

EZ - Ride Suspension

Part # 24973 2005 - 2007 Ford Super Duty F250 / F350 4.5" Suspension system

<u> Part</u> #	<u>Description</u>	<u>Qty.</u>
24970-CL01	Front coil springs	2
25975-04	DS & PS radius arm relocation brackets	2
24970-04	Track bar relocation bracket	1
24970-06	DS & PS front brake line bracket	2
24970-10	DS & PS front bump stop bracket	2
24970-11	DS & PS ABS relocation bracket	2
24970-14	Rear carrier bearing bracket	1
25975-02	Steering stabilizer bracket	1
SB-05	Front sway bar end links	2
70205	Box kit (Pitman arm)	1
24973NB	Hardware bag	1
24973PL	Hardware bag	1
5U-3817R	5/8" x 3 5/8" x 17" round u-bolts	4
58NW	Hardware bag	1
BL5504	5 1/2" rear blocks	2
24973INST	Instruction manual (customer copy)	1
24973INST	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 are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us, and our product.

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.

Torque settings:

5/16"	15—18 ft lbs.
3/8"	28—32 ft lbs.
7/16"	30—35 ft lbs.
1/2"	65—85 ft lbs.
9/16"	85—120 ft lbs.
5/8"	95—130 ft lbs.
3/4"	100—140 ft lbs.

Installation manual 4.5" Suspension system

2005 - 2007 Ford Super Duty F250 / F350

Part # 24973

sj112907rev.01

Important customer information:

Tuff Country EZ-Ride Suspension highly recommends that a qualified and/or certified mechanic performs this installation.

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

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.

It is the responsibility of the customer or the mechanic 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. OEM manual should be used as a reference guide.

Make sure to use lock tite on all new and stock hardware associated with this installation.

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.

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:

Tuff Country recommends a 36x13.50 tire package once part # 24973 has been installed. If larger than a 36x13.50 tire is installed on your vehicle in conjunction with part # 24973; Tuff Country assumes no liability and the warranty will be VOID.

Tuff Country uses the same coil spring on vehicles with gas or diesel engines. If the vehicle that you are working on is a gas engine and you are sitting high in the front end, please contact Tuff Country or you local Tuff Country dealer and order part # 82150 (rear add-a-leaf).

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 new 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.

Tuff Country highly recommends installing shock boots once the new shocks have been installed and the shock boots need to be ordered as a separate part #. If you have not already ordered your new shock boots, please feel free to contact Tuff Country or your local Tuff Country dealer and order your new shock boots. Tuff Country EZ-Ride suspension offers; Red, light blue, dark blue, black, yellow and gray shock boots. If shock boots are not installed on the new shocks, damage could occur to the piston of the new shock. If the new shock is damaged due to not having a shock boot installed, warranty will be void.

Description Quantity 7/16" x 2 1/2" bolts 2 2 3/8" USS flat washers 4 5/16" x 1" bolts 1/4" USS flat washers 8 5/16" Unitorque nuts 4 18 mm x 135 mm bolts 4 8 18 mm flat washers 4 18 mm unitorque nuts 3/8" nylock nuts 4 5/16" USS flat washes 4 2 1/2" unitorque nut 9/16" x 3" bolts 2 1/2" USS flat washers 6 9/16" unitorque nuts 2

Hardware bag 24973PL includes:

Hardware bag 24973NB includes:

<u>Description</u>	Quantity
2	
S10156 (.750" x 1.000" x 2.625")	4
PB6199 (short bump stop)	2
PB6052 (tall bump stop)	2
PB8297 (front upper shock bushings)	4
S10107 (front upper shock washers)	4
M30JN (pitman arm nut)	1
MO2220 (poly bushings)	4
S10175 (sleeve)	2
MO3808 (lower sway bar endlink bushings)	4
S10113 (lower sway bar endlink washers)	4
LUBE (Poly lube packs)	2
ZIPTIES (zip ties)	2

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.

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:

Step # 1 — # 8 is performed with the weight of the vehicle on the ground

- 1. Safely block the rear tires of the vehicle so the vehicle is stable and can not roll backwards.
- 2. Working on the driver side, remove the stock sway bar end link from the stock lower mount on the axle and the stock sway bar. The stock end link and all stock hardware may be discarded. Repeat procedure on the passenger side. Let the stock sway bar hang.
- 3. Working on the driver side, remove the stock cotter pin and retaining nut that connects the stock tie rod to the stock pitman arm. Save the stock hardware for later re-installation. Loosen, but do not fully remove the stock nut that connects the stock tie rod to the stock pitman arm.

