Rough Country 382.23 Installation Instructions

5-Inch Lift Kit with N3 Shocks for 1994–1999 Dodge Ram 2500 4WD

Part number: 382.23

trailfortress.com/rough-country-5-inch-lift-kit-382-23

Scan for fitment, price and install help

921353300A

ROUGH COUNTRY SUSPENSION SYSTEMS®

1353BAG2

94-02 2500/3500 Dodge 5” 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.

⚠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 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 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 35x12.50 tire on the stock 17” x 9” or 20” wheels at 5” of lift. On an aftermarket 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.

⚠NOTICE **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. 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.

trailfortress.com/rough-country-5-inch-lift-kit-382-23

Tools and Supplies Needed to Install Kit

1. Torque Wrench	8. Pitman Arm Puller
2. ½" Drive Ratchet and Sockets	9. Hammers
3. Assorted Combination Wrenches	10. 17/32" Drill Bit
4. Heavy Duty Jack Stands	11. 9/16" Drill Bit
5. Hydraulic Floor Jacks	12. Die Grinder with Cut Off Wheel
6. Center Punch	13. Safety Glasses
7. Grinder	14. WD-40

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.

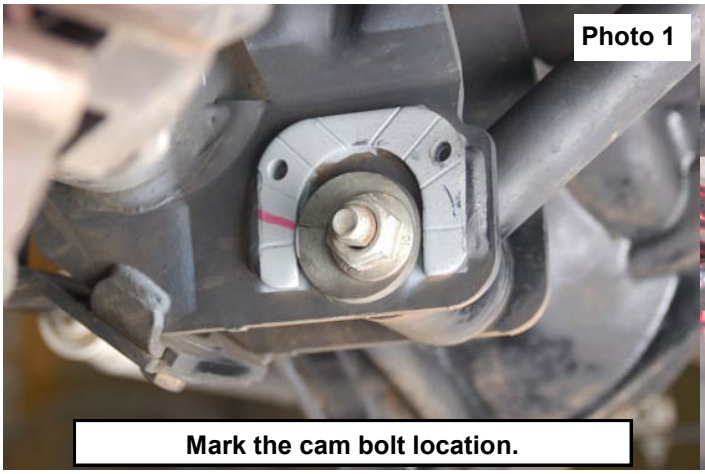


Photo 1

Mark the cam bolt location.

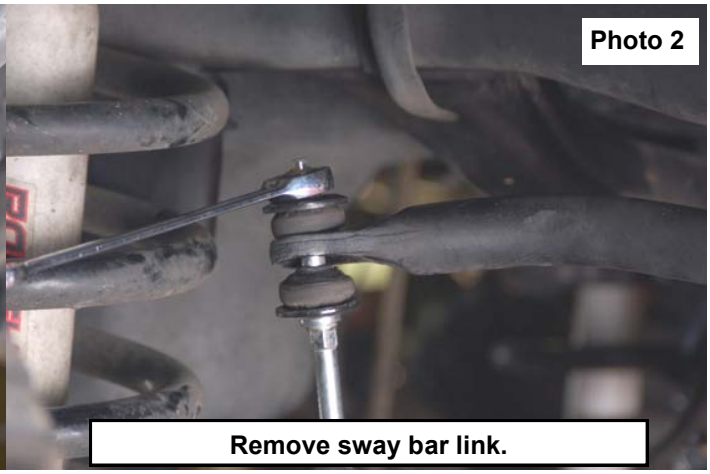


Photo 2

Remove sway bar link.

7. Remove the lower link from the axle using a 21mm wrench. **See Photo 3.**
8. 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.
9. 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.

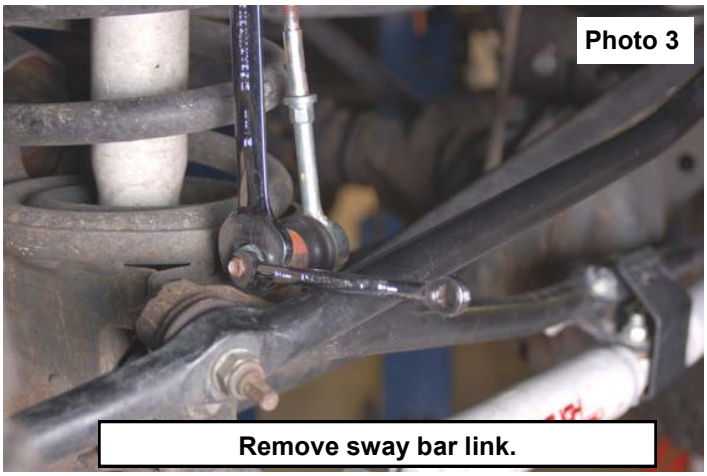


Photo 3

Remove sway bar link.

10. The new control arms will be installed one side at a time on the vehicle. This is done to make it easier to remove the hardware from the arms and to not cause bind in the front suspension. Remove the lower suspension arm nut, cam, and cam bolt from the axle using a 21mm and a 24mm socket and wrench. Remove the nut and bolt from the frame attachment point and remove the lower suspension arm from the vehicle. **See Photo 4.** Retain hardware for reuse.
11. Using a 21mm socket remove the upper control arm from the axle and frame. Note—the passenger side upper control arm frame bolt will have to be cut or remove the exhaust before the bolt can be removed.
12. Install the rear control arm drop bracket into the original control arm mount with supplied 9/16" x 4.5" bolt, washers, and nut. **See Photo 5.** Do not tighten

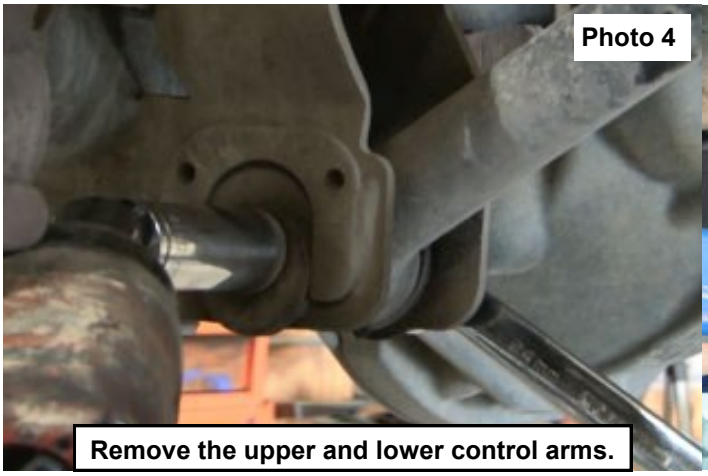


Photo 4

Remove the upper and lower control arms.



