

# INSTALLATION GUIDE



Part#: 012459



**HARDCORE LIMITED LIFETIME WARRANTY**

## 4.5" Rear Coil Spring

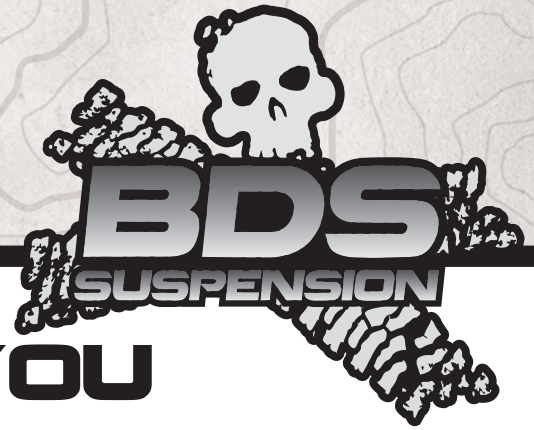
**Dodge 2500 Pickup | 2019**

Rev. 032923

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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

<b>Coil Spring Box Kit: 012459</b>		
<i>Part #</i>	<i>Qty</i>	<i>Description</i>
03857	1	Rear Track Bar Bracket
145	1	Track Bar Bracket Sleeve (2-1/8" long)
032409	2	4.5" Rear Coil Spring
02499	2	Rear Bump Stop
911112	2	15" Sway Bar Link
SB58BK	4	Hourglass Bushing - EB1
03896	1	Rear Brake Line Bracket
01661	2	Rear Brake Line Tab
62147	4	5/8" x 12mm ID x 1-.3/8" Sleeve
498	1	Bolt Pack
	1	9/16"-12 x 4" Bolt, Yellow Zinc
	2	9/16" SAE Washer, Yellow Zinc
	1	9/16"-12 Prevailing Torque Nut, Yellow Zinc
	2	7/16"-14 x 1-1/2" Bolt, Yellow Zinc
	2	7/16" SAE Washer, Yellow Zinc
	2	7/16"-14 Serrated Edge Flanged Nut, Clear Zinc
795	1	Bolt Pack
	4	12mm-1.75 x 65mm Bolt, Clear Zinc
	8	7/16" USS Washer, Clear Zinc
	4	12mm-1.75 Prevailing Torque Nut, Clear Zinc
451	1	Bolt Pack
	4	10mm-1.50 x 80mm Bolt, Clear Zinc
	4	10mm Washer, Clear Zinc
354	1	Bolt Pack
	2	3/8"-16 x 1-1/4" Bolt, Yellow Zinc
	4	3/8" SAE Washer, Yellow Zinc
	2	3/8"-16 Prevailing Torque Nut, Yellow Zinc
356	1	Bolt Pack
	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

<i>Part #</i>	<i>Qty</i>	<i>Description</i>
85756	2	Rear NX2 Shocks
or		
98224756	2	Rear Fox 2.0 Shocks

# INSTALLATION INSTRUCTIONS

## PRE INSTALLATION NOTES:

*Kit is for Ram 2500 coil spring equipped vehicles only. It will not fit rear Air Ride equipped vehicles*

## SPECIAL TOOLS

3/8", 1/2" Drill Bit

## INSTALLATION INSTRUCTIONS

1. Park vehicle on clean flat and level surface. Block front wheels for safety.
2. Disconnect the rear trackbar from the axle, retain all hardware. (Fig 1)

