Rough Country 32120 Installation Instructions

6-Inch Lift Kit with N3 Shocks for Dodge Ram 1500 2WD

Part number: 32120

trailfortress.com/rough-country-6-inch-lift-kit-32120

Scan for fitment, price and install help

921321200

ROUGH COUNTRY SUSPENSION SYSTEMS®

1321BAG1

06-08 DODGE 1500 2WD 6” LIFT KIT

Thank you for choosing Rough Country for all your suspension needs.

Rough Country recommends a certified technician install 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 instructions before beginning installation. Check the kit hardware against the kit contents list. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have the tools needed to install the kit.

⚠WARNING Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

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. We will be happy to answer any questions concerning the design, function, and use of our products.

⚠NOTICE This 6” suspension system was developed using a 35 X 12.5 tire with aftermarket wheels. 20” wheels with 5 1/2” backspace or an 18” wheel with 5” of backspace will be required to maintain adequate clearance.
Stock wheels can be used with this lift with the addition of a 1/4” wheel spacer. As with any tire and wheel combination it is recommended to trial fit the tire / wheel to assure there are no clearance problems.

⚠NOTICE **DEALER AND VEHICLE OWNER**

Any vehicle equipped with any Rough Country product should have a “Warning to Driver” decal installed on the inside of the windshield or on the vehicle’s dash. The decal should 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 forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service life.

Tools Needed:

WD-40	**16mm Socket / Wrench**
Loc-Tite	**18mm Socket / Wrench**
Hammer	**19mm Socket / Wrench**
Dead Blow Hammer	**21mm Socket / Wrench**
T30 Torx head bit	**22mm Socket / Wrench**
5mm Allen Wrench	**24mm Socket / Wrench**
8mm Socket / Wrench	**35mm Socket**
10mm Socket / Wrench	**1 1/16” Socket**
13mm Socket / Wrench	
14mm Socket / Wrench	
15mm Socket / Wrench	

Torque Specs:

Size	Grade 5	Grade 8
5/16”	15 ft/lbs	20 ft/lbs
3/8”	30 ft/lbs	35 ft/lbs
7/16”	45 ft/lbs	60 ft/lbs
1/2”	65 ft/lbs	90 ft/lbs
9/16”	95 ft/lbs	130 ft/lbs
5/8”	135 ft/lbs	175 ft/lbs
3/4”	185 ft/lbs	280 ft/lbs

Class 8.8	Class 10.9
6MM	5 ft/lbs	9 ft/lbs
8MM	18ft/lbs	23 ft/lbs
10MM	32ft/lbs	45ft/lbs
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs

trailfortress.com/rough-country-6-inch-lift-kit-32120

KIT CONTENTS



1321Box1 *Containing*:
- *1-Fr Cross-member*
- *1-Rr Cross-member*

1321Box2 Containing:
- *2-Rear Blocks*
- *4-U-bolts*
- *1-U-bolt Nut bag*
- *2-Rear Shocks (658694)*
- *2-Front Shocks (658723)*
- *1-1329BAG1*

1321Box3 *Containing:*
- *1-Dr Coil Spacer*
- *1-Pass Coil Spacer*
- *2-Bump Stop Brackets*
- *2-Inner Flag Nuts*
- *2-Outer Flag Nuts*
- *2-Fr Sway Bar Brkt*
- *2-Fr Sway Bar Link*
- *1-Dr Fr Brake Line*
- *1-Pass Fr Brake Line*
- *4-Sway Bar Link Brackets*
- *1-1329BAG1*
- *1-1321BAG2*
- *1-LINKBAG2*

1380Box1 Containing:
- *1-Dr Knuckle*

1380Box2 Containing:
- *1-Pass Knuckle*

1329Bag1 *Containing*

For Front and Rear Cross-Members:
- *4-18mm x 150mm Bolt*
- *4-18mm Lock Nut*
- *8-Square Washers*

1321Bag2 *Containing:*

For Coil Spacers
- *6-3/8 x 1.25” Bolts*
- *6-3/8 Flat Washers*

For Sway Bar Brackets:
- *4-7/16 x 1” Bolts*
- *4-7/16” Nylock Nuts*
- *4-7/16” Flat Washers*

For Front Bump Stops:
- 2-Dodge Bump Stops
- *2-3/8 x 1” Bolts*
- *6-3/8” Nylock Nuts*
- *10-3/8” Flat Washers*
- *2-3/8 x 2.5” Bolts*

LINKBAG2 Containing***:***

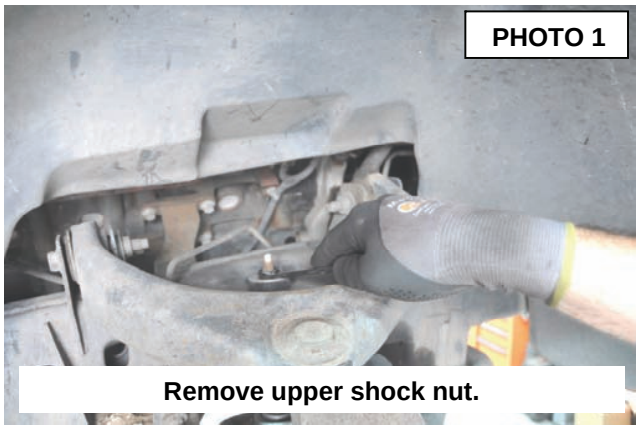
For Sway Bar Links
- *2-12mm x 35mm Bolts*
- *4-12mm x 65mm Bolts*
- *2-12mm x 50mm Bolts*
- *8-12mm Flange Lock Nuts*