Photo # 1 Photo # 2

4. Remove the stock steering stabilizer hardware from the stock tie rod and save the stock hardware for later re-installation. Remove the stock steering stabilizer from the stock tie rod.

Photo # 3 Photo # 4

5. Move back to the stock hardware attaching the stock tie rod end to the stock pitman arm and remove. Set the stock hardware aside for later re-installation. Carefully break the stock taper and remove the stock tie rod from the stock pitman arm.

Photo #5

6. Working on the driver side, remove the stock lower brake line bracket from the stock front axle. Save the stock hard-

ware for later re-installation. Repeat procedure on the passenger side.

Photo #6

7. Working on the driver side, remove the stock brake line bracket from the stock frame rail. Save the stock hardware for later re-installation. Repeat procedure on the passenger side.

Photo #7

8. Working on the driver side, remove the stock track bar hardware from the stock track bar bracket and save the stock hardware for later re-installation. Let the stock track bar hang.

Photo #8 Photo #9

- 9. 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.
- 10. Place a pair of hydraulic floor jacks under the front differential, and carefully raise up on both hydraulic floor jacks at the same time, until they come into contact with the front differential.
- 11. Working on the driver side, remove the stock shock from the stock location. Save the stock lower mounting hardware. The stock upper mounting hardware and the stock shock may be discarded. Special note: New longer front shocks are needed, if you have not already ordered shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper shocks. Tuff Country recommends using a 30" fully extended nitrogen gas shock. Repeat procedure on the passenger side.

Photo # 10 Photo # 11

12. Carefully lower down on both hydraulic floor jacks at the same time allowing enough room for the stock coil springs to be removed. Working on the driver side, remove the stock coil spring from the stock location. Save the stock rubber isolator. The stock coil spring may be discarded. Repeat procedure on the passenger side.

Photo # 12

13. Working on the driver side, remove the stock ABS line and breather hoses that attach to the stock radius arm. Let the stock ABS line and breather hoses hang. Repeat procedure on the passenger side.

Photo # 13 / Photo # 14 Photo # 15

14. Working on the driver side, remove the stock hardware that connects the stock radius arm to the stock radius arm drop bracket. Save the stock hardware for later re-installation. Repeat procedure on the passenger side. Carefully lower down on both hydraulic floor jacks, this will allow the

radius arm to come out of the stock location so that the new bracket can be installed.

Photo # 16 Photo # 17

15. Locate the new driver and passenger side radius arm relocation bracket. Locate (4) 18 mm x 135 mm bolts, (8) 18 mm flat washers and (4) 18 mm unitorque nuts from hardware bag 24973NB. Also, locate (4) S10156 sleeves from hardware bag 24973PL. Working on the driver side, install the new driver side radius arm relocation bracket into the stock mount and secure using the new 18 mm x 135 mm bolt, hardware and sleeves. Make sure to use thread locker or lock tite and torque to **125 ft lbs.** Repeat procedure on the passenger side.

Photo # 18 / Photo # 19 Photo # 20

- 16. Working on the driver side, remove the stock hardware that attaches the stock track bar to the stock frame rail and cross member. Save the stock hardware for later re-installation. The stock track bar bracket may be discarded.
- 17. Working on the driver side, remove the stock nut that connects the stock pitman arm to the stock sector shaft. The stock nut may be discarded but save the lock washer for later re-installation. Carefully remove the stock pitman arm from the stock sector shaft. The stock pitman arm may be discarded.

Photo # 21 Photo # 22

18. Locate the new pitman arm and the stock lock washer. Also, locate the new 30 mm jam nut from hardware bag 24973PL. Install the new pitman arm to the stock sector shaft and secure using the stock lock washer and new 30 mm jam nut. Make sure to use thread locker or lock tite and torque to **350 ft lbs.**

Photo # 23 Photo # 24

19. Locate the new track bar relocation bracket and the stock hardware. Install the new track bar relocation bracket to the stock location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque all (5) nuts to **75 ft lbs.**

Photo # 25 / Photo # 26 Photo # 27

20. Working on the driver side, remove the stock front bump stop from the stock front bump stop cup. Save the stock bump stop for later re-installation. Repeat procedure on the passenger side.