Photo 5

Install rear control arm drop bracket.

13. Locate the long flag nut and access hole in the frame. **See Photo 6.**
14. Insert the flag nut into the access hole. **See Photo 7.**

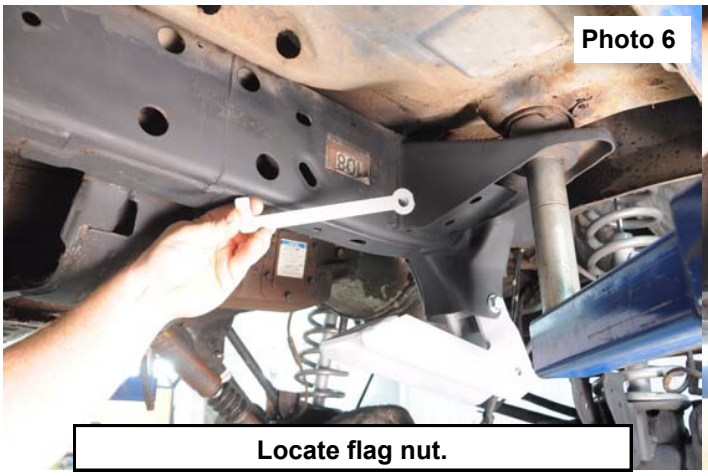


Photo 6

Locate flag nut.

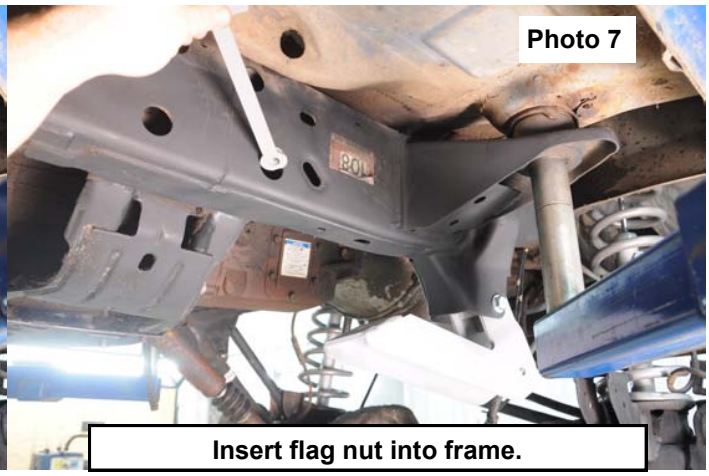


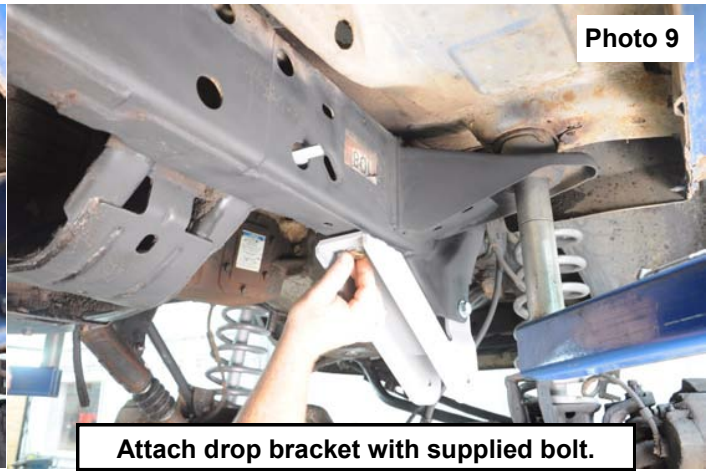
Photo 7

Insert flag nut into frame.

15. Align the flag nut with the hole in the bottom of the frame. **See Photo 8**.
16. Swing the control arm drop bracket up to the frame. Using the supplied 1/2” x 1.5” bolt and washer, attach the drop bracket to the frame with the flag nut. **See Photo 9.**



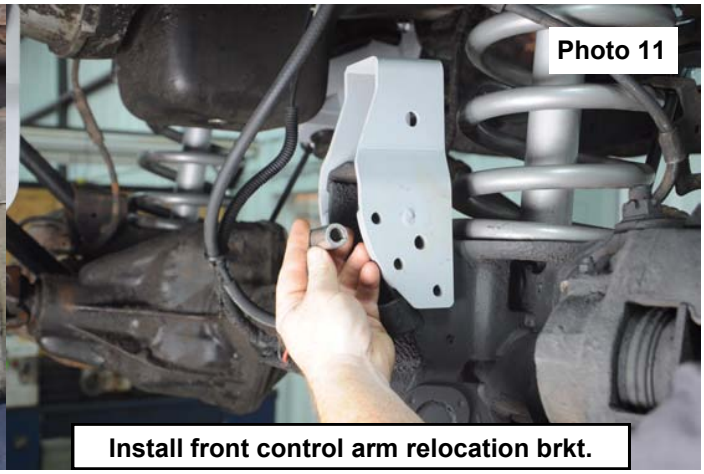
Align flag nut hole in frame and bracket.



