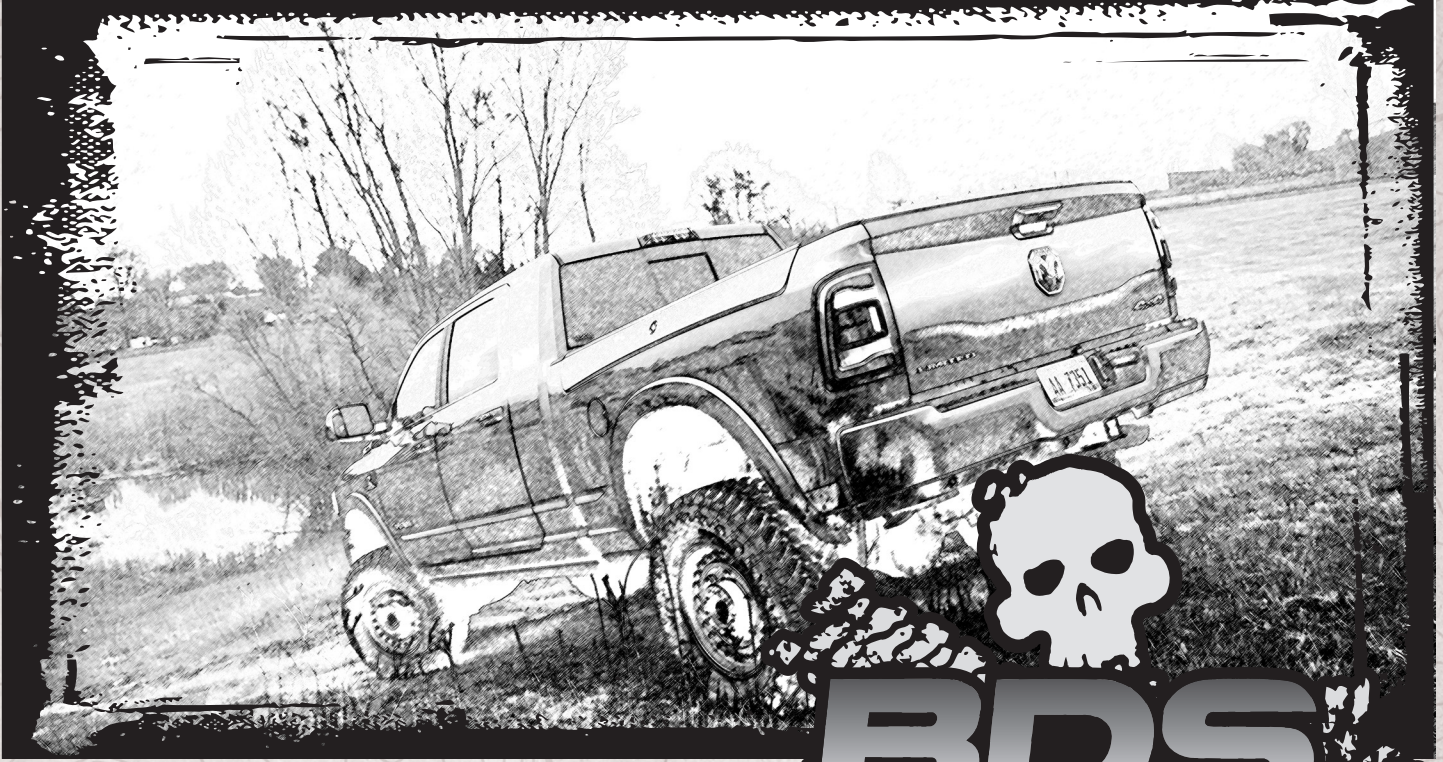


INSTALLATION GUIDE



Part#: 012319, 012626



HARDCORE LIMITED LIFETIME WARRANTY

4" & 6" Rear Air Ride Lift Systems

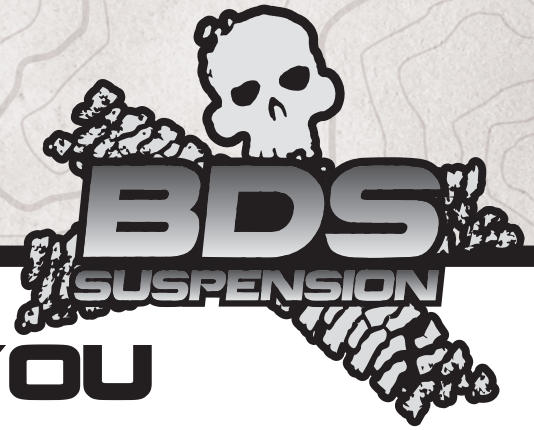
Dodge 3500 Pickup | 2019-21

Rev. 051721

491 W. Garfield Ave., Coldwater, MI 49036 • Phone: 517-279-2135

Web: www.bds-suspension.com • E-mail: tech-bds@ridefox.com

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 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 (012319)		
Part #	Qty	Description
03895	2	3" Rear Block
03585	2	3" Air Bag Spacer
964381412RB	4	9/16 x 4 3/8 x 14.5 U-bolt
03819	3	Air Tank Spacer
BP1007	1	4x - 9/16 U-Bolt
	8	5/8" Fine High Nut
	8	5/8" SAE Flat Washer
606	2	Bolt Pack - Air Bag Spacer
	2	5/16"-18 x 1-1/4" Bolt
	2	5/16-18 Prevailing Torque Nut
	4	5/16" SAE Washer
355	1	Bolt Pack - Air Tank Spacer
	3	8mm-1.25 x 50mm, Clear Zinc
	3	5/16" SAE Washer, Clear Zinc

Rear Air Bag Spacer Box Kit (012626)		
Part #	Qty	Description
03993	2	6" Rear Block
03584	2	6" Air Bag Spacer
964381612RB	4	9/16 x 4 3/8 x 16.5 U-Bolt
03896	1	Brake Line Bracket
03819	3	Air Tank Spacer
01661	1	Brake Line Bracket
606	2	Bolt Pack - Air Bag Spacer
	2	5/16"-18 x 1-1/4" Bolt
	2	5/16-18 Prevailing Torque Nut
	4	5/16" SAE Washer
355	1	Bolt Pack - Air Tank Spacer
	3	8mm-1.25 x 50mm, Clear Zinc
	3	5/16" SAE Washer, Clear Zinc
354	1	Bolt Pack - Brake Line Bracket
	2	3/8"-16 x 1-1/4" Bolt, Grade 8, Yellow Zinc
