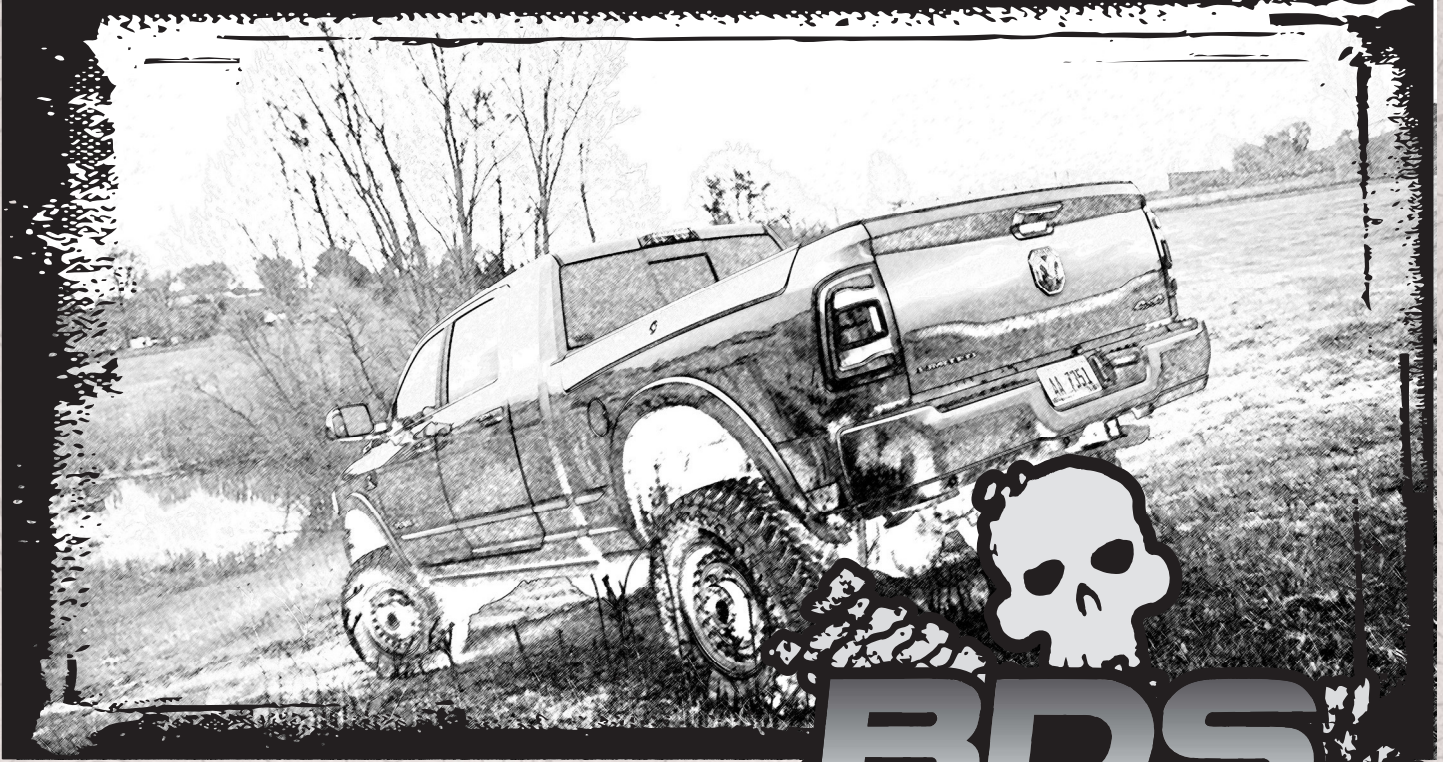


# INSTALLATION GUIDE



Part#: 012106



**HARDCORE LIMITED LIFETIME WARRANTY**

## 1" Rear Air Ride Lift Systems

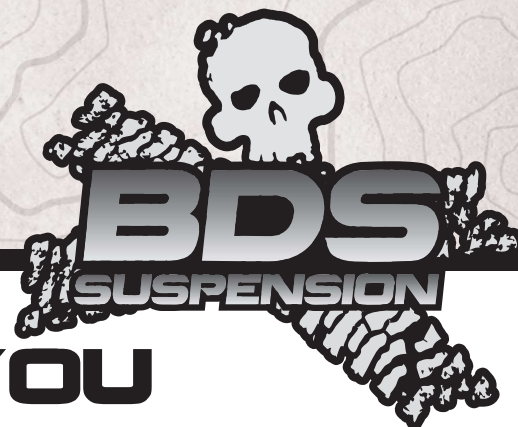
**Dodge 3500 Pickup | 2013-20**

Rev. 120321

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# Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.



## THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come. Thank you for choosing BDS Suspension!

### BEFORE YOU START

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

### FOR YOUR SAFETY

Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

### BEFORE INSTALLATION

Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.

Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.

Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.

Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.

Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.

If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.

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 attitude. Always measure the attitude prior to beginning installation.



Visit [560plus.com](http://560plus.com) for more information.

### BEFORE YOU DRIVE

Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.

Perform head light check and adjustment.

Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

# CONTENTS OF YOUR KIT

## Rear Air Bag Spacer Box Kit (012106)

Part #	Qty	Description
03986	2	2019 Ram 3500 1in Rear Block
03987	2	2019 Ram 3500 1in Rear Air Bag Spacer
964381212RB	4	9/16 x 4 3/8 x 12.5 Round E-Coat
01599	2	Leaf Pin
N96FH-B	8	9/16 Fine High Nut- Black
W96S-B	8	9/16 SAE Flat Washer-Black
136	4	Spacer 1.25" x 0.7"

## TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. The rear shock lengths are specific to not overextend the rear air bags. If replacing the rear shocks the lengths cannot be longer than what is provided in this kit.

**TECH  
TIPS**

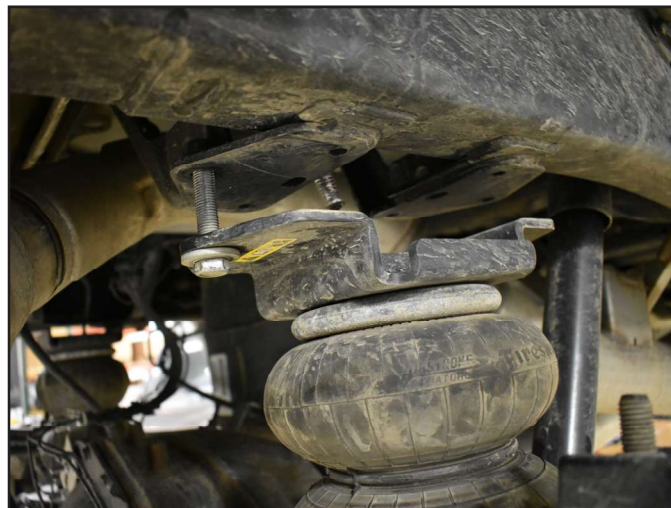
## INSTALLATION INSTRUCTIONS

### SPECIAL TOOLS

1. Park vehicle on clean flat and level surface. Block front wheels for safety.
2. Disconnect the battery to disable the rear air suspension.
3. Raise the rear of the vehicle. Support the frame rails with jack stands, and the axle with a jack.
4. Remove the two bolts attaching the air bag to the frame (Fig. 1).

Grinder / File

**FIGURE 1**



5. Remove the factory shocks.
6. Remove the U-bolts and U-bolt plates from one side of the vehicle only. Loosen the U-bolts, but do not remove the opposite side.



**Tip** The sensor arm can be removed from the upper spring plate for ease of removing the U-bolt plate to die grind the holes.

**FIGURE 2**



7. Lower the axle and removed the factory plastic center pin be carefull not to over extend the air bag air line. Replace with new metal pin. The pin will be a press fit. It may be necessary to take a rotary grinding tool to remove the sharp edge from the leaf pack to allow easier installation (Fig 3).

