



Installation Manual
2018-2019 Jeep JLU 4 door
4" Suspension Lift Kit
Part # 44105

SS02102019

Part # 44105
2018-2019 Jeep JLU 4 Door
4" Suspension Lift kit

Part #	Description	Qty.
44105-01	Front upper control arm	2
44105-02	Front lower control arm	2
44105-03	Rear upper control arm	2
44105-04	Rear Lower control arm	2
44100-05	Rear track bar relocation bracket	1
44100-06	Front adjustable track bar	1
44100-08	Front bump stop	2
44100-09	Rear bump stop bracket	2
F2355-02	Rear sway bar end link	2
JL4R-CL03	Rear coil spring	2
JL4F-CL01	Rear coil spring	2
44105NB	Hardware bag	1
44105NB1	Hardware bag	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.

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. Usually OE alignment specs are ideal but on these particular kits we like to see the Castor a little bit lower than specs. It will help with tire wear and drivability.

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:

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.

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 recommends using loctite on all new and stock hardware associated with the installation of this suspension system.

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.

Tuff Country recommends a 37" sized tire once part #44105 has been installed. 37" tires can require trimming if used in extreme offroad situations. If larger than a 37" tire is installed on your vehicle in conjunction with part # 44105, Tuff Country assumes no liability and the warranty will be VOID. Due to different types of tread patterns, some aggressive tires in this size recommendation may require slight trimming of inner fender plastic. **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.**

Recommended tools selection:

- Torque wrench
- Standard socket set
- Standard wrench set
- Metric socket set
- Metric wrench set
- Tape measure
- Hydraulic floor jacks
- Measuring Caliper
- Drill & Assorted drill bits

Hardware Bag 44105NB1 includes:

Description	Quantity
JM12T Heim joint	2
SJNR12 Heim joint jam nut	2
MO2220 Poly bushing	8
S10325 Shock sleeve	8
S10136 .750" x .562" x 1.510" sleeve	1
S10026 .680" x .500" x 1.500" sleeve	4
S10336 Heim joint mis-alignment sleeve	4

Hardware Bag 44105NB includes:

Description	Quantity
916312B 9/16" x 3 1/2" bolt	1
9163B 9/16" x 3" bolt	1
916UN 9/16" unitorque nut	2
12WA 1/2" uss flat washer	4
12212B 1/2" x 2 1/2" bolt	2
12UN 1/2" unitorque nut	2
716WA 7/16" uss flat washer	4
38312B 3/8" x 3 1/2" bolt	2
38114B 3/8" x 1 1/4" bolt	6
516WA 5/16" uss flat washer	8
38FLN 3/8" flange nut	8

Please follow these instructions carefully:

Before installation begins, measure from the center of the wheel 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:

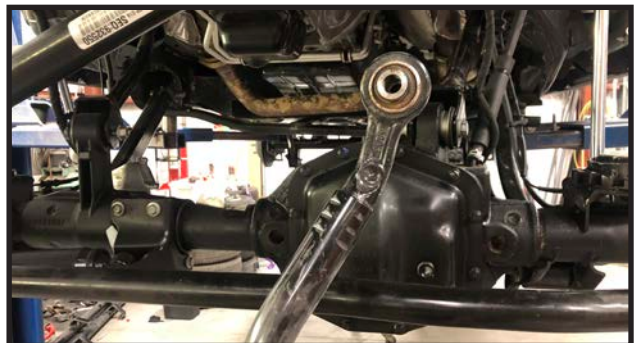
1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll. Safely lift the front of the vehicle and support the vehicle with a pair of jack stands. Place a jack stand on both the driver and the passenger side frame rail. Next, remove the front wheels and tires from both sides.

2. Support the entire front axle with at least 2 hydraulic floor jacks, making sure it has room to raise and lower the front axle

3. Remove the bolt from the front track bar where it attaches to the front axle bracket. Save the hardware



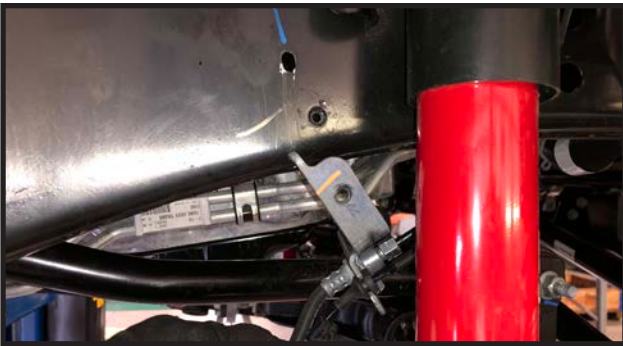
4. Remove the bolt from the track bar where it attaches to the driver side frame bracket. Save the hardware and remove the entire front track bar.