9/16BAG;

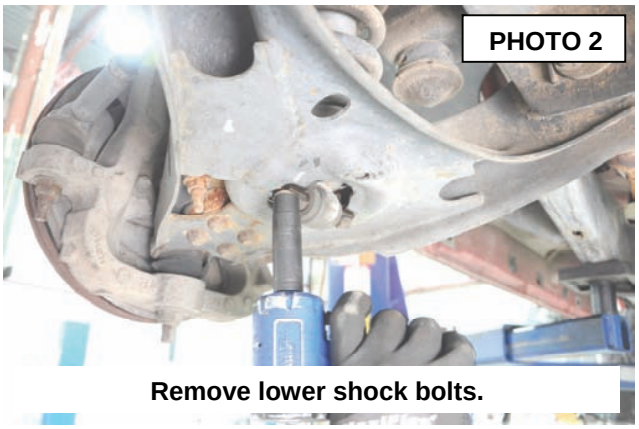
For Rear Ubolts:
- *8-9/16” Nylock Nuts*
- *8-9/16” Flat Washers*

INSTALLATION INSTRUCTIONS

1. Chock rear wheels of the vehicle and raise the front of the vehicle using a floor jack.
2. Support the vehicle with jack stands.
3. Remove wheel using 22mm socket.
4. Using a 9/16” wrench, remove the upper shock nut. **Photo 1**.
5. Using a 13mm socket, remove the lower shock bolts and save for reuse. **See Photo 2.**

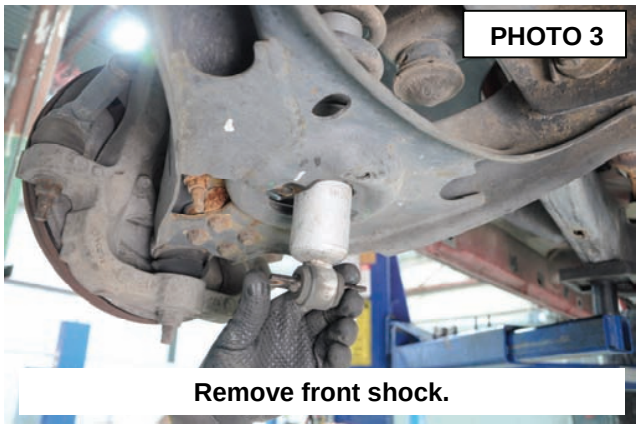


Remove upper shock nut.

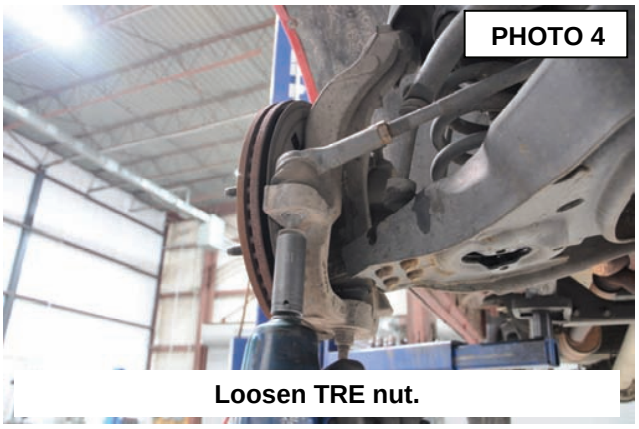


Remove lower shock bolts.

6. Remove the factory shock. **See Photo 3.**
7. Using a 21mm socket, loosen the tie rod end nut. **Do not remove**. **See Photo 4.**



Remove front shock.



Loosen TRE nut.

8. Strike the knuckle at the tie rod end to release the taper, then remove the nut and tie rod end from the knuckle. **See Photo 5.**
9. Remove the brake caliper using a 21mm wrench. *Place the caliper out of the way, do no hang by the brake line.* **Photo 6.**

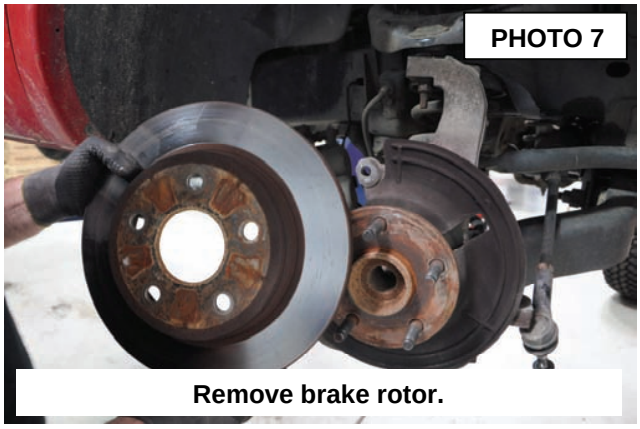


Strike knuckle to remove tie rod.



Remove brake caliper.

