



## EZ - Ride Suspension

## Installation manual

### 6" suspension system

2003 - June 2007

Dodge Ram 2500 / 3500

Part # 36003

sj11507rev.04

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6" suspension system

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
36000-01	Upper coil spring spacers	2
36000-02	Upper control arms	2
36000-03	Lower control arms	2
36000-04	Track bar relocation bracket	1
DODDSSWAY-01	DS upper sway bar relocation bracket	1
DODPSSWAY-01	PS upper sway bar relocation bracket	1
34000-10	Pitman arm	1
36000NB1	Hardware bag	1
36005SL	Hardware bag	1
34000PL	Hardware bag	1
BL404	4" rear lifted blocks	2
5U-31215R	9/16" x 3 1/2" x 15" round u-bolt	4
5U-41817R	9/16" x 4 1/8" x 17" round u-bolt	4
916NW	Hardware bag	1
LUBE	Poly lube packs	2
36003INST	Instruction manual (customer copy)	1
36003INST	Instruction manual (installer copy)	1
MIRRORHANGER	Rear view mirror hanger	1
WARNINGDECAL	Warning decal	1
DECAL	Window sticker	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.**

**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 lock tite on all new and stock hardware associated with the installation of this suspension system.**

**It is the responsibility of the installers or the retail shop to make sure that the customer receives a copy of the installation manual and the warning pamphlets. Tuff Country sends (2) copies of the installation manual. One for the installer and one for the customer that has proper post installation procedures.**

**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.**

**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.**

**If you desire to return your vehicle to stock, it is the customers responsibility to save all stock hardware.**

**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.**

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

### 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 of 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:

It is mandatory that a 17" or taller wheel is installed once part # 36003 has been installed. Tuff Country recommends a 36x12.50 tire package. If larger than a 36x12.50 tire is installed on your vehicle in conjunction with part # 36003; Tuff Country assumes no liability and the warranty will be VOID.

Some of the new 2003 — 2008 Dodge Rams come from the factory with a 2 piece rear drive line. After the suspension system is installed a vibration may occur at initial take off. If this is the case on the vehicle that you are working on, the stock carrier bearing drop bracket needs to be lowered. Please contact Tuff Country or your local Tuff Country dealer and order part # 20824.

Tuff Country EZ-Ride Suspension packages (2) sets of instruction sheets with this box kit. (1) is for the installer and (1) is for the customer. The (1) for the customer has some post installation procedure literature and it is the installers responsibility to make sure that the customer receives a copy of the installation manual along with the literature.

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.

New longer front and rear shocks are needed after this suspension system has been installed and the front and rear shocks need to be ordered as a separate part #. If you have not already ordered your front and rear shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your front and rear shocks. Tuff Country recommends installing a 30" fully extended nitrogen gas shock in the front and a 33" fully extended nitrogen gas shock in the rear.

After completion of the installation, Tuff Country EZ-Ride Suspension highly recommends that the installer informs the customer that whenever they have their vehicle lifted in the air by the frame rail, the front sway bar end links need to be disconnected from the stock sway bar. If this is not done, damage will occur to the stock front end links.

**Recommended tools selection:**

- Cut off wheel
- Sawzall
- Torque wrench
- Standard socket set
- Standard wrench set
- Metric socket set
- Metric wrench set
- Tape measure
- Hydraulic floor jacks

**Hardware bag 36000NB1 includes:**

<u>Description</u>	<u>Quantity</u>
9166B (9/16" x 6" bolt)	1
916512B (9/16" x 5 1/2" bolt)	1
916312B (9/16" x 3 1/2" bolt)	1
9164B (9/16" x 4" bolt)	2
12WA (1/2" USS flat washer)	8
SUW-916 (9/16" u-bolt harden washer)	2
916UN (9/16" unitorque nut)	4
124B (1/2" x 4" bolt)	1
716WA (7/16" USS flat washer)	2
12UN (1/2" unitorque nut)	1
716112B (7/16" x 1 1/2" bolt)	4
38WA (3/8" USS flat washer)	8
716UN (7/16" unitorque nut)	4
M1480B (14 mm x 80 mm bolt)	1
M14WA (14 mm washer)	2
S10107 (fender washer)	4
38112B (3/8" x 1 1/2" bolt)	6
516WA (5/16" USS flat washer)	12
38NLN (3/8" Nylock nut)	6

**Hardware bag 36005SL includes:**

<u>Description</u>	<u>Quantity</u>
S10059 (.875" x .550" x 2.370")	4
S10060 (.875" x .640" x 2.630")	4
S10061 (1.130" x .610" x 2.270")	1
S10062 (1.130" x .610" x 1.330")	1
34000-07 (Nut bracket)	1

**Hardware bag 34000PL includes:**

<u>Description</u>	<u>Quantity</u>
MO2617 (control arm bushing)	16
MO3509 (front upper shock bushing)	2
M03510 (front upper shock bushing)	2

**Hardware bag 916NW includes:**

<u>Description</u>	<u>Quantity</u>
SUW-916 (9/16" harden u-bolt washer)	8
916HN (9/16" u-bolt high nut)	8

**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:** \_\_\_\_\_

**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:** \_\_\_\_\_

**Front end installation:**

1. Working on the driver side, remove the stock sway bar from the stock sway bar end link. Save the stock sway bar end link hardware for later re-installation. Repeat the procedure on the passenger side. Now remove the stock sway from the stock end links and let the stock sway bar hang.

