



# Installation Manual

## 2019 Ram 1500 Rebel 4x4

### 2.5" Front leveling kit

### Part # 32106 & 32107

SS03132019

Part # 32106 AND 32107

2019 Ram 1500 Rebel 4x4 ( Excludes models with air-bag suspension )

2.5" Front leveling kit

Part #	Description	Qty.
32106-01	Top strut plate	2
32105-01	Internal strut spacer	2
*34105-01	Driver side upper control arm	1
*34105-02	Passenger side upper control arm	1
34106-01	Driver side upper control arm	1
34106-02	Passenger side upper control arm	1
*32106NB	Hardware bag	1
32107NB	Hardware bag	1

\* - Included in Part # 32106 Ball joint style upper control arm kit

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.

**Please be aware that some Dodge Ram owners may experience a vibration in the front end or a violent shaking vibration of the front wheels when going over a bump at certain speeds. This is due to the front differential and suspension when Dodge Ram trucks are in 4x4 mode. These two symptoms are often lumped together and called a "steering oscillation" however it is actually two different problems with the Ram Truck. The 4HI mode vibration is a vibration or shudder that**

**occurs when accelerating in 4x4 high mode. This symptom appears isolated to 1500 non-Mega Cab model trucks and only when in 4-hi mode. Dodge could not discover why their stock trucks would do this for some customers and not others, so the final official statement from Dodge was that there is no problem and that all of the new Rams will shudder or shake when in 4x4 high.**

**Therefore, after installing this kit on your Dodge Ram truck, if you experience either of the two symptoms mentioned above, Tuff Country recommends two options. 1). Remove the kit from the vehicle and send it back to the company you purchased it from for a full refund or 2). Install High angle CV joints that will stabilize the factory vehicles issues. 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. 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.

**IMPORTANT!**

This kit will NOT work on vehicles equipped with Active-Level™ Four-Corner Air Suspension. If your vehicle is equipped with this type of suspension, please contact the company you purchased the lift kit from and arrange for returning the parts.

Hardware bag 32106NB includes:

Description		Quantity
TC-002	Poly bushing	8
S10254	.750" x .563" x 1.950" sleeve	4
M101.5FLN	10mm x 1.5 flange lock nut	6
SERT06	90 degree grease fitting	4
SHOCK-TIE	Zip tie	2

Hardware bag 32107NB includes:

Description		Quantity
TC-002	Poly bushing	8
S10246	9/16" uniball mis-alignment sleeve	2
S10255	uniball tapered mis-alignment sleeve	2
S10254	.750" x .563" x 1.950" sleeve	4
M101.5FLN	10mm x 1.5 flange lock nut	6
9165B	9/16" x 5" bolt	2
916UN	9/16" unitorque nut	2
12WA	1/2" uss flat washer	4
SERT06	90 degree grease fitting	4
SHOCK-TIE	Zip tie	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: \_\_\_\_\_

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, locate and remove the ABS wire harness clip from the upper control arm.

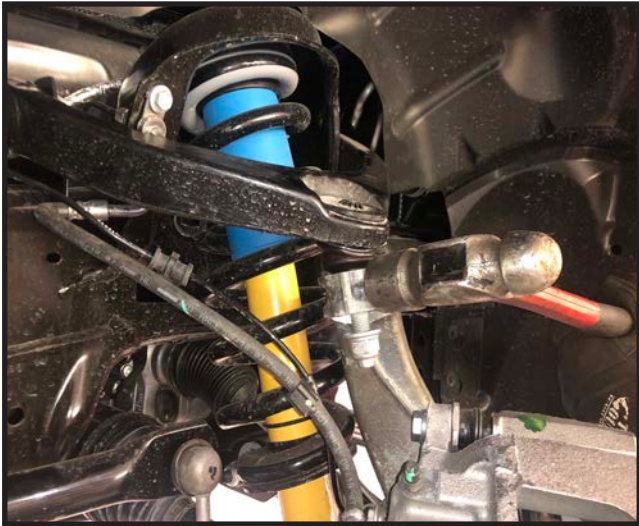


3. On the driver side, support the lower control arm with a hydraulic jack so that the suspension cannot drop. Locate and remove the upper ball joint nut.



4. Using a hammer, carefully strike the steering knuckle to knock the taper loose and separate the ball joint from the knuckle.





5. Next, remove the 2 bolts and hardware that are holding the upper control arm to its frame pockets. Save the hardware for re-installation. Remove the upper control arm from the vehicle.