10. Remove brake rotor. **See Photo 7.**
11. Remove sway-bar link from sway-bar using a 15mm and 16mm wrench. **See Photo 8.**

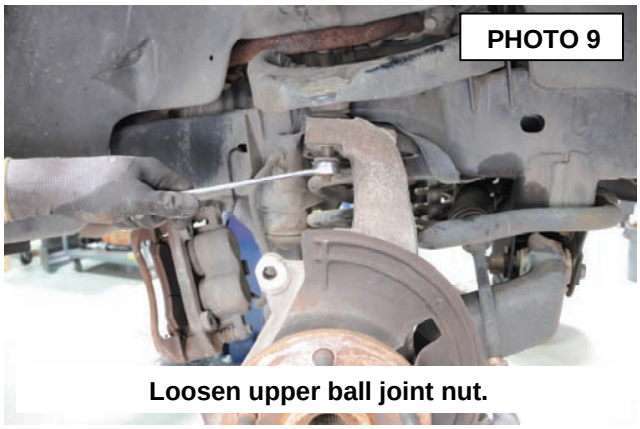


Remove brake rotor.

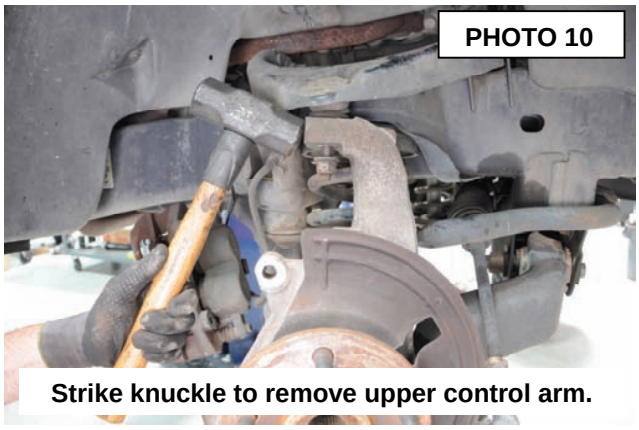


Remove upper sway bar hardware.

12. Place a jack under the lower control arm. Then using a 21mm wrench, loosen the upper ball joint nut. **Do not completely remove nut at this time**. **See Photo 9.**



Loosen upper ball joint nut.

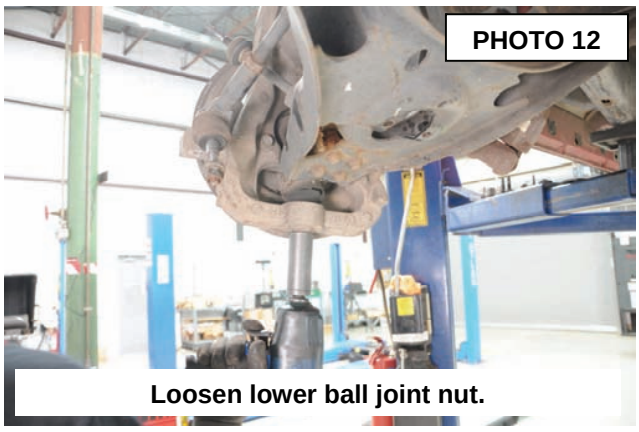


Strike knuckle to remove upper control arm.

13. Using a hammer, strike the knuckle at the ball joint to release the taper. Remove nut and knuckle from upper control arm. **See Photo 10.**
14. Lower jack and carefully remove the coil spring. **See Photo 11.**
15. Using a 24mm socket, loosen the lower ball joint nut. **Do not completely remove the nut at this time. See Photo 12.**
16. Using a hammer, strike the knuckle at the lower ball joint to release the taper. Remove nut and knuckle from lower control arm. **See Photo 13.**



Remove coil spring.

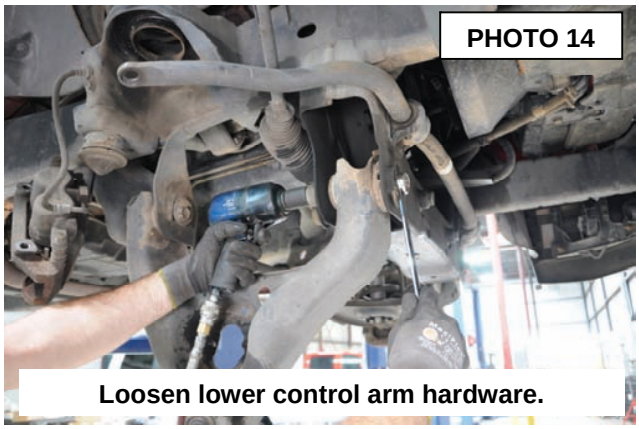


Loosen lower ball joint nut.



Strike knuckle to remove from lower control arm.

17. Using a 24mm wrench and socket, loosen the lower control arm bolts. **See Photo 14.**
18. Remove the lower control arms. Save the hardware for reuse. **See Photo 15.**



Loosen lower control arm hardware.

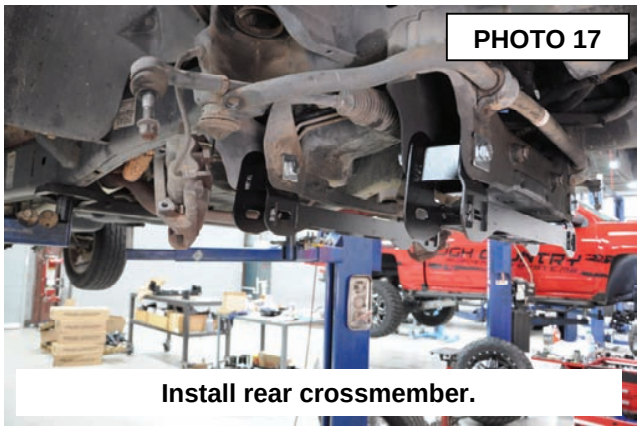


Remove lower control arm.