Attach drop bracket with supplied bolt.

17. Tighten the 1/2” bolt using a 3/4” socket and the 9/16” bolt using 13/16” and 7/8” wrenches. **See Photo 10.**
18. Place the front control arm relocation bracket over the factory control arm mount. **See Photo 11.**





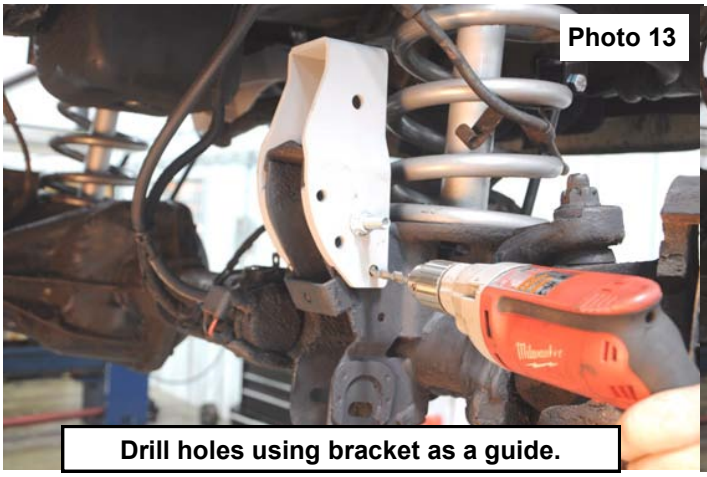
Install front control arm relocation brkt.

19. Install the supplied 12mm sleeve into the stock control arm pocket. Using the supplied 12mm x 120mm bolt, washers, and nut secure the bracket to the control arm pocket. **See Photo 12. Make sure the bracket is straight with the backside of the control arm pocket.**

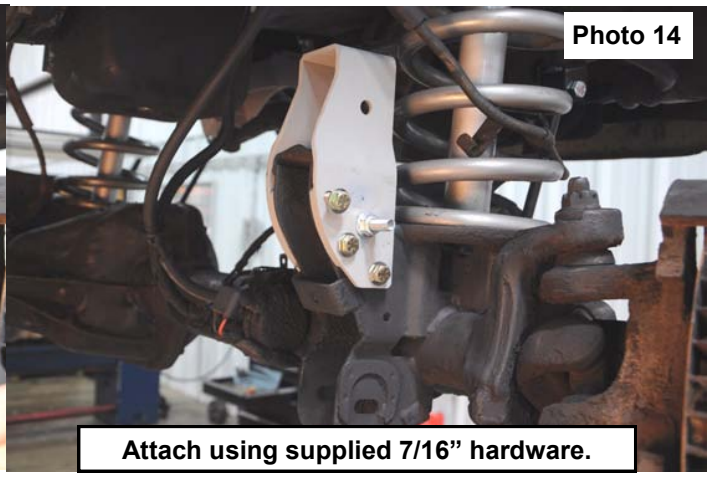


Use supplied sleeve and hardware.

20. Using a 3/8 Allen, remove the brake caliper. Using the control arm bracket as a guide, drill the (3) holes using a 15/32" drill. **See Photo 13.**
21. Using the supplied 7/16" x 1.5" bolts, washers, and nuts, tighten using 5/8" and 11/16" wrenches. **See Photo 14.**

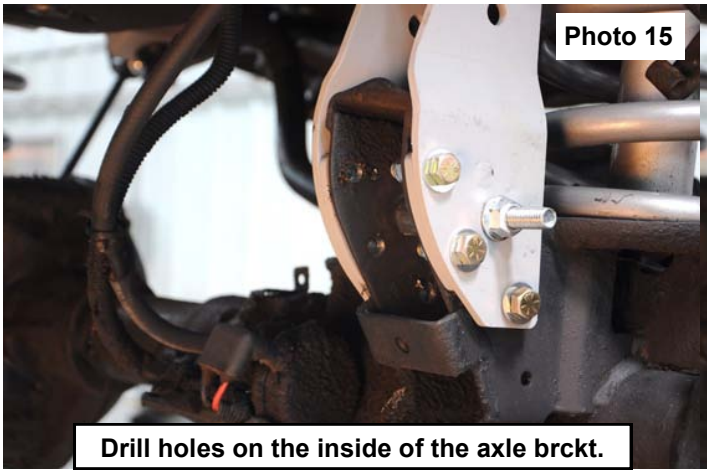


Drill holes using bracket as a guide.

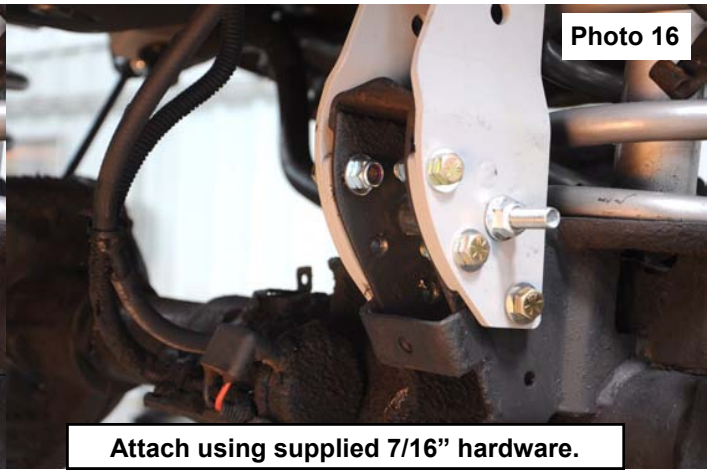


Attach using supplied 7/16" hardware.

