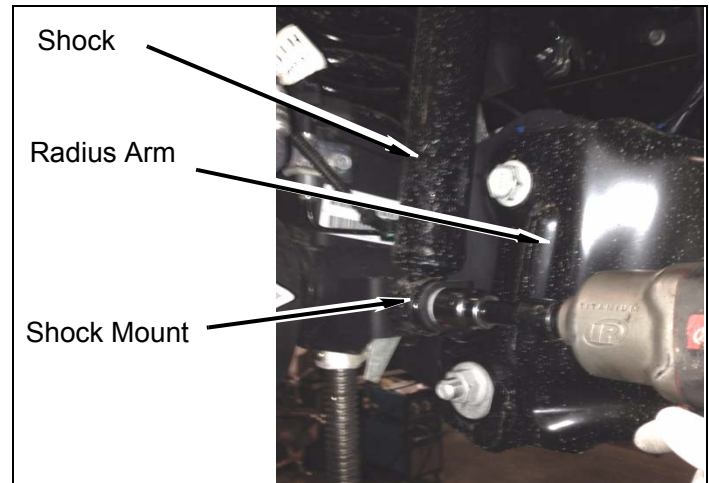
Use extreme caution when lifting vehicle from ground. To prevent serious personal injury, ensure the lifting device is securely placed.

4. Remove lug nuts and front wheels from vehicle.
5. Disconnect the 4 bolts that hold the sway bar to the frame, and allow the sway bar to swing down.

6. Disconnect the brake line brackets from the top of the radius arm mount on the front axle..



7. Remove the front shocks, retain the lower mounting hardware..



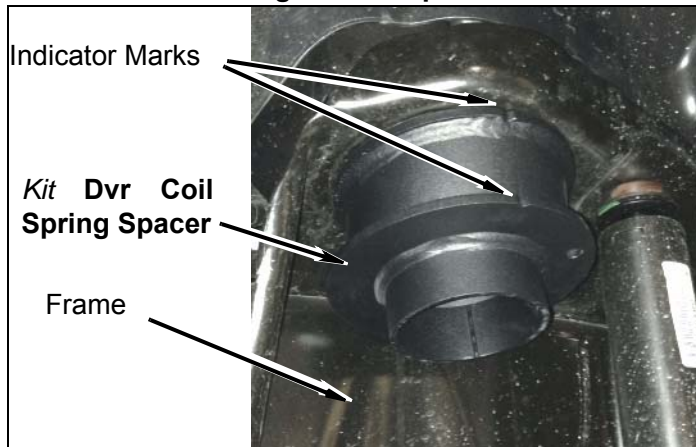
8. Lower the front axle and remove the coil springs. Check for appropriate slack in ABS wires, brake lines, and differential breather hose. Keep the coils separated, do not switch sides.

DRIVER and PASSENGER SPACER IDENTIFICATION

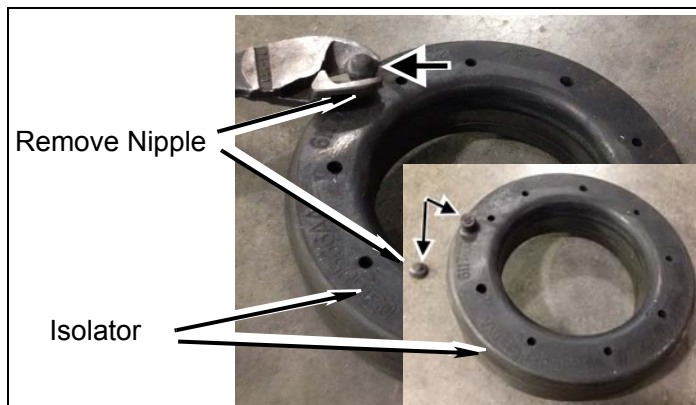


- Install **kit coil spacers** with **kit 7/16" hardware** through the factory hole in coil bucket. Tighten to 35ft-lbs. **Note:** The orientation of the parts will be so that the spacer indicators (shown below) face outward away from the center of the vehicle as the 7/16" stud is indicated into place.

