



Installation Manual

Leveling kit

2018 - Current

Toyota 4Runner TRD Pro

Part # 52016

ZS10222019

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<i>Part #</i>	<i>Description</i>	<i>Qty.</i>
51020-01	Strut spacer	2
52016NB	Hardware bag	1

Congratulations on your selection to purchase a Tuff Country EZ-Ride Suspension System. We at Tuff Country EZ-Ride Suspension are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us and our product.

If you desire to return your vehicle to stock, it is the customers responsibility to save all stock hardware and components.

The Tuff Country EZ-Ride Suspension product safety label that is included in your kit box must be installed inside the cab in plain view of all occupants.

Special note: Before installation begins, it is the customers/installers responsibility to make sure that all parts are on hand.

Important customer information:

Tuff Country EZ-Ride Suspension highly recommends that a qualified or a certified mechanic performs this installation.

It is the responsibility of the customer/installer to wear safety glasses at all times when performing this installation.

It is the customers/installers responsibility to read and understand all steps BEFORE installation begins. Also, the OEM manual should be used as a reference guide.

This vehicles reaction and handling characteristics may differ from standard cars and/or trucks. Modifications to improve and/or enhance off road performance may raise the intended center of gravity. Extreme caution must be utilized when encountering driving conditions which may cause vehicle imbalance or loss of control. **DRIVE SAFELY!** Avoid abrupt maneuvers: such as sudden sharp turns which could cause a roll over, resulting in serious injury or death.

It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every off road use.

After the original installation, Tuff Country EZ-Ride Suspension also recommends having the alignment checked every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension takes no responsibility for abuse, improper installation or improper suspension maintenance.

Important information that needs to be read before installation begins:

Tuff Country developed this kit using a 32X11.5 tire. The stock tires and wheels can be used in conjunction with this lift kit. If a wider tire is installed on the stock wheel, contact with the upper control arm will occur, and is not recommended. **Our tire and wheel fitments are only a guideline. Different production times or tolerances will vary and this size should only be used as a starting point. Each vehicle is different and will need to be treated as such.**

Before installation begins, Tuff Country EZ-Ride Suspension highly recommends that the installer performs a test drive on the vehicle. During the test drive, check to see if there are any uncommon sounds or vibrations. If uncommon sounds or vibrations occur on the test drive, uncommon sounds or vibrations will be enhanced once the suspension system has been installed. Tuff Country EZ-Ride Suspension highly recommends notifying the customer prior to installation to inform the customer of these issues if they exist.

Make sure to use loctite on all new and stock hardware associated with the installation of this suspension system.

Recommended tools selection:

- Cutoff tool
- Wall mounted strut compressor
- Torque wrench
- Standard socket set
- Standard wrench set
- Metric socket set
- Metric wrench set
- Tape measure
- Hydraulic floor jacks

Hardware bag 52016NB includes:

<u>Part#</u>	<u>Description</u>	<u>Quantity</u>
14WA	1/4 Washer	2
S10090	1.000" x .500" x .400" spacer	2
S10025	1.250" x .563" x 1.000" spacer	4
S10051	1.750" x .510" x .950" spacer	2
M10501.25B	10mm x 50mm x 1.25tp bolt	2
M10651.25B	10mm x 65mm x 1.25tp bolt	2
126B	1/2" x 6" bolt	2
12UN	1/2" unitorque nut	2
716WA	7/16" flat washer	2
M835B	8mm x 35mm bolt	2
M10WA	10mm washer	4

Please follow these instructions carefully:

Before installation begins, measure from the center of the wheel hub, to the bottom of the fender well, and record measurements below.

Pre-installation measurements:

Driver side front: _____
Passenger side front: _____
Driver side rear: _____
Passenger side rear: _____

At the end of the installation take the same measurements and compare to the pre-installation measurements.