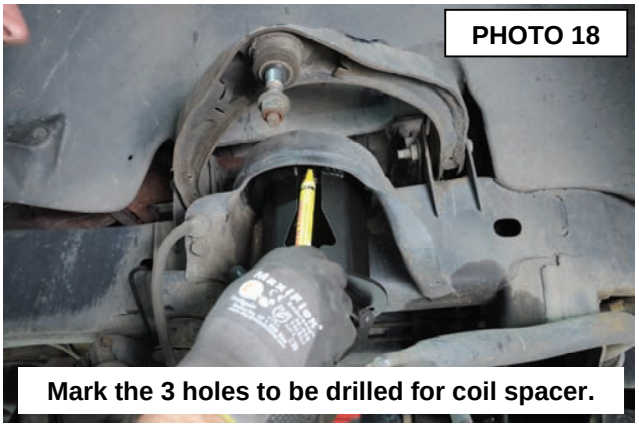
19. Install new front cross member using the supplied hardware from 1329BAG1. **Do not tighten. See Photo 16.**
20. Install new rear cross member using the supplied hardware from 1329BAG1. **Do not tighten. See Photo 17.**
21. Place the supplied coil spacer in the coil spring bucket and mark the 3 holes to be drilled. **Coil spacers are side specific. Arrow goes toward frame pointing to the front of the vehicle. See Photo 18.**



Install front crossmember.

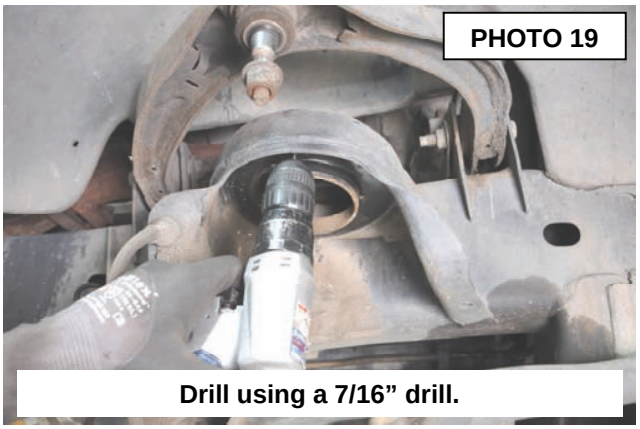


Install rear crossmember.



Mark the 3 holes to be drilled for coil spacer.

23. Using a 7/16” drill, drill the 3 marked holes for the coil spacer. **See Photo 19.**
24. Install the inner flag nut up through the coil bucket. This flag nut will be used for the 2 holes closest to the frame. **See Photo 20.**

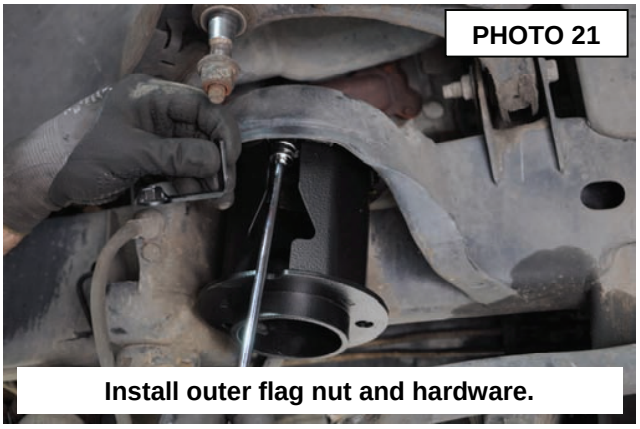


Drill using a 7/16” drill.

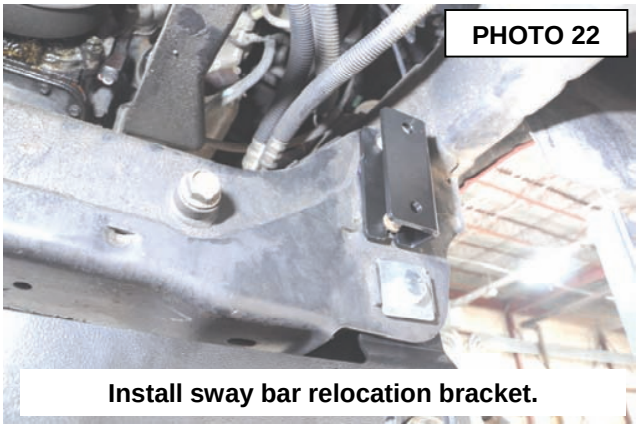


Install inner flag nut.

25. Install the coil spacer and the outer flag nut using the 3/8” x 1.25” bolts and washers from 1321BAG2. **See Photo 21**.
26. Remove the sway bar from the frame and install the sway bar relocation brackets using the stock hardware to attach the bracket to the frame. Do not install the sway bar at this time. **See Photo 22**.