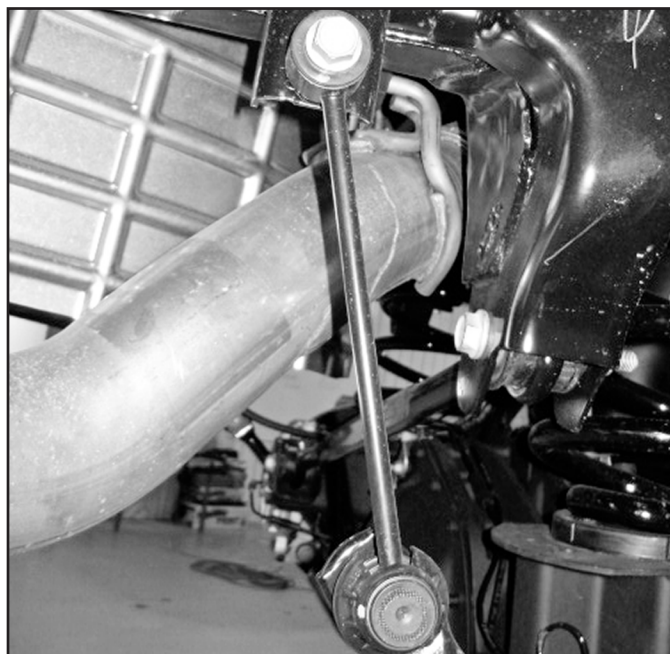
*Tip: You may need to detach the vent hose clip from the track bar bracket to prevent the nut tab from puncturing the vent hose.*

**FIGURE 1**



3. Raise the rear of the vehicle and support the frame rails with jack stands.
4. Remove the rear wheels.
5. Support the rear axle with a hydraulic jack.
6. Disconnect the rear sway bar links from the frame and sway bar. (Fig 2)

**FIGURE 2**



7. Disconnect the brake line bracket from the rear axle. (Fig 3)

**FIGURE 3**



8. If equipped unbolt the power hop damper bracket from the rear axle.
9. Disconnect the driver side E-brake line from the frame right in front of the rear lower arm pocket. Attach one of the brake line tabs to the factory mount using factory hardware and E-brake line to the brake line tab to lower it. Use the provided 5/16" hardware in bolt pack 356. Torque all hardware to 21 ft-lbs. (Fig 4)

**FIGURE 4**



10. Disconnect the rear shocks and lower the axle, retain hardware. On the driver's side it is easiest to access the top hardware by cutting the inner fender well as shown. This trim procedure is not required but greatly aids in removal and installation of the shock. (Fig 5, 6)

**FIGURE 5**

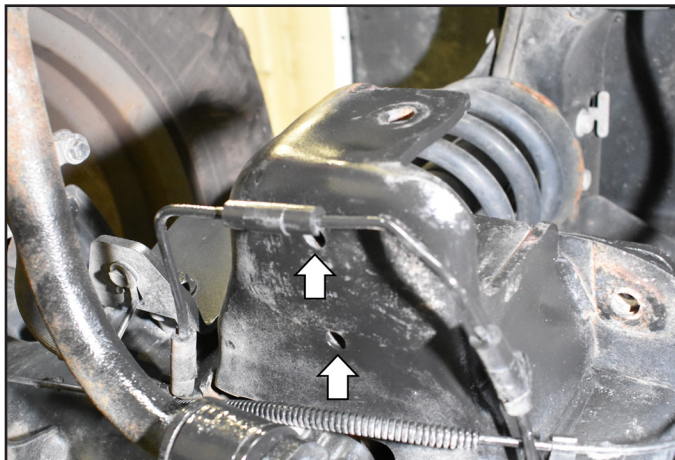


**FIGURE 6**

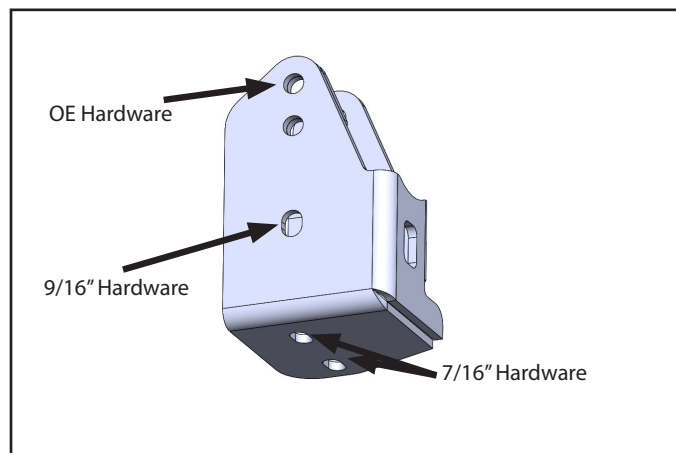


11. Remove the rear coil springs and upper and lower coil spring retainers.
12. Clearance the bottom two holes in the factory track bar bracket with a 1/2" drill bit to accept 7/16" hardware. (Fig 7A)
13. Install the track bar bracket to the axle. Hardware is located in bolt pack 498. First place the 2-1/8" long sleeve and place it inside the track bar bracket at the factory track bar bolt location using the provided 9/16" x 4" hardware. Using the 7/16" x 1-1/2" bolts, washers, and flange nuts attach the bracket through the bottom holes. (Fig 7B)