Photo #28

21. Working on the driver side, remove the stock bump stop cup from the bottom of the stock frame rail and save the stock bump stop cup and the stock hardware for later reinstallation. Repeat procedure on the passenger side.

Photo # 29

22. Locate the new bump stop relocation brackets. Also, locate the stock bump stop cup mounting hardware. Working on the driver side, secure the new bump stop relocation bracket to the stock location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to **18 ft lbs.** Repeat procedure on the passenger side.

Photo # 30

23. Locate the stock bump stop cups. Also, locate the (2) 5/16" x 1" bolts, (4) 1/4" USS flat washers and (2) 5/16" unitorque nuts from hardware bag 24973NB. Working on the driver side, install the stock bump stop cup to the newly installed bump stop relocation bracket and secure using the new 5/16" x 1" bolts and hardware. Make sure to use thread locker or lock tite and torque to **18 ft lbs.** Repeat procedure on the passenger side.

Photo # 31

24. Locate the stock bump stops. Working on the driver side, install the stock bump stop into the newly placed bump stop cup. Repeat procedure on the passenger side.

Photo # 32 / Photo # 33

- 25. Locate the new driver and passenger side brake line relocation bracket. Also locate the stock brake line bracket hardware. Working on the driver side, install the new brake line relocation bracket to the stock frame rail and secure using the stock hardware. **Do not tighten at this point.** Repeat procedure on the passenger side.
- 26. Locate (2) 5/16" x 1" bolts, (4) 1/4" USS flat washers and (2) 5/16" unitorque nuts from hardware bag 24973NB. Working on the driver side, install the stock brake line to the newly installed brake line relocation bracket and secure using the new 5/16" x 1" bolt and hardware. Make sure to use thread locker or lock tite and torque to 18 ft lbs. Repeat procedure on the passenger side. Move back to the stock hardware holding the new bracket to the stock frame rail and add some thread locker or lock tite and torque to 12 ft lbs.

Photo # 34

27. Locate the new coil springs. Also, locate the stock isolators. Working on the driver side, install the stock isolator on the new coil spring and install the new coil spring into the stock location. Carefully raise up on the hydraulic floor jack until the new coil springs seats properly into the stock upper and lower location. Repeat procedure on the passenger side.

Photo # 35

28. Locate the stock radius arm hardware. Working on the driver side, install the stock radius arm to the new radius arm relocation bracket and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to 125 ft lbs. Repeat procedure on the passenger side.

29. Working on the driver side and using a flat head screw driver, carefully open up the stock lower brake line bracket and slide the stock bracket down towards the axle to allow re-installation into the stock location. Repeat procedure on the passenger side.

Photo # 36 / Photo # 37

30. Locate the stock lower brake line bracket hardware. Working on the driver side, install the stock lower 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 # 38

31. Working on the driver side, scribe a mark at the top of the stock lower shock bracket. Scribe this mark on the outside lip. Repeat procedure on the passenger side.

Photo # 39

32. Working on the driver side and using a die grinder, carefully cut off the top of the outside bracket. Repeat procedure on the passenger side.

Photo # 40

- 33. Locate the new front shocks. Special note: New longer front shocks are needed, if you have not already ordered shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper shocks. Tuff Country recommends using a 30" fully extended nitrogen gas shock. Locate the new poly bushings and proper sleeves that are packaged with the new shock and install them into the lower eyelet of the new shocks. Special note: Make sure to use a lithium or moly base grease prior to inserting the new lower shock bushings and sleeves into the new lower shock eyelet. This will increase the life of the bushing as well as prevent squeaking.
- 34. Locate the new shock boots. Special note: Tuff Country highly recommends installing shock boots once the new shocks have been installed and the shock boots need to be ordered as a separate part #. If you have not already ordered your new shock boots, please feel free to contact Tuff Country or your local Tuff Country dealer and order your new shock boots. Tuff Country EZ-Ride suspension offers: Red, light blue, dark blue, black, yellow or gray shock boots. If shock boots are not installed on the new shocks, damage could occur to the piston of the new shock. If the new shock is damaged due to not having a shock boot installed, warranty will be void. Install the new shock boots onto the new shocks and secure the lower part of the new shock boots to the new shocks with the new shock ties that are provided with the new shock boots.
- 35. Locate (2) PB8297 upper shock bushings and (2) S10107 upper shock washers from hardware bag 24973PL. Install (1) PB8297 and (1) S10107 onto the stem

of the new shocks.

