



## 02-07 2500 Dodge 5" Lift Kit

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.

### 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 35" 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 not 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.

The Dodge 2500 & 3500 comes from the factory with the front end sitting 2" to 2.5" lower than the rear end. This suspension package has the rear block and u-bolts packaged separately because the Dodge can be equipped with 2 different rear axles. We also recognize people desire different looks relative the height from front to rear and offer a 3" block as well as a 4" block and u-bolt combination. If you have a 3.5" axle tube and ordered a 3" block you need rear block and u-bolt part number 6563, if you have a 3.5" axle tube and ordered a 4" block you need rear block and u-bolt part number 6569, if you have a 4" axle tube and ordered a 3" block you need block and u-bolt part number 6570, and if you have a 4" axle tube and ordered a 4" block you need block and u-bolt part number 6571. Please verify that you have the correct block and u-bolt part numbers before starting installation.

This suspension system was developed for 37x12.50 tire on the stock 17" x 9" or 20" wheels at 5" of lift. On an after-market wheel you will need to purchase a 8" wide wheel with minimum of 4-5/8" 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.

**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.**

### Notice to Dealer and Vehicle Owner

Any vehicle equipped with any Rough country product must have the "Warning to Driver" 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 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.**

### Tools and Supplies Needed to Install Kit

1. Torque Wrenches	8. Pitman Arm Puller
2. ½" 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. Non- Water Soluble Grease

### 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. Remove the lower link from the axle using a 21mm wrench. **See Photo 3.**

Photo 1

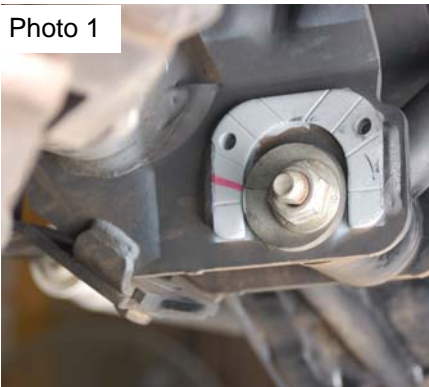


Photo 2

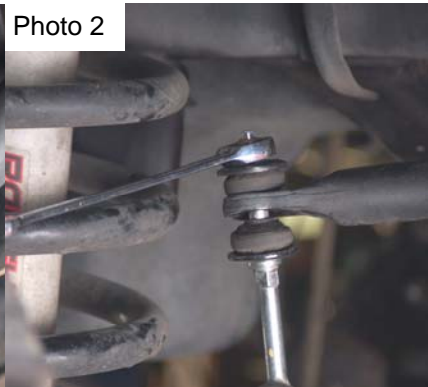


Photo 3



7. Remove the track bar from its upper mounting point on the frame using a 24mm wrench and rest it on the axle. It may be helpful to loosen the lower track bar bolt on the axle. Retain hardware for reuse.
8. Remove the cotter pin, and castle nut from the drag link where it connects to the pitman arm. A pitman arm tool may be needed to separate the drag link from the pitman arm. Remove the stock nut, and lock washer from the sector shaft on the steering box. Save hardware for later installation. Using a pitman arm puller carefully remove the stock pitman arm.
9. Remove the lower suspension arm nut, cam, and cam bolt from the axle. Remove the nut and bolt from the frame attachment point and remove the lower suspension arm from the vehicle. Repeat this step for the opposite side of the vehicle. Retain hardware for reuse.
10. Attach the grease fittings provided with the new Rough Country lower suspension arms (longer arm) using a 5/16" wrench. Using the lithium-based grease pack provided in kit, grease the inside of the lower suspension arm bushing tubes and the bushings themselves. Insert the two bushing halves into the lower suspension arm and press in the lower 16mm ID sleeve provided. The use of a vice or C-clamp may facilitate the insertion of the sleeves.
11. Install the new Rough Country lower suspension arms in place of the stock lower suspension arms. **See Photo 4.** Slight prying of the mounts apart may be necessary for arm installation. Install the original rear suspension arm bolt and slightly tighten the nut. Install the original front suspension arm bolt and slightly tighten the nut. Refer to the reference mark on the cam bolt and the axle when installing the cam bolt. Repeat on the other side of the vehicle.



Photo 4



Photo 5

Rough Country Fixed arms shown. Adjustable arms available.