22. Using the 15/32" drill, drill the (3) holes on the inside of the control arm pocket. **See Photo 15.**
23. Finish attaching the control arm bracket, with the supplied 7/16" x 1.5" bolts, washers, and nuts. Tighten using 5/8" and 11/16" wrenches. **See Photo 16.**

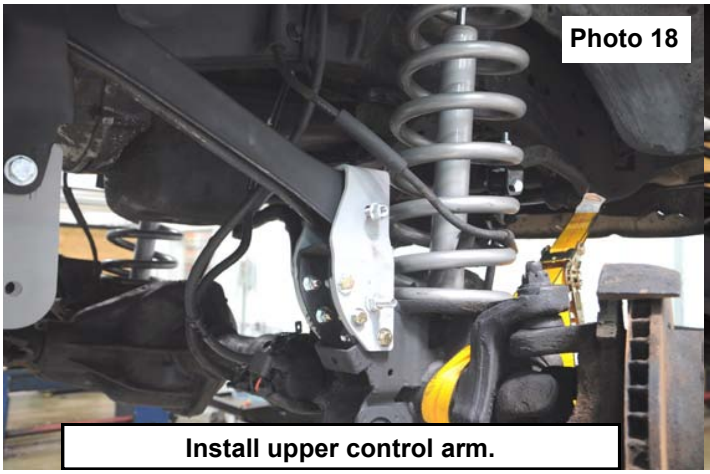


Drill holes on the inside of the axle brckt.

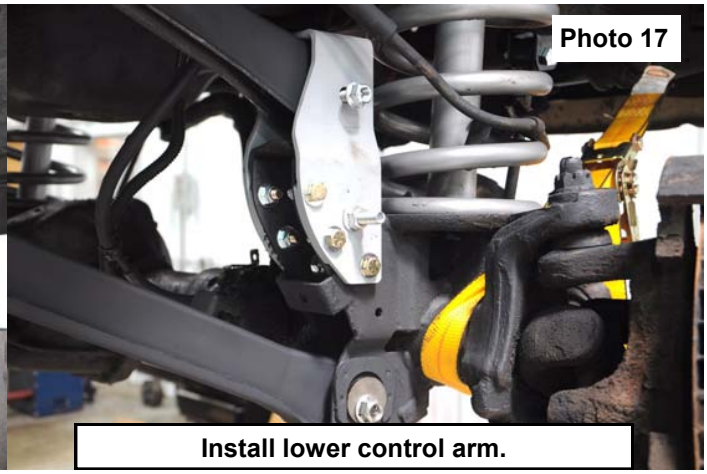


Attach using supplied 7/16" hardware.

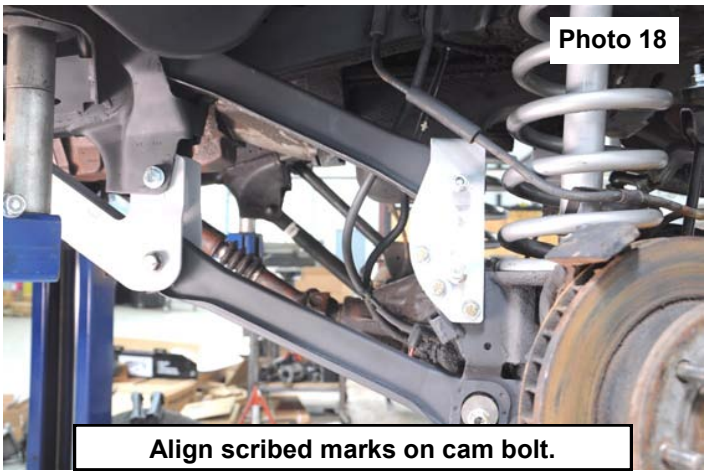
24. Install the stock upper control arm in the new control arm relocation bracket and the stock control arm pocket on the frame. Use the factory hardware. **See Photo 17.**
25. Install the stock lower control arm in the drop bracket on the frame and the factory location on the axle. Align scribed marks on the cam. Tighten factory hardware. **See Photo 17**



Install upper control arm.



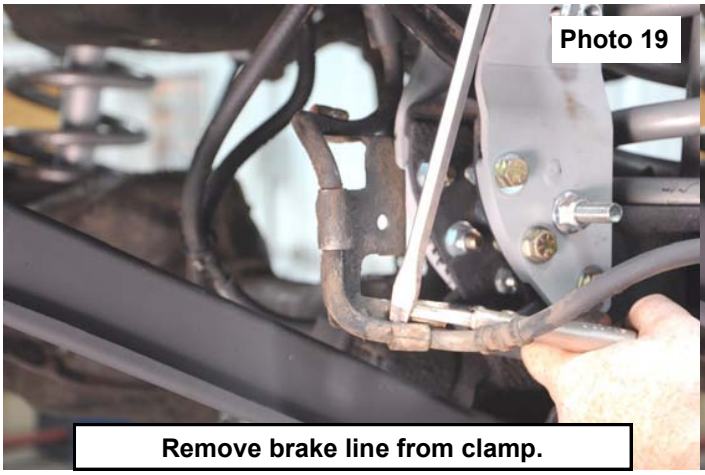
Install lower control arm.

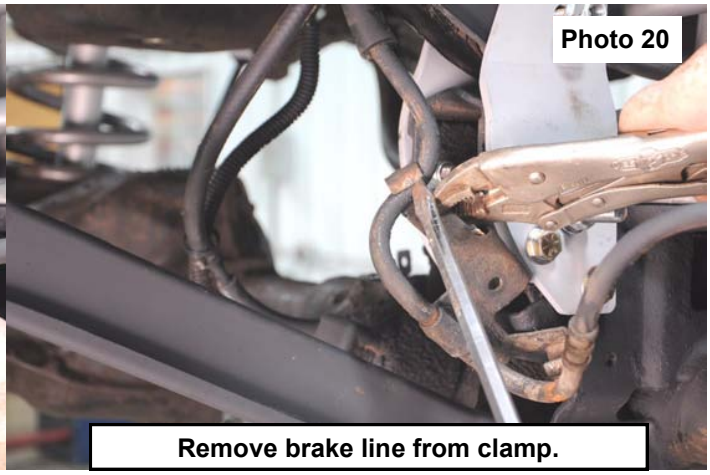


Align scribed marks on cam bolt.

