

TOYOTA 1996-2002 4Runner 3" 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 tools needed list and make sure you have needed tools.

PRODUCT USE INFORMATION

AWARNING 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 265/70R-16 or (31 x 10.5) tire with factory wheels. For aftermarket wheel and tire combinations consult your tire and wheel specialist.

A 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

Kit Contents:

2-Front Strut Spacers w/ Hardware 2-Rear Coil Spacers 2-Rear Retaining Washers 2-3/8" x 4.25" Bolts 2-3/8" Flat Washers 2-Rear Shocks Absorbers 2-Rear Shock Upper Mounting Hardware Bags **Tools Needed:** 12 mm Wrench 14 mm Socket 17 mm Socket 17 mm Wrench 19 mm Socket Hammer 16mm Wrench 21mm Socket 9/16" 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



FRONT INSTALLATION

- 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. Remove cotter pin from the outer tie rod end on the steering linkage. Using 19mm socket 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.**
- 4. Using a 17mm wrench, remove the sway bar bolts, allowing the sway bar to drop. Retain hardware. See Photo 2.



- 5. 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.**
- 6. Using a 14mm socket, remove the 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





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







9. Install the new strut extension bracket. Align the holes on the strut extension with the bolts on top of the strut plate and secure with factory hardware. Torque fasteners. **See Photo 7**.



- 10. Install the strut assembly into the strut tower and start the supplied 10mm nuts and lock washers. Using a 17mm wrench torque to 47ft. Lbs.
- 11. 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.
- 12. 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.
- 13. 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
- 14. Reinstall the ABS wire on the knuckle with stock hardware and tighten using a 12mm socket.
- 15. Repeat steps 3-14 on opposite side of vehicle.
- 16. Using 17 mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.
- 17. 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.
- 18. 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.



REAR INSTALLATION

- 1. Jack up the rear of the vehicle, so that the rear tires are off the ground and support the vehicle with jack stands.
- 2. Remove the rear tires/wheels. Using a 21mm deep well socket.
- 3. Using a 19mm socket and wrench remove the frame side factory track bar bolts. Save stock hardware for reuse.
- 4. Using a 12mm socket remove the factory bolts holding on the brake line mounts to the axle. See Photo 1
- 5. Using a 17mm socket & wrench remove the rear shocks. Retain the lower shock hardware for reuse. See Photo 2





- 6. Lower the axle and remove the factory coil spring.
- 7. Install the supplied retaining washer above the coil pocket. See Photo 3.
- 8. Install the 2" coil spacer in the coil pocket and 3/8"-16x4 1/4" bolt and flat washer into the retaining washer using a 9/16" socket. **See Photo 4**.





- Install new coil spring in the factory pocket, a coil spring compressor may be needed to facilitate the install of the coil. Turn the coil until the end of the wrap hits the stop on the coil pocket. See Photo 5.
- 10. Using pliers, carefully bend down the brake line mount. See Photo 6







- 11. Using 17mm socket for the lower and a 14mm wrench for the upper, install new Rough Country shocks, 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.
- 12. Using a 12mm socket install the factory bolts holding the brake line mounts to the axle.
- 13. Install the factory track bar bolt in the frame side using a 19mm socket and wrench.
- 14. Reinstall tire/wheels. Using a 21mm socket. Torque to 82 ft. lbs. Jack up the rear of the vehicle and remove the jack stands.
- 15. Lower the vehicle to the ground.
- 16. This vehicle must have a front-end alignment after installation of the suspension kit. The vehicle will be aligned to factory specs.



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.

Thank you for purchasing a Rough Country Suspension System.

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.

