



EZ - Ride Suspension

Installation manual 3" suspension system 2005 — 2008 Toyota Tacoma Part # 52907

sj111607rev.02

Part # 52907
2005-2008 Toyota Tacoma
3" suspension system

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
52907-01	Pre-load spacer	2
52907-02	Strut spacer	2
TCI-R15	Rear add-a-leafs	2
CB38	Hardware bag	1
5U-232S	9/16" x 2 9/16" x 7 5/8" square u-bolts	4
52907NB1	Hardware bag	1
52907INST	Instruction sheet (customer copy)	1
52907INST	Instruction sheet (installer copy)	1
MIRRORHANGER	Rear view mirror hanger	1
WARNINGDECAL	Warning decal	1
DECAL	Window sticker	1

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

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.

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

Make sure to use lock tite on all new and stock hardware associated with this installation.

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.

Important customer information:

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

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

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.

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

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:

Due to the different variation of the stock strut spring rate, height after installation of the spacer may vary. Any questions please feel free to contact Tuff Country or your local Tuff Country dealer.

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.

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.

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 52907NB1 includes:

<u>Description</u>	<u>Quantity</u>
126B (1/2" x 6" bolt)	2
12UN (1/2" unitorque nuts)	2
BU3000 (front strut stud / hardware bag)	1
M850HEXB (8 mm x 50 mm hex bolt)	1
S10051 (1.750" x .510" x .950")	2
S10105 (1.000" x .385" x 1.300")	1
916HN (9/16" u-bolt washers)	1

Hardware bag CB38 includes:

<u>Description</u>	<u>Quantity</u>
CB381 (3/8" centering bolt)	2
38FN (3/8" fine nut)	2

Recommended tools selection:

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

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: _____

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: _____

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 frame with a pair of jack stands. Place a jack stand on both the driver and passenger side. Next, remove the wheels and tires from both sides.

2. Remove the stock front skid plate and save the stock skid plate and hardware for later re-installation.

3. Working on the driver side, remove the stock sway bar end link from the stock knuckle. Save the stock hardware for later re-installation. Repeat procedure on the passenger side.

4. Working on the driver side, remove the stock cotter pin that connects the stock knuckle to the stock upper control arm. Save the cotter pin for later re-installation. Loosen but do not remove the stock castle nut that secures the stock knuckle to the stock upper control arm. Carefully break the stock taper in the stock upper control arm and the stock knuckle. Once the taper has been broke, remove the stock castle nut and set aside for later re-installation. Repeat procedure on the passenger side.

5. Working on the driver side, place an reference mark on the driver side strut. This is done so that the driver side strut will be put back into the driver side of the vehicle. Working on the driver side, remove the (3) upper stock nuts that connect the stock strut into the stock location. Save the stock nuts for later re-installation. Repeat procedure on the passenger side.

6. Working on the driver side, remove the stock lower bolt that connects the stock strut to the stock lower mounting location and save the stock hardware for later re-installation. **Special note: During removal of the stock bolt,**

take special care not to damage the stock 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 remove. Remove the stock strut assembly from the stock location and set aside for further instructions. 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 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

7. Locate the driver side stock strut. 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.**

8. Using a wall mounted strut compressor, carefully compress the driver side stock strut until the upper stock strut bracket can be removed. Remove the stock nut and hardware from the top of the stock strut assembly and save the stock hardware for later re-installation. Set the driver side strut and strut compressor aside.

9. Working on the driver side stock strut, remove the stock upper strut bearing plate from the stock strut assembly. Remove the stock rubber isolator from the stock upper strut bearing plate and set the stock upper strut bearing plate and isolator aside.

10. Locate (3) new 10 mm x 2 1/4" strut stud bolts from hardware bag BU3000 that are packaged in hardware bag 52907NB1. Working on the driver side stock upper strut bracket, carefully remove the stock studs located in the stock upper strut bracket and discard. **Special note: The use of a hammer will make the removal of the stock studs easier.** Carefully install the new 10 mm x 2 1/4" strut stud bolts into the stock upper strut bracket. Set the stock upper strut bracket aside for further instructions.

11. Locate (1) new strut spacer, the driver side stock strut, the newly modified stock upper strut bearing plate, the stock isolator and the stock upper strut hardware. Carefully compress the stock strut enough so that the new strut spacer can be installed. Install the new strut spacer and isolator into the stock strut and secure the stock upper bearing plate to stock strut assembly using the stock upper strut hardware. Make sure to use thread locker or lock tite. Torque to **65 ft lbs.**

12. Locate (1) new upper strut isolator spacer and the stock upper hardware. Working on the driver side, install the new upper strut isolator spacer on top of the new strut assembly and install into the stock strut upper location. Secure the top of the new strut assembly using the stock hardware. Torque to the stock hardware to **42 ft lbs. Special note: If**

needed, carefully cut off the excess thread off of the 10 mm x 2 1/4" studs.

