TRAIL FORTRESS

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Rough Country 76642 Installation Instructions

3-Inch Lift Kit with M1 Shocks for 2010–2024 Toyota 4Runner 4WD, Part 76642

Part number: 76642

trailfortress.com/rough-country-3-inch-lift-kit-76642

Scan for fitment, price and install help

921748000

ROUGH COUNTRY SUSPENSION SYSTEMS®

2010-22 4 Runner 3.5” Kit

Thank you for choosing Rough Country for your suspension needs.
Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassembly/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 parts list on this page and the product layout on the last page. Be sure you have all needed parts and know where they go. Also please review the tools needed list and make sure you have needed tools.

⚠NOTICE The **74830 and the 74870** will not fit X-REAS suspension equipped models.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is, the easier it will roll. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

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.

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. If questions exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed using a Maximum tire size of 285/70R-17 tire with factory wheels. For aftermarket wheel and tire combinations consult your tire and wheel specialist.

⚠NOTICE NOTICE TO 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.

⚠NOTICE Note to installer : Before installation begins we recommend that a test drive be performed. While driving check for uncommon sounds and/or vibrations . What you feel and hear during the test drive will only magnify once lift kit is installed. Advise you to discuss possible issues identified from drive with customer before proceeding to install this kit.

Tools Needed:
7mm Wrench
12 mm Wrench
14 mm Socket
17 mm Socket
17 mm Wrench
19 mm Socket
Hammer
Punch
16mm Wrench
21mm Socket
9/16” Wrench
Torque Wrench

Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16”	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8”	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16”	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2”	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16”	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8”	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4”	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

trailfortress.com/rough-country-3-inch-lift-kit-76642

74830
Kit Contents:
1-Driver Upper Control Arm
1-Pass Upper Control Arm
2-Front Strut Spacers
2-Rear Coil Spacers
2-Rear Shocks Absorbers
2-Rear Shock Upper Mounting Hardware Bags
1-Front Bag that includes:
- 6-10mm Nuts
- 6-10mm Lock Washers
- 6-10mm Flat Washers
- 6-10mm Studs
- 1-1/2” Jam Nut

Upper control arm bag:
- 2-6mm Bolts

1-Rear Bag containing:
- 2-1/2” x 1 1/4” bolts
- 4-Washers
- 2-Nylock nuts

74830 Kit



74800
Kit Contents:
1-Driver Upper Control Arm
1-Pass Upper Control Arm
2-Front Strut Spacers
2-Rear Coil Spacers
2-Flag Nuts
2-Rear Shock Brackets
1-Front Bag that includes:
- 6-10mm Nuts
- 6-10mm Lock Washers
- 6-10mm Flat Washers
- 6-10mm Studs
- 1-1/2” Jam Nut

Upper control arm bag:
- 2-6mm Bolts

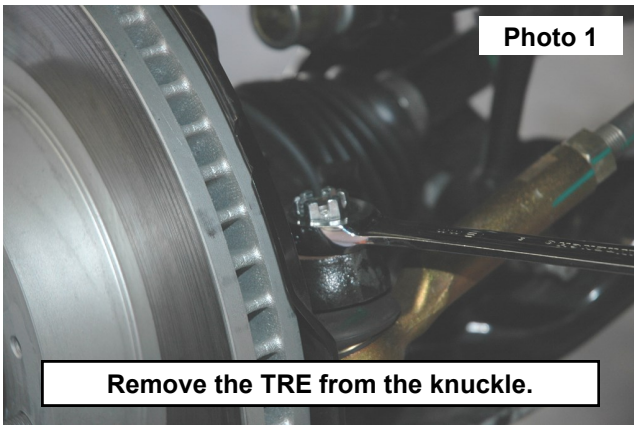
1-Rear Bag containing:
- 2-1/2” x 1 1/4” bolts
- 4-Washers
- 2-Nylock nuts

