Rough Country 39170 Installation Instructions

5-Inch Lift Kit with V2 Shocks for Dodge Ram 2500/3500 4WD

Part number: 39170

trailfortress.com/rough-country-5-inch-lift-kit-39170

Scan for fitment, price and install help

923913000A

ROUGH COUNTRY SUSPENSION SYSTEMS®

2003-07 2500/3500 Dodge 5” Lift Kit Drop Brackets

Thank you for choosing Rough Country Suspension for your Off Road 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. Average professional install time for this kit is 4-6 hours.

Please read all the instructions before beginning the installation. Check the kit hardware against the kit contents list on the last page. Be sure you have all the needed parts and understand where they go.

⚠WARNING **Product Use Information**

As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll-bar and cage system. Seat belts and should harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Also check the steering stabilizer. It is a good idea when adding larger than stock tires to go with a larger bore steering stabilizer or a dual unit for tires 35ò and above. Inspect the stabilizer and replace as necessary.

Braking performance and capability are decreased when significantly large/heavier tires and wheels are used. Take this into consideration while driving.

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, and/or combining body lift with 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.

⚠NOTICE This suspension system was developed for 37x12.50 tire on the stock 17ò x 9ò or 20ò wheels at 5ò of lift. On an aftermarket wheel you will need to purchase a 8ò wide wheel with minimum of 4-5/8ò of backspacing. When larger tires are installed, speedometer recalibration is necessary. Due to ride height inconsistencies from the factory you may need to slightly trim the front plastic valance for proper tire clearance.

This kit can also be used a 3500 single rear wheel truck. Use of this kit on a dual rear wheel pickup is not recommended. Block and u-bolt combinations may vary with 3500 models.

⚠NOTICE **On vehicles equipped with a two piece driveshaft & carrier bearing as on the Mega Cab, there is the potential for take off vibration, depending on the severity this can be corrected with shimming down the carrier bearing.**
Carrier bearing drop kit Part # 1110 is available from Rough Country. Also 2500/3500 trucks with factory overload springs the overload will have to be removed for the new block and u-bolt installation.

⚠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. By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable Federal, 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.

INSTALLING DEALER—It is your responsibility to install the warning decal and to forward these installation instructions to the vehicle owner for review and to be kept in the vehicle for its service life.

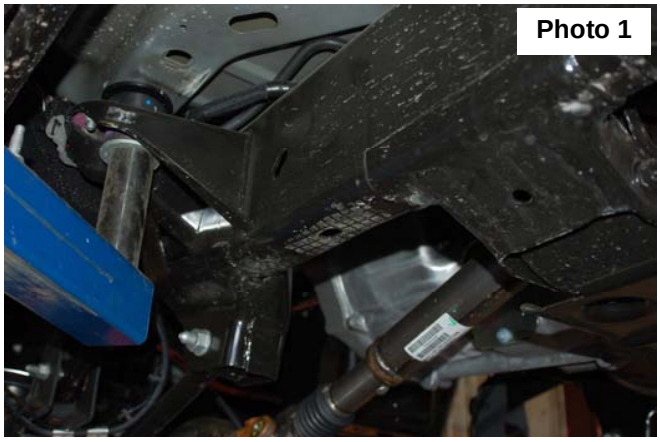
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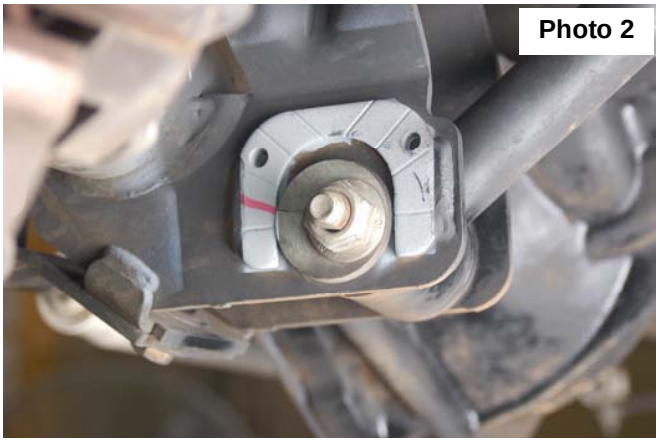
Tools and Supplies Needed to Install Kit

1. Torque Wrenches	8. Pitman Arm Puller
2. ½ò Drive Ratchet and Sockets	9. Hammers
3. Assorted Combination Wrenches	10. C-Clamps
4. Heavy Duty Jack Stands	11. Center Punch
5. Hydraulic Floor Jacks	12. Rubbing Alcohol
6. Channel Locks	13. Safety Glasses
7. Anti-Seize Compound	14. 7/16ò Drill Bit