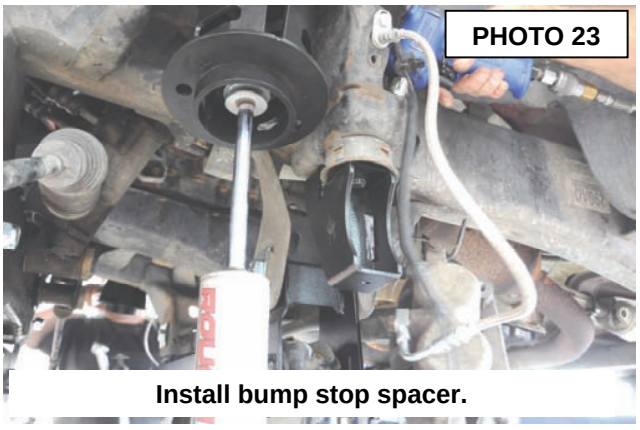


Install outer flag nut and hardware.

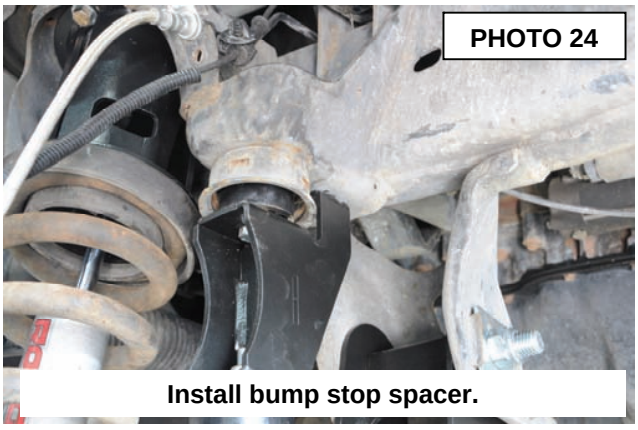


Install sway bar relocation bracket.

27. Install the bump stop brackets using the supplied puck as a spacer and the supplied 3/8” hardware from 1321BAG2. **Photo 23 & 24.**

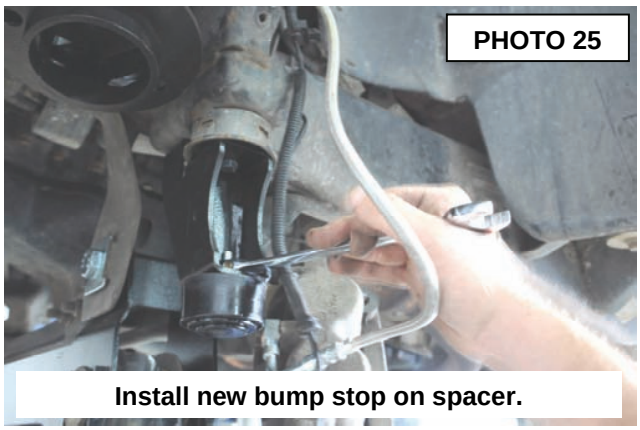


Install bump stop spacer.

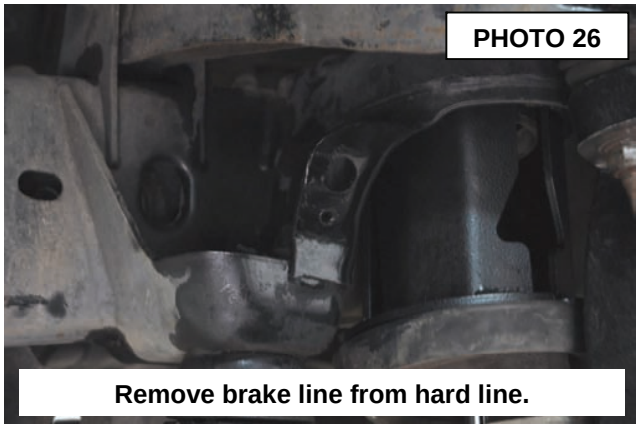


Install bump stop spacer.

28. Install supplied bump stops from 1321BAG2. Tighten using a **See Photo 25.**
29. Using a 13mm, remove the stock brake line bolt from the frame and remove the brake line from the hard line. **See Photo 26**.

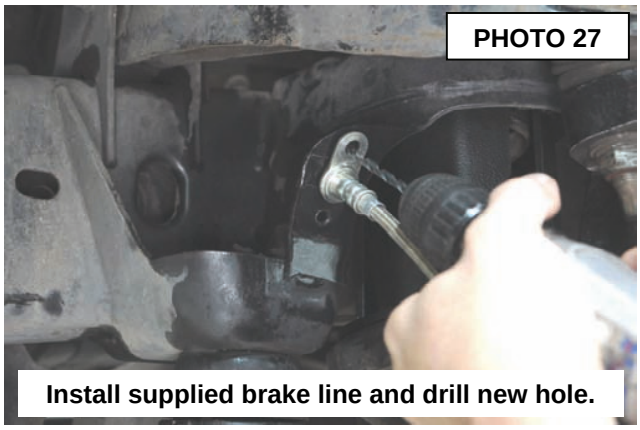


Install new bump stop on spacer.

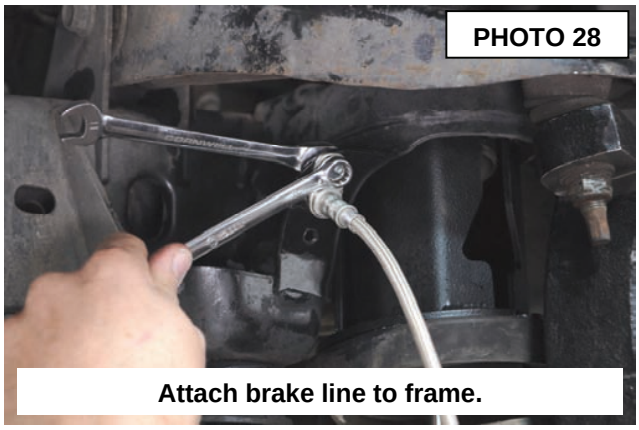


Remove brake line from hard line.