**Photo # 1**

**Step # 1 needs to be performed with weight of the vehicle on the ground. If this step is not performed with the weight of the vehicle on the ground, damage will occur to the stock sway bar end links.**

2. 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 tires and wheels from both sides.

3. Place a pair of hydraulic floor jacks under the front axle. Place one on the driver side and one on the passenger side. Carefully raise up on both hydraulic floor jacks at the same time until the hydraulic floor jacks come into contact with the front axle.

4. Working on the driver side, remove the stock nut that connects the stock tie rod end to the stock pitman arm. Save the stock nut for later re-installation. Using a hammer, carefully break the taper on the stock tie rod that connects to the stock pitman arm. **Special note: Take special care not to rip or tear the stock outer tie rod boot. The new pitman arm has a reverse taper on it, after the new pitman arm has been installed, the stock outer tie rod needs to be rotated 180 degrees.**

**Photo # 2**

5. Next, remove the stock nut and lock washer from the sector shaft on the stock steering box. Save the stock hardware for later re-installation. Using a pitman arm puller,

carefully remove the stock pitman arm from the stock sector shaft. The stock pitman arm may be discarded.

**Photo # 3 / Photo # 4**

6. Open the hood of your vehicle. Working on the driver side, locate and remove the upper stock shock nut. Also, remove the upper stock shock retainer washer and grommet. The stock nut, retainer washer and grommet may be discarded. Repeat procedure on the passenger side.

**Photo # 5**

7. Working on the driver side, remove the (3) stock nuts that hold the upper stock shock tower to the stock location. The stock hardware may be discarded. Set the upper stock shock tower aside for later re-installation. Repeat procedure on the passenger side.

**Photo # 6**

8. Working on the driver side, Scribe a reference mark on the bottom of the stock coil spring and the stock coil spring pocket. This will allow you to re-install the stock coil spring and spacer back into the stock location at a later step. Repeat procedure on the passenger side. Remove the stock lower shock bolt from the stock mounting location and save the stock hardware for later re-installation. Carefully lower down on the hydraulic floor jack holding the driver side axle about 2". Remove the stock shock and the stock coil spring from the stock location. The stock upper coil mounting ring may be discarded. Save the stock isolator and coil spring for later re-installation. **Special note: Shocks are not included with this kit box and the shocks need to be ordered as a separate part number. Tuff Country EZ-Ride Suspension recommends using a 30" fully extended nitrogen gas shock. If you have not already ordered your shocks, please contact Tuff Country or your local Tuff Country dealer and order your new front shocks.** Repeat procedure on the passenger side.

**Photo # 7 / Photo # 8**

9. Working on the driver side, remove the stock hardware that connects the stock track bar to the stock location. Save the stock retaining nut for later re-installation. The stock bolt may be discarded.

**Photo # 9**

10. Working on the driver side, remove the stock brake line bracket that connects the stock brake line between the stock upper and lower control arm mounts on the axle. Save the stock hardware for later re-installation. Repeat procedure on the passenger side.

**Photo # 10**

11. Working on the driver side lower control arm mounting bracket that is located on the stock front axle, scribe a mark on the stock alignment cams and another directly across on the reinforcement bracket. This will give you a good alignment reference until you get the vehicle to an alignment shop for a proper front end alignment. Repeat procedure on the passenger side.

**Photo # 11**

12. Working on the driver side, remove the stock lower control arm from the stock frame rail and axle location. Save the stock hardware for later re-installation. Remove the stock lower control arm and discard. Repeat procedure on the passenger side.

**Photo # 12 / Photo # 13**

13. Working on the driver side, remove the stock upper control arm from the stock frame mount and axle location. The stock hardware may be discarded. Remove the stock upper control arm and discard. Repeat procedure on the passenger side. **Special note: Due to clearance issues with the stock exhaust, the passenger side upper control arm frame mounting hardware will need to be cut off. Carefully cut the stock bolt and discard the stock hardware. New hardware is provided for the new upper control arms. Carefully pushing the stock exhaust over to the driver side will help make clearance to perform this step on the passenger side.**

**Photo # 14**

14. Locate (2) new upper coil spring spacers, the stock rubber isolator pads and the stock coil springs. Insert the stock rubber isolator pads inside the recess in the new upper coil spring spacers. Working on the driver side, place the new upper coil spring spacer on the top of the stock coil spring and insert the bottom of the stock coil spring back into the stock lower pocket. **Special note: Refer to the mark that was scribed in step # 8 so that you can re-install the bottom of the stock coil spring back into the stock location.** Carefully raise up on the hydraulic floor jack until the top of the stock coil spring and the new coil spring spacer seat properly into the upper stock coil spring pocket. **Special note: When installing the upper coil spring spacer into the stock upper pocket, make sure that the (3) holes in the new upper coil spring spacer and the stock pocket line up with each other.** Repeat procedure on the passenger side.