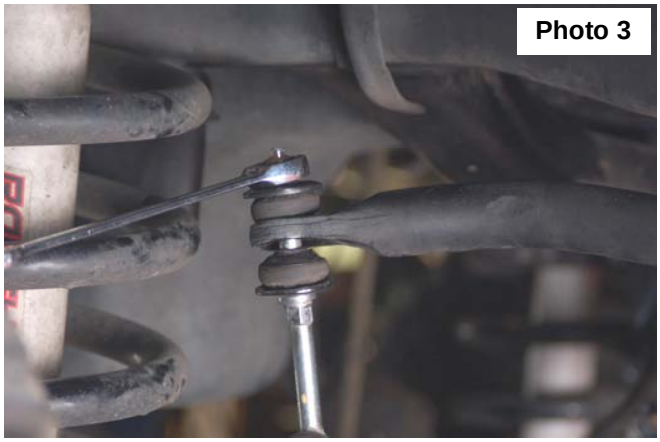
FRONT SUSPENSION INSTALLATION

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 using a 18mm wrench. The shocks will be removed when the coils are removed.
3. Remove the track bar bolt on frame side using a 24mm socket. Then raise vehicle and remove tires and wheels using 22mm socket
4. When raising vehicle using a jack or lift do not place lift arms or jack stands on frame between lower control arm and transmission cross-member. This is done so new parts can be installed. **See Photo 1**

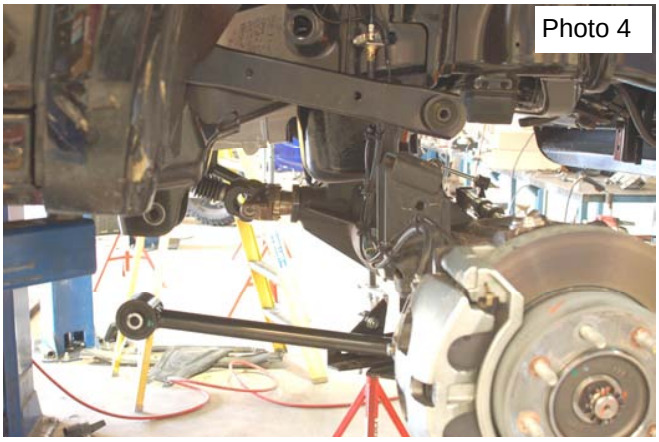

Photo 1

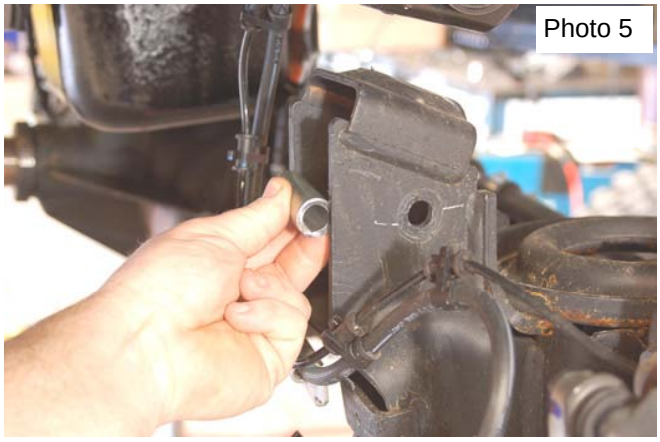

Photo 2

5. On both sides of the vehicle , scribe alignment marks on the adjustable cam bolt for later reference. **See Photo 2**
6. Remove the stock front upper sway bar links from the sway bar as shown in **Photo 3** using a 15mm wrench. Remove the lower link from the axle using a 21mm wrench.
7. Using a 13mm socket remove brake line bracket from axle on driver and passenger side. Disconnect drag link from pitman arm using a 21mm wrench retaining factory hardware. Use a hammer to strike the end of the pitman arm breaking loose the taper. Next remove the stock nut and lock washer holding on the pitman arm. Using a pitman arm puller carefully remove the stock pitman arm.
8. Using a 21mm socket remove the lower shock bolts.
9. Raise vehicle up and remove coil springs and shocks.