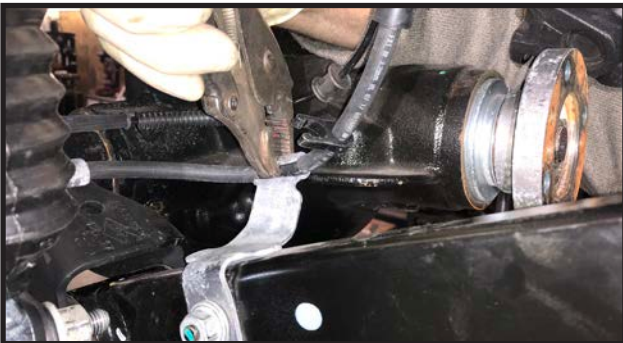
5. Remove both of the front shock absorbers from the vehicle. Save all of the hardware. **Special note: these photos only show removing the lower shock hardware, but you will need to remove the shock completely.**



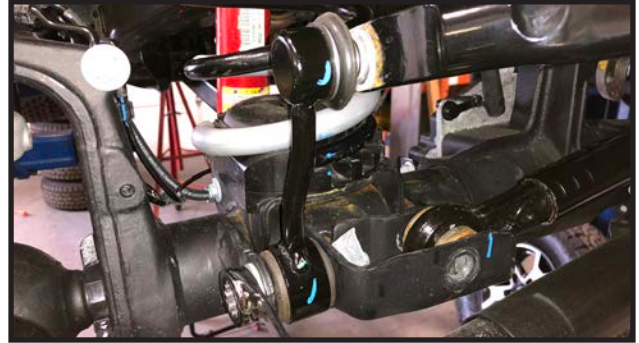
6. Locate and remove the front brake hose mounting brackets from the driver and passenger side frame rails. Save hardware.



7. Carefully pry open the metal brake hose brackets that are attached to the lower control arms so that the rubber brake hose can be removed. This step needs to be performed on driver and passenger side.



8. Remove both front sway bar end links completely. Save the mounting hardware.



9. Working on the passenger side, locate and remove the brake hose bracket that is attached to the lower coil spring perch. Save hardware



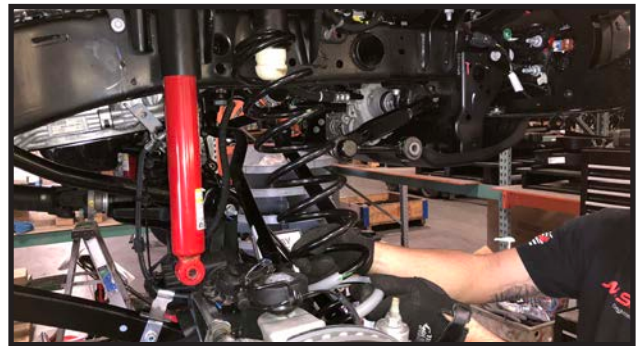
10. To obtain slack in the wire harnesses that control the front axle, you will need to pop out some plastic plugs. these are located on both upper control arms where they mount to the axle, and also up on the inner frame rail if you follow the wires up. Take special care to not damage any wires or plastic plugs as they will get re-installed later on.



11. Located beneath the front drive shaft, there is a cross-member that is bolted to the bottom of the frame rail on each side, remove the bolts that are holding it to the frame rail and let the crossmember hang from its skid plate.