36. Locate the stock lower shock mounting hardware. Locate (2) PB8297 upper shock bushings and (2) S10107 upper shock washers from hardware bag 24973PL. Locate (2) 1/2" USS flat washers from hardware bag 24973NB and locate the new shock stem nuts that were packaged with your new shocks. Working on the driver side, install the new shock into the stock upper location using the upper shock bushing, washers and nut. Torque to **28 ft lbs**. Secure the bottom of the new shock to the stock location and secure using the stock hardware and the 1/2" washers as a spacer. Make sure to use thread locker or lock tite. Torque to **45 ft lbs**.

Photo # 41 / Photo # 42 Photo # 43 / Photo # 44

37. Working on the driver side, carefully cut off the stock clip on the stock ABS. Repeat procedure on the passenger side.

Photo # 45

38. Locate (2) new zip ties from hardware bag 24973PL. Working on the driver side, re-install the stock ABS line back to the stock radius arm and then zip tie the stock ABS line and breather hose together. Cut off the excess zip tie. Repeat procedure on the passenger side.

Photo # 46

- 39. Working on the passenger side, remove the stock steering stabilizer from the stock bracket on the passenger side of the vehicle and save the stock hardware and the stock steering stabilizer for later re-installation.
- 40. Working on the passenger side, remove the stock steering stabilizer bracket from the stock cross member. Save the stock hardware for later re-installation. The stock bracket may be discarded.
- 41. Locate the new steering stabilizer relocation bracket and the stock hardware. Install the new steering stabilizer bracket to the stock location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to **45** ft lbs.

Photo # 47

42. Locate the stock tie rod hardware. Install the stock tie rod to the newly installed pitman arm and secure using the stock hardware. Make sure to add some thread locker or lock tite and torque to 95 ft lbs. Now install the stock retaining nut and cotter pin. Special note: If the stock cotter pin can not be installed because the hole in the stock retaining nut does not line up with the stock ball joint, DO NOT loosen the stock nut so that the cotter pin can fit, tighten the stock nut some more so that the stock cotter pin can be installed.

Photo # 48

43. Locate the stock steering stabilizer hardware and the

stock steering stabilizer. Install the stock steering stabilizer to the newly installed steering stabilizer bracket and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to **45 ft lbs.**

Photo # 49

44. Locate the stock steering stabilizer hardware. Install the stock steering stabilizer to the stock location and secure using the stock hardware. Make sure to add some thread locker or lock tite and torque to **45 ft lbs.**

Photo # 50

45. Locate the stock track bar mounting hardware. Working on the driver side, secure the stock track bar to the newly installed track bar relocation bracket and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to **145 ft lbs.**

Photo # 51

- 46. Carefully remove both hydraulic floor jacks from under the front differential.
- 47. Locate the new front sway bar end links. Also, locate (4) MO220 poly bushings and (2) S10175 (.6875" x .565" x 1.500" sleeves) from hardware bag 24973PL. Install the new bushings and sleeves into the new front sway bar end links. Special note: Make sure to use a lithium or moly base grease prior to inserting the bushings and sleeves into the new front sway bar end links. This will help with the life of the bushings as well as help prevent squeaking.
- 48. Locate (2) 9/16"x 3" bolt, (4) 1/2" USS flat washers and (2) 9/16 unitorque nuts from hardware bag 24973NB. Working on the driver side, install the new front sway bar end link to the outside of the stock sway bar and secure using the new 9/16" x 3" bolts and hardware. **Make sure to use thread locker or lock tite and torque to 80 ft lbs.** Repeat procedure on the passenger side.
- 49. Locate (4) MO3808 bushings and (4) S10113 over size washers from hardware bag 24973PL. Also, locate (2) 1/2" unitorque nuts from hardware bag 24973NB. Working on the driver side, install the new front sway bar end link to the stock lower location and secure using the new bushings, washers and 1/2" unitorque nut. Make sure to use thread locker or lock tite and torque to 70 ft lbs. Repeat procedure on the passenger side.
- 50. Check and double check to make sure that all steps have been completed properly for the front end and check again.
- 51. Install the tires and wheels and carefully lower the vehicle to the ground.

Rear end installation:

52. 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.