13. Locate the stock lower strut bolt and hardware. Secure the stock strut assembly into the stock lower location using the stock hardware. Make sure to use thread locker or lock tite. Torque to **75 ft lbs.** **Special note: When installing the stock 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 stock CV boot when re-installing the stock hardware.**

14. Repeat steps 7 - 13 on the passenger side strut assembly.

15. Locate the stock castle nut and cotter pin. Working on the driver side, secure the stock knuckle to the stock upper control arm using the stock hardware. Torque and install the stock cotter pin. **Special note: when torquing the stock castle nut, DO NOT loosen the stock castle nut to get the holes lined up to install the stock cotter pin, tighten the stock castle nut until the holes line up and the stock cotter pin can be installed.** Repeat procedure on the passenger side.

16. Locate the stock sway bar hardware. Working on the driver side, secure the stock sway bar to the stock spindle using the stock hardware to **65 ft lbs.**

17. Working on the driver side, carefully remove the stock bolt that connects the stock front differential to the stock front cross member. Save the stock oversize washer. The stock bolt and nut may be discarded. Repeat procedure on the passenger side..

18. Locate (2) new S10051, front differential spacer sleeves. Locate (2) 1/2" x 6" bolts and (2) 1/2" unitorque nuts from hardware bag 52907NB1. Also, locate the stock oversize 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 stock front cross member and secure using the new 1/2" x 6" bolt, 1/2" unitorque nut and the stock over size washer. Do not tighten at this point. Repeat procedure on the passenger side. **Move back to the 1/2" x 6" bolt on the driver and passenger side and add some thread locker or lock tite and torque to 80 ft lbs.** Carefully remove both hydraulic floor jacks front under the front differential.

Photo # 1

19. Locate the stock skid plate and the stock skid plate hardware. Re-install the stock skid plate into the stock location and secure using the stock hardware.

20. Re-install the tires and wheels and torque the lug nuts to the proper torque specifications. Carefully lower the vehicle to the ground.

Front installation complete!

Rear end installation:

21. To begin installation, block the front tires of the vehicle so that the vehicle is stable and can't roll forward. Safely lift the rear of the vehicle and support the frame with a pair of jack stands. Place the jacks stands on both the driver and the passenger side. Make sure that the parking brake is not set. Next, remove the tires and wheels from both sides.

22. Working on the driver side, remove the stock shock from the stock upper and lower location. Set the stock shock and the stock hardware a side for later re-installation. Repeat procedure on the passenger side.

23. Working on the driver side, remove the stock brake line bracket from the driver side of the rear axle. The stock bolt may be discarded.

24. 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 stock rear u-bolts. The stock rear u-bolts and the stock u-bolt nuts may be discarded, save the stock u-bolt washers. Place the stock u-bolt plate and the stock bump stop aside for later re-installation. Repeat procedure on the passenger side.

25. Carefully lower down on both hydraulic floor jacks at the same time until the stock rear spring assembly separates from the stock rear axle to allow enough room for the new rear add-a-leaf to be installed.

26. Working on the driver side, place a pair of "C" clamp vise grips on each side of the stock centering bolt. Carefully remove the stock centering bolt and nut and discard. Carefully remove the "C" clamp vise grips that are holding the stock springs together. **Special note: Be very carefully when removing the "C" clamps, the stock springs are under tension and can be dangerous.** Repeat procedure on passenger side.

27. Locate (2) new rear add-a-leafs. Locate (2) 3/8" centering bolts and (2) 3/8" fine nut from hardware bag CB38. Install the new rear add-a-leaf into the stock spring assembly. Secure the new rear add-a-leaf to the stock spring assembly using the new 3/8" center bolt and nut. **Torque to 28 ft. lbs. Special note: If the new add-a-leaf that you are installing into the stock spring assembly has an offset center hole location, place the longest side of the add-a-leaf towards the rear of the vehicle. Also the new add-a-leaf should be installed into the stock spring assembly in progression in order, from longest to shortest. The new add-a-leaf should be installed between the stock overload and the stock spring pack. The stock overload is usually the un-arched spring at the bottom of the stock leaf pack. Also, Tuff Country**

EZ-Ride Suspension recommends not using any air tools when installing the new add-a-leafs into the stock spring assembly. If air tools are used the centering bolt may strip, causing the stock spring assembly to come apart. With a suitable cutting tool, cut off the extra thread from the new centering bolt. Repeat procedure on passenger side.

Photo # 2

28. Carefully raise up on both hydraulic floor jacks at the same time until the stock rear axle makes contact with the stock spring assembly.