12. With all the slack now obtained in the wire's and brake hoses, carefully lower down the front axle and remove the front coil springs. **Take special care to not over extend any wires or brake hoses.**



13. Working on the driver side, remove the heat shield from the upper control arm frame mount pocket



14. Remove the upper control arm from the vehicle and save the mounting hardware



15. Working on the driver side, remove the lower control from the vehicle. Save the hardware



16. Locate 1 new upper control arm part # 44105-01, and 1 new lower control arm part # 44105-02.

17. Install the new upper control arm. Use the OE hardware to install the new control arm. **Torque bolts to 125 ft lbs. Re-install the heat shield.**



18. Install the new lower control arm using the OE hardware. **Torque bolts to 125 ft lbs.**



Repeat steps 13 - 18 on the passenger side

19. Locate the new front aluminum bump stops part # 44100-08. Also locate (2) 38312B, (2) 516WA, (2) 38FLN from hardware bag 44105NB. Install the new bolts with the washer on the bolt head side, into the front bump stop so that the head of the bolt is recessed into the bump stop.



20. Locate the new front coil springs, Hold the new bump stop in to the bottom of the coils springs and install them into the vehicle. Make sure the lower part of the coils spring seats into the spring tower properly and that the new 3/8" x 3 1/2" bolt starts into the hole in the middle of the spring tower.



21. Install the 3/8" flange nut on the 3/8" x 3 1/2" bolt and torque to **30 ft lbs.**



22. Locate the new front track bar, part # 44100-06. Also locate (2) JM12T, (2) SJNR12, and (4) S10336. Thread the new heim joints into each end of the track bar doing your best to turn them both in equal amounts. Measuring from the center point of each heim joint, adjust the length of the assembled track bar to be at 34". **This measurement is a starting point and in most situations will be what it will stay at, however, due to inconsistencies in vehicle manufacturing, the length may have to be fine tuned on an alignment machine.**



23. Install the S10336 mis-alignment sleeves into each heim joint and install the new track bar in the vehicle using the OE mounting hardware. Torque bolts to **125 ft lbs.** **Special note, if the track bar does not line up to the mounting holes right away, you may need to pry the axle side to side to get it aligned.**



24. With the front track bar installed, tilt it slightly towards the front bumper and tighten the 2 jam nuts on each heim joint



25. Carefully raise the front axle up so that you can re-install brake hose brackets and wire clips.

26. Reinstall the passenger side brake hose bracket on the coil spring perch that was removed in step # 9.



27. Re-install the wire harness plugs/clips to the upper control arms and the frame rails.



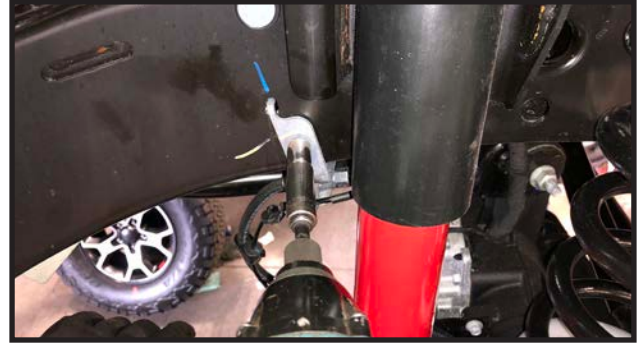
28. Install new front shock absorbers using the OE hardware. **Special note: if your new front shocks do not have the proper upper bushings and sleeves already installed in them, make sure to use the new S10325 shock spacer sleeves from hardware bag 44105NB1**



29. Re-install the front crossmember bolts that were loosened and/or removed in step # 11.



30. Re-install the brake hose brackets to the driver and passenger side frame rails using the OE hardware.



31. Working on the REAR of the vehicle, remove the OE sway bar end links and install them on the FRONT of the vehicle. Use the OE hardware and torque to **65 ft lbs.**



32. Re-install the tires and wheels and torque the lug nuts to the wheel manufacturer's specifications.

Carefully lower the vehicle back down to the ground and remove the jacks.

Front end Installation Complete!

Rear end Installation:

33. To begin installation, block the front tires of the vehicle so that the vehicle is stable and can't roll. Safely lift the rear 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 frame rail. Next, remove the rear wheels and tires from both sides.

34. Remove the track bar bolt that is attaching it to the rear axle bracket.



35. Remove both rear shock absorbers, and save the mounting hardware.



36. Located on the outside of the frame rails, are the brake hose brackets, you will need to remove the bolts that are attaching them to the frame. Save the bolts



37. Located on the passenger side of the rear axle is the breather hose, and it is clipped to the emergency brake cable and electric rear locker wire harness. You will need to unclip enough of these clips to gain slack to lower the rear axle down. See photos below



38. With all the gained slack in the brake hoses, and wire harness, carefully lower the rear axle down enough to remove both rear coil springs. Save the upper rubber coil spring isolator.



