



Installation Manual

2.5" Suspension Lift System

2015 - Current

Toyota Tundra TRD Pro

Part # 52080 & 52085

SS04022019

Part # 52080 & 52085
2015 - Current Toyota Tundra TRD Pro
2.5" Lift kit

Part #	Description	Qty.
53070-01	Strut spacer	2
*54070-02	driver side upper control arm	1
*54070-03	passenger side upper control arm	1
54070-05	sway bar spacer tube	2
56070-18	emergency brake cable bracket	2
BL201	2" rear block	2
5U-247S	rear u-bolt	4
916NW	u-bolt hardware	1
55916-01	skidplate/tow hook spacer block	2
*52080NB	hardware bag	1
*52080NB1	hardware bag	1
**54070-02	driver side upper control arm	1
**54070-03	passenger side upper control arm	1
**52085NB	hardware bag	1
**52085NB1	hardware bag	1

* - Items included in the 52080 kit only

** - Items included in the 52085 kit only

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. If any parts are missing, please feel free to call one of our customer service representatives @ (801) 280-2777.

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. If you have any questions or concerns, please contact our technical department @ (801) 280-2777. 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.

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 or 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 35" x 11.50" tire with a wheel that has a back spacing of 5.5" or less. 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:

Grease gun with lithium based grease
Grinder with cutoff disc and sanding disc
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 52080NB1 includes:

Part#	Description	Quantity
TC-002	Poly bushing	8
S10346	1.187" x .440" x .785"	4
S10347	1.187" x .440" x 2.560"	2
S10348	1.187" x .440" x 3.600"	1
S10315	.780" x .638" x 2.430"	4
S10051	1.750" x .510" x .950"	2
S10090	1.000" x .500" x .400"	8

Hardware bag 52080NB includes:

Part#	Description	Quantity
126B	1/2" x 6" bolt	2
716WA	7/16" flat washer	2

12UN	1/2" unitorque nut	2
5161B	5/16" x 1" bolt	2
14WA	1/4" flat washer	6
516UN	5/16" unitorque nut	2
14UN	1/4" unitorque nut	2
M8120B	8mm x 120mm bolt	1
M895B	8mm x 95mm bolt	2
M860B	8mm x 60mm bolt	2
M10120B	10mm x 120mm bolt	2
M1260B1.25	12mm x 60mm bolt (1.25 tpi)	8
M12WA	12mm flat washer	8
M12LWA	12mm Lock washer	4
M8WA	8mm flat washer	5
M10WA	10mm flat washer	2
SERT06	grease fitting	4
SUW-916	9/16" hardened washer	2
S10077	2.000" x .625" oversize washer	4

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S10051	1.750" x .510" x .950"	2
S10090	1.000" x .500" x .400"	8
S10246	Uniball mis-alignment sleeve	2
S10249	Tapered Uniball mis-alignment sleeve	2

Hardware bag 52085NB includes:

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M1260B1.25	12mm x 60mm bolt (1.25 tpi)	8
M12WA	12mm flat washer	8
M12LWA	12mm Lock washer	4
M8WA	8mm flat washer	5
M10WA	10mm flat washer	2
SERT06	grease fitting	4
9165B	9/16" x 5" bolt	2
12WA	1/2" flat washer	4
916UN	9/16" unitorque nut	2
S10077	2.00" x .625" oversize washer	4

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: _____

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.

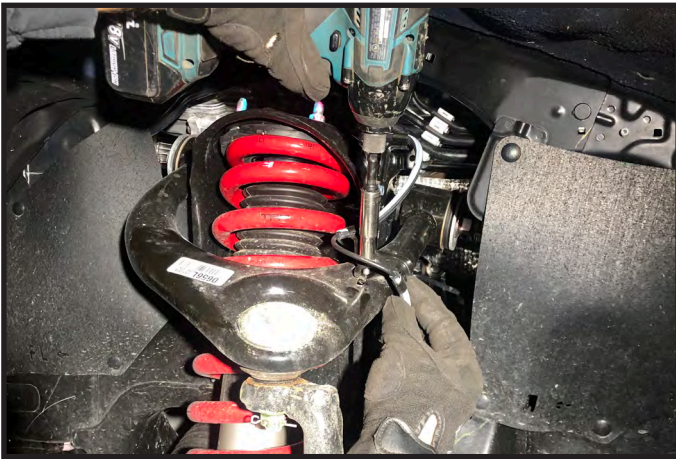
2. Carefully remove the 3 plastic body clips that attach the front bumper to the front skid plate.



3. Remove all the front skid plate mounting hardware, including the tow hook bolts. Carefully remove the skid plate and set aside for later work. **Refer to the following photo for all attachment points**



4. Working on the driver side, remove the ABS wire harness bracket from the upper control arm.



5. Remove the cotter pin and castle nut from the upper ball joint.



6. Support the lower control arm using a suitable jack. Carefully strike the top of the steering knuckle with a hammer to break loose the upper ball joint taper.



