

# **EZ - Ride Suspension**

New part # 44800 Old part # YJ31B 1987 - 1996 Jeep YJ Wrangler 3.5" suspension system

	Part #	<u>Description</u>	<u>Qty.</u>
	5U-121R	1/2" x 2 1/2" x 7" round u-bolt	6
	5U-1503R	1/2" x 3" x 7 3/4" round u-bolt	2
i	12NW	Hardware bag	2
	YJ3-01	Front track bar relocation bracket	1
	YJ3-02	Rear track bar relocation bracket	1
	44800NB	Hardware bag	1
	CB38	Hardware bag	1
	SB-01	Sway bar end links	2
١	44800NB2	Hardware bag	1
	44800SL	Sleeve bag	1
	44800INST	Instruction manual (customer copy)	1
I	44800INST	Instruction manual (installer copy)	1
l	MIRRORHANGER	Rear view mirror hanger	1
1	WARNINGDECAL	Warning decal	1
I	DECAL	Window decal	1
l			

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 last page of the installation manual.

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.

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

Installation manual 3.5" suspension system 1987 - 1996 Jeep YJ Wrangler New part # 44800 Old part # YJ31B

sj042507rev.02

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 or the mechanic to wear safety glasses at all times when performing this installation.

It is the customers or the installers responsibility to read and understand all steps before installation begins. If you have any questions or concerns, please contact our technical department @ (801) 280-2777. Also, the OEM manual should be used as a reference guide.

This vehicles reaction and handling characteristics may differ from standard cars and/or trucks. Modifications to improve and/or enhance off road performance may raise the intended center of gravity. Extreme caution must be utilized when encountering driving conditions which may cause vehicle imbalance or loss of control. DRIVE SAFELY! Avoid abrupt maneuvers: such as sudden sharp turns which could cause a roll over, resulting in serious injury or death.

It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every off road use.

After the original installation, Tuff Country EZ-Ride Suspension also recommends having the alignment checked every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension takes no responsibility for abuse, improper installation or improper suspension maintenance.

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.

# 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:

The front and rear springs need to be ordered as a sperate part # from the box kit. If you have not already ordered your new front and rear springs, please contact Tuff Country or your local Tuff Country dealer and order (2) 48380 (old number TCI-YJ3F) for the front springs and (2) 49380 (old part # TCI-YJ3R) for the rear springs.

The pitman arm needs to be ordered as a sperate part # from the box kit. If you have not already ordered your new pitman arm, please contact Tuff Country or your local Tuff Country dealer and order (1) 70401 (old part # YJSA).

Tuff Country recommends a 33x12.50 tire package. If larger than a 33x12.50 tire is installed on your vehicle in conjunction with part # 44800; Tuff Country assumes no liability and the warranty will be VOID.

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 cellular gas shock in the front and a 23" fully extended cellular gas shock in the rear.