30. Connect supplied brake line to hard line. Using the bracket as a guide and a 5/16” drill, drill a new hole in the mounting bracket. **See Photo 27.**
31. Attach the brake line bracket to the frame using the supplied 1/4” x 1” bolt and hardware from the brake line bag. **See Photo 28.**

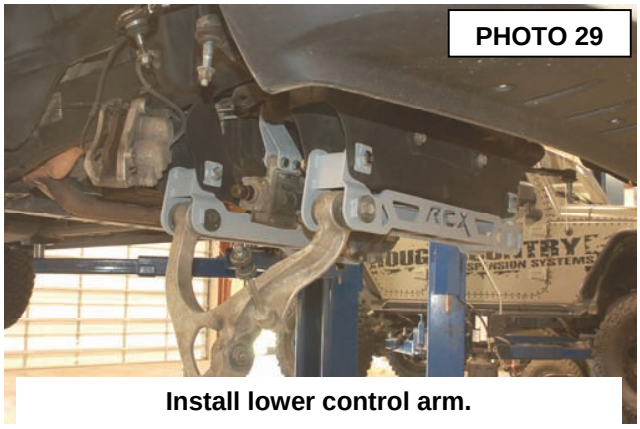


Install supplied brake line and drill new hole.



Attach brake line to frame.

32. Install the lower control arms using the factory hardware. **Do not tighten at this time. See Photo 29.**
33. Using an 18mm socket, remove the hub assembly from the factory knuckle. **See Photo 30.**

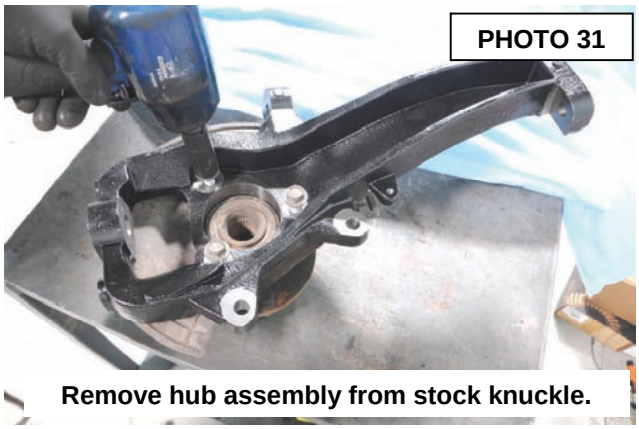


Install lower control arm.



Remove hub assembly from stock knuckle.

34. Install the hub assembly in the new lifted knuckle and torque to factory specs using an 18mm socket. **See Photo 31.**
35. Install the knuckle onto the lower ball joint. Install the factory coil spring. Using a jack under the lower control arm, raise the knuckle and attach to the upper ball joint. Torque to factory specs. Install the rotor and caliper onto the knuckle. **Photo 32.**



Remove hub assembly from stock knuckle.

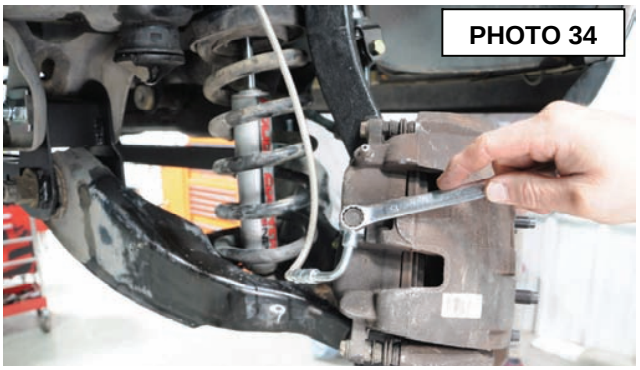


Install knuckle, brake rotor, and caliper.

36. Torque the caliper bolts to factory specs using a 21mm socket. **See Photo 33.**
37. Attach the brake line to the caliper using the supplied copper washers. Tighten using a 15mm wrench. **See Photo 34.**

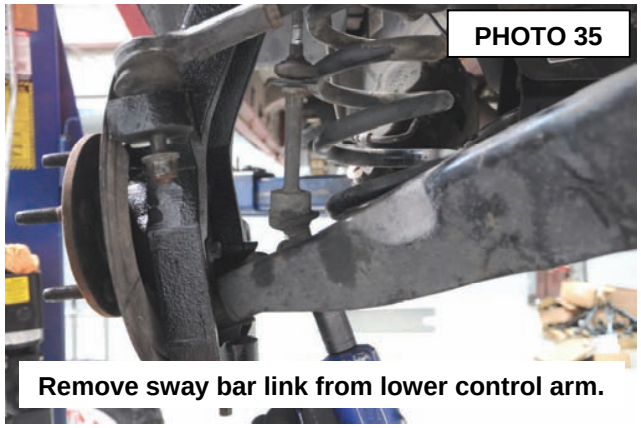


Tighten brake caliper hardware.