15. Locate the new front shocks. **Special note: Shocks are not included with this suspension system, shocks need to be ordered as a separate part number. Tuff Country EZ—Ride Suspension recommends using a 30" fully extended nitrogen gas shock. If you have not already ordered your shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper front shocks.** Install the new poly bushings and proper crush sleeve into the bottom part of the new shock. **Special note: Make sure to use a lithium or moly base grease prior to inserting the new bushings and sleeves into the new lower eyelet of the new shock. This will increase the life of the bushing as well as prevent squeaking.**

16. Locate the new upper shock grommets from hardware bag 34000PL. Also, locate (4) S10107 upper shock washers from hardware bag 36000NB1. Install the new shock grommets and washers onto each of the new front shocks. Working on the driver side, install the new front shock back into the stock location. Repeat procedure on the passenger side. **Special note: Install the new shock through the engine compartment to make shock installation easier.**

**Also, Tuff Country EZ-Ride Suspension highly recommends that the shocks are installed with shock boots. If shock boots are not installed, damage may occur to the piston of the new shock.**

17. Locate the stock lower shock hardware. Working on the driver side, secure the lower portion of the new shock into the stock lower location using the stock hardware. Make sure to use thread locker or lock tite and torque to **85 ft lbs.** Repeat procedure on the passenger side.

18. Locate the stock upper shock tower. Also locate (6) 3/8" x 1 1/2" bolts, (12) 5/16" USS flat washers and (6) 3/8" nylock nuts from hardware bag 36000NB1. Working on the driver side, install the stock upper shock tower into the stock location and secure the new upper coil spring spacer and the stock upper shock tower to the stock location using the new 3/8" x 1 1/2" bolts and hardware. Make sure to use thread locker or lock tite. Torque the new 3/8" hardware to **35 ft lbs.** Repeat procedure on the passenger side. **Special note: Make sure that the new shock seats properly into the stock upper shock tower.**

19. Working on the driver side, install the new upper shock grommet and washer and secure using the new shock nut. Torque to **32 ft lbs.** Repeat procedure on the passenger side.

**Photo # 15 / stock coil spring, coil spring spacer and new shock installation.**

20. Locate the new upper control arms. Locate (8) control arm bushings from hardware bag 34000PL. Also, locate (4) S10059, upper control arm sleeves from hardware bag 36005SL. **Special note: The new upper control arms are the shorter of the 2 arms.** Insert the new poly bushings into each end of the new upper control arms. **Special note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new upper control arms. This will increase the life of the bushing as well as prevent squeaking.** Next, install the new upper control arm sleeves into the previously installed poly bushings.

21. Locate (1) 9/16" x 6" bolts, (1) 9/16" x 5 1/2" bolt, (2) 9/16" x 4" bolts, (6) 1/2" USS flat washers, (2) 9/16" u-bolt harden washers and (3) 9/16" unitorque nuts from hardware bag 36000NB1. Also, locate (1) 34000-07 (nut bracket) from hardware bag 36005SL. Working on the driver side, install the new upper control arm to the stock frame mount location and secure using the new 9/16" x 6" bolt, hardware and 9/16" u-bolt harden washer. **Special note: the new 9/16" special washers needs to be installed on the inner part of the stock frame rail. Do not tighten at this point.** Next, install the new upper control arm to the stock mounting location on the stock front axle. Secure using the new 9/16" x 4" bolt and hardware. **Do not tighten at this point. Special note: Raising the axle to ride height and moving the axle up and down will make for easier upper control arm installation. Slight prying of the stock control arm bracket also may be needed to make installation easier.** Working on the passenger side, install the new upper control arm to the stock upper frame mount and secure using the new 9/16"

x 5 1/2" bolt, 1/2" USS flat washer (on the outside of the stock frame rail), 9/16" u-bolt harden washer (on the inside of the stock frame rail) and the new nut bracket. Next, install the new upper control arm to the stock mounting location on the stock front axle. Secure using the new 9/16" x 4" bolt and hardware. **Do not tighten at this point. Special note: Carefully pushing the stock exhaust over to the driver side will help make clearance to perform this step on the passenger side.**

**Photo # 16 / passenger side upper mount**

**Photo # 17 / driver side upper mount**

22. Locate the new lower control arms. Locate (8) control arm bushings from hardware bag 34000PL. Also, locate (4) S10060 lower control arm sleeves from hardware bag 36005SL. **Special note: The new lower control arms are the longer of the 2 arms.** Insert the new poly bushings into each end of the new lower control arms. **Special note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new lower control arms. This will increase the life of the bushing as well as prevent squeaking.** Next, install the new lower control arm sleeves into the previously installed poly bushings.

23. Locate the stock lower control arm mounting hardware. Working on the driver side, install the new lower control arm to the stock frame mount location and secure using the stock hardware. **Do not tighten at this point.** Next, install the new lower control arm to the stock mounting location on the stock front axle. Secure using the stock hardware. **Special note: Raising the axle to ride height and moving the axle up and down will make for easier lower control arm installation. Slight prying of the stock control arm bracket also may be needed to make installation easier.** Add some thread locker or lock tite to the stock lower axle mounting hardware and refer back to the marks that were scribed in step # 11 and torque the stock hardware to **85 ft lbs.**