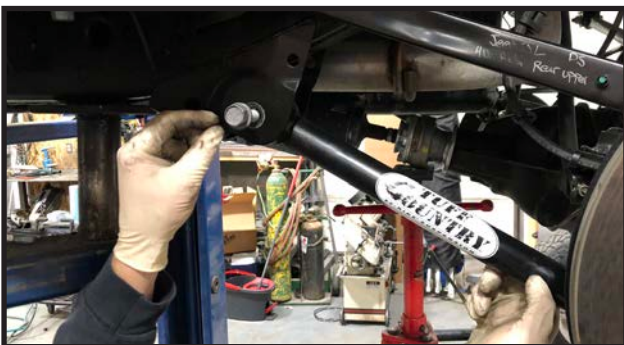
39. Using a 3rd jack, support the rear differential at the drive-line yoke. Make sure this jack has room to raise and lower a few inches each way.

40. Remove BOTH of the rear lower control arms and save the hardware.



41. Locate 2 new lower control arms part # 44105-04.

42. Install the new lower control arms using the OE hardware. **Torque bolts to 125 ft lbs.**

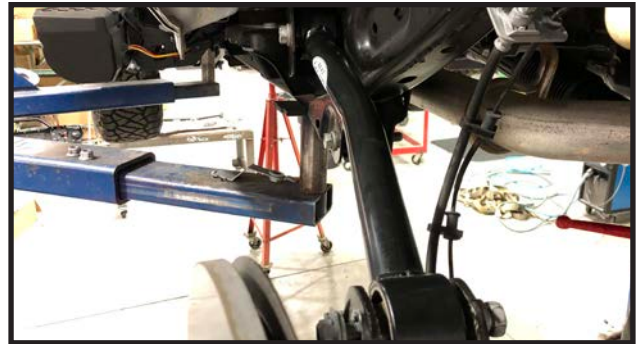


43. Remove BOTH rear upper control arms and save the hardware.



44. Locate the new rear upper control arms part # 44105-03.

45. Install the new upper control arms using the OE hardware. **Torque bolts to 125 ft lbs. Special note: you will notice that these arms are bent, they need to be installed so that they bend in towards the frame to allow tire clearance.**



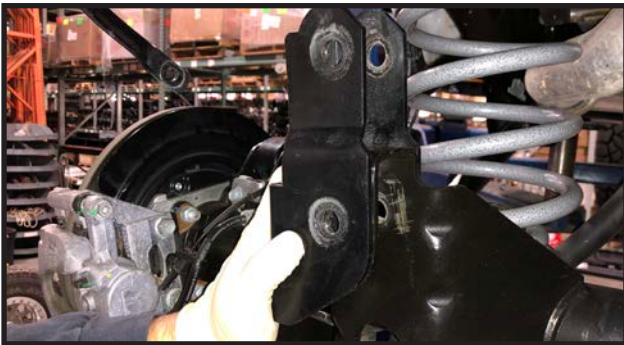
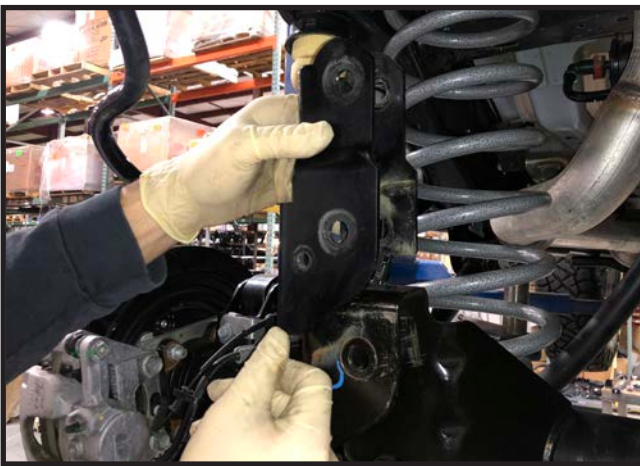
46. You may now remove that 3rd jack that you put under the rear driveline yoke.