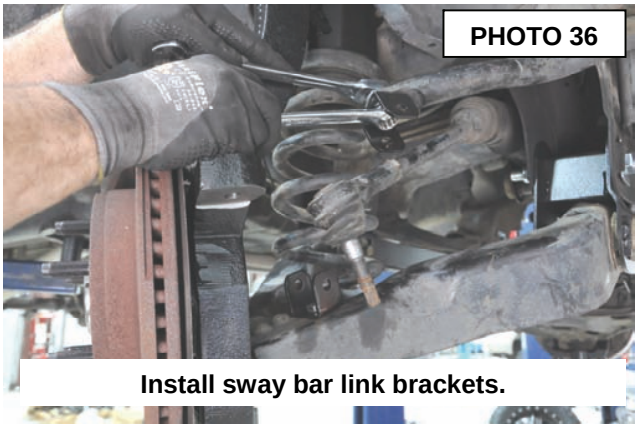


Attach brake line to caliper using supplied hardware.

38. Using an 18mm socket, remove the sway bar link from the lower control arm. **See Photo 35.**
39. Install the sway bar onto the new relocation brackets using the 7/16” bolts and hardware from 1321BAG2.
40. Install the sway bar link brackets on the sway bar and lower control arm using the supplied 12mm x 35mm bolts and hardware from LINKBAG2. Tighten using an 18mm wrench and socket. **See Photo 36.**

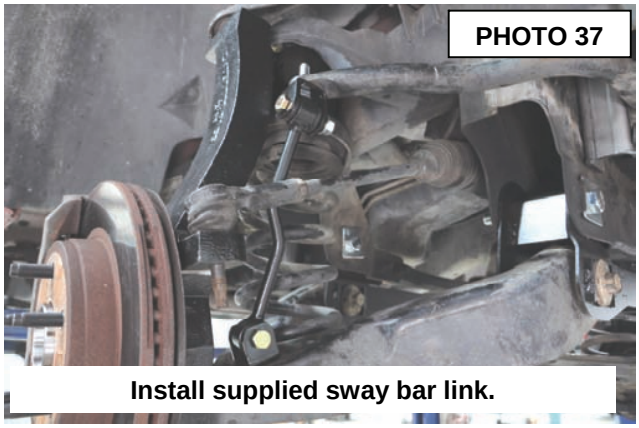


Remove sway bar link from lower control arm.

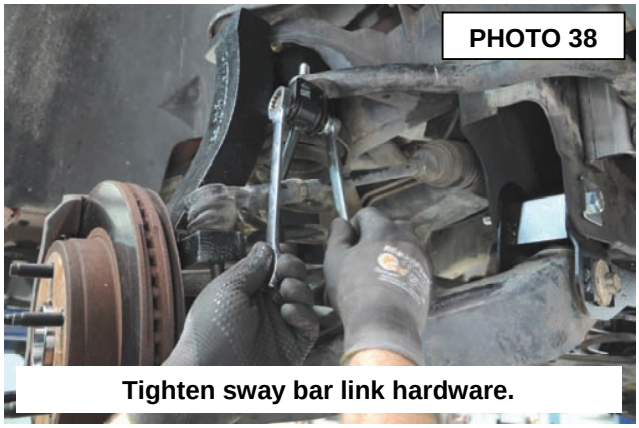


Install sway bar link brackets.

41. Attach the supplied sway bar links to the brackets using the supplied bolts and hardware from LINKBAG2. **See Photo 37.**
42. Tighten using an 18mm wrench and socket. **See Photo 38.**

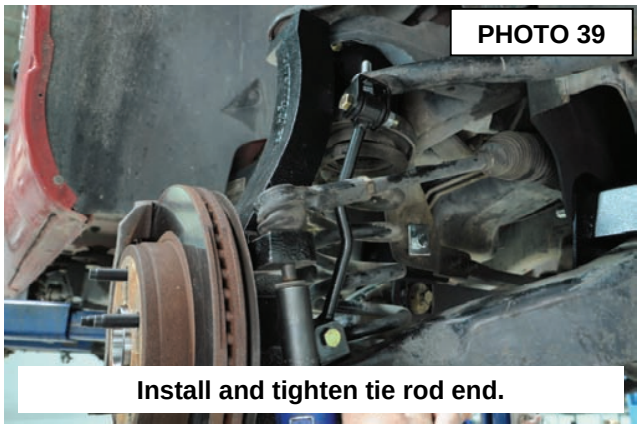


Install supplied sway bar link.



Tighten sway bar link hardware.

43. Install the tie rod end on the knuckle and torque to factory specs using a 21mm socket. **See Photo 39.**
44. Install the supplied 658723 N2.0 shock. Place a cup washer (cup up) and bushing on the shock upper stud before installing. **See Photo 40.**

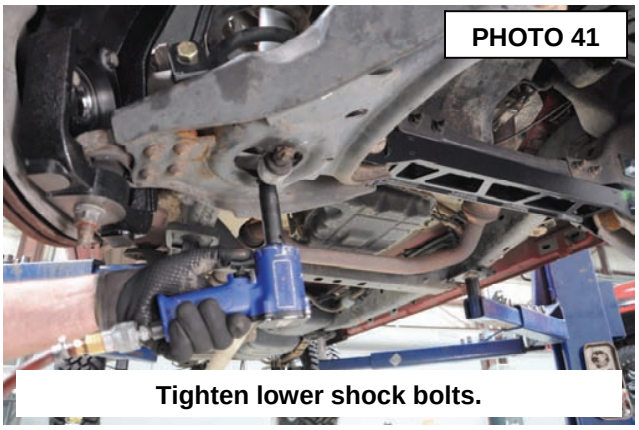


Install and tighten tie rod end.