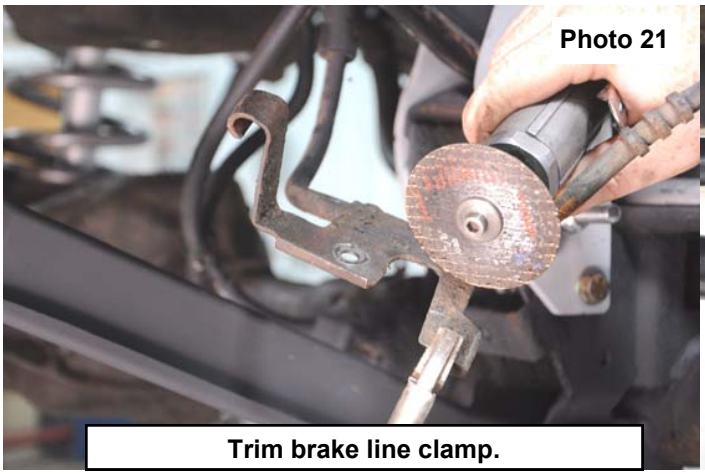
26. Install brake caliper using 3/8” Allen.
27. Remove the lower shock bolts on the axle, and save for later installation. The shock absorbers will be removed from the vehicle at the same time the coils are removed from the vehicle.
28. Carefully lower the jack until the coil springs are free (the upper 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.
29. Assemble shock absorbers Part #660757 and install the shock in the upper mount using the supplied hardware and using the factory hardware in the lower mount.
30. 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 be required for installation
31. 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.
32. Remove the coil spring compressor at this time.
33. Install the new pitman arm into the stock location on the sector shaft, using stock hardware and torque nut to 185 ft. lbs.
34. Reinstall the drag link onto the pitman arm using stock hardware.
35. Raise the front axle with a floor jack to slightly compress the coil springs.
36. Install the lower end of the shocks in the stock location and tighten using stock hardware.

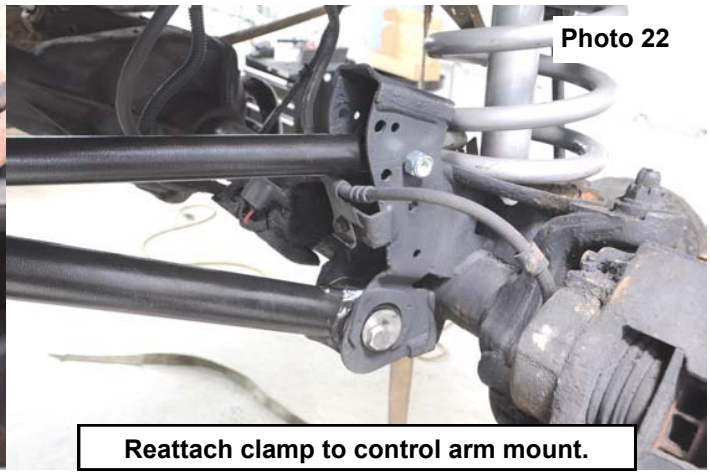
37. Using a 13mm wrench, remove the brake line bracket from the control arm pocket.
38. Using a flat screwdriver and vise grips, pry the bracket open and remove the brake line. **See Photos 19 & 20.**


Photo 19
Remove brake line from clamp.


Photo 20
Remove brake line from clamp.

39. Using a cutoff tool, cut the brake line bracket as shown in **Photo 21.**
40. Attach the upper control arm to the axle using the supplied 9/16" x 3.75" bolts, washers, and nuts.
41. Attach the lower control arm to the axle using the stock cam bolts. Align marks from step 4.
42. Attach the brake line bracket to the control arm mount to using the stock hardware. **See Photo 22.** Tighten using a 13mm wrench.


Photo 21
Trim brake line clamp.

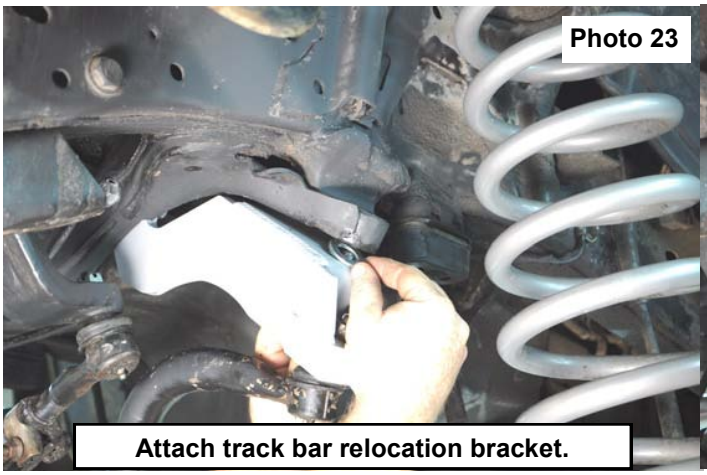

Photo 22
Reattach clamp to control arm mount.

