



Installation Manual **Toyota 8" Clamshell bushing** **& Removal tool** **Part # 50910 & 50911**

SS07242019

Part # 50910 and 50911
Toyota 8" Clamshell bushing and Removal tool

Part #	Description	Qty.
T8CS-BUSHING	Clamshell bushing	1
T8CS-bushpuller	Bushing puller tool	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.

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

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.

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.

Recommended tool selection:

(optional) Seal driver tool
Telescoping magnet tool
(optional) Chisel
Hammer
Torque wrench
Standard socket set
Standard wrench set
Metric socket set
Metric wrench set

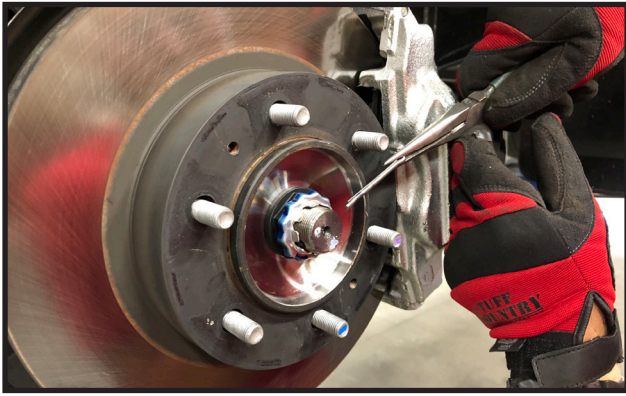
1. To begin installation, remove the front driver side tire and wheel.



2. Carefully remove the wheel hub cover cap.



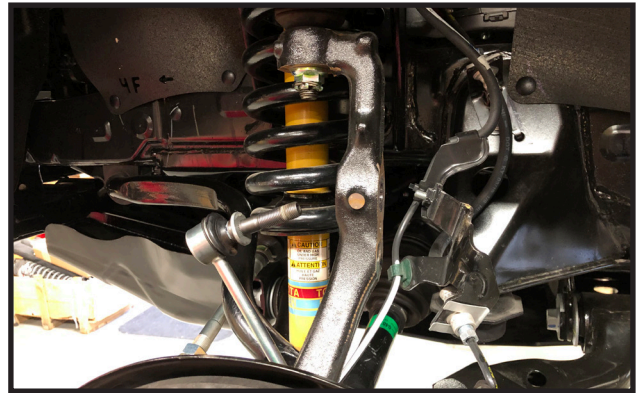
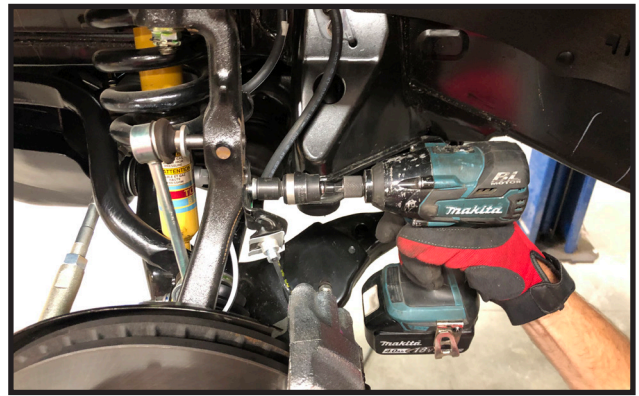
3. Remove the CV axle cotter pin, star nut, and axle nut.



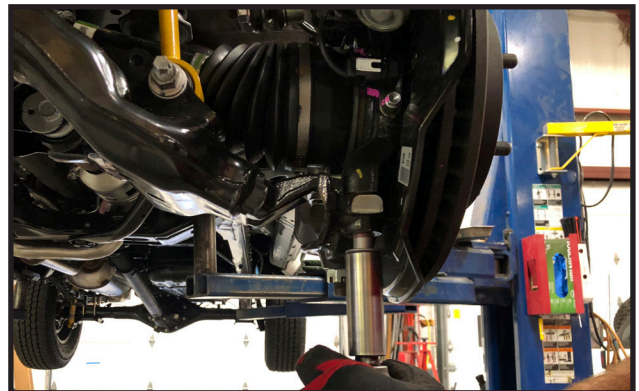
4. Working on the steering knuckle, remove the sway bar endlink where it attaches to the steering knuckle.