**Photo # 18 / driver side frame mount**

**Photo # 19 / passenger side axle mount**

24. Locate the new track bar relocation bracket. Locate (1) 9/16" x 3 1/2" bolt, (2) 1/2" USS flat washers and (1) 9/16" unitorque nut from hardware bag 36000NB1. Also, locate (1) S10061 crush sleeve from hardware bag 36005SL. Working on the driver side, install the new track bar relocation bracket into the stock location and secure using the new 9/16" x 3 1/2" bolt, crush sleeve and hardware. **Do not tighten at this point.**

**Photo # 20 / Photo # 21**

**Photo # 22**

25. Hold the newly installed track bar relocation bracket up flush with the stock track bar location. Use the holes in the new track bar relocation bracket as guides, carefully drill (2) 1/2" holes into the stock track bar location. **Special Note: To make drilling easier, remove the (3) stock bolts that hold the stock steering box to the inside of the stock frame rail. Move the stock steering box out of the way during drilling. After the (2) 1/2" holes have been drilled into the stock track bar bracket, re-install the stock steering box back into the stock location using the stock hardware.**

**Make sure to use thread locker or lock tite. Torque the stock steering box hardware to 95 ft lbs.**

**Photo # 23**

26. Locate (1) 1/2" x 4" bolt, (2) 7/16" USS flat washers and (1) 1/2" unitorque nut from hardware bag 36000NB1. Also locate (1) S10062 crush sleeve from hardware bag 36005SL. Secure the new track bar bracket to the previously drilled holes using the new 1/2" x 4 1/4" bolt, crush sleeve and hardware. Make sure to use thread locker or lock tite. Torque the new 1/2" bolt to **85 ft lbs.** Move back to the new 9/16" x 3 1/2" bolt that was installed in step # 25 and add some thread locker or lock tite and torque to **95 ft lbs.**

**Photo # 24 / Photo # 25**

27. Locate (1) 14 mm x 80 mm bolt and (2) 14 mm flat washers from hardware bag 36000NB1. Also, locate the stock retaining nut. Install the stock track bar into the newly installed track bar relocation bracket and secure using the new 14 mm x 80 mm bolt, flat washers and stock retaining nut. Make sure to use thread locker or lock tite. Torque to **110 ft lbs.** **Special note: If you are not able to install the stock track bar into the previously installed track bar relocation bracket, you will need to perform this step once the weight of the vehicle is on the ground.**

28. Locate the new pitman arm and the stock pitman arm hardware. Install the new pitman arm into the stock location on the stock sector shaft and secure using the stock hardware. Make sure to use thread locker or lock tite. Torque the stock nut on the sector shaft to **225 ft lbs.**

**Photo # 26**

29. Locate the stock outer tie rod hardware. **Special note: The new pitman arm has a reverse taper on it, if you have not already rotated the stock outer tie rod 180 degrees, rotate the stock outer tie rod at this point.** Secure the stock outer tie rod to the previously installed new pitman arm using the stock hardware. Make sure to use thread locker or lock tite. Torque to **85 ft lbs.**

**Photo # 27**

30. Locate the stock brake line bracket hardware. Working on the driver side, install the stock brake line bracket to the stock location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to **12 ft lbs.** Repeat procedure on the passenger side.

**Photo # 28**

31. Carefully remove both hydraulic floor jacks from under the front differential.

32. Working on the driver side, remove the stock sway bar from the stock frame location and save the stock hardware. Repeat procedure on the passenger side. Set the stock sway bar aside for later re-installation.

**Photo # 29**

33. Locate the new driver and passenger side sway bar relocation brackets. Also, locate the stock sway bar

mounting hardware. Working on the driver side, install the new driver side sway bar relocation bracket to the to the stock frame location and secure using the stock hardware. **Do not tighten at this point.** Repeat procedure on the passenger side. **Special note: When the new driver and passenger side sway bar relocation brackets are installed, the stock sway bar will be moved down and forward.**

34. Locate (4) 7/16" x 1 1/2" bolts, (8) 3/8" USS flat washers and (4) 7/16" unitorque nuts from hardware bag 36000NB1. Also, locate the stock sway bar. Working on the driver side, install the stock sway bar to the previously installed driver side sway bar relocation bracket and secure using the new 7/16" x 1 1/2" bolt and hardware. **Do not tighten at this point.** Repeat procedure on the passenger side. For now let the stock sway bar hang.

35. Check and double check to make sure that all step were performed properly. Check and double check to make sure that all new and stock hardware is torqued to proper torque settings. The upper and lower control arms still need to be torqued to specs and this will be done once the rear end installation has been completed and the weight of the vehicle is on the ground. Also, the stock sway bar end links need to be re-installed and this will also be done once the weight of the vehicle is on the ground.

36. Install the tires and wheels and carefully lower the vehicle to the ground.

37. If you were not able to install the stock track bar to the newly installed track bar relocation bracket, perform this step now that the weight of the vehicle is on the ground.

**Rear end installation:**

**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 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 rear:** \_\_\_\_\_

**Passenger side rear:** \_\_\_\_\_

38. To begin installation, block the front tires of the vehicle so that the vehicle is stable and can't roll forward. Safely lift the rear 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.

39. Position a pair of hydraulic floor jacks under the rear

axle. Place one jack stand on the driver side and one on the passenger side. Raise up on both hydraulic floor jacks at the same time until they make contact with the rear axle.