47. Locate the new rear coil springs, also locate the OE rubber spring isolator and install it on top of the new coil springs.

Install the new coil springs taking care to not over extend any brake hoses or wire's

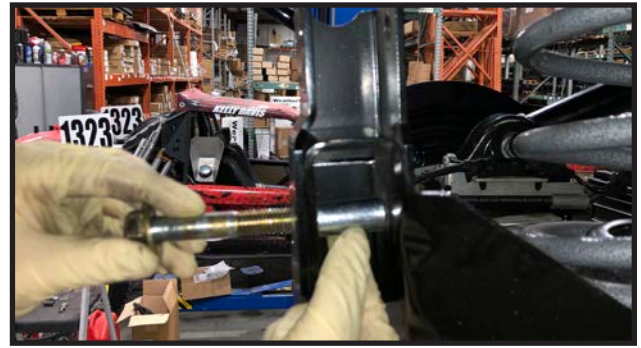


48. Locate the new rear track bar relocation bracket, part # 44105-05. Install the new bracket over the OE bracket on the rear axle



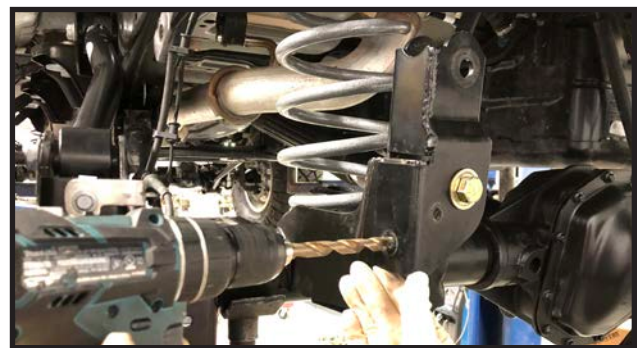
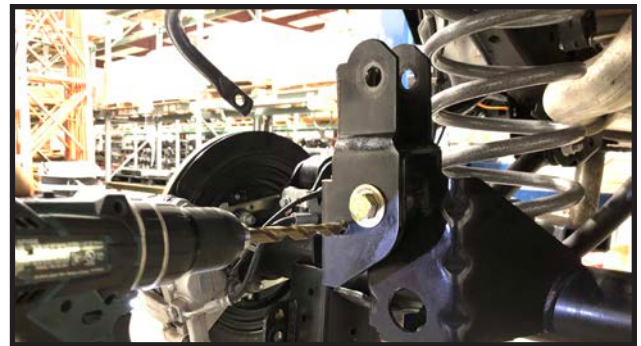
49. Locate (1) 9/16" x 3" bolt, (1) 9/16" x 3 1/2" bolt, (4) 1/2" flat washers, (2) 9/16" unitorque nuts, (2) 3/8" x 1 1/4" bolts, (2) 5/16" flat washers, (2) 3/8" flange nuts, and (1) S10136 crush sleeve.

50. Install the crush sleeve into the pocket of the OE bracket and insert the 9/16" x 3 1/2" bolt with a 1/2" washer through it.



51. Install the other 1/2" flat washer and the 9/16" unitorque nut and torque the bolt down to **125 ft lbs.**

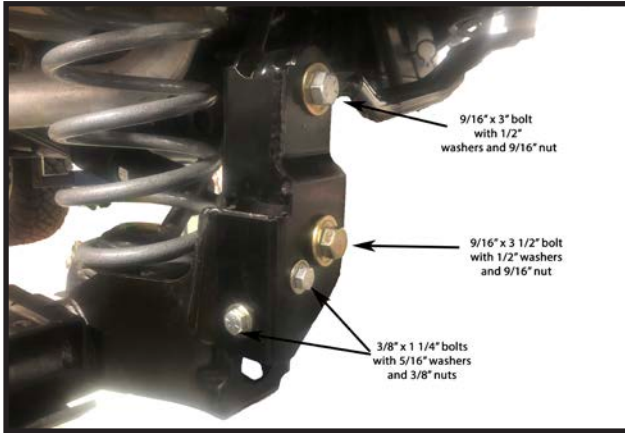
52. Using the new bracket as a guide, carefully drill out the (2) 3/8" holes in the OE bracket.