**FIGURE 7A**



**FIGURE 7B**



*Note: It may be necessary to grind the top of the OE track bar rear mount flange due to vehicle variances.*

14. Tighten the trackbar bracket hardware as follows: 14mm factory hardware to 140 ft-lbs, 7/16" hardware to 70 ft-lbs.
15. Install the new coil springs with OEM isolators. The new coil springs will require the transfer of the plastic wrap from the factory coils to the new coils. The plastic spring wrap will eliminate any possible noise from the progressive coils. Raise axle and ensure that the isolators are centered over the factory mounts. Orientate the coils so that the lower locating tab is at the rear of the vehicle. (Fig 8)

**FIGURE 8**



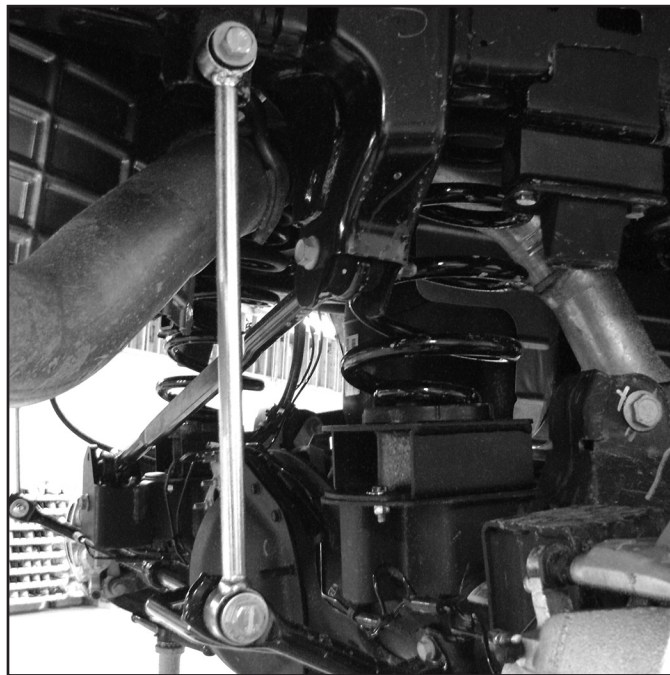
16. Drill out the small hole inside the frame behind the shock mounting hole to 3/8".
17. Install the shock eliminator bracket onto the shock using hardware in bolt pack 946 included in the shock box. Tighten 1/2" eliminator hardware to 75ft-lbs. Install the shocks into the vehicle. Tighten 3/4" eliminator hardware to 120ft-lbs (Fig 9)

**FIGURE 9**



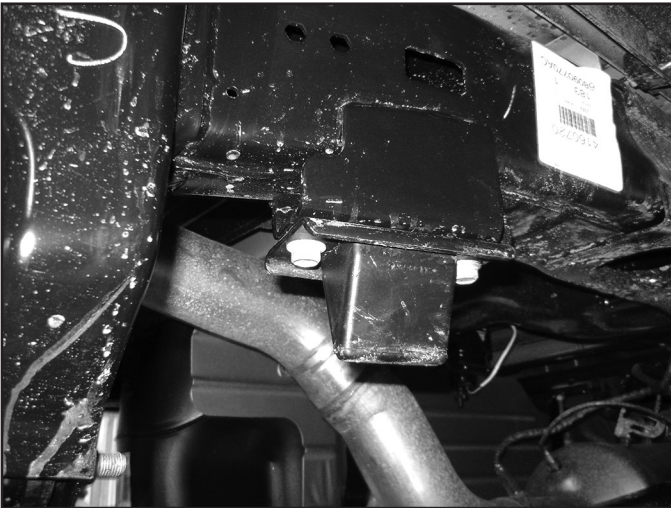
18. Grease bushings and sleeves and install into the sway bar links. Install sway bar links with the new 12mm hardware. (BP 795). Tighten to 45 ft-lbs. (Fig 10)