- 53. Place a pair of hydraulic floor jacks under the rear differential and carefully raise up on both hydraulic floor jacks at the same time until they come into contact with the rear differential.
- 54. Working on the driver side, remove the stock shock from the stock location and save the stock hardware for later re-installation. The stock shock may be discarded. Special note: New longer rear shocks are needed, if you have not already ordered your new rear shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper shocks. Tuff Country recommends using a 33" fully extended nitrogen gas shock. Repeat procedure on the passenger side.
- 55. Working on the driver side, remove the stock brake line bracket that connects to the stock u-bolt plate. Save the stock hardware for later re-installation.

Photo # 52

- 56. Working on the driver side, remove the stock u-bolts from the stock location and discard the stock u-bolts and hardware. Set the stock upper u-bolt plate aside for later reinstallation. Repeat procedure on passenger side.
- 57. Carefully lower down both hydraulic floor jacks at the same time approximately 5". **Special note: Take special care not to over extend any brake lines and/or hoses.** Working on the driver side, remove the stock block and discard. Repeat procedure on the passenger side.
- 58. Locate the new rear 5 1/2" blocks. Working on the driver side, install the new rear block between the stock spring assembly and the stock rear differential. Repeat procedure on the passenger side. Carefully raise up on both hydraulic floor jacks at the same time until the stock spring assembly sits flush with the newly installed 5 1/2" lifted block.
- 59. Locate the new 5/8" x 3 5/8" x 17" round u-bolts. Locate (8) 5/8" u-bolt high nuts and (8) 5/8" u-bolt washers from hardware bag 58NW. Also, locate the stock upper u-bolt plate. Working on the driver side, install the new u-bolts into the stock location and secure using the new hardware. Torque to **135 ft lbs.** Repeat procedure on the passenger side.
- 60. Locate the stock brake line bracket hardware. Working on the driver side, secure the stock brake line bracket to the stock location using the stock hardware. Make sure to use thread locker or lock tite and torque to **12 ft lbs.**
- 61. Locate the new rear shocks. Special note: New longer rear shocks are needed, if you have not already

ordered shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper shocks. Tuff Country recommends using a 33" fully extended nitrogen gas shock. Locate the new poly bushings and proper sleeves that are packaged with the new shock and install them into the upper and lower eyelet of the new shocks. Special note: Make sure to use a lithium or moly base grease prior to inserting the new lower shock bushings and sleeves into the new lower shock eyelet. This will increase the life of the bushing as well as prevent squeaking.

- 62. Locate the new shock boots. Special note: Tuff Country highly recommends installing shock boots once the new shocks have been installed and the shock boots need to be ordered as a separate part #. If you have not already ordered your new shock boots, please feel free to contact Tuff Country or your local Tuff Country dealer and order your new shock boots. Tuff Country EZ-Ride suspension offers: Red, light blue, dark blue, black, yellow or gray shock boots. If shock boots are not installed on the new shocks, damage could occur to the piston of the new shock. If the new shock is damaged due to not having a shock boot installed, warranty will be void. Install the new shock boots onto the new shocks and secure the lower part of the new shock boots to the new shocks with the new shock ties that are provided with the new shock boots.
- 63. Locate the upper and lower stock shock hardware. Working on the driver side, install the new rear shock into the stock upper and lower location and secure using the stock hardware. Torque to **80 ft lbs.** Make sure to use thread locker or lock tite. Repeat procedure on passenger side.
- 64. Carefully remove the (2) hydraulic floor jacks from under the rear differential.
- 65. Locate (2) PB6199 short poly bump stops and (2) PB6052 taller poly bump stops from hardware bag 24973PL. Also, locate (4) 3/8" nylock nuts and (4) 5/16" USS flat washers from hardware bag 24973NB. Working on the driver side of the stock rear spring assembly. Remove the (2) stock teflon inserts located on the stock over load in the stock spring assembly. Discard the stock teflon inserts. Install (1) PB6052 (taller poly bump stop) in front location on the stock spring assembly. Secure using the new 3/8" hardware. Torque to 28 ft lbs. Install (1) PB6199 (shorter poly bump stop) in the rear location on the stock spring assembly. Secure using the new 3/8" hardware. Torque to 28 ft lbs. Repeat procedure on the passenger side.

Photo # 53 / front bump top Photo # 54 / rear bump stop

Special note: If the vehicle that you are working has a 1 piece rear drive shaft, please skip to step # 66.
66. Place a hydraulic floor jack under the rear carrier bear-

ing and carefully raise up on the hydraulic floor jack until it Special note: After the completion of the installation, makes contact with the stock carrier bearing. Remove the Tuff Country EZ-Ride Suspension recommends taking stock hardware that connects the stock carrier bearing to the the vehicle to an alignment shop and having a proper stock carrier bearing bracket. The stock bolt may be dis-Ifront end alignment performed. carded but make sure to keep the nut bracket attached to the stock carrier bearing bracket. Carefully lower down on the Tuff Country EZ-Ride Suspension recommends that a hydraulic floor jack approximately 1 1/2".

