



Installation Manual
Upper Control Arms W/Uniball joint
2005-2016 Toyota Tacoma 4wd & 2wd
PreRunner
Part # 50930
 SS08182014

Part # 50930
 Upper Control Arms W/Uniball joint
 2005-2016 Toyota Tacoma
 4wd & 2wd PreRunner

<i>Part #</i>	<i>Description</i>	<i>Qty.</i>
54910-02	Driver side upper control arm	1
54910-03	Passenger side upper control arm	1
50930PL	Hardware bag	1
50930NB	Hardware bag	1
50930INST	Instruction manual	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.

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.

For a list of parts, please refer to the back of the installation manual for photos of parts that are included in this suspension system.

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

After the completion of the installation a front end alignment is required. 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.

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.

This Suspension kit comes with (1) installation manual and some post installation procedure literature and it is the installers responsibility to make sure that the customer receives the post installation procedure literature. If a customer would like a copy of the installation manual, please have them visit our website at www.tuffcountry.com. Have them go to the customer care section to download these instructions. If you have any questions, please feel free to call us at (801) 280-2777.

Hardware bag 50930PL includes:

<u>Description</u>	<u>Quantity</u>
TC-002 Poly upper control arm bushings	8
S10248 .750"x.555"x2.280 crush sleeve	4
SERT05 Grease Fitting	4

Hardware bag 50930NB includes:

<u>Description</u>	<u>Quantity</u>
S10246 Uniball alignment sleeve	2
S10245 Uniball alignment sleeve (tapered)	2
S10140 9/16" x 2" fender washer	4
9165B (9/16" x 5" bolt)	2
12WA 1/2" USS flat washer	4
916UN 9/16" unitorque nut	2
14UN 1/4" unitorque nut	2
14WA 1/4" USS flat washer	2

Recommended tools selection:

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: _____

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: _____

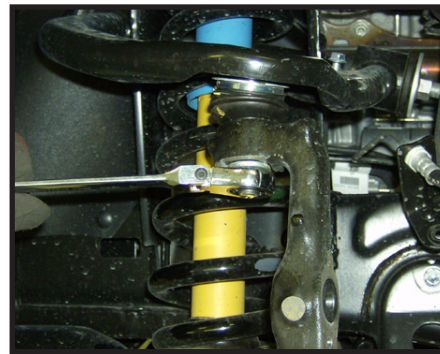
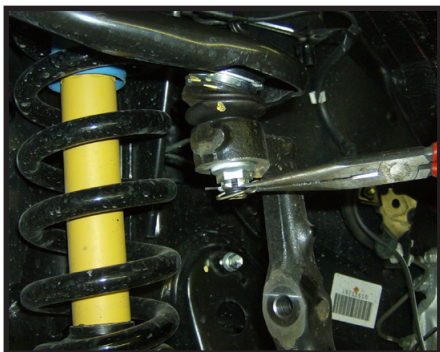
Driver side rear: _____

Passenger side rear: _____

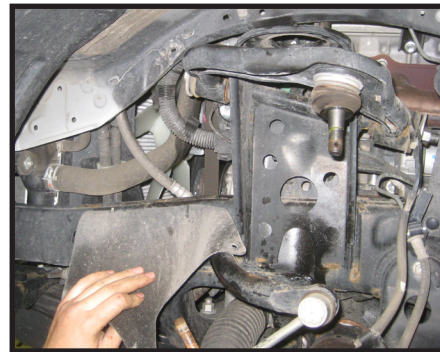
Front end installation:

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



3. Working on the driver side, Remove plastic clips holding rubber spray gaurds to the inner fender. Only remove enough to get to the upper control arm bolt. Repeat on Passenger side.



4. Using a pair of large channel locks or similar type tool, Bend the pinch welded lip of the inner fender just enough that the upper control arm bolt will be able to be completely removed. Remove bolt and save. Repeat on passenger side.



5. Remove upper control arms from vehicle



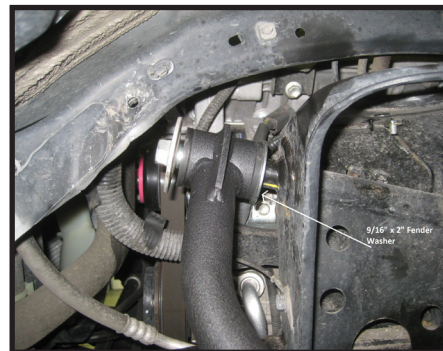
6. Locate the new upper control arms. Locate (8) poly bushings and (4) S10248 sleeves from hardware bag 50930PL, Install the new bushings and sleeves into the new upper control arms. **Special note: Make sure to use a fair amount of lithium or moly base grease before installing the new bushings and sleeves into the control arms. This will increase the life of the bushing as well as help prevent squeaking.**



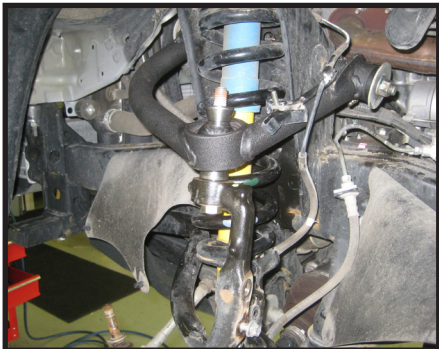
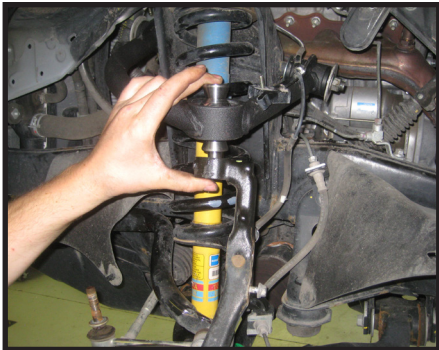
7. Locate the new sert fittings from hardware bag 50930PL. Install the new sert fittings into the new upper control arms. **Special note: Make sure not to over tighten and also make sure that the sert fitting is facing towards the outside of the vehicle. This will make for easier access when using a grease gun.**



8. Locate (4) 9/16" x 2" fender washers out of hardware bag 50930NB. Working on the driver side, install the new upper control arm into the OE pocket using the OE hardware along with the new fender washers. **Torque bolts to 95 ftlbs. Special note: The fender washers will be installed on the inside of the arm as it attaches to both the front and rear mounts. Do not tighten at this point. Repeat procedure on the passenger side.**



9. Locate (1) S10246 (1) S10245 uniball alignment sleeves, (1) 9/16" x 5" Bolt, (2) 1/2" USS flat washers, and (1) 9/16" unitorque nut from hardware bag 50930NB. Working on the driver side, 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. Repeat on Passenger side. Special note: the bolt is installed with the threads pointing upwards. Torque bolt to 95 ft lbs



10. Working on the driver side, locate (1) 1/4" nylock nut and (1) 1/4" USS flat washer. Attach the OE ABS brake wire bracket to the new upper control arm. Repeat on passenger side.



11. Re-install the tires and wheels and torque the lug nuts to the proper torque specifications.

Installation Complete!