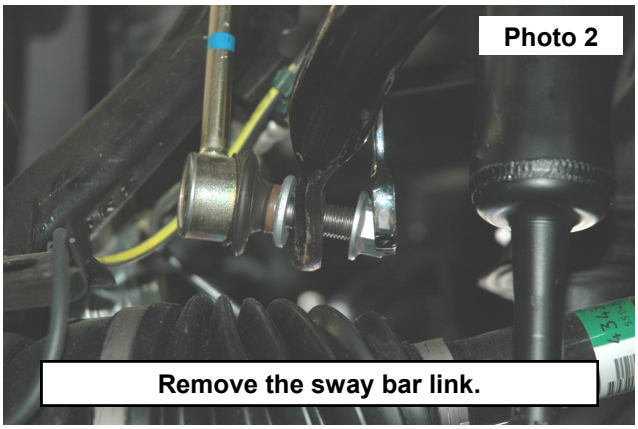
74800 Kit



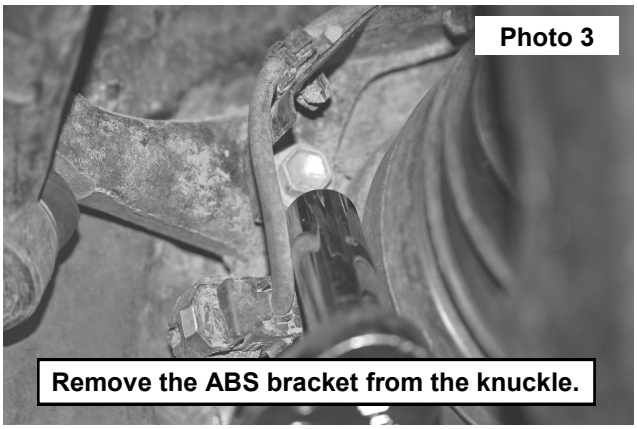
INSTALLATION INSTRUCTONS

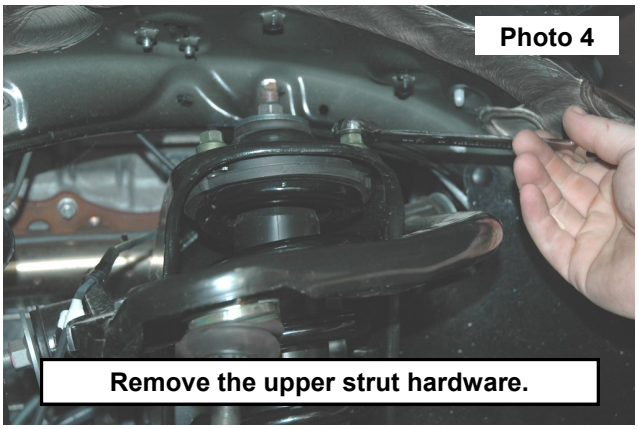
1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground.
2. Remove the front tires/wheels. Using a 21mm deep well socket.
3. Using a 12mm socket, remove the skid pate from the vehicle.
4. Remove cotter pin from the outer tie rod end on the steering linkage. Using 19mm socket/wrench remove the nut. Using a hammer hit on the side of the cast knuckle to allow the tie rod end to separate from the knuckle. Remove the linkage from the knuckle. Push linkage forward to make room for installation. Retain factory nut. **See Photo 1.**
5. Using a 17mm wrench, remove the sway bar bolts, allowing the sway bar to drop. Retain factory hardware. **See Photo 2.**



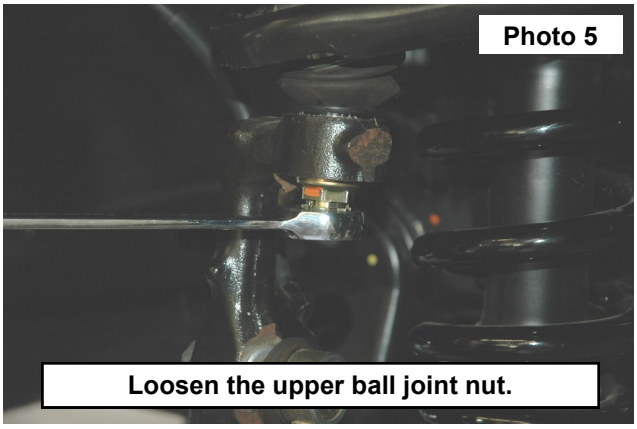


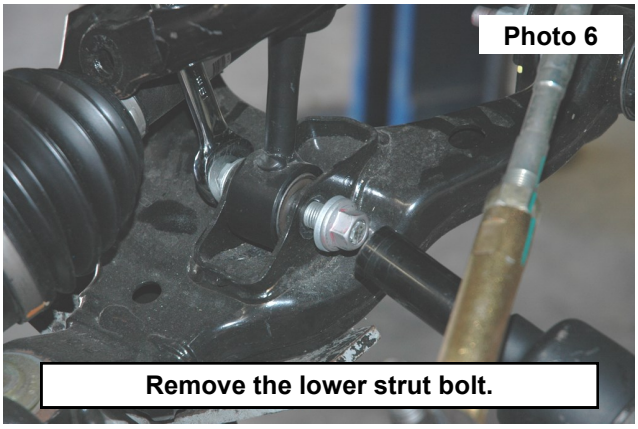
6. To allow the strut to be removed, remove the ABS bracket from the knuckle using a 12mm socket. Retain factory hardware for reuse. **See Photo 3.**
7. Using a 14mm socket, remove the strut nuts on the upper strut tower that holds the assembly in place. **See Photo 4**. One nut can be left on an upper stud to hold the strut in place.