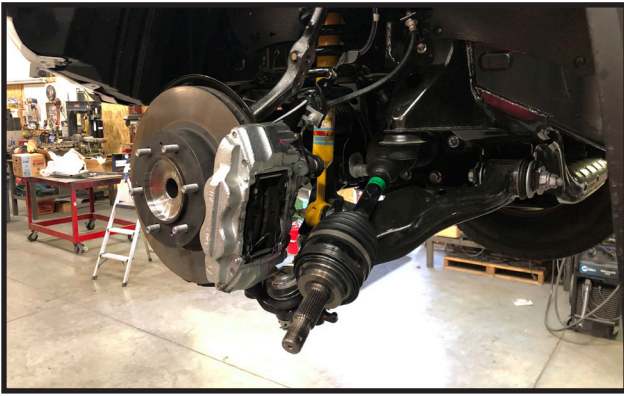
6. Also remove the brakeline/ABS wire bracket from the steering knuckle.



7. Remove the 2 lower ball joint - steering knuckle bolts



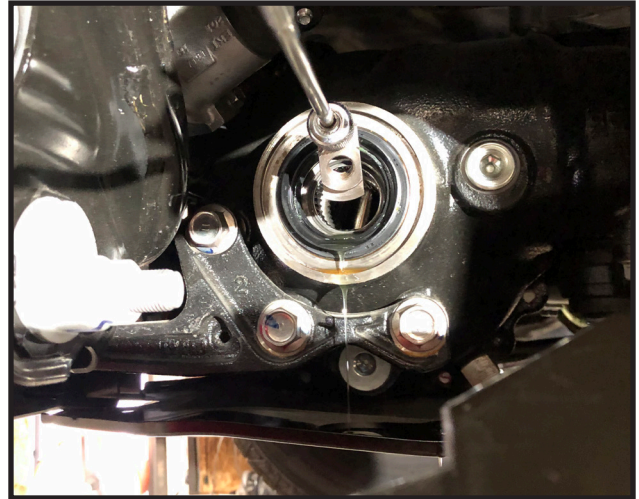
8. Carefully swivel the entire steering knuckle assembly forward and out of the way to access the CV axle. Make sure the CV axle dis-engages from the wheel hub



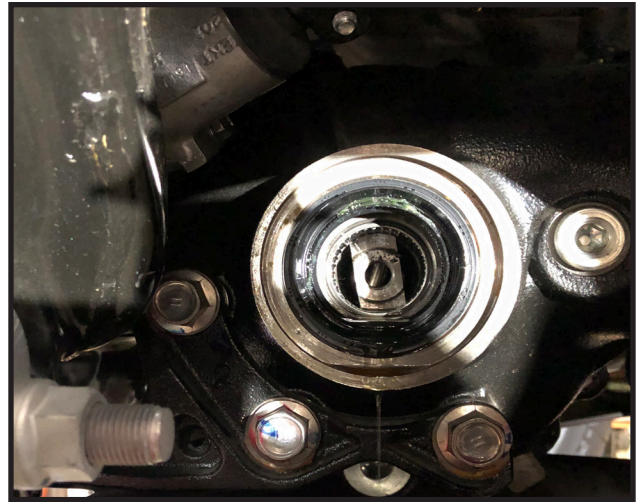
9. Carefully remove the CV axle from the front differential
Special note: when the CV axle is removed, gear lube will leak out and the front differential will need to be topped off after the install.



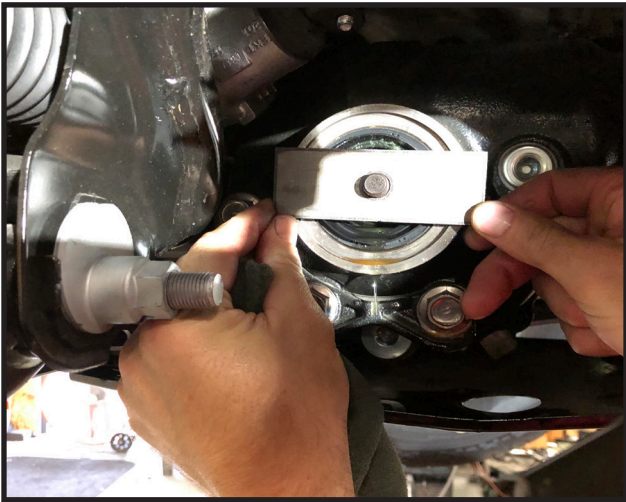
10. Using a telescoping magnet tool, install the threaded insert of the T8CS-Bushpuller tool into the side of the front differential. It is easiest to install this on an angle until it sits behind the lip of the OE needle bearing. If the insert gets jammed on angle, you will need to use a long punch tool and tap it the rest of the way in. **Special note: Take extra care to not let the insert fall too far into the differential or else the differential will have to be completely removed and opened up to fish it out!!**