Post-installation measurements:

Driver side front: _____
Passenger side front: _____
Driver side rear: _____
Passenger side rear: _____ Please follow instructions carefully:

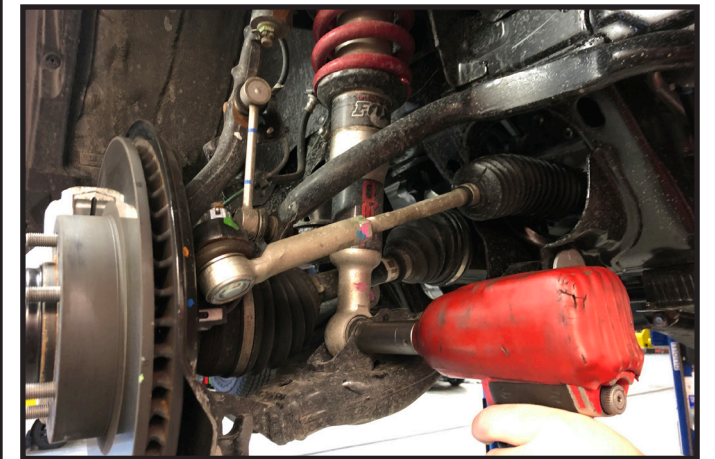
Front end installation:

1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the vehicle with a pair of jack stands. Place a jack stand on both the driver and the passenger side. Next, remove the front wheels and tires from both sides.

2. Working on the driver side, remove 2 of the upper strut mounting nuts, and leave 1 of them loosely threaded on to hold strut into the vehicle.



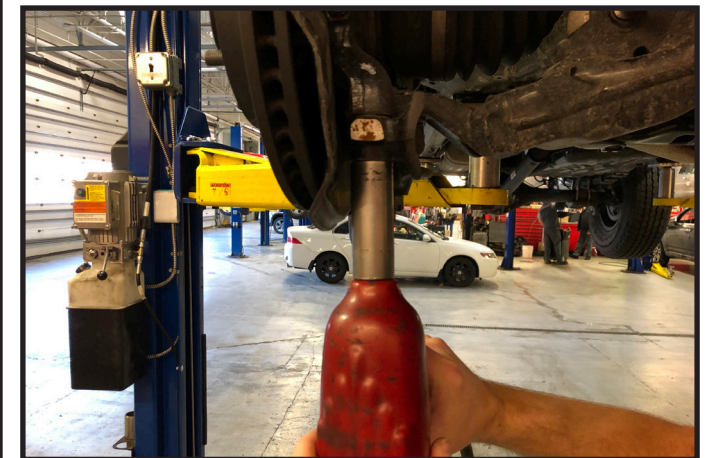
4. Loosen but do not remove the lower strut mounting hardware.



5. Locate and remove the 2 bolts that attach the lower control arm ball joint piece to the steering knuckle.

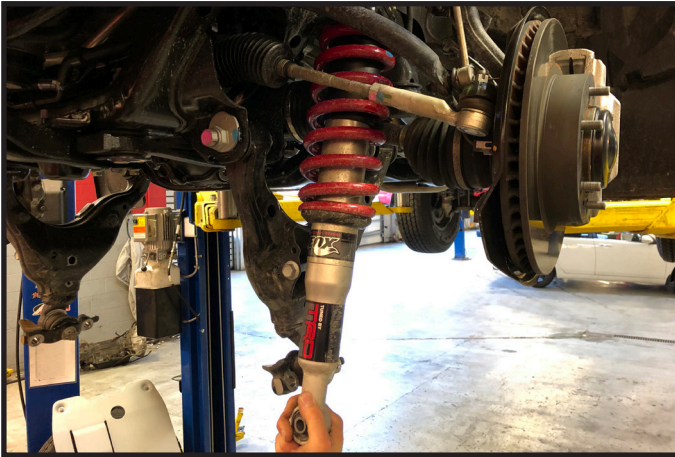


3. Remove the front skid plate and set aside.



6. Loosen, but do not remove the lower control arm cam adjusting bolts.

7. Support the lower control arm using a suitable jack. Remove the 3rd upper strut mounting nut, and remove the lower strut mounting hardware. Carefully lower the jack down so that the strut can be removed from the vehicle.