6. Locate the new upper control arms, also locate the (4) grease fittings. Install the grease fittings into each eyelet of the control arms so that they are facing towards the outside of the vehicle. **Special note: Be extra careful not to over tighten these small brass grease fittings.**





7. Locate (8) TC-002 control arm bushings, and (4) S10254 crush sleeves. Install the bushings and sleeves into each control arm. **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.**



8. Working on the driver side, Install the new upper control arm into the vehicle using the OE hardware. Torque to 75 ft lbs.



9. At this point if you are installing the ball joint style upper control arms, connect the upper ball joint to the steering knuckle using the new castle nut, washer, and cotter pin, and skip to step # 11. If you are installing the uniball style upper control arms, see the next step.



10. Locate (1) S10246, (1) S10255, (1) 9165B, (2) 12WA, and (1) 916UN from hardware bags 32107NB. Install uniball mis-alignment sleeves into the uniball as shown in the pictures below and re-attach the arm to the steering knuckle using the new 9/16" bolt and hardware. **Torque to 95 ft lbs**







11. Working on the driver side, locate and remove the sway bar end link from the lower control arm. Save the hardware



12. Remove 2 of the 3 upper strut mount nuts and loosen the 3rd one.



13. Loosen but do not remove the lower strut mounting bolt and hardware.



14. Remove both lower control arm cam adjustment bolts and save for later re-installation.





15. Carefully remove the lower strut mounting bolt from the lower control arm and lower the arm down out of the way.



16. Remove the 3rd upper strut mounting nut and remove the entire strut assembly from the vehicle.



**Tuff Country EZ-Ride Suspension recommends a wall mounted strut compressor be used when performing the steps that talk about installing the internal spacer into the strut. If you do not have a wall mounted strut compressor, please have these steps performed by your local Certified Technician.**

17. On the top portion of the strut, make a mark on the top plate, rubber isolator, and the coil spring in a straight line. This is done so that it can be re-assembled in the same orientation.



18. Using the proper wall mounted strut compressing machine, carefully put pressure on the strut assembly and remove the upper shock nut.



19. Lift off the upper strut plate and set aside.

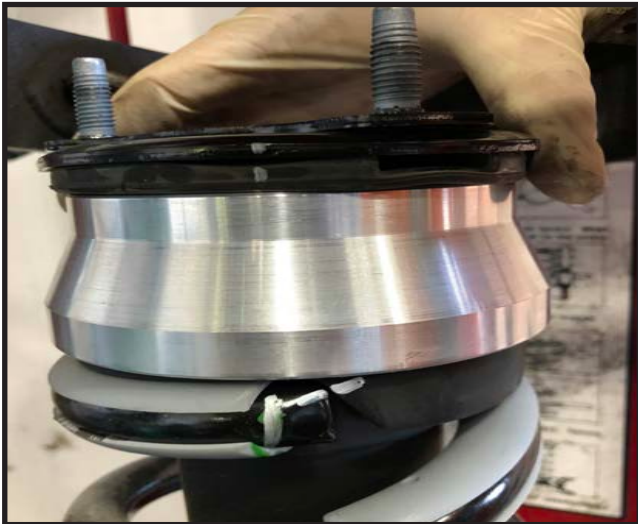




20. Locate a new internal strut spacer and install on the top of the coil spring.



21. Re- install the top strut plate making sure to line up your marks you made on it and the coil spring.



22. Carefully compress the strut assembly back together and re-install the OE upper shock nut.



23. Remove the strut assembly from the compressing tool, and install a new upper strut plate on top of it over the 3 OE studs.



24. Re-install the strut assembly into the vehicle and loosely start 2 of the 3 upper nuts. Use the new 10mm x 1.5 flange lock nuts from the hardware bag.







25. Swing the lower control arm back up until you can pin the lower strut mounting bolt. Do not tighten at this time.



26. Raise the lower control arm up and re-install the cam adjustment bolts the same direction that they were removed. Do not tighten at this point. **Special note: we typically set the adjustment bolts in the center position until they can be adjusted on an alignment machine.**



Repeat steps #2 - 26 on the passenger side of the vehicle.

27. Re-install both front sway bar end links to the lower control arm mounting locations.



28. Using the provided zip ties, tie the ABS wire harness to the rubber brakeline on both sides of the vehicle.



29. If you have not applied grease to the upper control arm bushings, then now is the best time to use the grease fittings and apply grease until you see it seeping out of the bushings.



30. Re-install the tires and wheels and carefully lower the vehicle back to the ground.

31. With the vehicle sitting back under its own weight, go back and tighten the lower strut mounting bolts, Cam adjustment bolts, and the 3 nuts on the top of each strut assembly.





## **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.