7. Separate the upper ball joint from the steering knuckle and carefully let the knuckle hang off to the side.



8. Locate and carefully remove the push plugs that are holding the inner fender splash guards to the inner fender, to gain access to the upper control arm bolt.



9. Remove the upper control arm mounting bolt and hardware, then carefully remove the upper control arm from the vehicle.

10. Locate the new driver side upper control arm, also locate (4) TC-002 poly bushings, (2) S10239 crush sleeves, and (2) SERT06 grease fittings. Install the new bushings and sleeves into the new upper control arms. **Special note: Make sure to use a fair amount of lithium or moly base grease before installing the new bushings and sleeves into the control arms. This will increase the life of the bushing as well as help prevent squeaking.**





11. Install the new grease fittings into the new upper control arm. **Special note: Make sure not to over tighten and also make sure that the sert fitting is facing towards the outside of the vehicle. This will make for easier access when using a grease gun.**

13. If you are installing kit #52080 with ball joint style control arms, secure the upper ball joint to the steering knuckle using the new castle nut, cotter pin, and a 9/16" hardened washer from hardware bag 52080NB. Torque to 85 ft lbs.



12. Locate (2) S10077 oversized washers, Install the new upper control arm using the oversized washers on the inside bushings. Refer to photo below for location. Torque the OE upper control arm mounting bolt to 125 ft lbs.

If you are installing kit #52085 uniball style upper control arms, follow step # 14

14. Locate (1) S10246 (1) S10249 uniball alignment sleeves, (1) 9/16" x 5" Bolt, (2) 1/2" USS flat washers, and (1) 9/16" unitorque nut. Insert the uniball alignment sleeve that has the tapered bottom into the bottom of the Uni-ball. Now insert the alignment sleeve that does not have a taper into the top part of the uni-ball. Now install assembled uniball joint into

the steering knuckle and secure using the new 9/16" x 5" bolt and hardware. Torque bolt to 95 ft lbs



15. Re-attach the ABS wire harness bracket to the new upper control arm using the 1/4" unitorque nut and 1/4" flat washer.



16. Re-install the plastic push plugs to hold the inner fender splash guards.



17. Remove the upper strut mounting hardware, but leave 1 of the nuts finger tight to hold the strut in place.



18. Remove the lower bolt where the sway bar endlink attaches to the lower control arm.



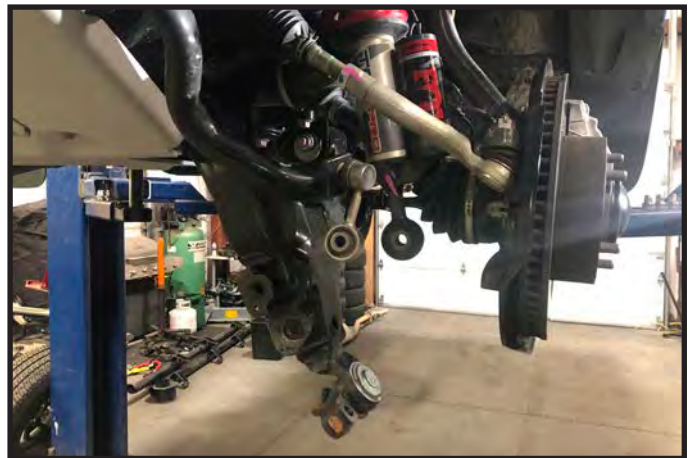
21. Remove the bolts that attach the lower control arm to the bottom of the steering knuckle. Make sure to hold onto or support the lower control arm so it does not swing out of control.



19. Remove the lower strut mounting bolt at the lower control arm.



20. Loosen, but do not remove the lower control arm mounting/adjusting bolts.

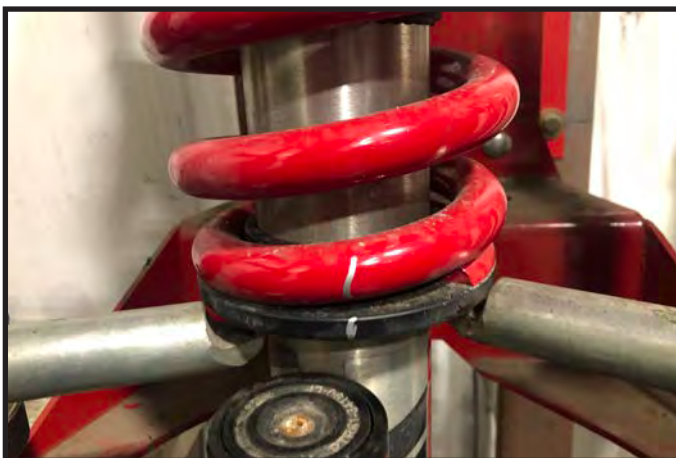


22. Remove the 4th upper strut mounting nut and carefully lift the strut out of the vehicle.



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 or certified install shop.