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:		Please follow instructions carefully:	
Torque wrench		Before installation begins, measure from the center of	
Standard socket set		the hub, to the bottom of the fender well, and record	
Standard wrench set	•	Imeasurements below.	
Metric socket set		Inicasaromonia solowi	
		Pre-installation measurements:	
Metric wrench set		Fre-installation measurements.	
Tape measure			
Hydraulic floor jacks		Driver side front:	
		Passenger side front:	
Hardware bag 44800NB includes:			
		At the end of the installation take the same	
Description	<b>Quantity</b>	measurements and compare to the pre-installation	
		measurements.	
1/2" x 1 1/2' bolt	1		
1/2" x 3 1/2" bolt	3	Post-installation measurements:	
1/2" unitorque nut	4		
7/16" USS flat washer	8	Driver side front:	
12 mm x 60 mm bolt	1	Driver side front:	
		Passenger side front:	
12 mm flat washer	5		
12 mm unitorque nut	3	Front end installation:	
12 mm x 75 mm bolt	.2		
1/2" x 3" flat head allen bolt	6	1. To begin installation, block the rear tires of the vehicle so	
		that the vehicle is stable and can not roll backwards. Safely	
Hardware bag 44800NB2 includes:		lift the front of the vehicle and support the frame with a pair	
		of jack stands. Place one on the driver side and one on the	
Description	Quantity	passenger side. Next, remove the tires and wheels from the	
Description	SKUMITELY	front of the vehicle.	
MO2220 (poly bushing)	8	front of the vehicle.	
S10026 (.680" x .500" x 1.500" sleeve)	4		
,		2. Working on the driver side, remove the stock hardware	
BLR03 (rear brake line relocation bracket)	1	from the stock upper stem mount on the stock shock and dis-	
5161B (5/16" x 1' bolt)	1	card the stock hardware. Next, remove the lower stock	
14WA (1/4" USS flat washer)	2	mounting hardware that connects the stock shock to the	
516UN (5/16" unitorque nut)	1	stock location. Save the stock hardware. The stock shock	
DS41 (4 degree axle shim)	2	may be discarded. Special note: New longer front shocks	
22SW (2" x 2" square washer)	1	are needed after this suspension system has been	
11SW (1" x 1" square washer)	1	installed and the front shocks need to be ordered as a	
LUBE (poly lube packs)	.2	separate part #. If you have not already ordered your	
, , ,		front shocks, please feel free to contact Tuff Country or	
Hardware bag 12NW includes:		your local Tuff Country dealer and order your front	
landing ray in morador	•		
<u>Description</u>	Quantity	shocks. Tuff Country recommends installing a 30" fully	
<u>nescribrion</u>	<u>wuanuty</u>	extended cellular gas shock in the front. Repeat proce-	
4/2" u half high mit	o	dure on the passenger side.	
1/2" u-bolt high nut	8		
1/2" u-bolt harden washer	8	3. Working on the driver side, remove the stock sway bar	
		end link from the stock lower location and save the stock	
Hardware bag CB38 includes:		hardware. Now remove the stock upper mounting hardware	
		that connects the stock sway bar end link to the stock sway	
<u>Description</u>	<b>Quantity</b>	bar. The stock end link and the stock upper mounting hard-	
,	<del></del>	ware may be discarded. Repeat procedure on the passenger	
3/8" x 6" centering bolt	2	iside.	
3/8" fine nut	2	GIGG.	
, o into nat	-	14 Morking on the driver side remains the stands have	
Hardware bag 44800SL includes:		4. Working on the driver side, remove the stock brake line	
Haraware bay 440003L Hicitues.		from the stock mounting location and save the stock hard-	
Description		ware. Repeat procedure on the passenger side.	
Description Qua			
D4000 (4 000)	•	5. Place a pair of hydraulic floor jacks under the front axle.	
S10025 (1.000" x .563" x 1.000" sleeve)	6	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 they come into contact with the front axle.	
		6. Working on the passenger side, remove the stock track	
L			

re-installation. Let the stock track bar hang.

- the stock tie rod and the stock pitman. Special note: take Torque to new u-bolts to 85 ft lbs. special care not to damage the stock tie rod boot. Next, Country dealer and order (1) 70401 (old part # YJSA).
- re-installation. Repeat procedure on the passenger side.
- 9. Working on the driver side, remove the stock spring from dure on the passenger side. the stock front and rear location. The stock spring may be discarded. Save the stock mounting hardware for later reinstallation.
- front springs need to be ordered as a sperate part # from Tuff Country dealer and order (2) 48380 (old number TCI-YJ3F). Remove the new bushings and sleeves from the new front spring pack. Using some lithium or moly base grease the new 1/2" hardware to 80 ft lbs. spread a fair amount of grease onto the new bushings and springs. Special note: Using the lithium or moly base front axle. grease will help on performance of the springs, the life of the bushings as well as help prevent squeaking.
- removed in step # 9. Working on the driver side, install the new front spring into the stock location. Add some thread spring shackle hardware. We will do this, once the weight of the vehicle is on the ground. Repeat procedure on the passenger side.
- 12. Carefully lower down on both hydraulic floor jacks holding the front axle at the same time until the front axle perch∤20. Using the newly installed front track bar relocation brackseats properly with the newly installed front springs.
- 13. Locate (2) 1/2" x 2 1/2" x 7" round u-bolts. Locate (4) 1/2" u-bolt high nuts and (4) 1/2" u-bolt harden washers from 21. Locate (1) 1/2" x 1 1/2" bolt, (2) 7/16" USS flat washers hardware bag 12NW. Also, locate the stock u-bolt plate that Torque the new u-bolts to 85 ft lbs.