**FIGURE 10**



19. Remove the factory bump stops. Install bump stop drop brackets with new 10mm hardware (BP 451). Install so the small holes are towards the center of the vehicle. Tighten to 35 ft-lbs. (Fig 11, 12)

**FIGURE 11**

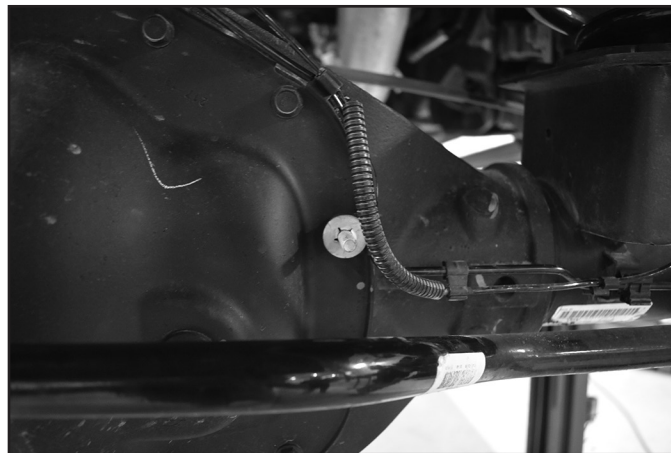


**FIGURE 12**



20. Remove the passenger side brake hardline from the passenger side of the differential cover. (Fig 13)

**FIGURE 13**



21. Attach the supplied brake line tab to the passenger side hard line with the supplied 5/16" hardware (Bolt Pack 354) and then the tab to the differential cover with the supplied washer and 8mm nut. Torque all hardware to 21 ft-lbs. (Fig 14)

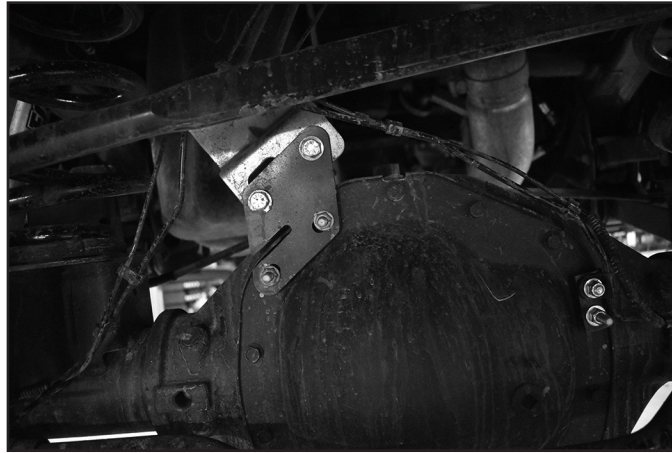
**FIGURE 14**



22. Attach the supplied rear brake line bracket to the top of the rear differential cover with factory hardware. Torque to 12 ft-lbs. Use the provided 3/8" hardware (Bolt Pack 356) and fasten the factory brake line bracket to the supplied brake line bracket. Torque hardware to 26 ft-lbs. (Fig 15)



**FIGURE 15**



**IF EQUIPPED WITH POWER HOP DAMPER SEE END OF INDEXING INSTRUCTIONS.**

23. Reinstall wheels, if installing aftermarket wheels it is recommended to remove all of the rotor retaining clips to allow the wheel to sit flush against the rotor. Tighten to factory specifications.
24. Lower vehicle to the ground.
25. Attach the trackbar to the new bracket with factory trackbar bolt and nut tab utilizing the top hole in the track bar bracket. It may be necessary to have an assistant push on one side of the truck slightly to get the holes aligned. Tighten to 154 ft-lbs.
26. Recheck all hardware for proper torque, check again after 500 miles.



**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.