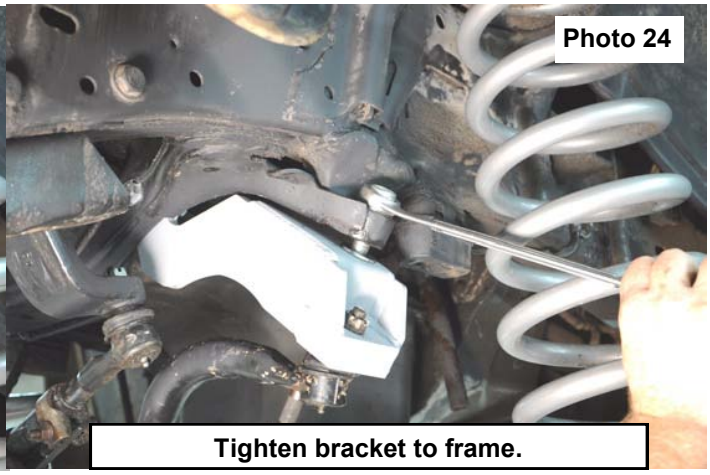
43. Repeat steps 4-42 on opposite side of the truck.

44. Install the track bar onto the new track bar relocation bracket.
45. Install the new track bar relocation bracket using the supplied 18mm x 80mm bolt, nut, and washers. **See Photo 23.**

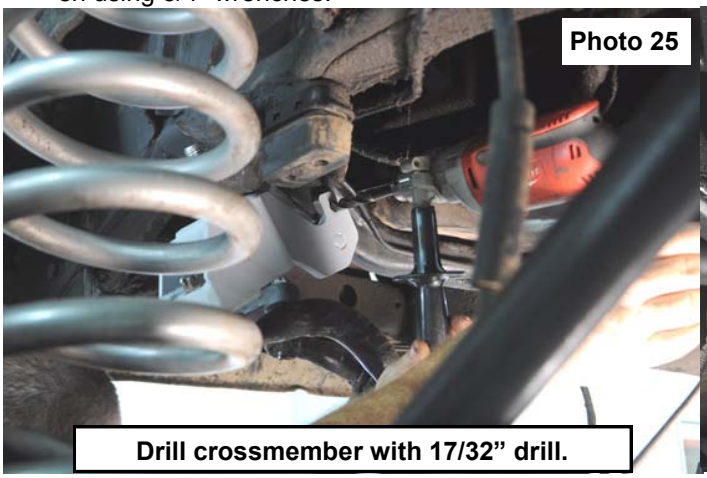
NOTICE **Install (1) washer between the new bracket and the stock frame mount.**

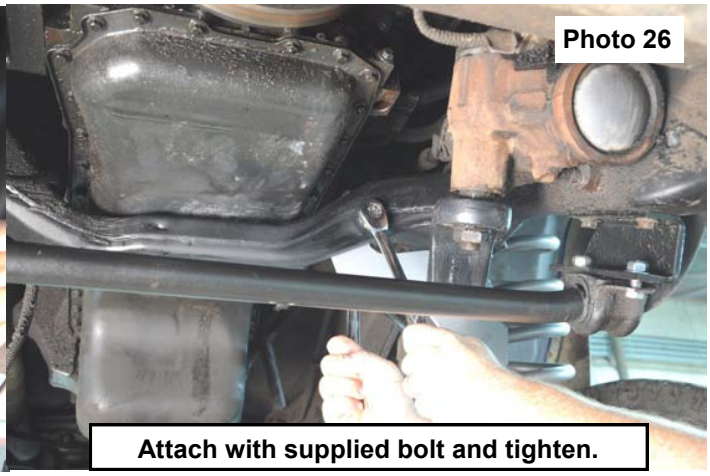
46. Tighten using 27mm wrenches. **See Photo 24.**



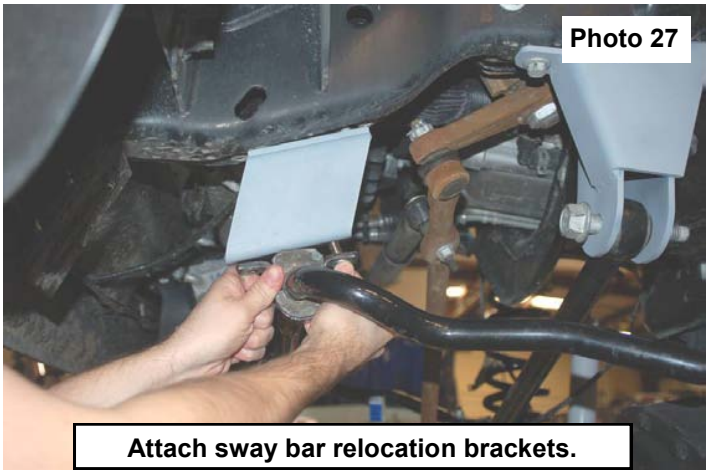


47. Using the new bracket as a guide, drill through the factory crossmember with a 17/32” drill. **See Photo 25.**
48. Attach the bracket to the crossmember using the supplied 1/2” x 2.5” bolt, washers, and nut. **See Photo 26.** Tighten using 3/4” wrenches.





49. Remove the sway bar from the frame using a 9/16” wrench.
50. Install the sway bar drop brackets using the factory hardware to secure to the frame.
51. Using the supplied 7/16” x 1.25” bolts, washers, and nuts, attach the sway bar to the drop brackets. **See Photo 27.**



52. Install the supplied axle breather tube extension. **See Photo 28.**
53. Install the supplied 4x4 vacuum hose extensions. **See Photo 29.**

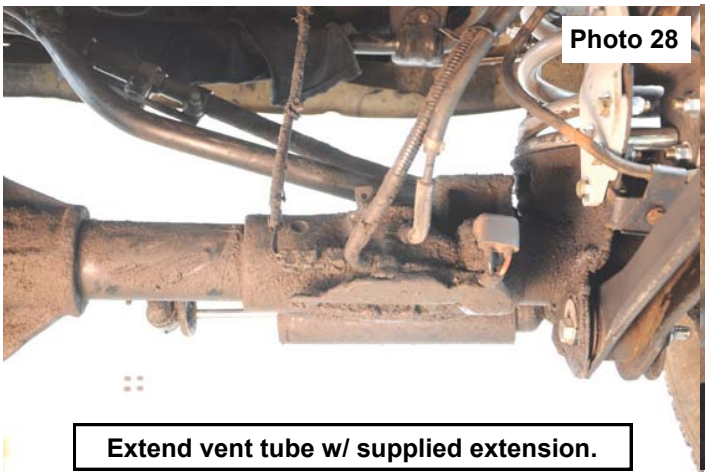


Photo 28

Extend vent tube w/ supplied extension.

