



Part #: 52904
1995 - 2004 Toyota Tacoma
4 x 4 & PreRunner
3" suspension system

Parts list:

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
52904-01	Rear brake proportioning valve bracket	1
52907-02	Front pre load spacer	2
52904-03	Front strut spacer	2
BL301	3" Rear lifted block	2
5U-243S	9/16" x 2 1/2" x 10 5/8" square u-bolts	4
52904BL	Rear extended brake line	1
52904NB	Hardware bag	1
52904NB1	Hardware bag	1
52904INST	Instruction manual (customer copy)	1
52904INST	Instruction manual (installer copy)	1
MIRRORHANGER	Rear view mirror hanger	1
WARNINGDECAL	Warning decal	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.

For a list of all parts, please refer to the Parts Description Page, at the end of the Installation Manual.

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

It is the responsibility of the installers to make sure that the rear view mirror hanger is hung from the rear view mirror. The rear view mirror hanger has instructions on proper post installation procedure.

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.

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.

Installation manual
3" suspension system
1995 - 2004 Toyota Tacoma
4 x 4 & PreRunner
Part # 52904

sj05292012rev.03

Important customer information

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

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

It is the responsibility of the customer or the mechanic 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. 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.

Torque settings:

5/16"	15—18 ft lbs.
3/8"	28—32 ft lbs.
7/16"	30—35 ft lbs.
1/2"	65—85 ft lbs.
9/16"	85—120 ft lbs.
5/8"	95—130 ft lbs.
3/4"	100—140 ft lbs.

Limited lifetime warranty

Notice to all Tuff Country EZ-Ride Suspension customers: It is your responsibility to keep your original sales receipt! If failure should occur on any Tuff Country EZ-Ride Suspension component, your original sales receipt must accompany the warranted unit to receive warranty. Warranty will be void if the customer can not provide the original sales receipt. Do not install a body lift in conjunction with a suspension system. If a body lift is used in conjunction with any Tuff Country EZ-Ride Suspension product, your Tuff Country EZ-Ride Suspension WARRANTY WILL BE VOID. Tuff Country Inc. ("Tuff Country") suspension products are warranted to be free from defects in material and workmanship for life if purchased, installed and maintained on a non-commercial vehicle; otherwise, for a period of twelve (12) months, from the date of purchase and installation on a commercial vehicle, or twelve thousand (12,000) miles (which ever occurs first). Tuff Country does not warrant or make any representations concerning Tuff Country Products when not installed and used strictly in accordance with the manufacturer's instructions for such installation and operation and accordance with good installation and maintenance practices of the automotive industry. This warranty does not apply to the cosmetic finish of Tuff Country products nor to Tuff Country products which have been altered, improperly installed, maintained, used or repaired, or damaged by accident, negligence, misuse or racing. ("Racing is used in its broadest sense, and, for example, without regards to formalities in relation to prizes, competition, etc.) This warranty is void if the product is removed from the original vehicle and re-installed on that or any other vehicle. This warranty is exclusive and is in lieu of any implied warranty of merchantability, fitness for a particular purpose or other warranty of quality, whether express or implied, except the warranty of title. All implied warranties are limited to the duration of this warranty. The remedies set forth in this warranty are exclusive. This warranty excludes all labor charges or other incidental of consequential damages. Any part or product returned for warranty claim must be returned through the dealer of the distributor from whom it was purchased. Tuff Country reserves the right to examine all parts returned to it for warranty claim to determine whether or not any such part has failed because of defect in material or workmanship. The obligation of Tuff Country under this warranty shall be limited to repairing, replacing or crediting, at its option, any part or product found to be so defective. Regardless of whether any part is repaired, replaced or credited under this warranty, shipping and/or transportation charges on the return of such product must be prepaid by the customer under this warranty.

Important information that needs to be read before installation begins:

Tuff Country recommends a 32x10.50 tire package. If a larger size tire is installed on your vehicle in conjunction with part # 52904; Tuff Country assumes no liability and the warranty will be VOID.

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.

New longer rear shocks are needed after this suspension system has been installed and the rear shocks need to be ordered as a separate part #. If you have not already ordered your rear shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your rear shocks. Tuff Country EZ-Ride Suspension recommends installing a 26" fully extended hydraulic shock once the suspension system has been installed.