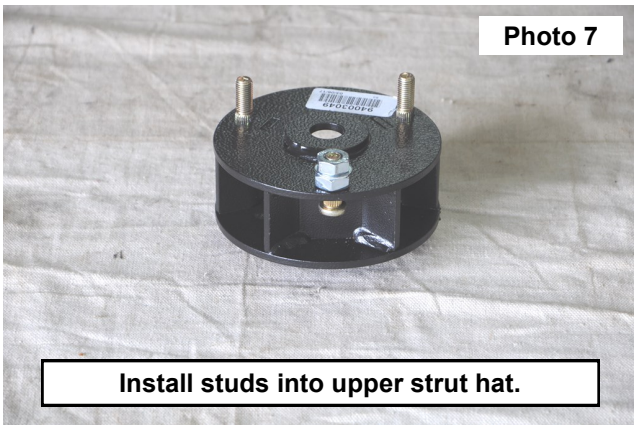


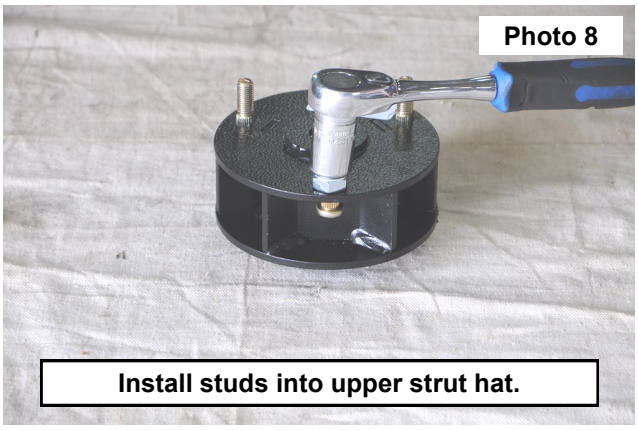
8. Place jack stand under the knuckle for support.
9. Using 19 mm socket remove nut from the ball joint on the upper control arm. Using a hammer hit the knuckle to allow the ball joint to separate from the upper control arm **See Photo 5**. **Do not** allow the knuckle to pull out far enough that it pulls the CV shaft out of the differential or over extends the brake line.
10. Using a 19mm socket and wrench, remove the strut bolt from the lower control arm and remove the strut assembly. Retain the factory lower hardware for reassembly. Note the direction of the bolt for reassembly. **See Photo 6.**



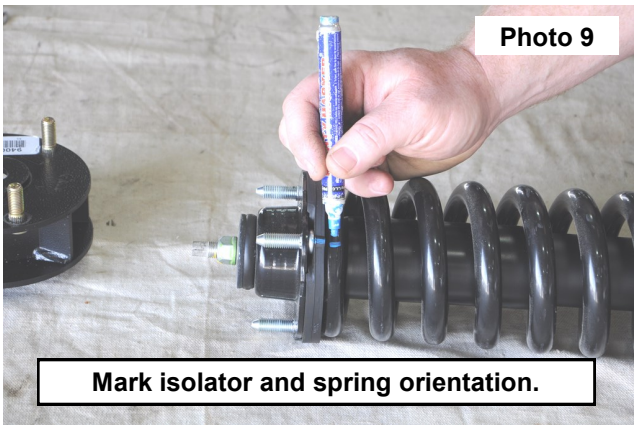


11. Place the supplied 10mm studs from 10MMSTUDBAG-1 into the holes in the strut spacer. **See Photo 7.**
12. Use the supplied 1/2” jam nut and the supplied 10mm nut, from 10MMSTUDBAG-1, and a 17mm socket to pull the stud into the spacer. **See Photo 8.**





13. On the factory strut assembly, mark the orientation of the studs, spring isolator and coil spring. **Make sure to mark all 3 studs. See Photo 9.**
14. Place the strut into a strut compressor and compress the strut. Using 17mm and 7mm wrenches, remove the upper strut hat and bushings. **See Photo 10**.





15. Remove the strut hat and bushing. **See Photo 11**.
16. Save the upper bushing, washer, and nut for reuse. **See Photo 12.**



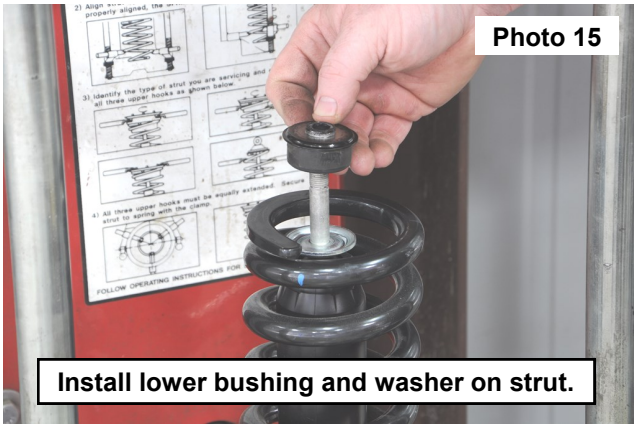


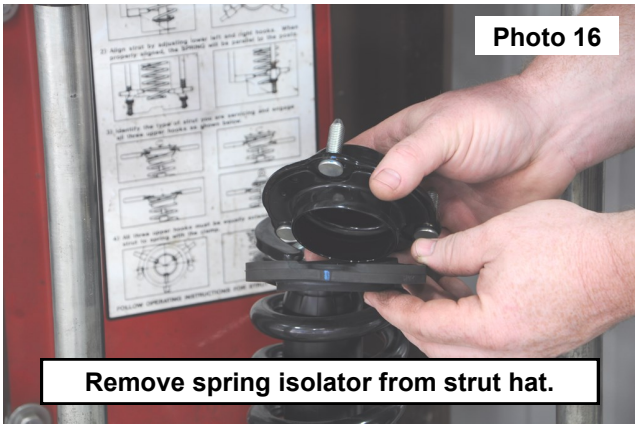
17. Using a hammer and punch, knock the lower strut bushing and washer out of the factory strut hat. **See Photo 13.**
18. Retain the lower strut bushing and washer for reuse. S**ee Photo 14.**