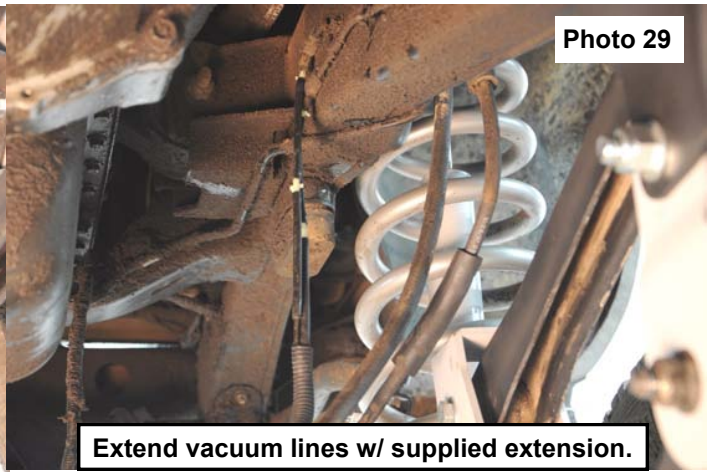


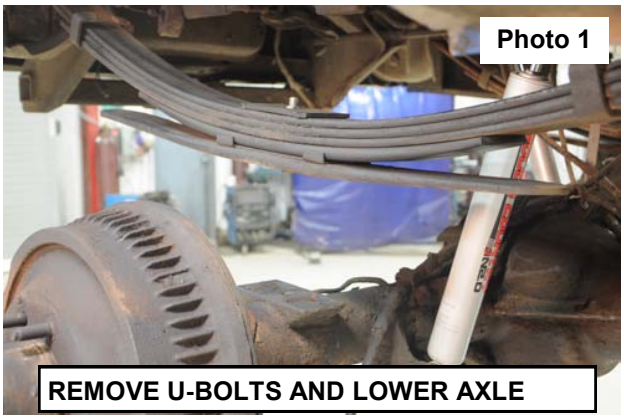
Photo 29

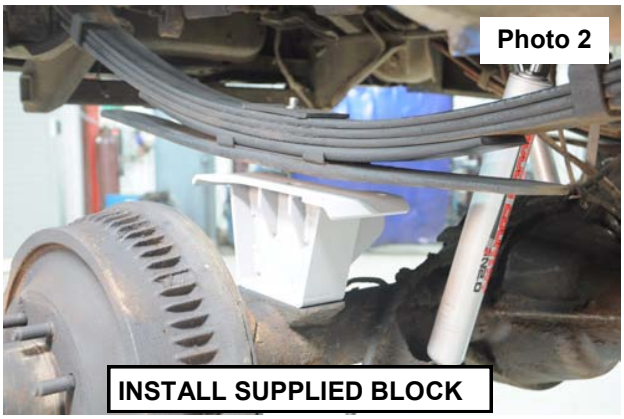
Extend vacuum lines w/ supplied extension.

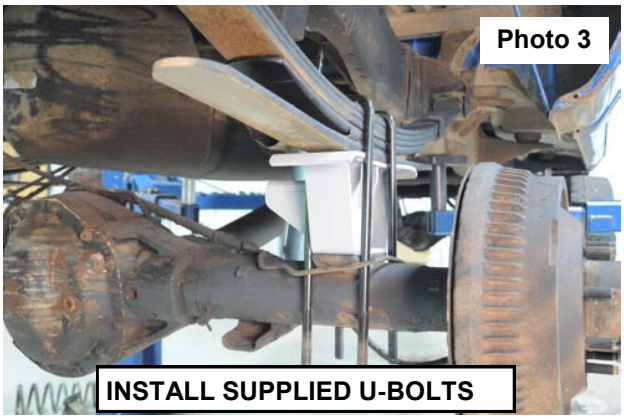
54. Make sure you have enough slack for the 4x4 light wire.
55. Install the tires / wheels. Lower vehicle to the ground.
56. Turn the wheels to make sure the brake lines are adjusted properly, re-crimp the clamp around the line if necessary.
57. Torque the fasteners to the following specifications:
    - 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
    - Track Rod Bolt……..…..110 ft/lb

