Rough Country 343.20 Installation Instructions

3-Inch Lift Kit with N3 Shocks for Ram 2500/3500 4WD (2003-2013)

Part number: 343.20

trailfortress.com/rough-country-3-inch-lift-kit-343-20

Scan for fitment, price and install help

921343200

2003-13 Ram 2500/ 2003-2012 Ram 3500 3” - Diesel Only

Thank you for choosing Rough Country for all of your suspension needs.
Rough Country recommends a certified technician installs this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read all the instructions before beginning the installation. Check the kit hardware against the Kit Contents list on next page. Be sure you have all the needed parts and understand where they go. Also please review the tools needed list to be certain that you have the tools necessary to complete the installation.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend, because of roll-over possibility, that seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side roll-over may occur. Braking performance and capabilities are decreased when significantly larger/heavier tires and wheels are used. Take this into consideration while driving. Also, speedometer recalibration is necessary when larger tires are installed.

Do no add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands, lifts, with this suspension lifts voids all warranties. Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

Due to differences in manufacturing, dimension and inflated measurements, tire and wheel combinations should be test fit prior to installation. For this application we recommend a wheel not to exceed 9òin width with 4.5 ñof backspacing.. Additionally a quality tire of radial design is recommended, not exceeding a 295/60 R20 or equivalent. Please note that use of a 35òx 12.5òtire may require modification to the front valance.

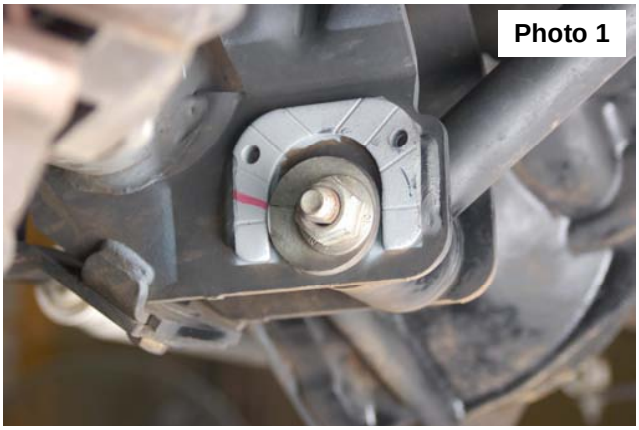
⚠NOTICE NOTICE TO DEALER AND VEHICLE OWNER

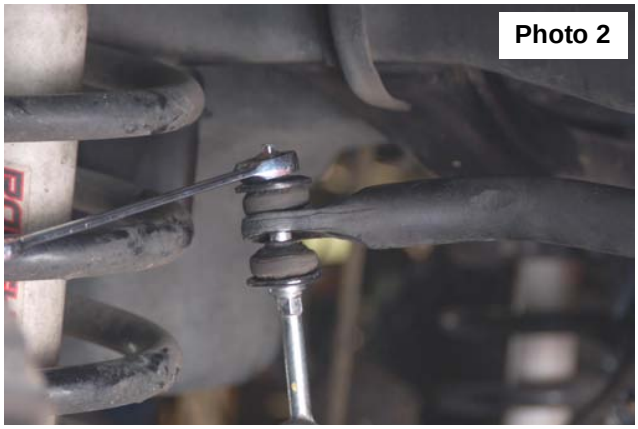
Any vehicle equipped with any Rough country product must have the ñWarning to Driverò decal installed on the sun visor or dash. The decal is to act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics. INSTALLING DEALERð It is your responsibility to install the warning decal and to forward these installation instructions on too the vehicle owner for review and to be kept in the vehicle for its service life.

We hope installing your Rough Country lift kit is a positive experience. Please note that variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. Additionally, the current trend in manufacturing of vehicles results in a frame that is highly flexible and may shift slightly on disassembly prior to installation. The use of pry bars and tapered punches for alignment is considered normal and usually does not indicate a faulty product. However, if you are uncertain about some aspect of the installation process, please feel free to call our tech support department at 800-222-7023. We do not recommend that you modify the Rough Country parts in any way as this will void any warranty expressed or implied.