Photo 3

10. On passenger side remove upper control arm bolt on axle side using a 21mm socket and wrench. Remove bolt from lower control arm on frame side using a 21m wrench and a 1 1/16 socket. Placing a jack under passenger side on axle slowly move axle forward until upper control arm can be move above axle **See Photo 4**
11. Install the supplied sleeve then install upper control arm bracket using the supplied 9/16 x 5òlong bolts, washers, and nuts. Make sure new bracket and old upper control arm mount are straight with one another then tighten bolt using a 21mm and a 22mm wrench. **See Photo 5, 6, 7.** On some models grinding is required on the factory upper control bracket edge. **See Photo 6**


Photo 4


Photo 5

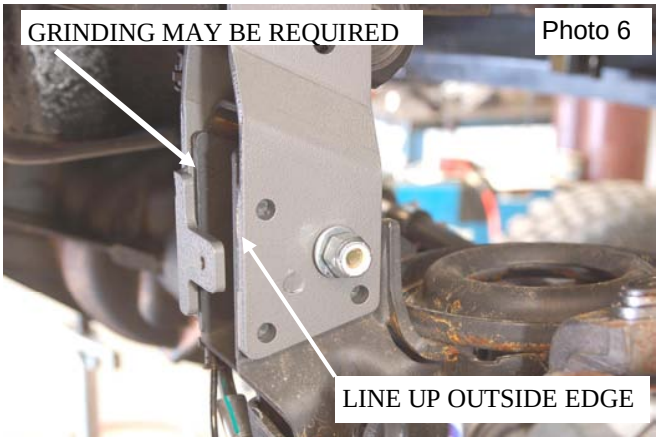
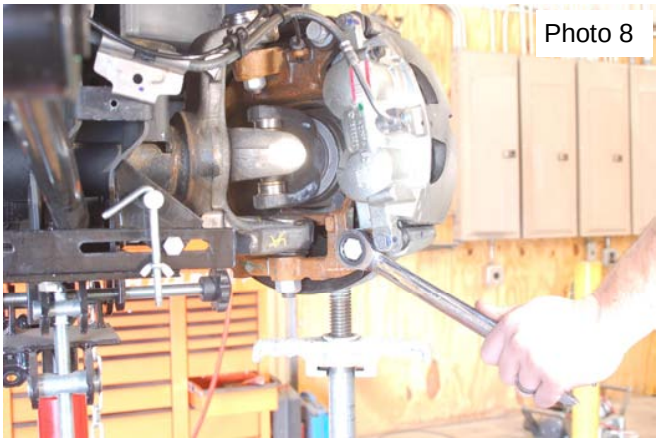
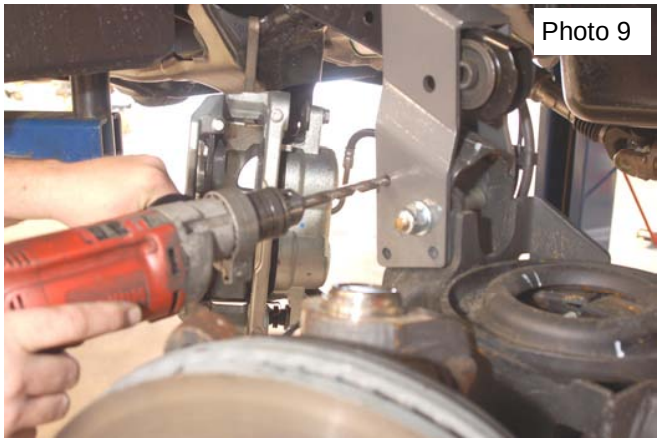


Photo 6


Photo 7

12. Using a 24mm socket remove brake caliper bolts and hang caliper out of the way. **See Photo 8** Using control arm drop bracket as a guide drill all six holes using a 7/16 drill bit. Install the 7/16 x 1.5òlong bolts, washers, and nuts into drilled holes. Tighten bolts using 5/8 and a 11/16 wrench. **See Photo 9**


Photo 8


Photo 9

13. Reinstall the brake caliper with stock hardware using a 24mm wrench to tighten

14. Install the supplied flag nut into slotted hole behind body mount. **See Photo 10** Install lower control arm drop bracket using supplied 5/8 x 4.5òlong bolt, nut, and washer. Use the 1/2 x 1.5òbolt, washer, and nut for rear of drop mount. **See Photo 11** Install lower and upper control arms into pockets using stock hardware. Tighten 1/2 bolt using a 19mm socket and wrench, and tighten the 5/8 bolt using 24mm wrench and socket. Do not tighten lower and upper control arm pivot bolts at this time.