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

Hardware bag 52904NB includes:

<u>Description</u>	<u>Quantity</u>
SUW-916 (9/16" U-bolt high nut)	8
M830B (8 mm x 30 mm bolt)	2
M840B (8 mm x 40 mm bolt)	2
51634B (5/16" x 3/4" bolt)	2
14WA (1/4" USS flat washer)	6
516UN (5/16" unitorque nut)	2
128B (1/2" x 8" bolt)	2
12UN (1/2" unitorque nut)	2

Hardware bag 52904NB1 includes:

<u>Description</u>	<u>Quantity</u>
ECLIP (Brake line clip)	1
BU3000 (10 mm studs)	1
SB34 (3/4" shock bushing)	4
S10021 (.500" x .380" x .620" sleeve)	2
S10051 (1.750" x .510" x .950")	2
BLR01 (rear emergency brake cable extension)	1
5161B (5/16" x 1" bolt)	1
14WA (1/4" USS flat washers)	2
516UN (5/16" unitorque nut)	1

Before installation begins, it is the customers/installers responsibility to make sure that all parts are on hand. If any parts are missing, please feel free to call one of our customer service representatives @ (801) 280-2777.

Please follow instructions carefully:

Before installation begins, measure from the center of the 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, safely lift the front and rear of the vehicle and support the vehicle with jack stands on each corner of the vehicle. Next, remove the wheels and tires from both the front and rear of the vehicle.

2. Working on the driver side, remove the sway bar hardware from the frame location. Save the hardware for later re-installation. Repeat procedure on the passenger side.

Special note: Tie the sway bar up and out of the way during installation.

3. Working on the driver side, remove the (3) upper nuts that connect the strut into the OE location. The nuts may be discarded. Repeat procedure on the passenger side.

4. Working on the drivers side, remove and save the cotter pin that is located in the ball joint connected to the upper control arm. Now, loosen but do not remove the castle nut. Using a hammer, carefully break the taper on the upper control arm ball joint. **Special note: Take special care not to damage the upper control arm, the ball joint or the ball joint dust boot.** Repeat procedure on the passenger side.



5. Working on the driver side, remove the lower bolt that connects the strut to the lower mounting location and save the hardware for later re-installation. **Special note: During removal of the bolt, take special care not to damage the CV boot. Also, make a mental note on which way the bolt is removed, it needs to be re-installed the same way that it was removed. Remove the strut assembly from the vehicle and set aside.** Repeat procedure on the passenger side.

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

6. Working on the driver side strut, scribe a line down the entire strut from the top of the strut to the bottom. **Special note: If this step is not performed properly re-installing the strut back into the vehicle will be difficult.**



7. Using a wall mounted strut compressor, carefully compress the strut until the upper bearing plate can be removed. Remove the nut and hardware from the top of the strut assembly and save the hardware for later re-installation.



8. Remove the upper strut bearing plate from the strut assembly. Remove the rubber isolator from the upper strut bearing plate and set the upper strut bearing plate and isolator aside.

9. Locate (3) new 10 mm x 2 1/4" strut stud bolts from hardware bag 52904NB1. Working on the driver side upper strut bracket, carefully remove the studs located in the upper strut bearing plate and discard. **Special note: The use of a hammer will make the removal of the studs easier.** Carefully install the new 10 mm x 2 1/4" strut stud bolts into the stock upper strut bearing. Set the modified stock upper strut bearing plate aside.



10. Locate (1) new pre load spacer, the driver side strut, the newly modified upper strut bearing plate, the isolator and the upper strut hardware. Carefully compress the strut enough so that the new strut spacer can be installed. Install the new strut spacer and isolator into the strut and secure the upper bearing plate to strut assembly using the upper strut hardware. Make sure to use loctite. Torque to **65 ft lbs.** **Special note: Make sure that the marks that were scribed earlier in the installation, line up with each other.** Also, on some struts the OE dust boot may need to be removed and discarded.



11. Locate (3) new 10 mm nylon lock nuts from hardware 52904NB1. Also, locate (1) new upper strut spacer and the upper hardware. Working on the driver side, install the new upper strut isolator spacer on top of the new strut assembly and install back into the vehicle. Secure the top of the new strut assembly using the new 10 mm nylon lock nuts hardware. Make sure to use loctite and torque to **42 ft lbs.** **Special note: If needed, carefully cut off the excess thread off of the 10 mm x 2 1/4" studs. Also, if need be to make installation easier, the upper control arm may need to be removed from the knuckle.**



12. Locate the lower strut bolt and hardware. Secure the strut assembly into the lower location using the hardware. Make sure to use loctite and torque to **75 ft lbs.** **Special note: When installing the lower bolt, make sure that the bolt is installed the way it was removed. Facing towards the front of the vehicle. Also, take special care not to damage the CV boot when re-installing the hardware.**

13. If you removed the upper control arm from the knuckle during the strut installation, use the OE hardware and cotter pin and secure the knuckle back to the upper control arm. **Torque to 80 ft lbs. Special note: If the cotter pin does not fit, do not loosen the castle nut but tighten it just a little bit more until the cotter pin can be installed.**

14. Repeat steps 6 - 13 on the passenger side strut assembly.

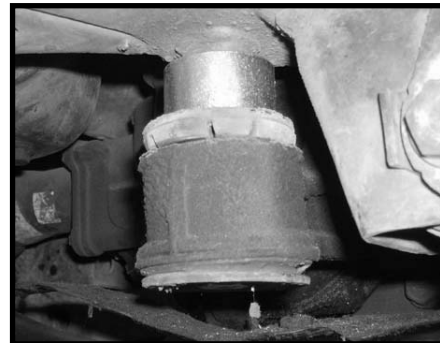
15. Working on the driver side, re-install the sway bar into the OE location and secure using the hardware. Repeat procedure on the passenger side.