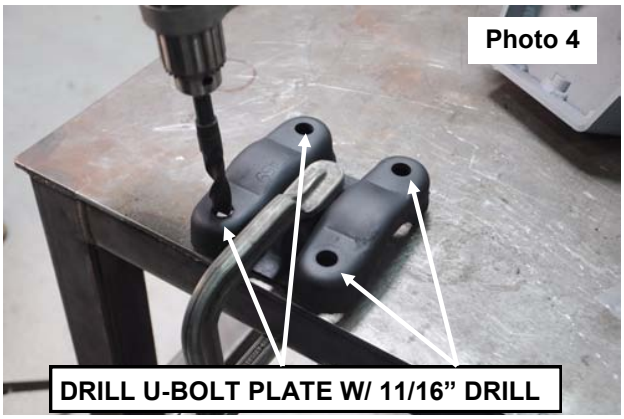
REAR INSTALLTION

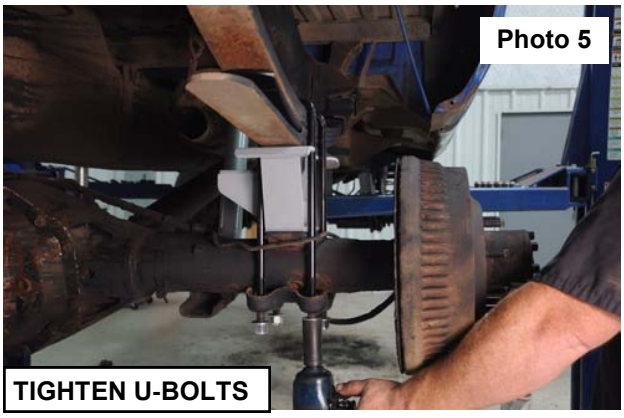
1. Chock front wheels and jack up the rear of the vehicle. Secure with jack stands on the frame rail.
2. Place a floor jack under the rear differential on the rear axle. Using a 18mm socket and wrench, remove the stock shock absorbers, retain the stock hardware for reuse.
3. Using a 24mm socket, remove the stock u-bolts. Use the floor jack to lower the axle assembly to allow for lifted block installation.
4. Install the Rough Country add-a-leaf per included instructions.
5. Install the Rough Country block in between the leaf spring and the axle. Jack up the axle and align the pins in the blocks and axle seat. **See Photos 1-3. **Bump stop nose on block goes to the inside of the truck.****
6. Using an 11/16" drill, drill the u-bolt plate. **See Photo 4.**

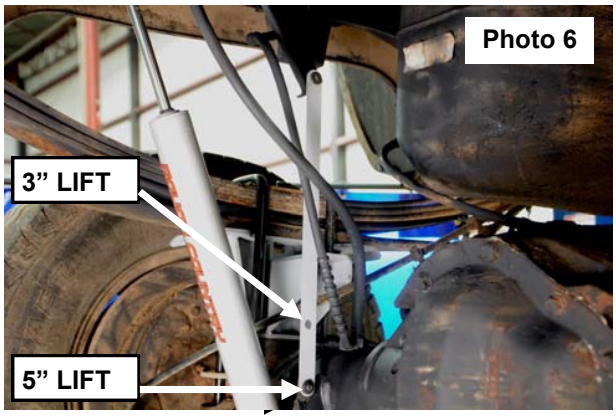












6. Install u-bolt plate. Tighten u-bolts in an alternating pattern. Torque to 85 ft-lbs. **See Photo 5.**
7. Install grommets into brake proportioning bracket. Install bracket on factory mounts. **See Photo 6. **Bottom hole is for 5" lift and next hole up from bottom is for the 3" lift.****
8. Install anti-wrap ubolts and hardware over leaf spring and into front and rear holes in the blocks and tighten.
9. Locate N3 shock part #660739. Using a 18mm socket and wrench, install using factory hardware on upper and lower shock mount.
10. Install the tires and wheels.
11. Jack up the rear of the vehicle and remove the jack stands. 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 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.

Alignment Specs

Front			
Total Toe	-0.00°	+0.10°	+0.20°
Front Camber	-0.75°	-0.25°	+0.25°
Caster	+2.25°	+3.25°	+4.25°
King-Pin	———	———	———
Incl. Angle	———	———	———
Rear			
Total Toe	°	°	°
Rear Camber	°	°	°
Thrust Angle	-.025°	+0.00°	+0.25°

Kit Contents:

2-Coil Spring
1-Front Track Bar Bracket
2-Front Sway Bar Drop Brackets
1-Pitman Arm
- (6614) 2000-02 Models
- (6612) 1994-99 Models

2-Rear Lift Block
2-Rear Add-a-Leafs
4-Rear U-bolt
2-Front N3 Shock Absorbers (660757)
2-Rear N3 Shock Absorbers (660739)
2-Lower Control Arm Brackets
2-Control Arm Bracket Flag Nuts
1-1382BAG2
1-1382BAG4
1-1394BAG5
1-6111BAG
1-1263BAG2
1-5/8BAG

Poly Bags:

1382BAG2:
- 4-7/16" Flat Washers
- 4-7/16" x 1.25" Bolts
- 4-7/16" Nylock Nuts
- 2-1/2" Flat Washers
- 1-1/2" Nylock Nut
- 1-1/2" x 2.50" Bolt
- 2-3/16" Vent Hoses
- 4- 3/16" Vent Hose Couplers
- 1-5/16" Vent Hose
- 1-5/16" Vent Hose Coupler
- 3-Rubber Grommets
- 1-18mm x 80mm Bolt
- 3-18mm Flat Washers
- 1-18mm Nylock Nut

1382BAG5:
- 2-1/2" x 1.5" Bolts
- 2-1/2" Flat Washers
- 2-9/16" x 4.5" Bolts
- 4-9/16" Flat Washers
- 2-916" Lock Nuts
- 12-7/16" x 1.5" Bolts
- 12-7/16" Nylock Nuts
- 24-7/16" Flat Washers
- 2-12mm x 2.35" Sleeves
- 2-12mm x 120mm Bolts
- 2-12mm Flange Lock Nuts

1353BAG2:
- Instructions
- Warning To Driver

142731: Shock Bag
- 4-Stem Bushings
- 4-Bushings retainers
- 2-Stem Nuts

6111BAG: Hardware Bag
- 4-1/2" Center Pins
- 4-1/2" Nuts

1263BAG2:
- 4-7/16" x 3.125" x 3.25 Ubolts
- 8-7/16" Flat Washers
- 8-7/16" Nylock Nuts

5/8BAG:
- 8-5/8" Nylock Nuts
- 8-5/8" Flat Washers

trailfortress.com/rough-country-5-inch-lift-kit-382-23



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.