15. Install Rough Country coil spring and shock absorber part #658732 at this time using stock hardware for lower and supplied bushings, cups washers, and nut for the upper. Use a 14mm wrench for upper shock nut and a 21 mm socket for lower shock bolt.
16. The use of a coil spring compressor may be required for installation
17. Lower the axle until the spring can be seated in the mount. Check to be sure the wrap on the coil spring in relation to the lower mount properly seats the spring by turning the coil spring until it seats.
18. Repeat steps 8-17 on the driver side
19. Install the new pitman arm into the stock sector shaft using stock hardware and torque to 185 ft/lbs.
20. Place the track bar bracket on the factory upper track bar mount. Insert the supplied ¾òx 1 3/8òlong sleeve inside the factory mount and line it up with the mounting hole. **See Photo 12.** Install the supplied 16mm x 80mm bolt and nut through the bracket, sleeve and factory mount. Tighten slightly.
22. Install the 12mm x 3òbolt through the bracket and slotted existing hole in the frame cross member. **See Photo 13.** The bolt should be installed from the bottom. Install the supplied square washer and lock nut. Tighten track bar hardware. The track rod will be installed into the new mount after the vehicle is on the ground.





23. Reinstall the drag link onto the pitman arm using stock hardware.

24. Install the supplied sway bar link bracket as shown in **Photo 14** with the supplied 10mm x 55mm hardware.
25. Install the supplied bushings / sleeves in the new sway bar links and install in the new sway bar bracket as shown **Photo 15**
27. Install the sway bar link on the factory axle location with supplied 12mm x 65mm hardware. **See Photo 16.** Tighten hardware.


Photo 14

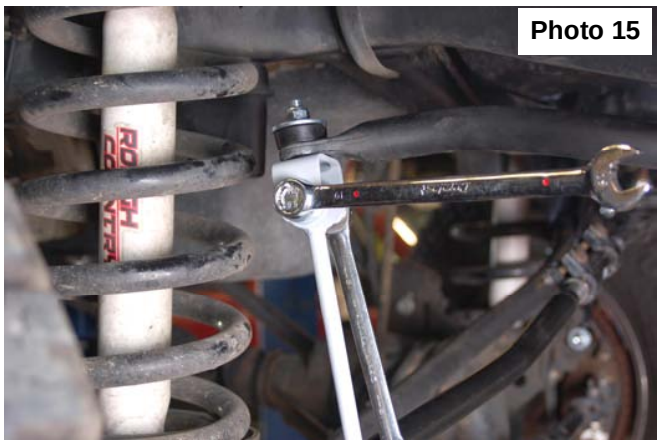

Photo 15

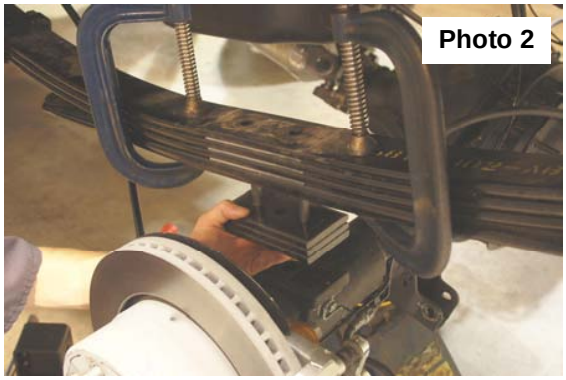

Photo 16

24. Install the tires / wheels. Lower vehicle to the ground.
25. Install the track rod in the new bracket using the supplied 16mm 80mm Bolt and lock nut.
26. Using a 13mm socket install brake line bracket to axle on driver and passenger side
27. Torque the fasteners to the following specifications:
    Lower suspension arm cam nuté é é é é 110 ft/lbs
    Lower suspension arm rear nuté é é é é .88 ft/lbs
    Upper suspension arm axle nuté é é é é .89 ft/lbs
    Upper suspension arm frame nuté é é é ..62 ft/lbs
    Track Rod Bolté é é é é é é é é é é ..110 ft/lb