	4	3/8" SAE Washer, Yellow Zinc
	2	3/8"-16 Prevailing Torque Nut, Yellow Zinc
356	1	Bolt Pack - Brake Line Bracket
	2	5/16"-18 x 1" Bolt, Clear Zinc
	4	5/16" SAE Washer, Clear Zinc
	2	5/16"-18 Prevailing Torque Nut, Clear Zinc
	1	8mm-1.25 Prevailing Torque Nut, Clear Zinc
	1	1/4" USS Washer, Clear Zinc
BP1007	1	Bolt Pack 9/16 U-Bolt
	8	9/16 High Nut
	8	9/16 Washer

TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. When installing this rear air ride system in conjunction with a 4-Link or radius arm drop bracket system. Use the provided air tank spacers in this box kit to provide clearance to the brackets.
2. 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

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, block the front wheels for safety. Support the frame rails with jack stands.
4. If installing a lift with 4-link bracket or radius arm relocation bracket. This box kit contains 3 air tank spacers (03819) and bolts to provide bracket clearance. Remove the 3 factory mounting bolts. Insert the spacers between the tank mounts and frame and tighten with the provided hardware from Bolt Pack 355.

SPECIAL TOOLS

Die Grinder / File

FIGURE 1



5. Disconnect the brake line mount from the rear axle to give extra slack during installation. Retain hardware.
6. Disconnect the e-brake cable and reroute the line to give adequate slack in the cable at full droop, reattach once routed for extra slack. (Fig. 2 & 3)