bar from the stock location, save the stock hardware for later 14. Locate (2) 1/2" x 3" x 7 3/4" round u-bolts. Locate (4) 1/2" u-bolt high nuts and (4) 1/2" u-bolt harden washers from hardware bag 12NW. Also, locate the stock u-bolt plate that 7. Working on the driver side, remove the stock tie rod that was removed in step # 8. Working on the passenger side, connects to the stock pitman arm. Save the stock hardware install the new u-bolts into the stock location and secure for later re-installation. Carefully break the stock tapper on using the new u-bolts, hardware and stock u-bolt plate.

remove the stock sector shaft hardware holding the stock pit-15. Locate the new front sway bar end links. Locate (8) man arm to the stock sector shaft. Save the stock hardware MO2220 (poly bushings), and (4) S10026 (sleeves) from for later re-installation. With a pitman arm puller, carefully hardware bag 44800NB2. Install the new bushings and remove the stock pitman arm from the stock sector shaft. sleeves into each end of the new end links. Special note: The stock pitman arm may be discarded. Special note: The Make sure to use a lithium or moly base grease prior to pitman arm needs to be ordered as a sperate part # from inserting the new bushings and sleeves into the new the box kit. If you have not already ordered your new pit-lend links. This will help increase the life of the bushings. man arm, please contact Tuff Country or your local Tuff help prevent squeaking and allow the new end links t work properly.

8. Working on the driver side, remove the stock u-bolts from 16. Locate (2) 1/2" x 3 1/2" bolts, (4) 7/16" USS flat washers the stock location. The stock u-bolts and the stock hardware and (2) 1/2" unitorque nuts from hardware bag 44800NB. may be discarded. Set the stock u-bolt plate aside for later Working on the driver side, install The new end link to the stock sway bar and secure using the new 1/2" x 3 1/2" bolt and hardware. Do not tighten at this point. Repeat proce-

# Illustration #1

17. Locate the front stock lower end link hardware that was removed from step # 3. Working on the driver side, secure 10. Locate the new front springs. Special note: The new the new end link to the stock lower u-bolt plate and secure using the stock hardware. Make sure to use thread locker or the box kit. If you have not already ordered your new tite and torque to 50 ft lbs. Repeat procedure on the pasfront springs, please contact Tuff Country or your local senger side. Move back to the new hardware that was installed in step # 15, attaching the new end links to the stock sway bar and add some thread locker or lock tite and torque

re-install the bushings and sleeves back into the new front 18. Carefully remove the hydraulic floor jacks from under the

19. Locate the new front track bar relocation bracket. Locate (1) 12 mm x 60 mm bolt, (2) 12 mm flat washers and (1) 12 11. Locate the stock spring mounting hardware that was mm unitorque nut from hardware bag 44800NB. Also, locate (1) 1" x 1" square washer from hardware bag 44800NB2. Working on the passenger side, install the new front track locker or lock tite and torque the spring hanger hardware bar relocation bracket around the outside of the stock loca-(rear eyelet) to **90 ft. lbs. Special note: Do not tighten the** tion and secure using the new 12 mm x 60 mm bolt and hardware. Special note: the 1" x 1" square washer will be installed on the outside of the new track bar relocation bracket.