53. Locate and install (2) 3/8" x 1 1/4" bolts, (2) 5/16" flat washers, and (2) 3/8" flange nuts into the newly drilled holes. torque to **30 ft lbs.**

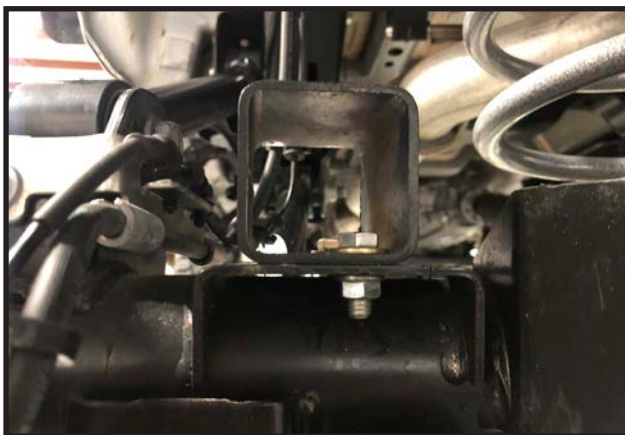
54. Re-install the rear track bar into the pocket of the new bracket using the new 9/16" x 3" bolt, 1/2" flat washers, and 9/16" unitorque nut. **Torque to 125 ft lbs. Special note:**

You may need to pry the rear axle side to side to line this back up.



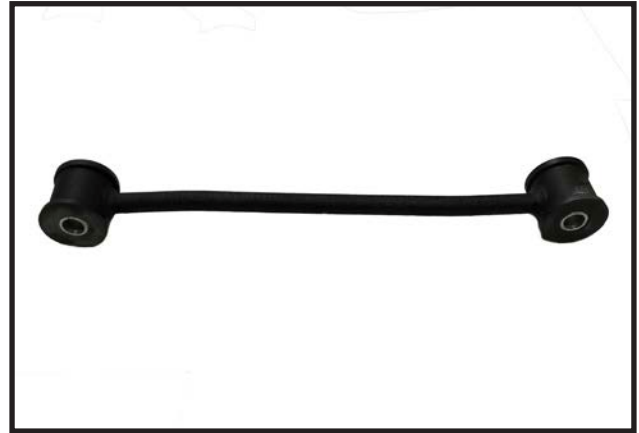
55. Locate (2) new rear bump stop brackets, part # 44100-09. Also locate (4) 3/8" x 1 1/4" bolts, (4) 5/16" flat washers, and (4) 3/8" flange nuts.

56. Install the new bump stop brackets on the OE bump stop pads located on the rear axle. Use the new 3/8" bolts and hardware to drop down into existing holes in the OE bump stop pads. Torque bolts to **35 ft lbs.**



57. Locate (2) new rear sway bar end links, part # F2355-02. Also locate (8) MO2220 bushings, (4) S10026 crush sleeves, (2) 1/2" x 2 1/2" bolts, (4) 7/16" flat washers and (2) 1/2" unitorque nuts. Apply a lithium based grease to the bushings and install them into the eyelets of the new sway

bar end links. Also, install the crush sleeves into each eyelet after the bushings have been installed



58. Using the OE hardware on the top eyelet and the new 1/2" hardware on the bottom eyelet, Install the new end links making sure that they match the following photos. Torque bolts to **75 ft lbs.**



59. Install new rear shock absorbers using the OE hardware. **Special note: if your new rear shocks do not have the proper upper bushings and sleeves already installed in them, make sure to use the new S10325 shock spacer sleeves from hardware bag 44105NB1. Torque bolts to 75 ft lbs.**



60. Re-install the brake hose brackets on the driver and passenger side frame rails using the OE hardware.



61. Re-attach any remaining wire clips that can still reach, and if necessary, use a zip tie to secure any loose wires or hoses.

64. Re-install the tires and wheels and torque the lug nuts according to the wheel manufacture's specs. Carefully lower the vehicle back down to the ground.

Installation Complete!

Check and double check to make sure that all steps were performed properly. After the completion of this install, Tuff Country Recommends taking the vehicle in for a complete front end alignment.

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 the system after the first 100 miles of installion. It is also the Customers responsibility to do a complete re-torque after every 3,000 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.