**** NOTICE: Dvr & Psg Side Kit Spacers Provided ****

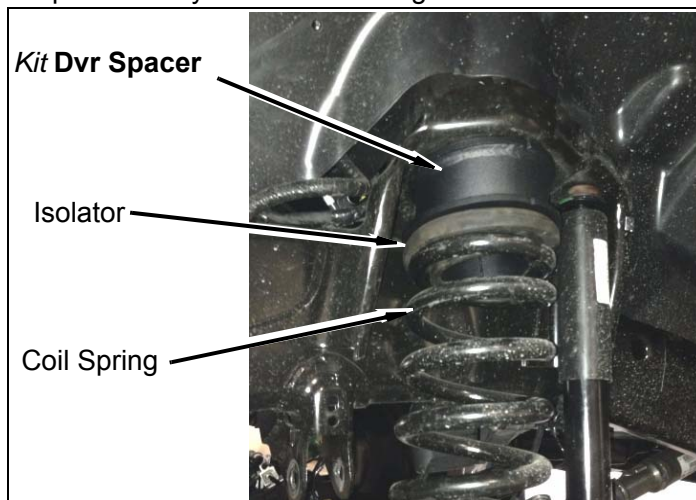


- Carefully cut and remove tip of isolator indication nipple as shown below:

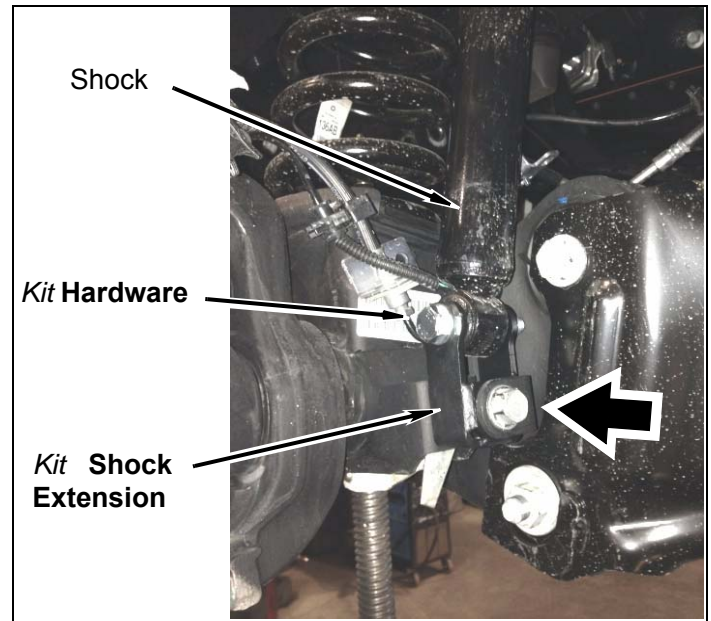


- Reinstall the factory upper isolator and coil springs. The tab on the isolator will go directly below the **kit spacer 7/16" stud**.

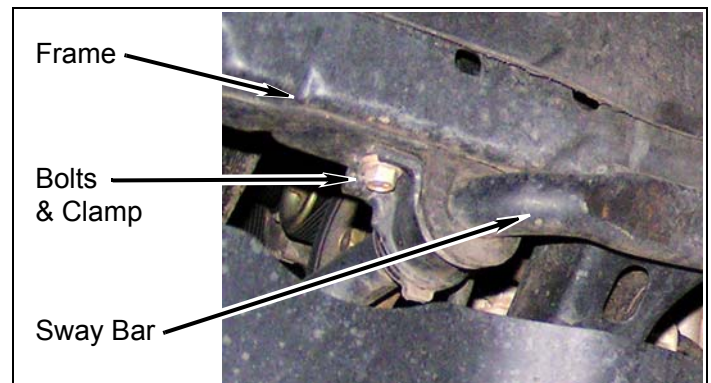
NOTICE: Coil spring **orientation & placement** is critical to keep the factory coils from bowing an excessive amount



- Install **kit shock extension** using OEM hardware to secure the **kit shock extension** to the shock mount.
- Raise front axle and install shock on to **kit shock extension** using **kit bolt, nut & washer** (M14-2.0 x 80mm).