12. Remove the upper suspension arm nut and bolt at the axle. Remove the nut and bolt at the frame and remove the upper suspension arm. Repeat this step for the opposite side of the vehicle. **Note: If your truck has a diesel engine it may be necessary to unbolt the exhaust from the turbo to allow for clearance to remove the upper front bolt.** Retain hardware for reuse.
13. Attach the grease fittings provided to the new Rough Country upper suspension arms using a **5/16"** wrench. Using a lithium based grease, provided in the kit, grease the inside of the upper suspension arm bushing tubes and the bushings themselves. Insert the two bushing halves into the upper suspension arm and press in the 14mm ID sleeve provided. The use of a vice or C-clamp may facilitate the insertion of the sleeve.
14. Install the upper suspension arms in place of the stock upper suspension arms. **See Photo 5.** Slight prying of the mounts may be necessary for arm installation. Install the original front and rear suspension arm bolt and slightly tighten the nuts. **Note: Raising the axle to ride height and rotating the lower arm cam adjusters will facilitate insertion of the upper suspension arms.** Repeat steps for the opposite side of the vehicle.
15. Remove the lower shock bolts on the axle, and save for later installation. The shock absorbers will be removed from the vehicle at the same time the coils are removed from the vehicle.
16. Carefully lower the jack until the coil springs are free (the upper suspension arm will be contacting the axle bracket) Remove the coil springs and shocks from the vehicle. Note: use of a coil spring compressor may be required for spring removal.
17. Assemble the hydraulic shock absorbers Part #650333 or gas shock Part #650388 with the supplied poly bushings and install the shock in the upper mount.
18. Install the Rough Country coil springs in the stock mounts by sliding the shock through the middle of the coil. The use of a coil spring compressor will ease installation.
19. 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.
20. If a coil spring compressor was used, remove it at this time.
21. Place the track bar bracket on the factory upper track bar mount. Insert the supplied  $\frac{3}{4}$ " x 1  $\frac{3}{8}$ " long sleeve inside the factory mount and line it up with the mounting hole. **See Photo 7.** Install the supplied  $\frac{9}{16}$ " x 3  $\frac{1}{2}$ " bolt and nut through the bracket, sleeve and factory mount. Tighten slightly.



Photo 7

22. Install the 12mm x 3" bolt through the bracket and slotted existing hole in the frame cross member. **See Photo 7.** 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. Install the new pitman arm into the stock location on the sector shaft, using stock hardware and torque nut to 185 ft. lbs. **See Photo 8.**

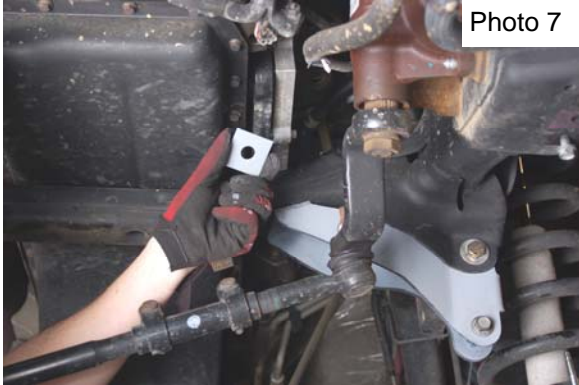


Photo 7



Photo 8

24. Reinstall the drag link onto the pitman arm using stock hardware.
25. Install the supplied sway bar link bracket as shown in **Photo 9** with the supplied 10mm x 55mm hardware.
26. Install the supplied bushings / sleeves in the new sway bar links and install in the new sway bar bracket as shown **Photo 10**



Photo 9



Photo 10

27. Install the sway bar link on the factory axle location with supplied 12mm x 65mm hardware. **See Photo 11.** Tighten hardware.
28. Raise the front axle with a floor jack to slightly compress the coil springs.
29. Install the lower end of the shocks in the stock location and tighten using stock hardware.
30. Lower vehicle to the ground. Install the tires / wheels.
31. Torque the fasteners to the following specifications:
 

Lower suspension arm cam nut.....	110 ft/lbs
Lower suspension arm rear nut.....	88 ft/lbs
Upper suspension arm axle nut.....	89 ft/lbs
Upper suspension arm frame nut.....	62 ft/lbs



Photo 11

### **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. Install the block between the leaf spring and the spring seat. Be sure that the center pin is seated in the spring seat, and the tallest end of the block is facing the rear of the truck. Repeat on opposite side.
5. Jack up the axle to compress the blocks onto the spring. Make sure the center pins are aligned.
6. Keeping the floor jack underneath the axle, install the u-bolts and torque to 90 ft.lbs.
7. Assemble the new hydraulic shock absorbers part # 650341 , or gas shock part # 650377 and install on the vehicle.
8. Install the wheels / tires. Jack up the vehicle and remove the jack stands.
9. 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.

On vehicles equipped with a carrier bearing there is the potential for take off shutter, depending on the severity this can be corrected with shimming down the carrier bearing up to 1/2inch. The amount of shimming required depends on the vehicle and the weight configuration.

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:****Poly Bags:**

2-Coil Spring  
 1-Front Track Bar Bracket  
 2-Front Sway Bar Links  
 1-Pitman Arm (6616)  
 2-Rear Lift Block  
 4-Rear U-bolt  
 2-Front Shock Absorber  
 2-Rear Shock Absorber  
 2-Upr Control Arm  
 2-Lwr Control Arm

**1394Bag1:**

4-16mm Lower Control Arm Sleeve  
 4-14mm upper control arm sleeve  
 8-Grease Fitting  
 8-Upper Control Arm Bushing  
 8-Lower Control Arm Bushing

**1394Bag2:**

1-9/16" Locknut  
 1-9/16" X 3 1/2"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. Bushing Cup Washer  
 2-10mm X 55mm Bolt  
 2-10mm Locknut  
 2-10mm Sway Bar Bracket Washer



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