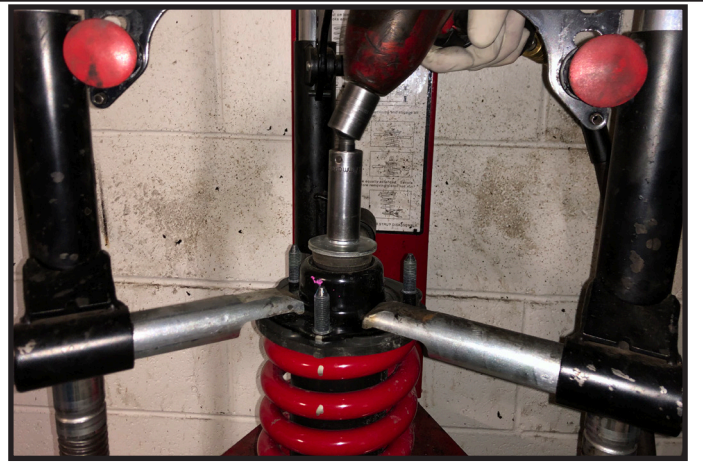


Tuff Country EZ-Ride Suspension recommends a wall mounted strut compressor be used when performing the steps that talk about installing the spacer into the strut. If you do not have a wall mounted strut compressor, please have these steps performed by your local Toyota Dealership

8. Place the strut into a wall mounted strut compressor. Mark a line on the top plate, rubber isolator, and the top of the coil spring. Also, scribe a line on the bottom of the coil and the bottom coil seat. **Special Note: if these steps are not performed properly, reinstalling the strut back into the vehicle will be difficult.**



9. Carefully compress the strut until the upper hardware can be removed. Remove the nut and hardware and save for re-assembly.



10. Remove the shock absorber from the strut assembly out of the bottom of the coil spring. Remove the metal washer and plastic dust boot. Save for re-installation



11. Locate a new strut spacer part # 51020-01 and install it over the body of the shock. **Make sure to install the new spacer so that the "coil shelf" is facing upwards.**

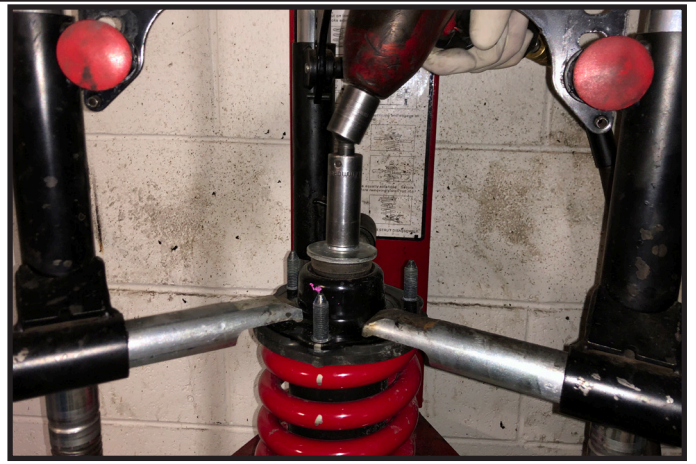


12. Re-install the plastic dust boot and metal washer

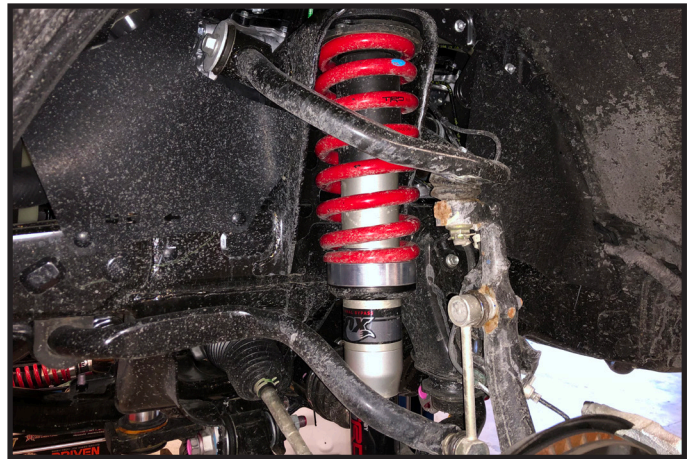


13. Re-install the shock absorber into the strut assembly and make sure to line up your reference marks made on step #8.

14. Re-install the OE upper shock hardware.



15. Remove the strut assembly from the strut compressor and take it back over to the vehicle. Install the strut back into the original location and use OE nuts to loosely hold the strut in place.