40. Working on the driver side, remove the stock shock from the stock location and save the stock upper and lower hardware for later re-installation. The stock shock may be discarded. **Special note: Shocks are not included with this suspension system, shocks need to be ordered as a separate part number. Tuff Country EZ—Ride Suspension recommends using a 33" fully extended nitrogen gas shock. If you have not already ordered your shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper front shocks.** Repeat procedure on the passenger side.

41. Working on the driver side, remove the (2) stock rear u-bolts. The stock rear u-bolts and hardware may be discarded. Set the stock upper u-bolt plate aside for later re-installation. Repeat procedure on passenger side.

42. Carefully lower down on both hydraulic floor jacks at the same time until the stock springs separate from the stock rear axle. Lower down approximately 4". **Special note: Make sure not to over extended any brake lines or hoses when lowering axle.**

43. Locate (2) new 4" lifted rear blocks. Working on the driver side, install (1) new 4" lifted block between the stock rear axle and the stock spring assembly. **Special Note: The new 4" lifted block has a taper to it, the small end of the block needs to be installed towards the front of the vehicle.** Repeat procedure on passenger side.

44. Raise up on both hydraulic floor jacks at the same time until the driver and passenger side stock spring assembly seats flush with newly installed 4" block.

**If the vehicle that you are working on is a Dodge Ram 2500 that does not have the 24 valve high output rear end please follow step # 45.**

**If the vehicle that you are working on is a Dodge Ram 2500 that has the 24 valve high output rear end or a Dodge Ram 3500, please follow step # 46.**

45. Locate (4) new 9/16" x 3 1/2" x 15" round u-bolts. Locate (8) 9/16" u-bolt high nuts and (8) 9/16" u-bolt washers from hardware bag 916NW. Also, locate the stock upper u-bolt plate. Working on the driver side, install (2) new 9/16" x 3 1/2" x 15" round u-bolts into the stock location and secure using the new 9/16" high nuts and washers. Torque to **120 ft lbs.** Repeat procedure on passenger side.

**Photo # 30**

46. Locate (4) new 9/16" x 4 1/8" x 17" round u-bolts. Locate (8) 9/16" u-bolt high nuts and (8) 9/16" u-bolt washers from hardware bag 916NW. Also, locate the stock upper u-bolt plate. Working on the driver side, install (2) new 9/16" x 4 1/8" x 17" round u-bolts into the stock location and secure using the new 9/16" high nuts and washers. Torque to **120 ft**

lbs. Repeat procedure on passenger side.

**Photo # 30**

47. Locate the new rear shocks. **Special note: Shocks are not included with this suspension system, shocks need to be ordered as a separate part number, Tuff Country EZ — Ride Suspension recommends using a 33" fully extended nitrogen gas shock.** Also, locate the stock upper and lower shock hardware. Install the new poly bushings into each end of the new shocks. **Special note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new shock. This will increase the life of the bushing as well as prevent squeaking.** Install the proper shock sleeve into the upper and lower eyelets of the new shocks. Working on the driver side, install the new rear shocks absorbers into the stock location using the stock hardware. Repeat procedure on passenger side. Make sure to use thread locker or lock tite and torque to **85 ft lbs.** **Special note: Tuff Country EZ-Ride Suspension highly recommends that the shocks are installed with shock boots. If shock boots are not installed, damage may occur to the piston of the new shock.**

48. Check and double check to make sure that all steps related with the rear end were performed properly. Check and double check to make sure that all stock and new hardware is torqued to proper torque specifications.

49. Remove both hydraulic floor jacks from under the rear axle.

50. Install the tire wheels and carefully lower the vehicle to the ground.

51. Move back to the front upper and lower control arm hardware and add some thread locker or lock tite and torque the stock and new hardware to **95 ft lbs.**

**Photo # 31 / Photo # 32**

52. Locate the sway bar end link hardware. Working on the driver side, install the stock sway bar end link back to the stock sway bar and secure using the stock hardware. Make sure to add thread locker or lock tite and torque to **18 ft lbs.**

**Photo # 33**

53. Move back to the new and stock hardware that connects the new sway bar relocation brackets to the stock frame rail and the stock sway bar to the new sway bar relocation brackets and add some thread locker or lock tite and torque the new and stock hardware to **38 ft lbs.**

**Photo # 34**

**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.**

**Tuff Country EZ-Ride Suspension packages (2) sets of instruction sheets with this box kit. (1) is for the installer and (1) is for the customer. The (1) for the customer has some post installation procedure literature and it is the installers responsibility to make sure that the customer receives a copy of the installation manual along with the literature.**

**After completion of the installation, Tuff Country EZ-Ride Suspension highly recommends that the installer informs the customer that whenever they have their vehicle lifted in the air by the frame rail, the front sway bar end links need to be disconnected from the stock sway bar. If this is not done, damage will occur to the stock front end links.**