67. Locate the new rear carrier bearing drop bracket. Also, lity to make sure that a re-torque is performed on all locate (2) 7/16" x 2 1/2" bolts and (2) 3/8" USS flat washers hardware associated with this suspension system after from hardware bag 24973NB. Install the new rear carrier**|the first 100 miles of installation. It is also the customers** bearing drop bracket between the stock carrier bearing responsibility to do a complete re-torque after every bracket and the stock carrier bearing and secure using the 3000 miles or after every off road use. Neglect of follow new 7/16" x 2 1 /2" bolts and hardware. Make sure to use ing these steps could cause brackets to come loose and thread locker or lock tite and torque to **65 ft lbs.** Carefully**∣cause serious damage to the suspension system and to** remove the hydraulic floor jack from under the rear carrier the vehicle. bearing.

Photo # 55

- been completed properly for the rear end and check again.
- 69. Install the tires and wheels and carefully lower the vehicle to the ground.

Congratulations, installation complete!

complete re-torque is done on all bolts associated with this suspension system. It is the customers responsibil-

Tuff Country EZ-Ride Suspension packages (2) sets of instruction sheets with this box kit. (1) is for the installer 68. Check and double check to make sure that all steps have**land (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.

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



Photo # 1



Photo # 2

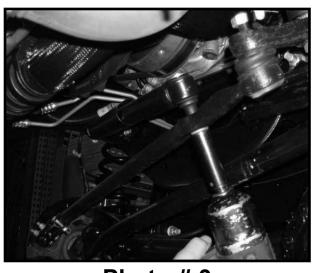


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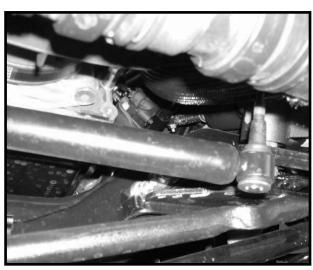


Photo # 4



Photo # 5

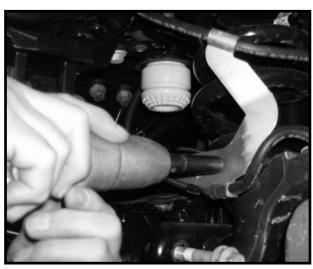


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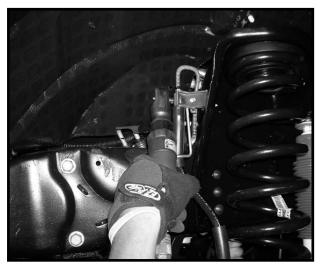


Photo #7



Photo #8

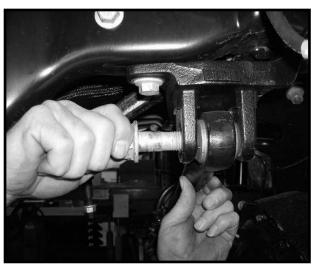


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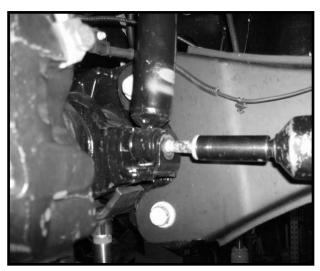


Photo # 10



Photo # 11

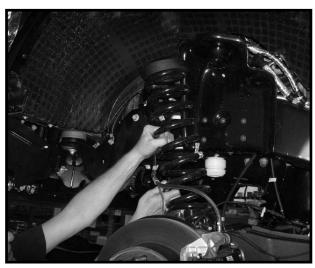


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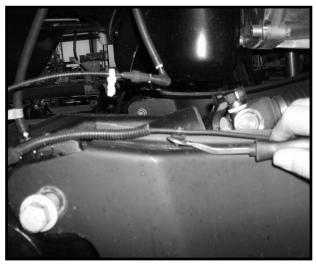