16. Working on the front of the vehicle, carefully remove both skid plates from under the vehicle. Save the hardware for later re-installation.

17. Place a pair of hydraulic floor jacks under the front differential. Place one on the driver side and one on the passenger side. Carefully lift up on both hydraulic floor jacks until they make contact with the front differential.

18. Working on the driver side, carefully remove the bolts that connect the front differential to the front cross member. Save the oversized washer. The bolt and nut may be discarded. Repeat procedure on the passenger side.

19. Locate (2) new S10051 from hardware bag 52904NB1. Locate (2) 1/2" x 8" bolts and (2) 1/2" unitorque nuts from hardware bag 52904NB. Also, locate the oversized washers. Carefully lower down on both hydraulic floor jacks allowing enough room for the new front differential spacers to be installed. Working on the driver side, install the new front differential spacer between the front differential and the front cross member and secure using the new 1/2" x 8" bolt, 1/2" unitorque nut and the oversized washer. Make sure to use loctite. **Do not tighten at this point.** Repeat procedure on the passenger side. At this time, torque the new 1/2" hardware to **80 ft lbs.** Carefully remove both hydraulic floor jacks from under the front differential.



20. Locate the front skid plate and the hardware. Also, locate (2) new 8 mm x 40 mm bolts from hardware bag 52904NB. Install the front skid plate into the OE location and secure using the OE hardware in the front holes and the new 8 mm bolt in the rear. Make sure to use loctite. **Do not tighten at this point.**

21. Locate the rear skid plate and hardware. Install the rear skid plate into the OE location and secure using the hardware. Make sure to use loctite. **Do not tighten at this point. Special note: The rear mounting holes may need to be enlarged for proper fitment.** Torque the OE skid plate hardware to **50 ft lbs.** and the new 8 mm bolts to **17 ft lbs.**

Rear end installation.

22. Working on the driver side, remove the shock from the upper and lower location. **Special note: New longer rear shocks are needed after this suspension system has been installed and the rear shocks need to be ordered as a separate part #. If you have not already ordered your new rear shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your new rear shocks. Tuff Country recommends running a 26" fully extended nitrogen gas shock in the rear.** Save the upper and lower shock hardware for later re-installation. The shock may be discarded. Repeat procedure on the passenger side.

23. Working on the driver side inner frame rail, remove the rear brake line clip that holds the rear brake line into the stock location on the frame rail. Save the rear brake line clip. Remove the brake line from the frame location and the distribution block located on the rear differential. The brake line may be discarded. **Special note: Place something under the vehicle to catch the brake fluid when it leaks out.**



24. Locate the new rear brake line and the new rear "E" clip. Install the new rear brake line to the distribution block located on the rear differential. Install the other end of the new brake line to the stock frame location. Re-install the stock clip into the stock location. If needed, install the "E" clip along with the stock clip to secure the upper portion of the new brake line into the stock location. **Special note: after the completion of the installation, bleed the brake lines and top off the brake fluid.**



25. Remove the rear brake proportioning valve bracket from the rear axle. The hardware may be discarded.

26. Locate the new rear brake proportioning valve bracket. Locate (2) 8 mm x 30 mm bolts and (2) 1/4" USS flat washers from hardware bag 52904NB. Also, locate (2) S10021 spacer sleeves from hardware bag 52904NB1. Install the new rear brake proportioning bracket into the OE location on the rear differential and secure using the new 8 mm x 30 mm bolt, washers and spacer sleeves. **Make sure to use loctite and torque to 19 ft lbs.**



27. Locate (2) 5/16" x 3/4" bolts, (4) 1/4" USS flat washers and (2) 5/16" unitorque nuts from hardware bag 52904NB. Install the OE brake. Secure the new rear brake proportioning valve extending bracket to the stock rear brake proportioning valve bracket using the new 5/16" x 3/4" bolt and hardware. **Torque to 20 ft lbs. Special note: When installing the new hardware, make sure that the bolt is facing towards the rear of the vehicle. This is done for clearance on the new bolts.**



28. Position a pair of hydraulic floor jacks under the rear differential. Place one jack stand on the driver side and one on the passenger side. Raise up on both hydraulic floor jacks at the same time until they make contact with the rear differential. Working on the driver side, remove the rear u-bolts. The rear u-bolts and the u-bolt nuts may be discarded, save the u-bolt washers. Place the u-bolt plate and the bump stop aside for later re-installation. Repeat procedure on the passenger side.