FIGURE 2

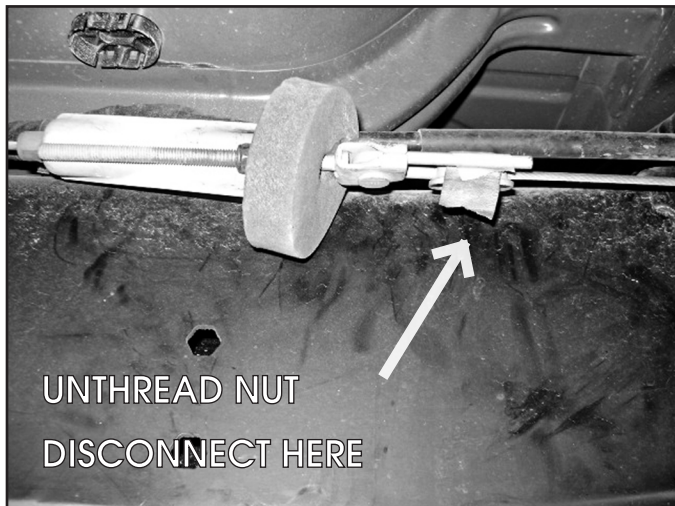
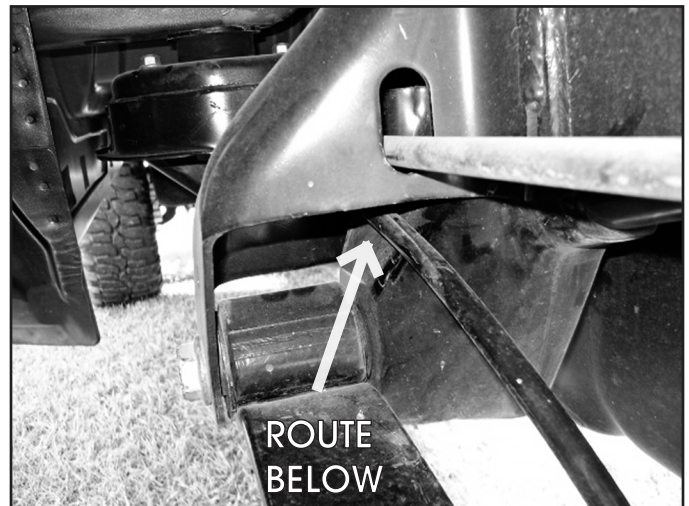


FIGURE 3



7. Remove the E-brake bracket from the frame for extra slack during installation. Retain hardware.(Fig 4)

FIGURE 4



8. Remove the two nuts attaching the air bag to the axle (Fig. 5). Save hardware.

FIGURE 5



9. Remove the factory shocks, retain all mounting hardware.
10. Support the rear axle with a hydraulic jack. Remove the U-bolts and U-bolt plates from one side of the vehicle only. Loosen the U-bolts, but do not remove on the opposite side.
11. Lower the axle and install the new lift block, off-setting the axle forward towards the front of the vehicle (Fig. 6). 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.*

FIGURE 6 (6" BLOCK SHOWN)

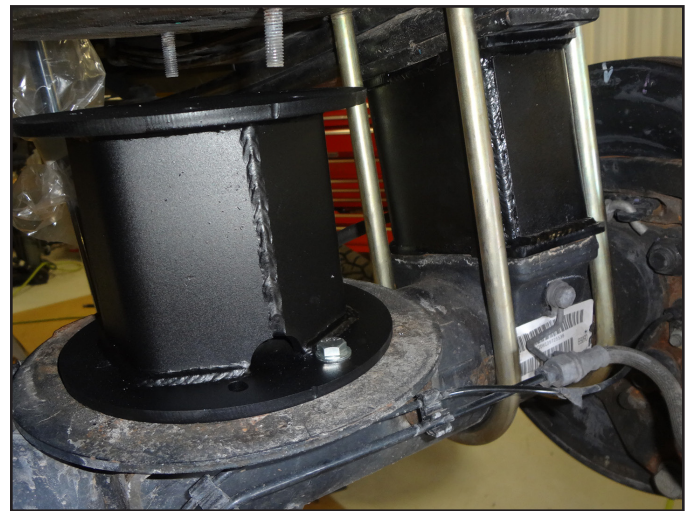


12. Install the provided air bag spacer to the axle with the provided 5/16" hardware from Bolt Pack 606. The air bag spacer will install with the small end of the spacer towards the front of the vehicle (Fig. 8 & 9). The spacers are not side specific and will mount concentric with the axle mount.

FIGURE 8



FIGURE 9



13. Repeat the block, spacer, and U-bolt on opposite side of the vehicle.
14. Tighten the U-bolts snugly at this time, do not torque until the vehicle is on the ground.
15. Grease the bushings and sleeves, install them into both ends of the shocks. Install the new shocks with factory hardware. Tighten to 65 ft-lbs. If installing optional Fox shocks, the body will be located at the frame mount.
16. Attach the air bag to the spacer with the factory nuts through the holes in the top of the air bag spacer.