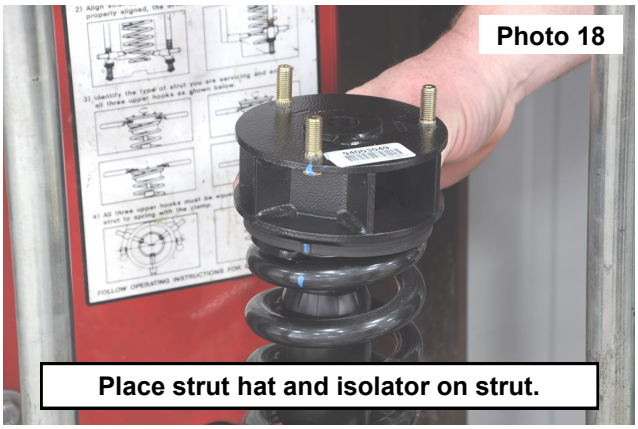
19. Place the lower strut hat bushing and washer back onto the strut shaft. **See Photo 15.**
20. Remove the spring isolator from the factory strut hat. **See Photo 16.**





21. Place the spring isolator on the new supplied strut hat, making sure to align marks with studs in the strut hat. **See Photo 17**.
22. Place the new strut hat and isolator on the strut, making sure to align the marks on the spring, spring isolator, and studs in the strut hat. **See Photo 18.**

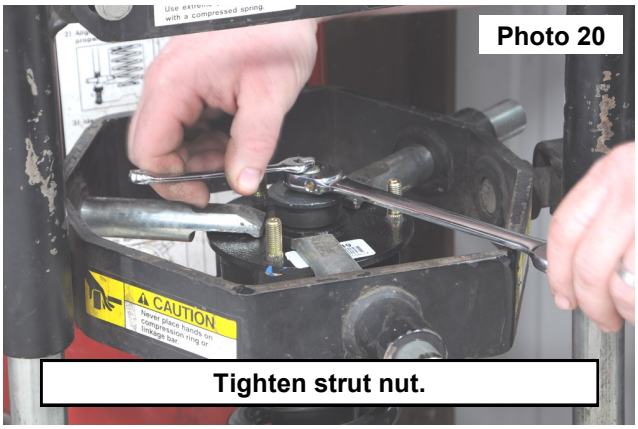




23. Place the new strut hat, factory bushing and washer onto the strut. **See Photo 19.**
24. Using the factory nut and 17mm and 7mm wrenches, tighten the strut hat nut until the bushings begin to bulge under the washer. **See Photo 20.**

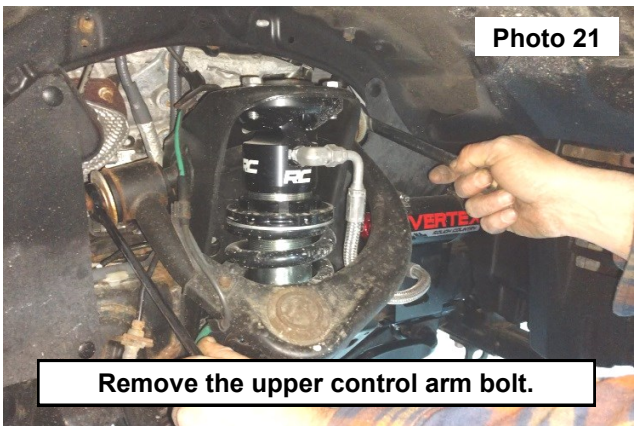


Compress and install upper bushing and washer.

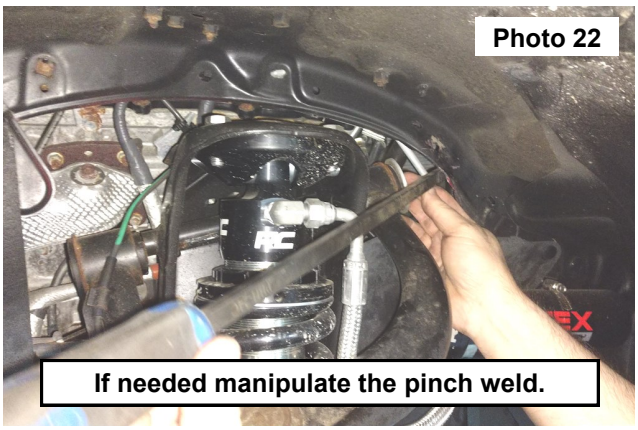


Tighten strut nut.