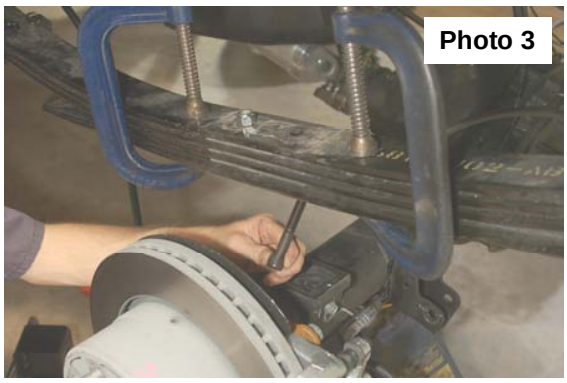
REAR BLOCK INSTALLATION

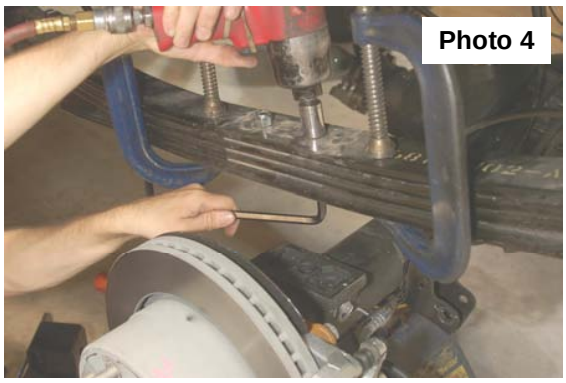
1. Secure and block the front tires of the vehicle on a level concrete or asphalt surface.
2. Raise the rear of the vehicle and support the frame with jack stands. Remove the rear wheels and tires and set aside.
3. Place a floor jack under the center of the axle, and remove the stock u-bolts. Also remove the stock shocks.
4. Lower the axle down away from the springs, to allow clearance for the block. Make sure you do not overextend the brake lines.
5. Using C clamps, clamp on each side of the leaf pack and remove the two spring bolts using an 18mm socket as shown in **Photo 1**.
6. Remove the factory mini spring pack and bolts. **See Photo 2.**



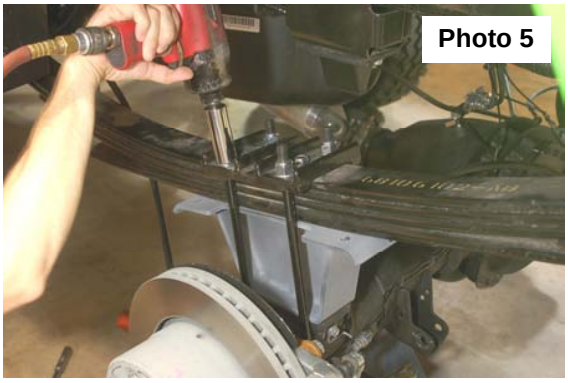


7. Install supplied 1/2òx 3òAllen head bolts and lock nuts. **See Photo 3.**
8. Tighten using a 3/4òsocket and 3/8òAllen. **See Photo 4.**





9. Remove C clamps and install supplied anti-wrap block and ubolts. Tighten using a 13/16òsocket. Torque to 90 ft-lbs. **Larger end of the block will go toward the rear of the truck. See Photo 5.**
10. Install supplied anti-wrap ubolts, washers, and nuts as shown in **Photo 6**. Tighten using a 5/8òsocket. Torque to 45 ft-lbs.





11. Assemble the new shock absorbers part # 658694 with bushings/sleeves and install on the vehicle.
12. Install the wheels / tires. Jack up the vehicle and remove the jack stands.
13. Lower the vehicle to the floor.

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 buyerôs 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:	Poly Bags:	
2-Coil Spring 1-Front Track Bar Bracket 2-Front Sway Bar Brackets 1-Pitman Arm (6616) 2008 (6615) 2009-10 2-Rear Lift Block 4-Rear U-bolt 2-Front Shock Absorber (658732) 2-Rear Shock Absorber (658704) 2-Upper Control Arm Drop Bracket 2-Lower Control Arms Drop Bracket	1394Bag2: 1-9/16òLocknut 1-9/16òX 3 1/2ò mm Bolt 5-12mm Flange Locknut 1-12mm X 80mm Bolt 4-12mm X 65mm bolt 4-12mm Sway Bar Bushing Washer 1-Square Track Rod Washer 4-Sway Bar Link Sleeve 2-Sway Bar Reloc. Stud Bushing 2-Sway Bar Reloc. Cup Washer 2-10mm X 55mm Bolt 2-10mm Locknut 2-10mm Sway Bar Bracket Washer	1342Bag1 2-14mm x .875 x 2.35 Sleeves 2-9/16òx 5ò 4-9/16òNylocks 2-9/16òWashers 12-7/16òx 1.5òBolts 12-7/16òNylocks 24-7/16òWashers 1342Bag2 2-5/8òx 4.5òBolts 2-5/8òNylocks 4-5/8òWashers 2-1/2òx 1.5òBolts 2-1/2òWashers 1394Bag5: Shock Bag 6-Shock Sleeves 4-Stem Bushings 4-Bushings retainers 2-Stem Nuts



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