29. Working on the driver side, remove the clips that connect the rear parking brake cables to the backing plates on the back side of the rear drums and save the clip for later re-installation. This is done so that the rear parking brake cables can be reconnected under the spring assembly once the new 3" lifted blocks have been installed.

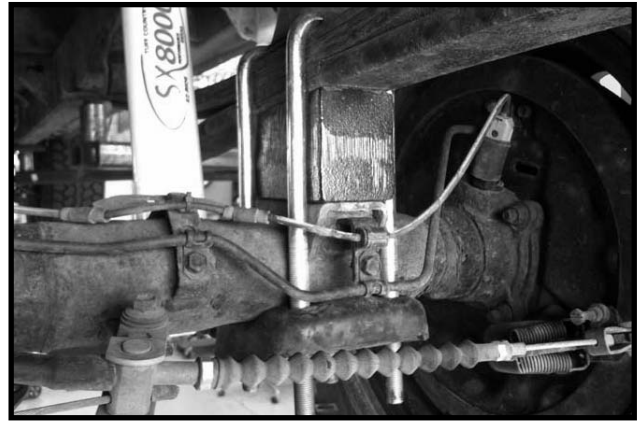
30. Carefully lower down on both hydraulic floor jacks at the same time until the rear spring assembly separates from the rear axle approximately 3.5".

31. Locate (2) new 3" lifted blocks. Working on the driver side, install the new 3" lifted blocks between the axle and the spring assembly. **Special note: The new 3" lifted block has a slight taper to it, make sure that smaller end of the block is facing towards the front of the vehicle. Repeat procedure on the passenger side.** Carefully raise up on both hydraulic floor jacks at the same time until the newly installed 3" lifted block seats properly with the stock spring assembly and the spring perch.

32. Locate (8) 9/16" u-bolt high nuts from hardware bag 52904NB. Also, locate the stock u-bolt washers and the (4) new 9/16" x 2 1/2" x 10 5/8" square u-bolts. Working on the driver side, re-install the u-bolt plates and bump stops into the OE location. Secure the spring assembly to the axle using the new u-bolts, u-bolt high nuts and the OE u-bolt washers. Torque to **85 ft lbs**. Repeat procedure on the passenger side.

33. Locate the new rear shocks. **Special note: New longer rear shocks are needed after this suspension system has been installed and the rear shocks need to be ordered as a separate part #. If you have not already ordered your new rear shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your new rear shocks. Tuff Country recommends running a 26" fully extended nitrogen gas shock in the rear.** Locate (4) new 3/4" shock bushings from hardware bag 52904NB1. Also, locate the upper and lower shock hardware. Install the new 3/4" shock bushings into each end of the new shocks. Working on the driver side, install the new rear shocks in the upper and lower location and secure using the OE hardware. Torque to **65 ft lbs**. Carefully remove both hydraulic floor jacks from under the vehicle.

34. Locate the rear parking brake cable clips. Working on the driver side, re-install the parking brake cable to the OE location on the backing plate of the drums and secure using the parking brake clips. **Special note: Make sure that the rear parking brake cable is now under the spring assembly.** Repeat procedure on the passenger side.



35. Locate the new rear emergency brake cable relocation bracket. Working on the driver side, remove the emergency brake cable bracket from the rear axle and install the new bracket to the OE location using the OE hardware. **Do not tighten at this point.**

36. Locate (1) 5/16" x 1" bolt (2) 1/4" USS flat washers and (1) 5/16" unitorque nut from hardware bag 52904NB1. Install the OE rear emergency brake cable bracket to the newly installed bracket and secure using the new 5/16" hardware. **Make sure to use loctite and torque to 8 ft lbs. Move back to the OE hardware and add some loctite and torque to 8 ft lbs.**



37. Re-install the front and rear tires and wheels. Carefully lower the vehicle to the ground.

38. With the help of a buddy, bleed the brake lines and with a Toyota approved brake fluid. Also, top off the brake fluid reservoir.

Congratulations installation complete!

Special note: After the completion of the installation, Tuff Country EZ-Ride Suspension recommends taking the vehicle to an alignment shop and having a proper front end alignment performed.

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 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. Neglect of following these steps could cause brackets to come loose and cause serious damage to the suspension system and to the vehicle.

Tuff Country EZ-Ride Suspension packages (2) sets of instruction sheets with this box kit. (1) is for the installer and (1) is for the customer. The (1) for the customer has some post installation procedure literature and it is the installers responsibility to make sure that the customer receives a copy of the installation manual along with the literature.

If you have any questions or concerns, please feel free to contact Tuff Country or your local Tuff Country dealer.