25. Using 19mm wrenches, remove the upper control arm bolt, nut, and washers. **See Photo 21.**
26. You may have to use a pry bar to manipulate the pinch weld, to remove the upper control arm bolt. **See Photo 22.**

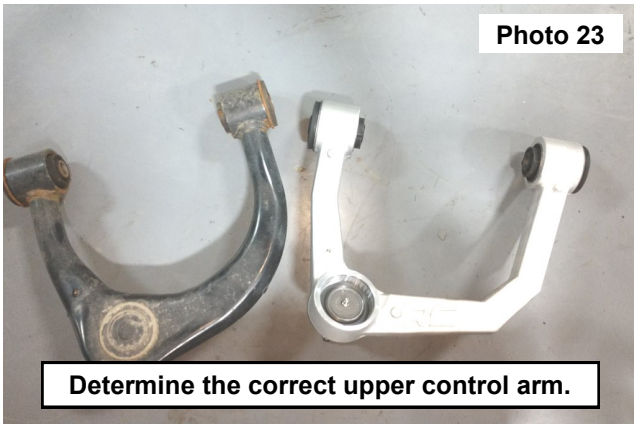


Remove the upper control arm bolt.



If needed manipulate the pinch weld.

27. Determine the correct upper control arm for the side of the vehicle you are working on. **See Photo 23.**
28. Install the supplied upper control arm using the factory hardware making sure to install the bolt from the front of the vehicle. Torque to factory spec using a 19mm socket & wrench **See Photo 24.**

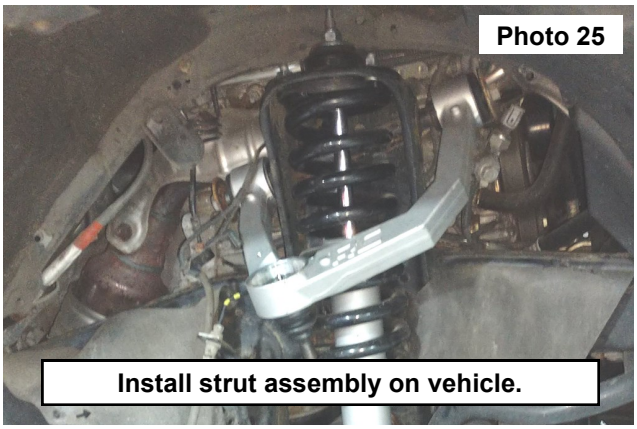


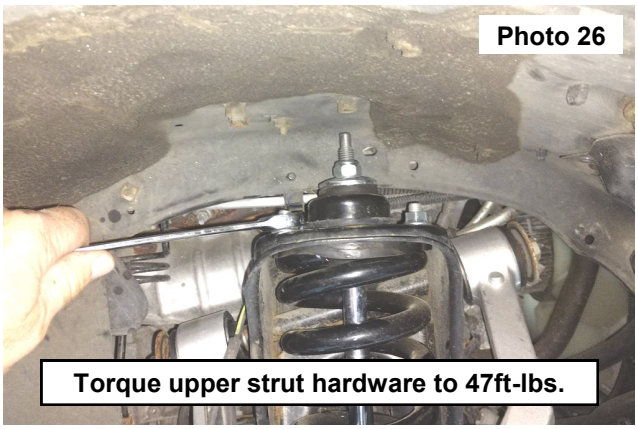
Determine the correct upper control arm.



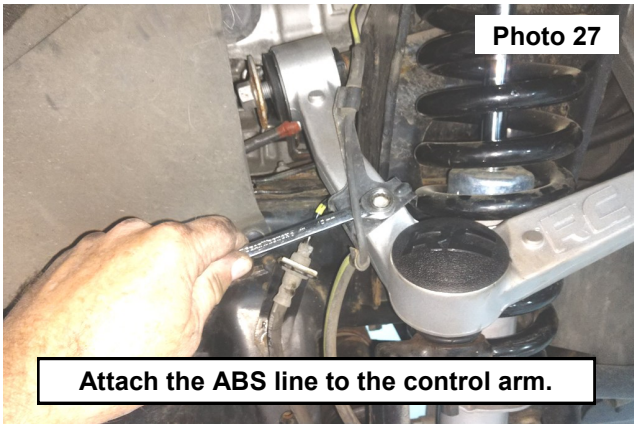
Install the supplied upper control arm.

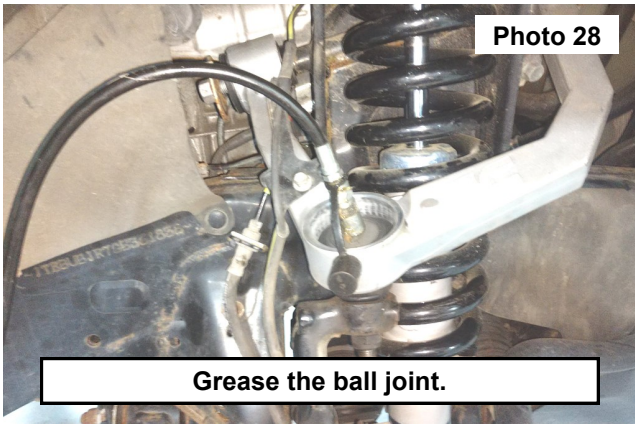
29. Install the strut assembly into the strut tower. **See Photo 25.**
30. Install the supplied 10mm nuts. Using a 17mm wrench torque to 47ft. lbs. **See Photo 26.**