- Reattach sway bar to the frame with factory hardware. Tighten to 40 ft-lbs.



- Reattach the factory brake line brackets to the axle with factory hardware. Tighten to 12 ft-lbs.

- Install wheels, if installing aftermarket wheels remove the retaining clips on the lug studs before installing new wheels. Tighten to factory specifications.

- Have an assistant turn the steering wheel and reattach the track bar to the frame with factory hardware. Tighten to 180 ft-lbs.

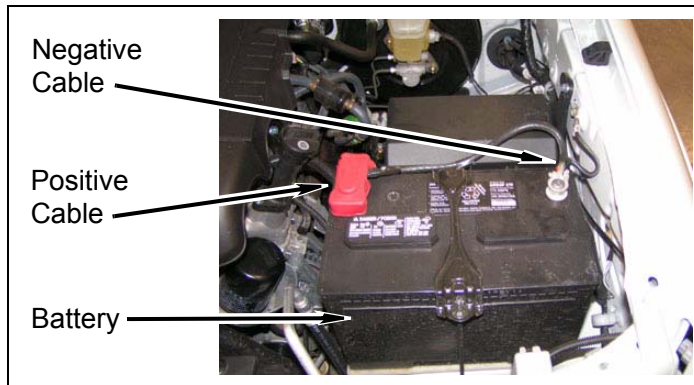
- Perform a steering sweep and check for adequate clearance. Recheck all hardware for proper torque.

- Adjust steering wheel to center by adjusting the collar on the drag link, do not drive the vehicle with the steering wheel crooked or traction control problems may arise.

After Completing Installation

Engine Compartment

1. Connect both battery cables. Connect positive cable first, then negative cable.



Miscellaneous

1. Apply **kit label** (warning) onto dashboard in plain sight of all vehicle occupants.
2. Adjust headlights.
3. Check all fasteners to ensure they are tight.
4. Ensure all wires, hoses, cables, etc. are properly connected and there is ample slack.
5. Align vehicle to OE specifications. Retain alignment results.

Dynamic Vehicle Check

1. Check steering and suspension in all positions to ensure that there is no bind and adequate clearance between all moving, fixed, and heated members. Check operation of clutch, brake system, and parking brake. Check operation of transmission and transfer case. Ensure there is full engagement in all gears and 4WD ranges. Check battery connections and electrical component operations. Test-drive vehicle.

⚠WARNING
Retorque all fasteners after 500 miles and after off road use. All suspension lift components should be visually inspected and fasteners retorqued during routine vehicle servicing.

⚠CAUTION
Performance Automotive Group does not recommend any particular wheel and tire combinations for use with its suspension lifts and cannot assume responsibility for the customer's choice of wheels and tires. Refer to your owner's manual for recommended tire sizes and warnings related to the use of oversized tires. Larger wheel and tire combinations increase stress and wear on steering and suspension components, which leads to increased maintenance and higher risk for component failure. Larger wheel and tire combinations also alter speedometer calibration, braking effectiveness, center of gravity, and handling characteristics. Consult an experienced local off road shop to find what wheel and tire combinations work best with your vehicle.

NOTE
All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the vehicle owner. Information contained in the instructions and on the warranty card will be required for any warranty claims. The vehicle owner needs to understand the modifications made to the vehicle and how they affect vehicle handling and performance. Failure to provide the customer with this information can result in damage to the vehicle and severe personal injury.

Kits Parts List

Qty.	Description
1	Instruction sheet
1	Label (logo)
1	Label (warning)
1	Loctite® (6ml bottle)
1	Spacer (DVR)
1	Spacer (PSG)
2	Extension (Shock)
1	<u>DL232PABAG (Hardware Bag Kit)</u>
2	Bolt (14mm x 80mm)
2	Nut (14mm, Lock)
2	Nut (7/16", Lock)
4	Washer (14mm)
2	Washer (7/16")