Tip *The air bags may need to be attached to the spacer when the vehicles is set on the ground with the weight of the vehicles.*

FIGURE 10



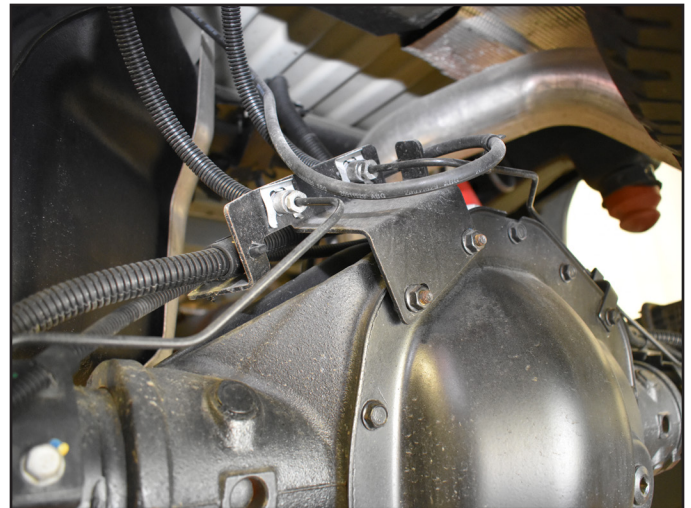
17. **6" Kit ONLY:** Attach the provided brake line bracket to the rear axle with factory hardware. Attach the factory bracket to the provided bracket with the 3/8" hardware from Bolt Pack 354. Torque factory hardware to 15 ft-lbs, 3/8" hardware to 26 ft-lbs. (Fig 11)

18. **4" Kit ONLY:** Reattach the factory brake line bracket to the rear axle with factory hardware. Torque to 15 ft-lbs. (Fig 12)

FIGURE 11

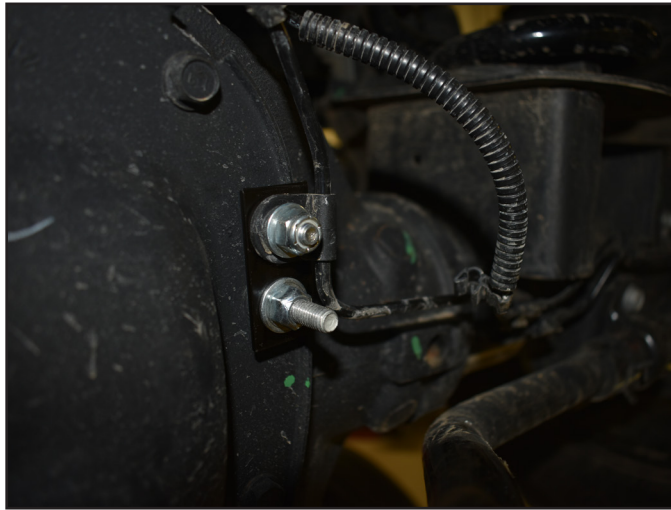


FIGURE 12



19. **6" Kit Only:** Attach the provided brake line bracket to the stud on the diff cover and attach the factory tab to the bracket. Using Bolt Pack 356. Not all hardware will be used. Torque 8mm to 191 in-lbs, and 5/16" hardware to 178 in-lbs (Fig. 13)

FIGURE 13

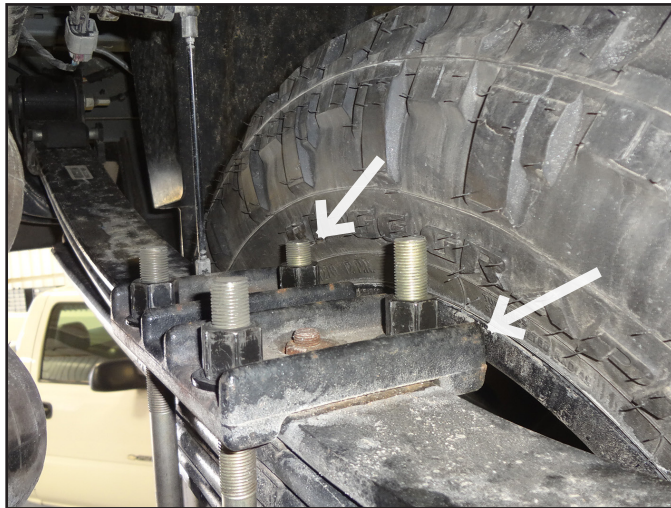


20. Reinstall wheels, torque to specification. Lower vehicle to the ground and torque U-bolts to 100 ft-lbs.
21. Reattach factory frame e-brake bracket with factory hardware. Torque to 21 ft-lbs

POST-INSTALLATION

22. 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. 14).

FIGURE 14



23. 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 and post them on the BDS Fan Page on Facebook at 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.

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.