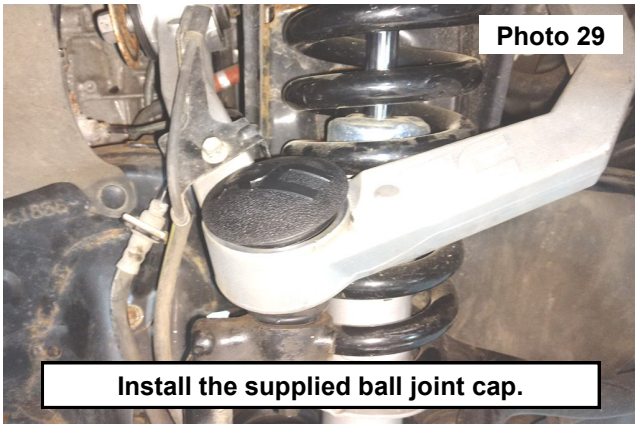


31. Position the strut assembly to reinstall the lower strut bolt in its original position that it was removed. Using original hardware and a 19mm socket torque to 100ft lbs.
32. Using a floor jack, raise the lower control arm and connect the upper ball joint on the upper control arm to the spindle. Using a original nut and a 19mm socket, torque to 40ft lbs.
33. Reinstall the tie rod end off steering linkage into knuckle using original factory nut. Using a 19mm socket torque nut to 65ft. Lbs. Install supplied new cotter pin
34. Attach the ABS wire bracket to the new upper control arm using the supplied 6mm x 16mm bolt. Torque to 6ft/lbs or 76 in/lbs using a 10mm socket. **See Photo 27.**
35. Using a grease gun, grease the ball joint. **See Photo 28.**



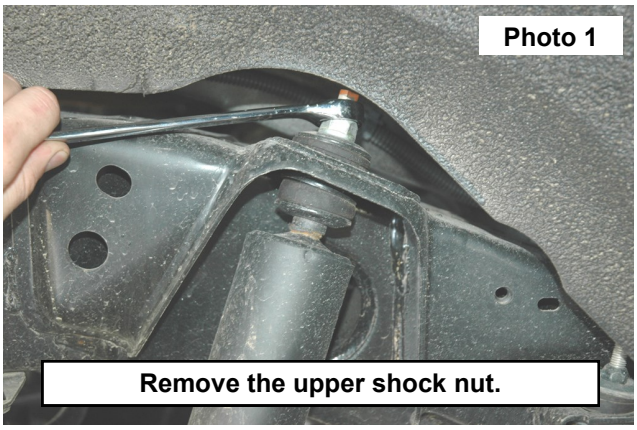


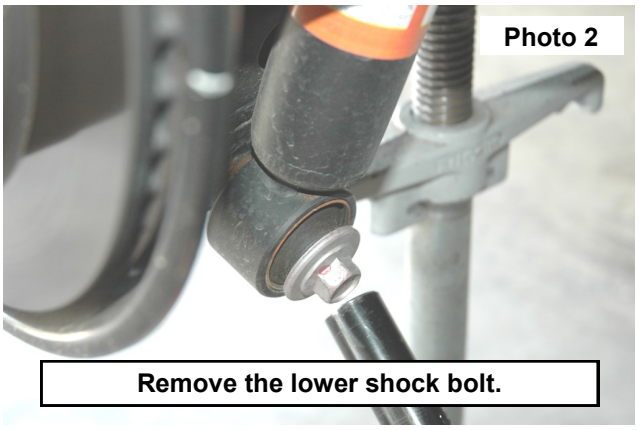
36. Install the supplied ball joint cap onto the control arm. **See Photo 29.**
37. Repeat steps 3-14 on opposite side of vehicle.
38. Using 17 mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.
39. Install the skid plate using the factory hardware and a 12mm socket.
40. Install the wheels / tires. Using a 21mm socket. Torque to 85 ft. lbs. With vehicle on the ground, check the clearance between the tire and upper control arm to make sure the arm does not rub the tire.
41. Jack up the vehicle and remove the jack stands. Lower the vehicle to the ground and re-check all bolts, to assure they are tight.
42. This vehicle must have a front-end alignment after installation of the suspension kit. The vehicle will be aligned to factory specs.



REAR INSTALLTION

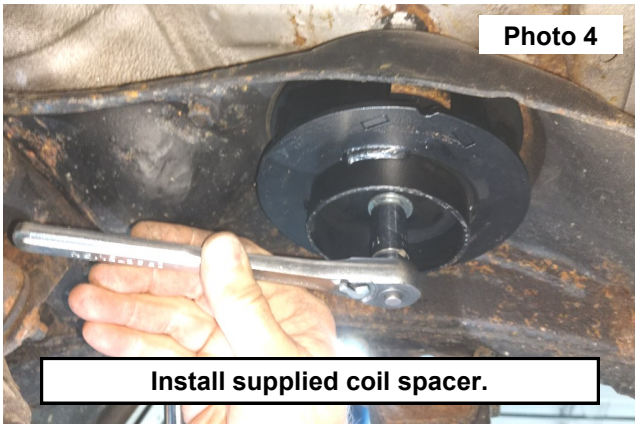
1. Jack up the rear of the vehicle and support the vehicle with jack stands, so that the rear tires are off the ground
2. Remove the rear tires/wheels. Using a 21mm deep well socket.
3. Using a 17mm socket and wrench remove the rear shocks. Retain the lower shock hardware for reuse. **See Photo 1 & 2.**