**FIGURE 3**

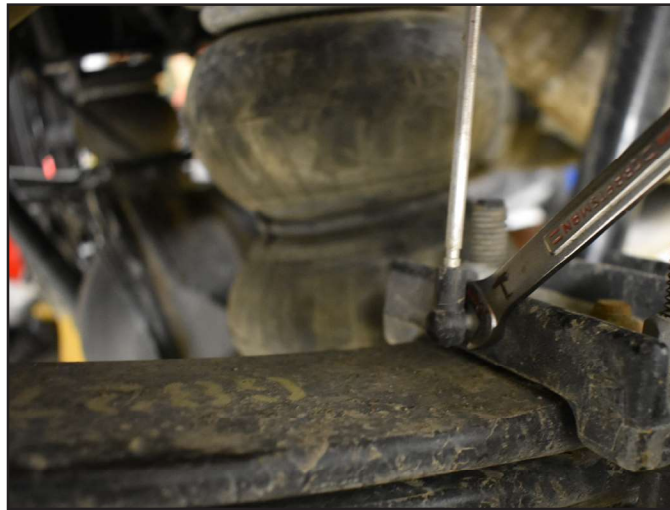


8. Install the new lift block. Install the new U-bolts and install the nuts, but do not tighten at this time.



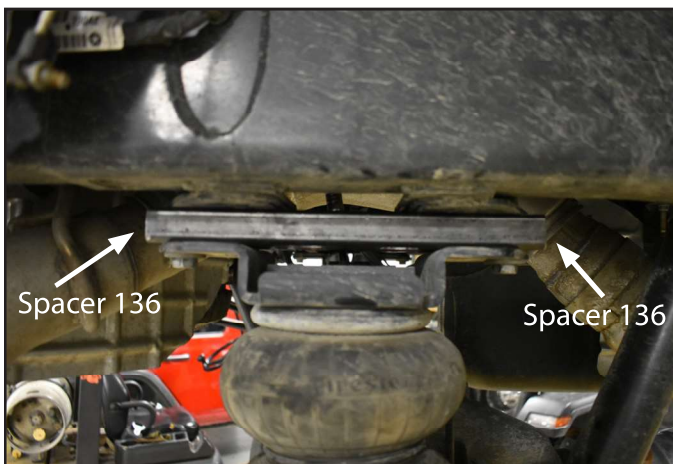
**Tip** *If the sensor arm was removed reinstall the arm to the U-bolt plate at this time. (Fig. 4)*

**FIGURE 4**



9. Install the provided spacers 136 into the ends of the air bag spacer and place the air bag spacer between the air bag and frame with the U cutout towards the center of the vehicle for the air line. (Fig. 5 & 6). The spacers are not side specific. Fasten with OE hardware and Torque to 89 ft-lbs.

**FIGURE 5**



**FIGURE 6**

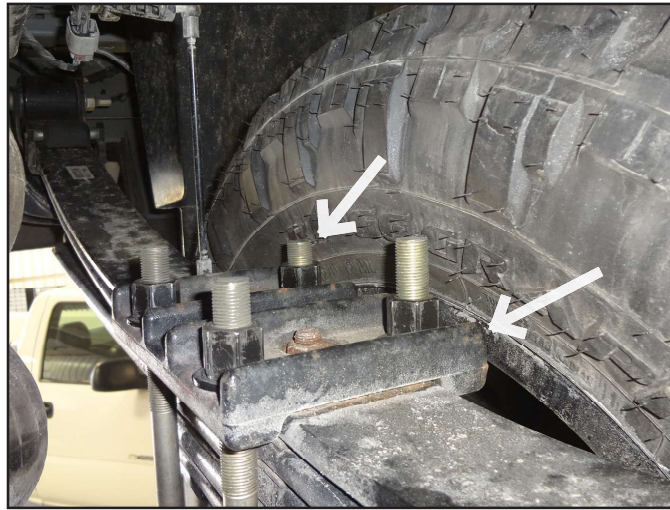


10. Repeat block, spacer, U-bolt, and pin installation on opposite side of the vehicle.
11. Tighten U-bolts snugly at this time, do not torque until the vehicle is on the ground.
12. Grease bushings and sleeves, install them into both ends of the shocks. Install new shocks with OE hardware. Tighten to 65 ft-lbs. If installing optional Fox shocks, the body will be located at the frame mount.
13. Reinstall wheels, torque to specification. Lower vehicle to the ground and torque U-bolts to 120 ft-lbs.

## **POST-INSTALLATION**

14. Check for clearance from the U-bolts the the wheel / tire. The U-bolts may need to be cut shorter / the corners of the U-bolt plate may need to be ground down for clearance (Fig. 7).

**FIGURE 7**



15. Recheck all hardware, check again at 500 miles, and again at regularly scheduled maintenance intervals. Check brake lines and ABS wires for proper clearance through steering sweep, use zip ties on the ABS wires if necessary. An alignment must now be performed.



### **WE WANT TO SEE YOUR RIDE!**

Grab photos of your BDS-equipped truck in action and send them in for a chance to be featured. Send it in to our Bad Ass Rides customer gallery at [bds-suspension.com/bar](http://bds-suspension.com/bar) and post them on the BDS Fan Page on Facebook at [facebook.com/BDSSuspensions](https://facebook.com/BDSSuspensions). Don't forget about your BDS swag! BDS offers t-shirts, hoodies, decals and more available on the BDS website or through your local BDS distributor.

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## **TIME TO HAVE SOME FUN**

**Thank you for choosing BDS Suspension.**

For questions, technical support and warranty issues relating to this BDS Suspension product, please contact your distributor/installer before contacting BDS Suspension directly.