29. Locate (4) new 9/16" x 2 1/2" x 7 5/8" square u-bolts. Locate (8) new 9/16" u-bolt high nuts from hardware bag 52907NB1. Also, locate the stock u-bolt plates, bump stops and the stock u-bolt washers. Working on the driver side, re-install the stock u-bolt plates and bump stops into the stock location. Secure the stock spring assembly to the stock axle using the new u-bolts, u-bolt high nuts and the stock u-bolt washers. **Torque to 85 ft lbs.** Repeat procedure on the passenger side.

Photo # 2

30. Locate (1) 8 mm x 50 mm hex head bolt and (1) S10105 from hardware bag 52907NB. Working on the driver side, secure the new spacer sleeve between the stock brake line bracket and the stock rear axle using the new 8 mm x 50 mm bolt. **Special note: make sure to use thread locker or lock tite and torque to 15 ft lbs.**

Photo # 3

31. Locate the stock rear shocks, the stock upper and lower shock hardware. Working on the driver side, install the stock rear shocks in the stock lower location and secure using the stock hardware. **Torque to 65 ft lbs.** Secure the stock shock into the stock upper location using the stock hardware and torque to **18 ft lbs.** Carefully remove both hydraulic floor jacks from under the vehicle.

Photo # 2

32. Re-install the tires and wheels and torque to lug nuts to proper torque settings. Carefully lower the vehicle to the ground.

Check and double check to make sure that all steps were performed properly. Once installation is complete take vehicle directly to an alignment center for proper front end alignment.

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.

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



Photo # 1

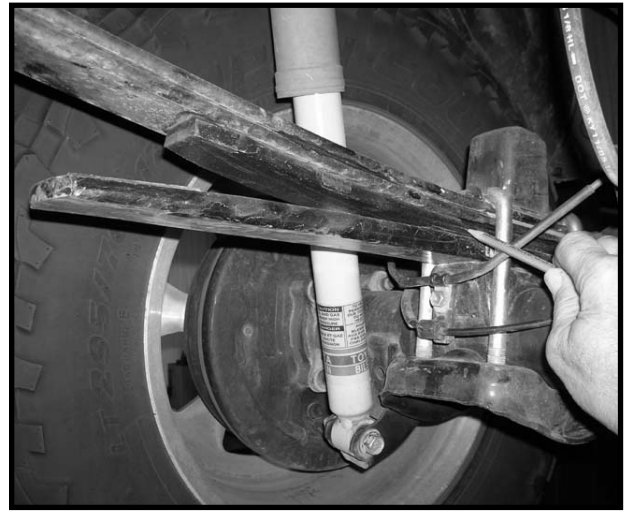


Photo # 2

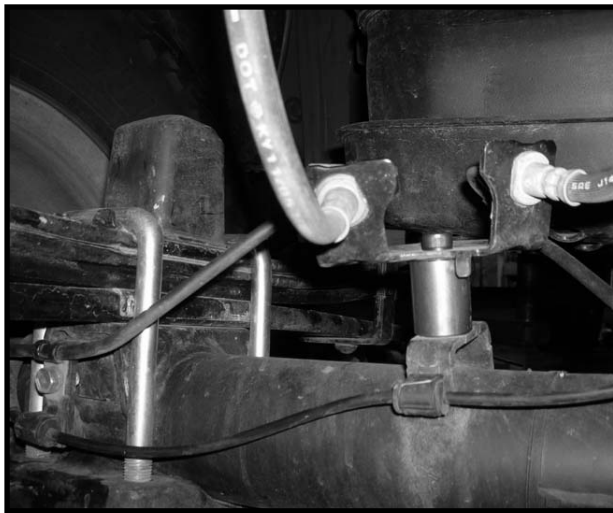
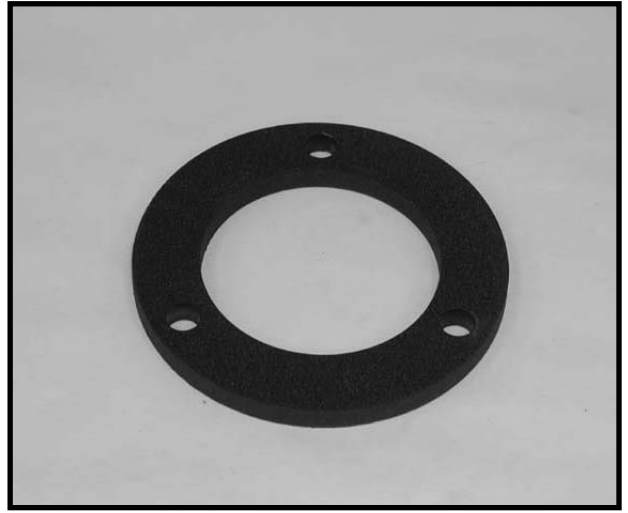


Photo # 3



52907-01 / qty. 2
Pre load spacer



52907-02 / qty. 2
Strut spacer