Photo # 13



Photo # 14



Photo # 15

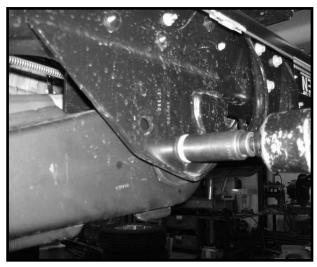


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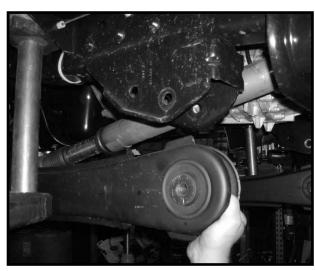


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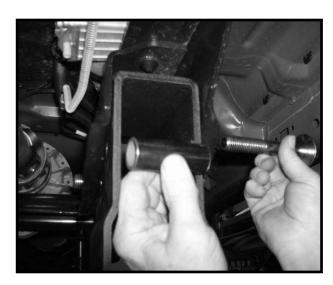


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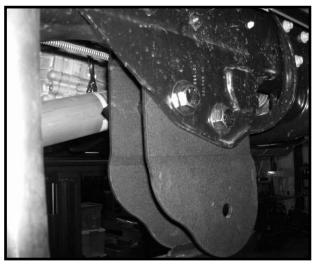


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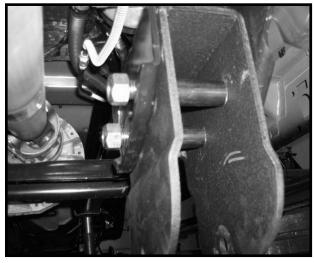


Photo # 20



Photo # 21



Photo # 22

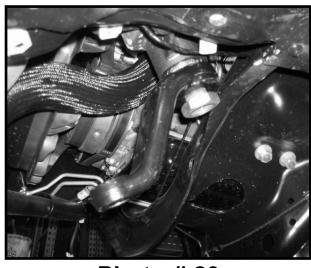


Photo # 23



Photo # 24



Photo # 25



Photo # 26

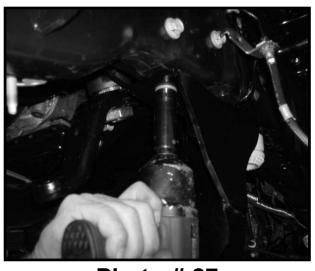


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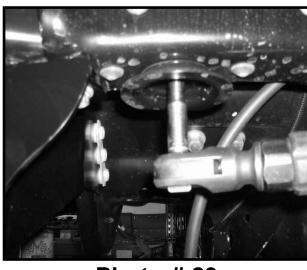


Photo # 29



Photo # 30

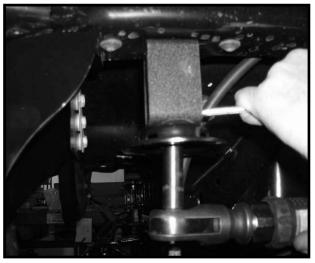


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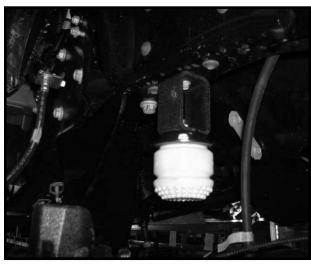


Photo # 32



Photo # 33

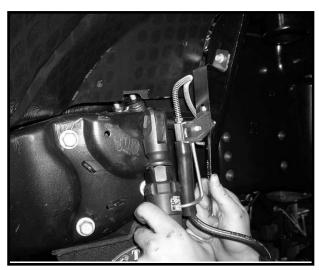


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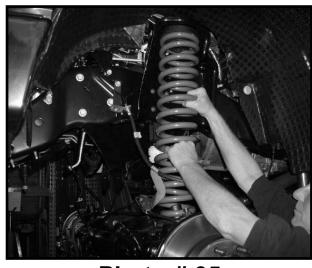


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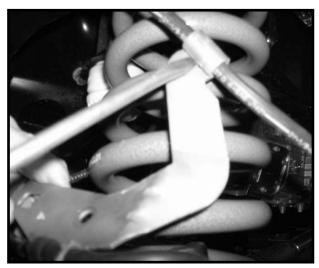


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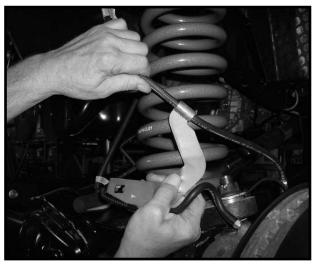