**If you have any questions or concerns, please feel free to contact Tuff Country or your local Tuff Country dealer.**





**Photo # 1**



**Photo # 2**



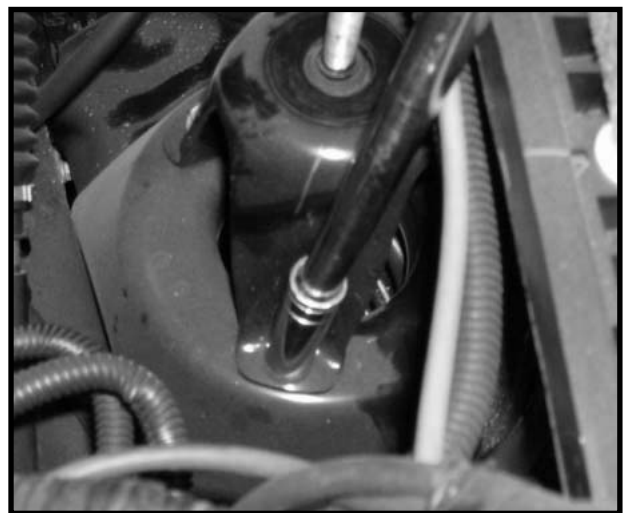
**Photo # 3**



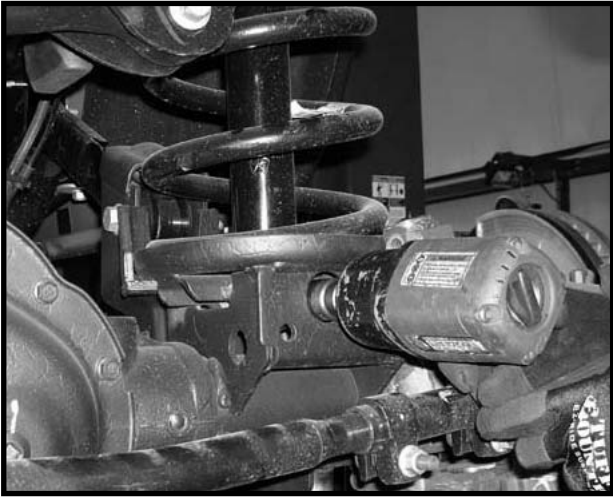
**Photo # 4**



**Photo # 5**



**Photo # 6**



**Photo # 7**



**Photo # 8**



**Photo # 9**



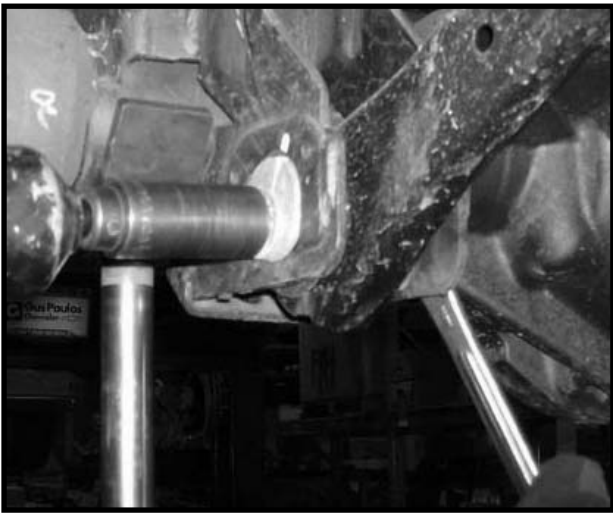
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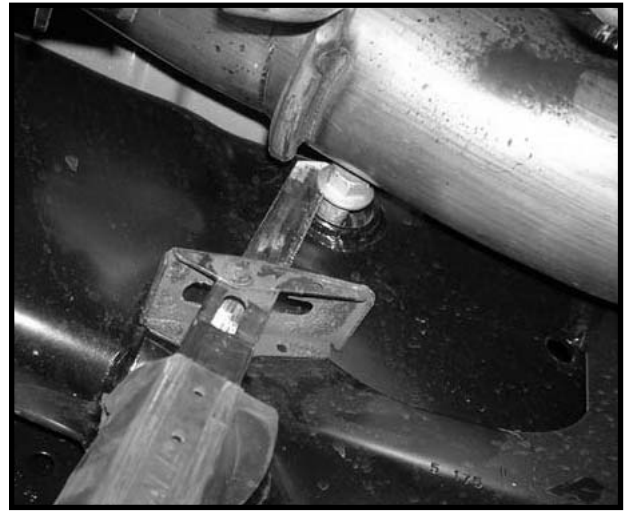
**Photo # 11**