FRONT SUSPENSION INSTALLATION

1. Secure and block the rear tires of the vehicle on a level concrete or asphalt surface
2. Open the hood and remove the shock nuts, retaining washers and rubber bushings from both upper shock mounts located inside the engine compartment. The shocks will be removed when the coils are removed.
3. Raise the front of the vehicle and support the frame with jack stands. Remove the front wheels and tires and set aside. Position a hydraulic jack under the front axle and raise the jack until the front suspension begins to compress
4. On both sides of the vehicle, scribe alignment marks on the adjustment cam and axle bracket at the lower link to axle attachment point for later reference. **See Photo 1**.
5. Unbolt the brake line brackets from the control arm mount on the axle using a 13mm wrench to ensure brake line free play during the suspension system installation.
6. Remove the stock front upper sway bar links from the sway bar as shown in **Photo 2** using a 15mm wrench to allow the axle to be lowered for coil spring removal and installation.

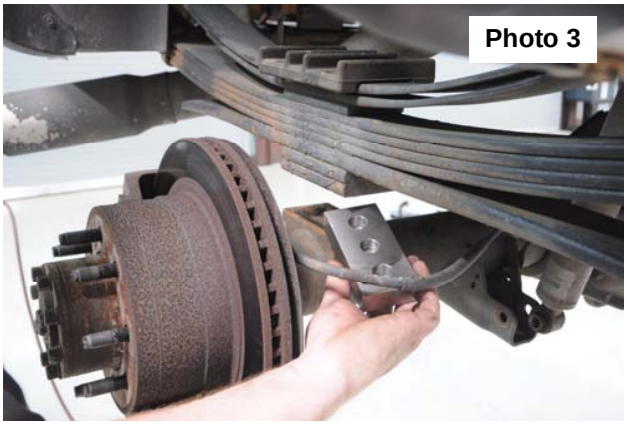




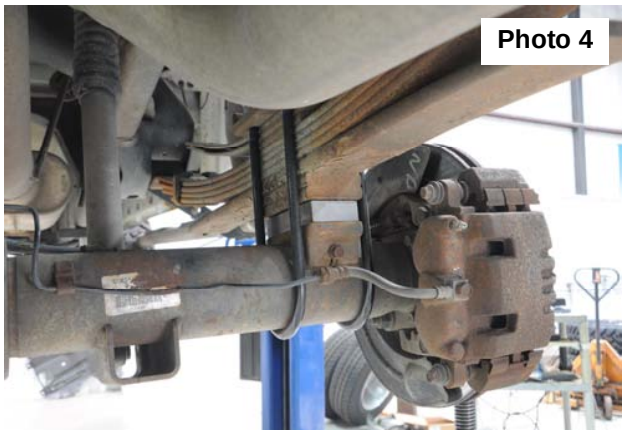
7. Lower the axle to the and remove the stock coils springs.
8. Install the new coil springs and new shocks in the same location as stock and jack up the axle to apply light pressure to the coil springs. Tighten shock hardware.
9. Adjust the cam washers on the lower control arm and retighten the factory hardware.
10. Reattach the sway bar links and tighten using a 15mm wrench.
11. Reattach the brake lines using a 13mm wrench.
12. Install wheels and tires and lower the vehicle to the ground.

Rear Installation

1. Secure and block the front tires of the vehicle on a level concrete or asphalt surface.
2. Jack up vehicle and place jack stands under the frame.
3. Support the rear axle using a jack.
4. Using a 24mm socket remove the factory ubolts and 21mm wrench to remove the factory shocks.
5. Let the axle down and place supplied 1òblock between spring and axle. **See Photo 3.**



6. Install the supplied ubolts, washers and nuts. **See Photo 4.** Do not tighten at this time.
7. Repeat process on opposite side of vehicle. Tighten all ubolt nuts using a 24mm socket.
8. Install supplied new rear shocks using factory hardware. Tighten using 21mm wrench.
9. Install wheel and tires and lower the vehicle to the ground.



POST INSTALLATION INSTRUCTIONS

Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering gear for interference and proper working order. Test brake system.
Perform steering sweep. Check to ensure brake hoses have sufficient slack and will not contact rotating, mobile, or fixed members, adjust lines/brackets to eliminate interference and maintain proper working order. Failure to perform inspections may result in component failure.
Re-torque all fasteners after 500 miles. Visually inspect components and re-torque fasteners during routine vehicle service.
Readjust headlights to proper settings.
It is the buyer's responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then every 1000 miles. Suspension components every 3000 miles.

Kit Contents



Thank you for choosing Rough Country Suspension for your Off Road needs.

By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable , State, and Local laws and regulations regarding the purchase, ownership, and use of the item. It shall be the buyers responsibility to comply with all Federal, State and Local laws governing the sales of any items listed, illustrated or sold. The buyer expressly agrees to indemnify and hold harmless Rough Country, LLC for all claims resulting directly or indirectly from the purchase, ownership, or use of the items.