Install supplied shock 658723.

45. Attach the shock to the lower control arm using the factory hardware, torque to factory specs using a 13mm socket. **See Photo 41.**
46. Install the supplied bushing and cup washer (cup down) then the supplied nut onto the shock stud. Tighten using a 9/16" wrench only until the bushing starts to bulge under the washer. **See Photo 42.**



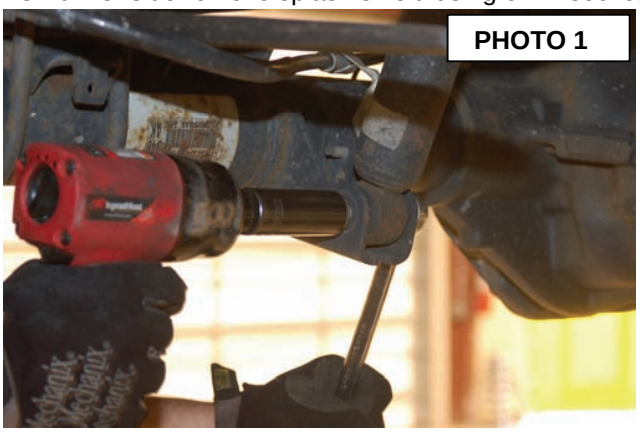
Tighten lower shock bolts.



Tighten upper shock nut.

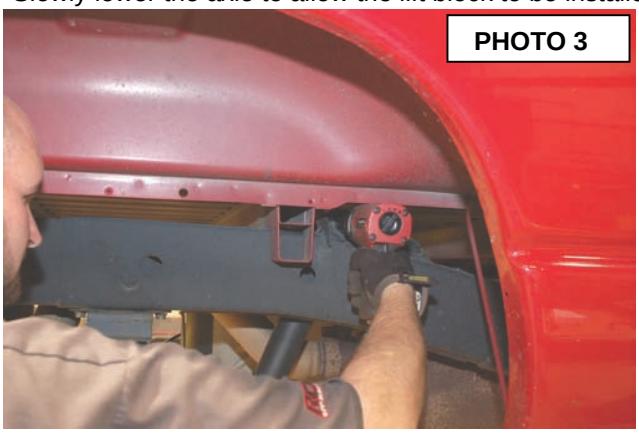
REAR INSTALLATION INSTRUCTIONS

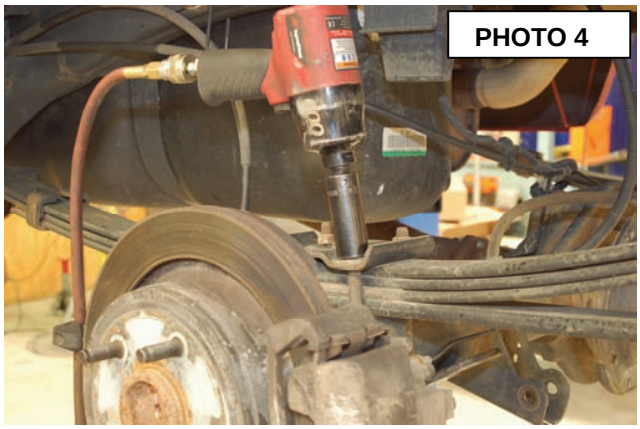
1. Chock the front tires and place the rear on jack stands. Lightly support the axle with a floor jack.
2. Remove the shocks from the axle using 21mm wrench on the top and bottom bolts. **See Photo 1.**
3. On driver side remove splash shield using 8mm socket to gain access to upper shock bolt. **See Photo 2.**



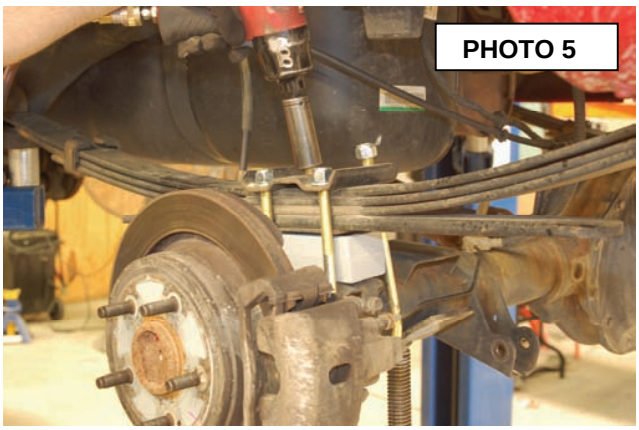


4. After the inner fender is removed, remove the shock from the frame mount using a 21mm socket. **See Photo 3.**
5. Support rear end and remove u-bolts using 21mm socket. **See Photo 4.**
6. Slowly lower the axle to allow the lift block to be installed. Take care not to over extend the rear brake line.





7. Install new block and u-bolts as shown and tighten using 22m socket. **See Photo 5. Shorter end of block goes to the front of the truck.**
8. Install new shocks (658694) with stock hardware. Tighten using 21mm socket. **See Photo 6.**
9. Reinstall splash shield using 8mm.
10. Install tires and wheels, jack up the vehicle, remove the jack stands and lower the vehicle to the ground.



POST INSTALLATION

1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance.
3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Readjust headlights to proper settings and take truck in for a front-end alignment to a qualified alignment professional.

Thank You for choosing Rough Country 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.