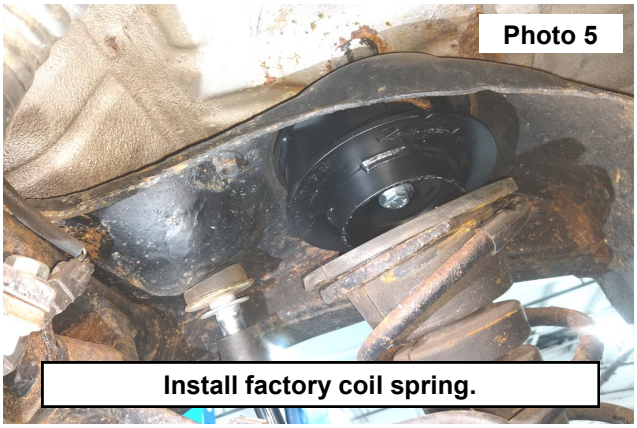


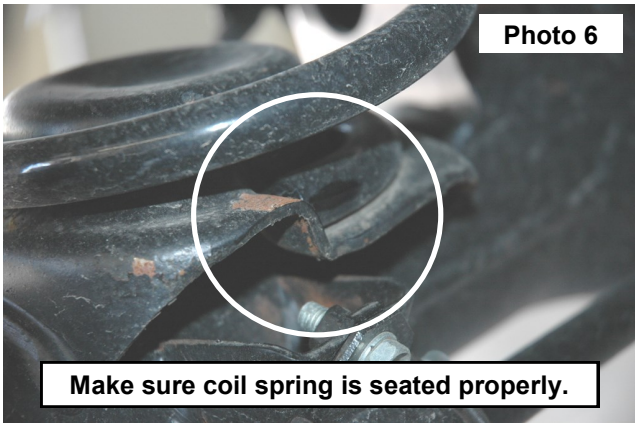
4. Using a 17mm socket or wrench disconnect the sway bar links. **See Photo 3.**
5. Using a 12mm wrench remove the bolt holding the brake line bracket to the frame on the drivers side, and the ABS wire on the passengers side.
6. Lower the axle and remove the factory coil spring.
7. Install new coil spring spacer in the factory pocket with the supplied 1/2" x 1 1/4" bolts, washers & nuts. **See Photo 4.**





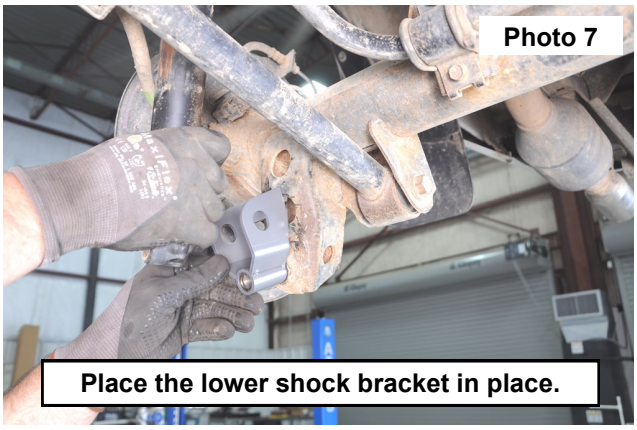
8. After the new spacer has been secured to the frame, reinstall the stock coil spring as shown in **Photo 5**.
9. Make sure the lower coil is positioned correctly in the lower spring seat. **See Photo 6.**

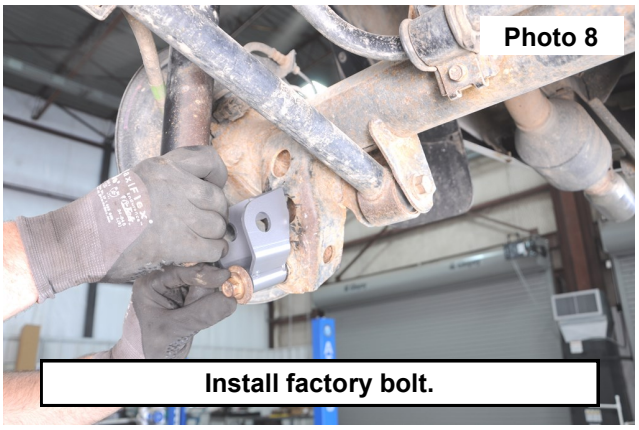




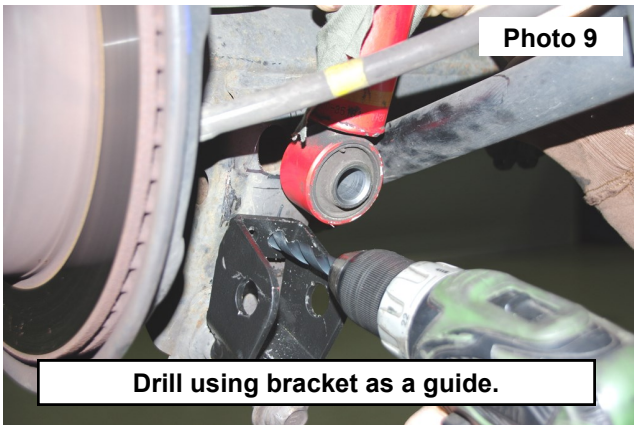
10. Using a 12mm wrench, reinstall the brake line bracket on the drivers side, and ABS bracket on the passengers side.
11. Using 17mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.