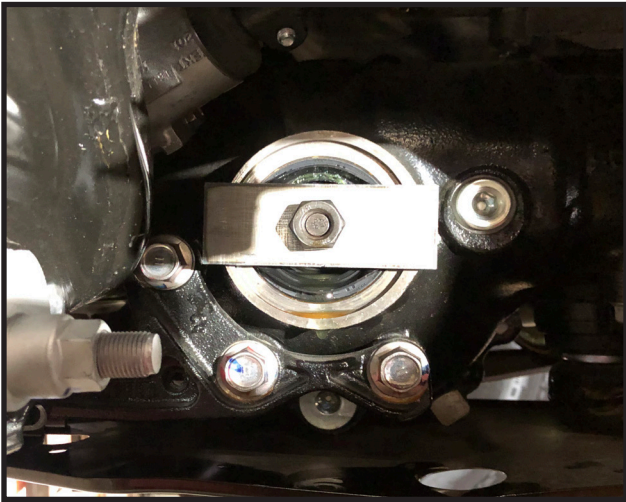
11. Install the threaded rod portion of the puller tool into the insert that was just installed, turn it in about 4 full turns.



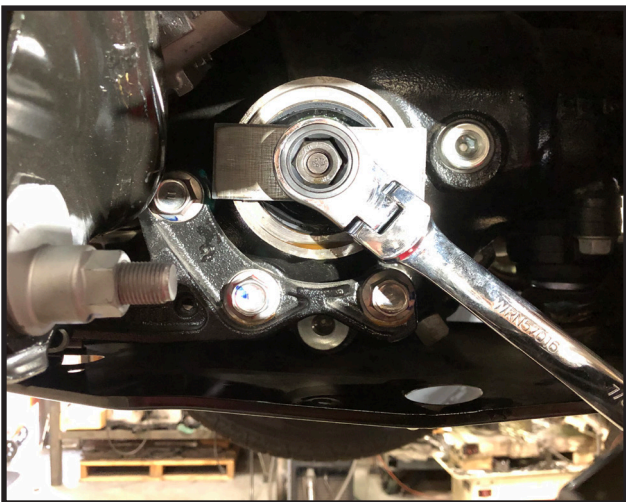
12. Install the plate over the threaded rod so that the plate will rest against the face of the differential. Be extra careful to not damage the axle seal if you are trying to re-use



13. Install the nut while maintaining pressure against the bearing to keep everything centered. Hand tighten nut for now



14. Carefully starting turning the nut and the needle bearing will start to come out, it should not take very much force so if it does seem to bind up, stop and check the threaded insert and make sure it is still centered. Proceed until the needle bearing is completely removed

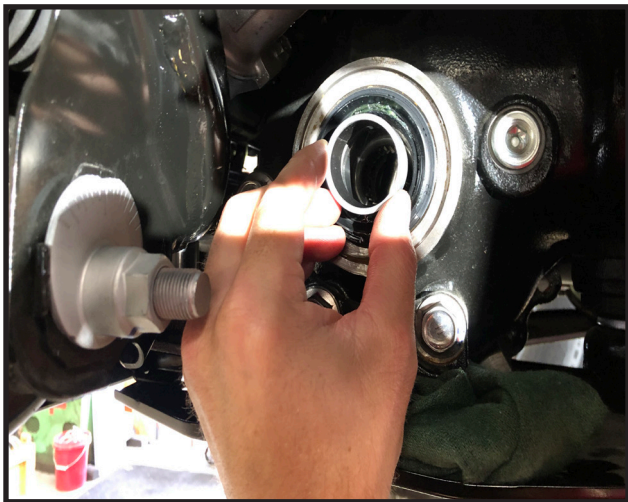


15. Locate the new T8CS-Bushing. **This bushing has 2 sides to it, one side is solid steel, and the other side has a seam in it, Make sure to install it so that the Solid steel side is facing out.**



16. Make sure to start the new bushing straight, and use a seal driver tool, or a socket that is the same diameter as the bushing, and start tapping the bushing into place





17. Install the new bushing until it is flush with the carrier. If it goes past flush, it might rest against the spider gear and cause issues.



18. Replace axle seal if needed and re-install the CV shaft.

19. Reverse steps 1- 8 and put the front end back together.

20. Check the oil level of the front differential and add gear lube if necessary. See vehicle's owners manual for fluid

specifications.