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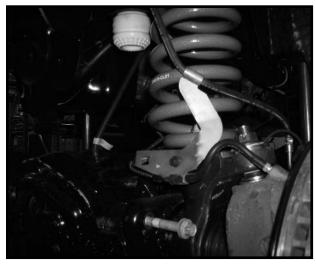


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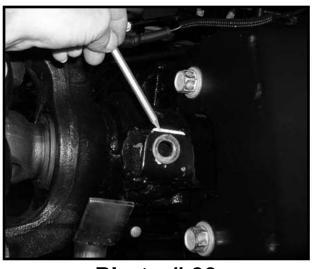


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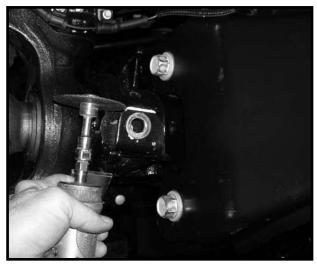


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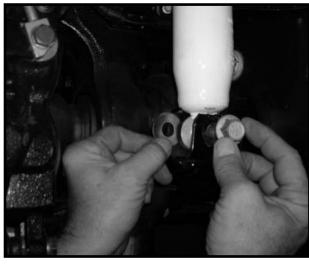


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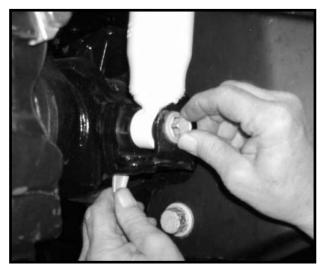


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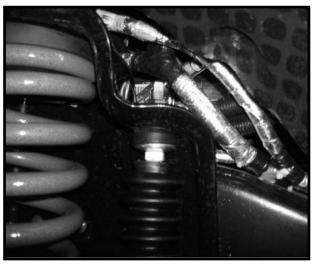


Photo # 43



Photo # 44

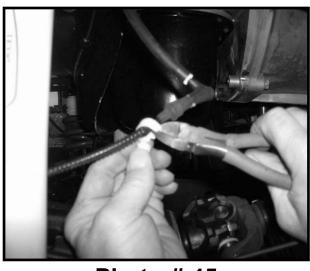


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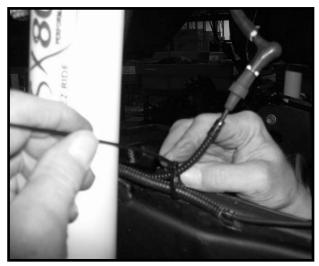


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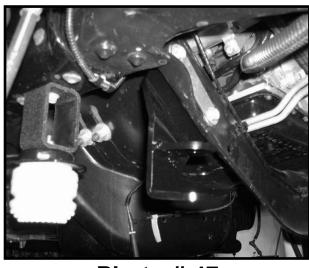


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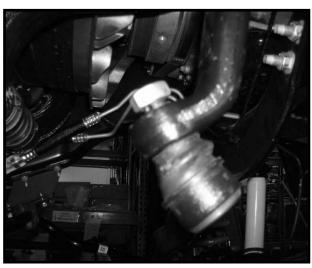


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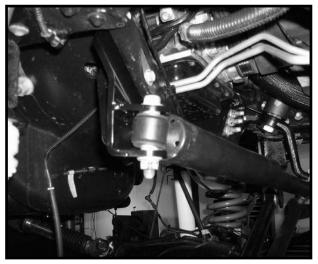


Photo # 49



Photo # 50

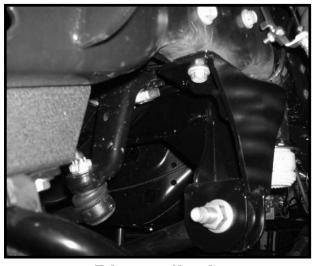


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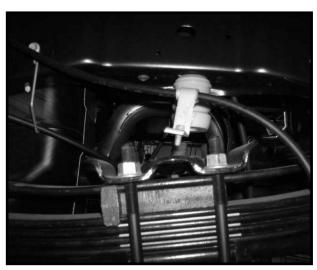


Photo # 52



Photo # 53



Photo # 54

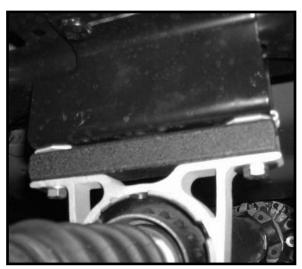


Photo # 55