**Photo # 12**



**Photo # 13**



**Photo # 14**



**Photo # 15**



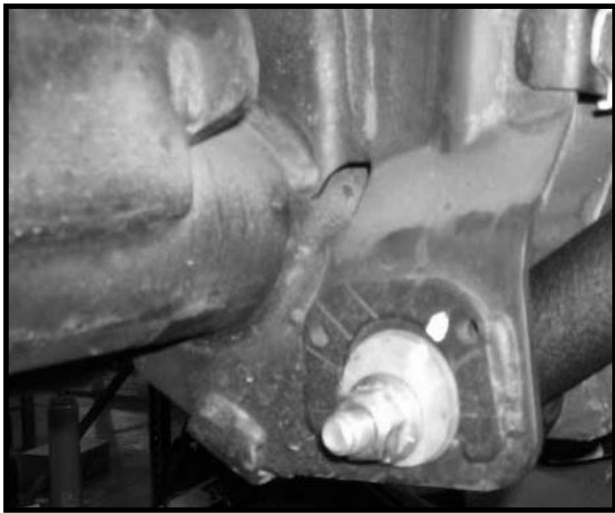
**Photo # 16**



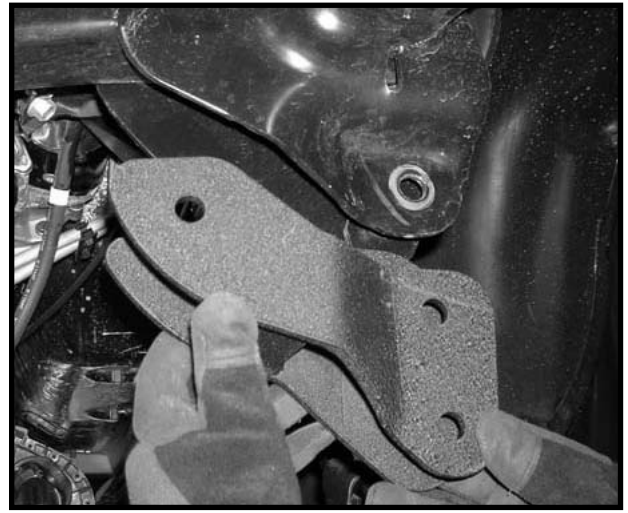
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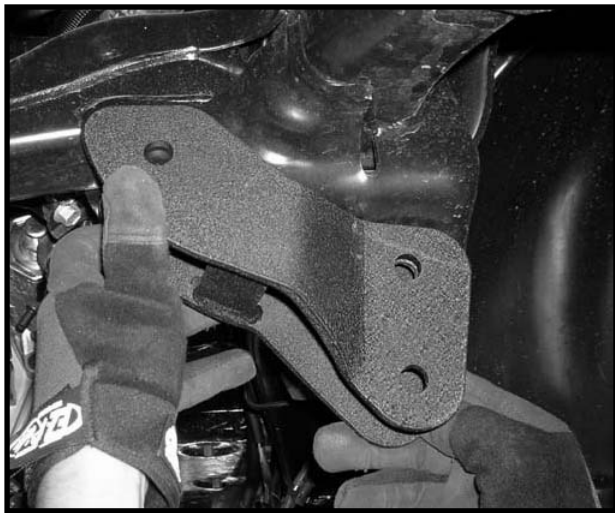
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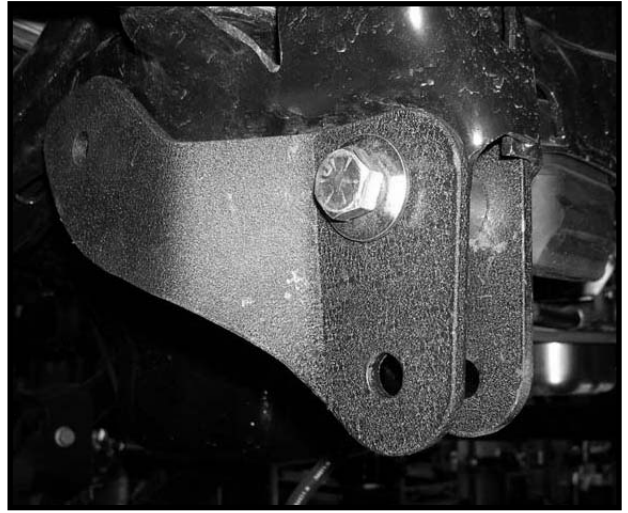
**Photo # 19**



**Photo # 20**



**Photo # 21**



**Photo # 22**

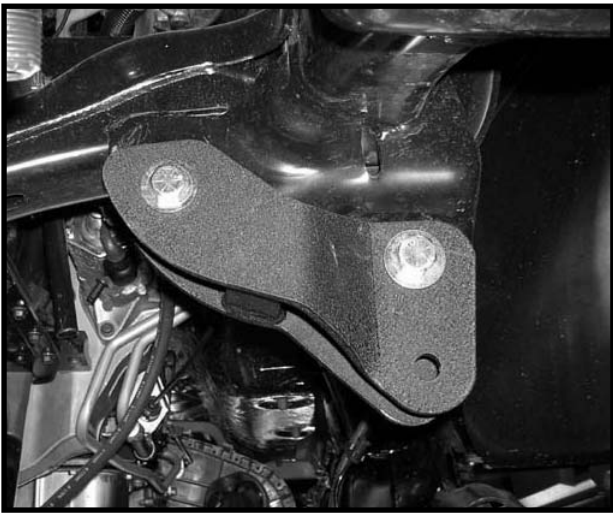


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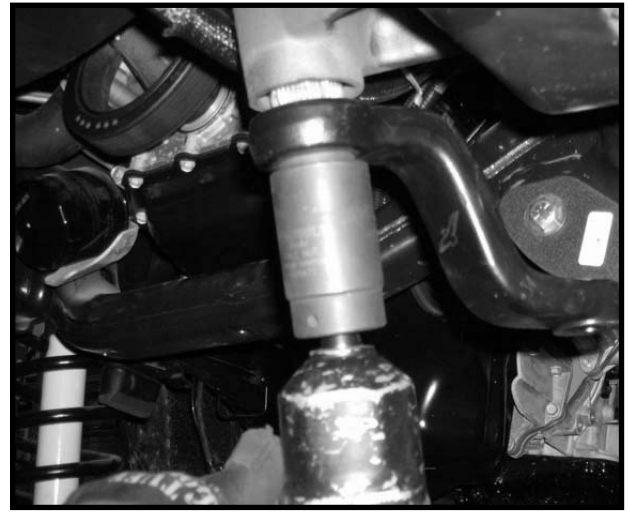