16. Raise the lower control arm back up until you can install the OE lower mounting bolt and hardware. Leave this loose for now.



17. Raise the lower control arm up even more until you can re-install the 2 lower ball joint bracket bolts to the steering knuckle. Torque to 160 ft lbs.

18. Now you can move back to the 3 upper strut mounting nuts and torque them to 55 ft lbs.



Repeat steps # 2 - 18 on the passenger side front of the vehicle.

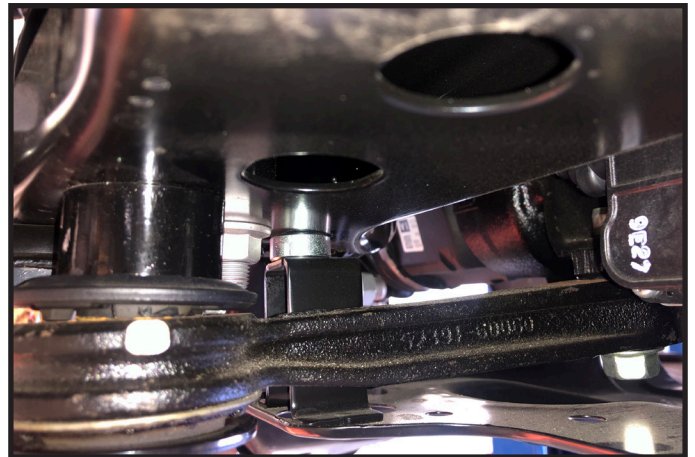
19. Locate the front differential mounting points, carefully remove the (2) OE bolts that connect the front differential brackets to the front crossmember, save the oversized washer and discard the bolt and nut.

20. Locate (2) new S10051 Diff drop sleeves, and (2) 1/2" x 6" bolts, (4) 716WA (2) 1/2" unitorque nuts. Also locate the OE oversized washers removed earlier, Install the front differential drop spacers between the OE brackets and front crossmember. Secure using new 1/2" x 6" bolts and 1/2" nuts. Torque to **80 ft lbs.**



21. Locate (2) S10090 spacers, (2) 8mm x 35mm bolts, and (2) 1/4" flat washers.

22. Remove the front two mounting bolts for the second skid plate. Space those two mounting points with the S10090 spacers and 8mm x 35mm and 14" washers.



23. Locate (4) S10025 spacers, (4) 10mm Washers, (2) 10mm x 50 x 1.25tp bolts and (2) 10mm x 65mm x 1.25tp bolts. Also locate the OE TRD skid plate.

24. Using (2) M10501.25B, (2) M10WA and (2) S10025. Space the front two skid plate mounting points. Using (2) M10651.25B, (2) M10WA and (2) S10025. Add the S10025 spacers to the OE skid plate rear mounts.our spacer will be used with the OE spacer. Install skidplate and Torque to **20 ft lbs.**

25. Install the tires and wheels, make sure to torque the lug nuts to the vehicle/wheel manufacturer specs. Carefully lower the vehicle back down o the ground.

26. Torque the lower control arm cam adjuster bolts to **135 ft lbs.**

27. Torque the lower strut mounting bolt to **85 ft lbs.**

Installation Complete!

Check and double check to make sure that all steps were performed properly. After the completion of this install, Tuff Country Recommends taking the vehicle in for a complete front end alignment.

Tuff Country EZ-Ride Suspension recommends that a complete re-torque is done on all bolts associated with this suspension system. It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with the system after the first 100 miles of installion. It is also the Customers responsibility to do a complete re-torque after every 3,000 miles or after every off road use. Neglect of following these steps could cause brackets to come loose and cause serious damage to the suspension system and to the vehicle.