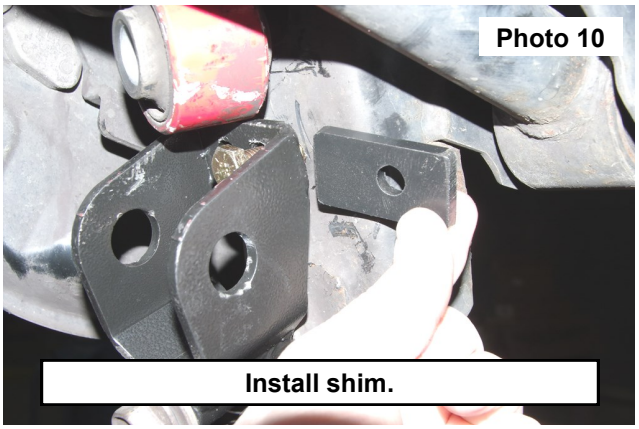
12. ***If not installing shocks skip to step 12.*** Using 17mm socket install new Rough Country shocks, 660773, using new hardware for the top, and factory hardware for the lower mount. Torque upper shock mount nut to 18 ft. lbs. Lower shock bolt torque to 72 ft. lbs.
13. Place the supplied shock bracket onto the lower shock mount. **See Photo 7.**
14. Use factory hardware to attach the bracket on the lower mount. **See Photo 8.**



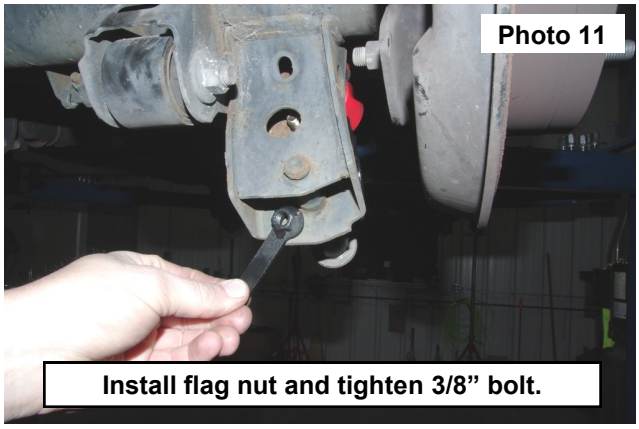


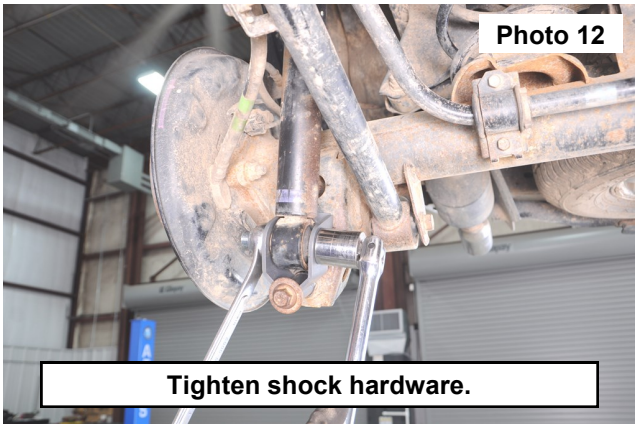
15. Temporarily install the shock in the relocation shock mount bracket and slide the supplied 3/4” x 3-1/2” bolt in the eye-ring of the shock.
16. Tighten the lower bolt on the stock shock mount using a 17mm wrench to make sure the bracket is properly aligned. Remove the 3/4” shock eye-ring bolt temporarily installed in step 14 and remove the shock from bracket.
17. Using the bracket as a guide and using a 3/8” bit, drill as shown in **Photo 9.** Driver side shown.
18. Place supplied 3/8” bolt into upper hole on shock bracket and install square shim between the new bracket and stock mount. **See Photo 10.**





19. Install the supplied flag nut on the 3/8” bolt as shown and tighten using a 9/16” wrench. **See Photo 10.**
20. Attach shock to bracket using supplied 3/4” x 3-1/2”bolts, nuts and washers. Tighten using 1-1/16” wrench and 1 1/8”socket. **See Photo 11.**
21. Repeat process for opposite side.





22. Reinstall tire/wheels. Using a 21mm socket. Torque to 82 ft. lbs. Jack up the rear of the vehicle and remove the jack stands.
23. Lower the vehicle to the ground.

POST INSTALLATION

1. Check and recheck all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check clearance between upper control arm and sidewall of tire for proper clearance. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Adjust headlights to proper settings given increased vehicle height.

MAINTENANCE INFORMATION

It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles.

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 directly or indirectly from the purchase, ownership, or use of the items.