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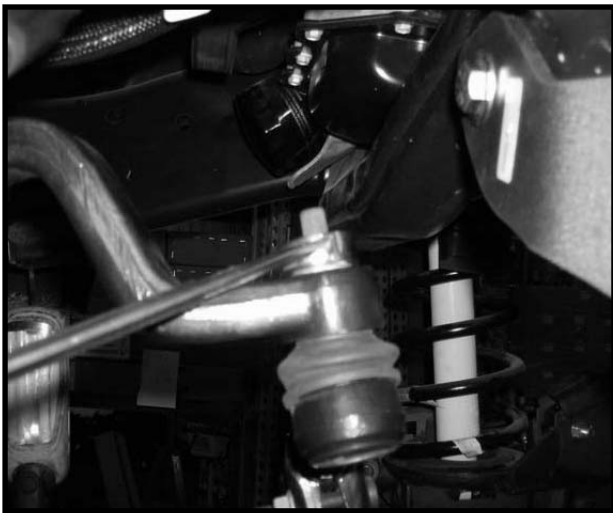




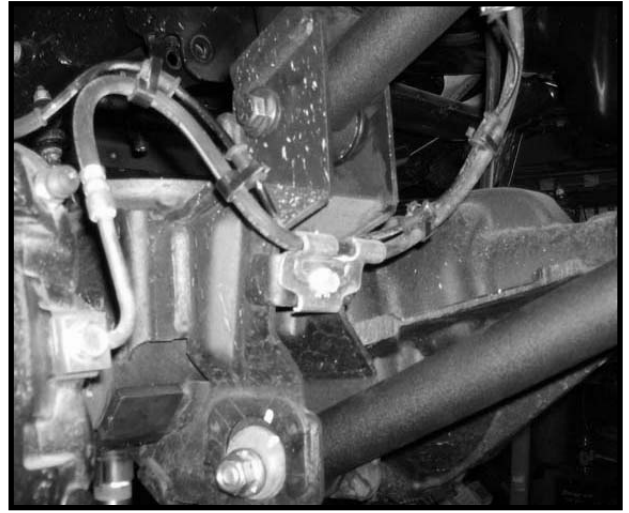
**Photo # 25**



**Photo # 26**



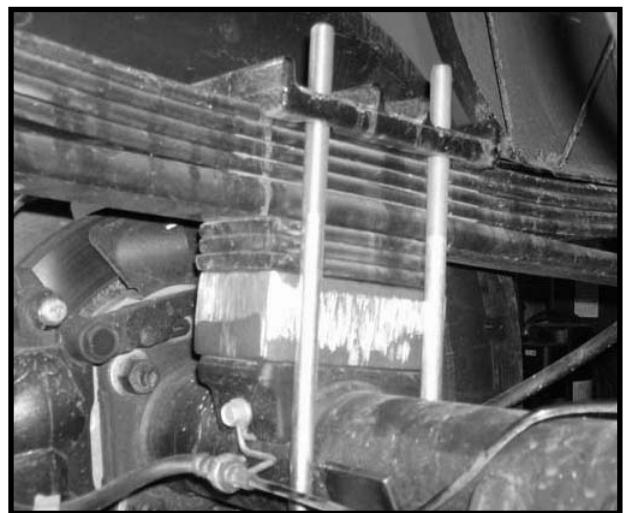
**Photo # 27**



**Photo # 28**



**Photo # 29**



**Photo # 30**



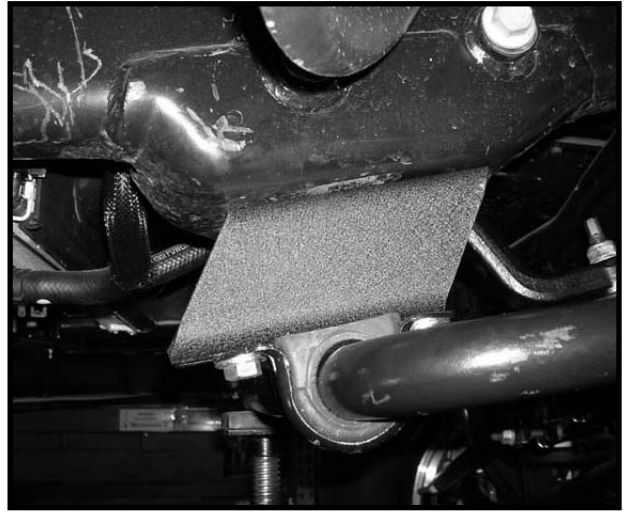
**Photo # 31**



**Photo # 32**



**Photo # 33**



**Photo # 34**



**36000-02 (2)**  
**Upper control arms**



**36000-03 (2)**  
**Lower control arms**



**36000-04 (1)**  
**Track bar relocation bracket**



**DODSSWAY-01 (1)**  
**DS sway bar relocation bracket**



**DODPSSWAY-01 (1)**  
**PS sway bar relocation bracket**



**36000-01 (2)**  
**Upper coil spring spacers**