23. Place the strut into a wall mounted strut compressor. Scribe a line on the bearing plate, rubber isolator, the top coil of the strut, the bottom coil of the strut and bottom strut plate. **Special note: If these steps are not performed properly re-installing the strut back into the vehicle will be difficult.**



24. Carefully compress the strut until the upper bearing plate can be removed. Remove the nut and hardware from the upper bearing plate and save the hardware for later re-installation. **Special note: Notice that on top of the bearing plate there is an arrow indicator marking. This marking is so that the coil over can installed back into the vehicle the same way it was removed, hence the bearing plate needs to be installed the same way it was removed.**



25. Remove and discard the rubber spring isolator from the bearing plate.



26. Locate the new strut spacer and install the bearing plate on top of the new spacer.



27. Re-install the new spacer and the bearing plate assembly back on top of the coil spring making sure to line up the marks you made previously. Carefully compress the coil until you can re-install the OE bushing, washer, and nut.



29. Install the strut back into the vehicle using the 4 OE upper mounting nuts. Make sure to only tighten these by hand at this time.



30. Looking at the lower control arm, where the pocket that holds the lower mount of the strut is, you will need to trim the edge of this mount to clear the lower stem of the strut. Refer to below photo for trimming.



28. Remove the strut from the strut compressor and install (4) S10090 spacer sleeves over the top of the (4) OE upper strut mounting studs.





31. Swing the lower control arm back up and pin the lower strut mount using the OE hardware.



32. Move back to the (4) upper strut mount nuts and torque them to 45 ft lbs.

33. Carefully raise the lower control up until it contacts the steering knuckle and install the OE bolts. Torque to 125 ft lbs.



Repeat steps 4 - 33 on the passenger side of the vehicle.

34. Locate the new sway bar spacer tubes. Also, locate (4) 12 mm x 60 mm bolts, (4) 12 mm flat washers and (4) 12 mm lock washers. Working on the driver side, install the new sway bar spacer tube between the sway bar and the OE mount and secure using the new 12 mm hardware. **Do not tighten at this point.** Repeat procedure on the passenger side. Once both sides have been attached add loctite on each new 12 mm bolt and torque to **65 ft lbs.**



35. Working on the driver side, remove the hardware that attaches the front portion of the differential to the OE mounts. Save the over size washer on the head side of the bolt. Repeat procedure on the passenger side.



36. Locate (2) S10051 sleeves. Also, locate (2) 1/2" x 6" bolts, (2) 7/16" USS flat washers and (2) 1/2" unitorque nuts. Working on the driver side, install the new spacer between the differential and the OE mount and secure using the new 1/2" hardware and the 7/16" USS flat washer on the nut side of the bolt. Also, make sure to use the OE over size washer on the head side of the bolt. Repeat procedure on the passenger side. Move back to the new hardware hardware on the driver and passenger side and torque to **55 ft lbs.**



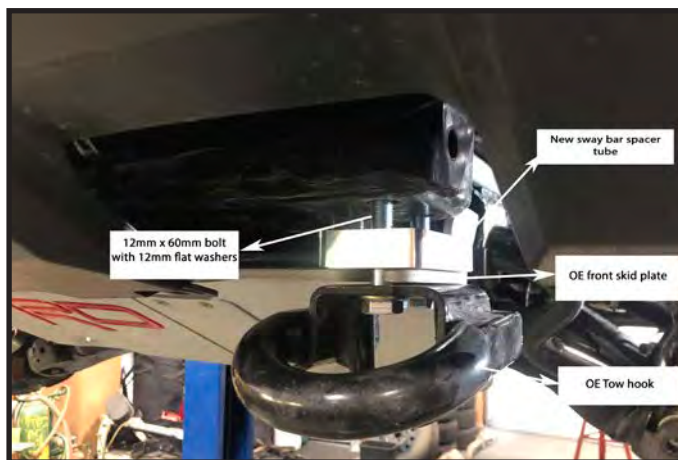
37. Locate the front skid plate and remove all of the OE mounting bolts. There are retainer rings on each bolt that will have to be carefully removed and saved for re-installation.



38. Install the new skid plate spacer sleeves and hardware according to the photo at the end of this manual.

39. Locate the new skid plate spacer tubes, also locate (4) M1260B1.25 bolts, and (4) M12WA. Install the new spacer tubes and hardware **LOOSELY** along with the front tow hooks. **Front bolts only for now.**

40. Install front skid plate making sure to sandwich it in between the tow hook and new spacer tubes.



42. Carefully tighten all the skid plate mounting hardware, making sure at the rear most locations to use the OE diamond shaped washers and OE nuts.



43. Install the tires and wheels and carefully lower the vehicle to the ground. Torque the lug nuts according to the vehicle or wheel manufacturers specifications.

44. With the vehicle on the ground, re-install the front sway bar end links into the lower control arm mounting spots using the OE hardware. Torque to 95 ft lbs.

45. Re-torque the lower control arm cam adjustment/mounting bolts.

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.