#### Illustration # 2

- et as a guide, carefully drill a 1/2" hole into the bottom of the stock track bar location.
- and (1) 1/2" unitorque nuts. Move back to the new front track was removed from step # 8. Working on the driver side, bar relocation bracket that was installed in step # 19 and install the new u-bolts into the stock location and secure remove the newly installed 12 mm hardware. Set the new 12 using the new u-bolts, hardware and stock u-bolt plate. mm bolt, hardware and 1" x 1" square washer aside. Secure the new front track bar relocation bracket to the stock mount-

ing point using the new 1/2" x 1 1/2" bolt and hardware into lock tite and torque to 18 ft lbs. Special note: Tuff Country moved earlier in this step. Make sure to add some thread new shock. Repeat procedure on the passenger side. locker or lock tite and torque to 65 ft lbs.

## Illustration # 2

front of the stock track bar. Also, if you are not able to Torque to 85 ft lbs. install the stock track bar to the newly installed track bar relocation bracket, this step will need to be performed 28. Check and double check to make sure that steps were once the weight of the vehicle is on the ground.

### Illustration #3

- 23. Working on the driver side, carefully drill a 5/16" hole into cle to the ground. the front portion of the stock upper shock mount. Repeat procedure on the passenger side.
- 24. Locate the stock brake line mounting hardware that was removed in step # 4. Working on the driver side, secure the ground. stock brake line into the new location and secure using the side. Special note: Carefully bending of the stock hard step #31 line will make installation easier. Take special care not to over extend or break the stock hard line.

### Illustration #4

- 25. Locate the new front shocks. Special note: New longer front shocks are needed after this suspension system 31. Locate the new rear springs. Locate (2) new 4 degree as prevent squeaking.
- 60 ft lbs. Secure the upper stem of the new shock into the rear of the vehicle. stock location and secure using the new hardware provided

the previously drill hole. Make sure to add some thread lock-EZ-Ride Suspension highly recommends that the er or lock tite and torque to 80 ft lbs. Now re-install the new shocks are installed with shock boots. If shock boots 12 mm bolt, hardware and 1" x 1' square washer that was are not installed, damaged my occur to the piston of the

27. Locate the new pitman arm. Special note: The pitman arm needs to be ordered as a sperate part # from the box kit. If you have not already ordered your new pitman 22. Locate (1) 2" x 2" square washer from hardware from arm, please contact Tuff Country or your local Tuff hardware bag 44800NB2. Also, locate the stock front track Country dealer and order (1) 70401 (old part # YJSA). bar hardware that was removed in step # 6. Install the stock Locate the stock sector shaft hardware and the stock tie rod track bar to the newly installed track bar relocation bracket hardware that was removed in step # 7. Install the new pitand secure using the stock hardware and the new 2" x 2" man arm to the stock sector shaft and secure using the stock square washer. Make sure to add some thread locker or lock hardware. Make sure to use thread locker or lock tite and tite and torgue the stock hardware to 65 ft lbs. Special note: torque to 145 ft lbs. Next, install the tie rod to the newly The new 2"x 2" square washer will be installed to the installed pitman arm and secure using the stock hardware.

- performed properly with the front end.
- 29. Install the tires and wheels and carefully lower the vehi-
- 30. If you were not able to install the stock track bar into the newly installed track bar relocation bracket in step # 22, perform step # 22 now that the weight of the vehicle is on the

stock hardware. Make sure to use thread locker or lock tite Special note: If the vehicle that you are working on is and torque to 18 ft lbs. Repeat procedure on the passenger equipped with a automatic transmission, please follow

> Special note: If the vehicle that you are working on is not equipped with an automatic transmission, please skip to step # 32

- has been installed and the front shocks need to be axle shims from hardware bag 44800NB2. Also, locate (2) ordered as a separate part #. If you have not already 3/8" x 6" center bolts and (2) 3/8" fine nuts from hardware **ordered your front shocks, please feel free to contact** bag CB38. Working on the rear springs and using a pair of Tuff Country or your local Tuff Country dealer and order clamps, place the clamps on both side of the axle shim that your front shocks. Tuff Country recommends installing is attached to the new rear spring. Carefully remove the cena 30" fully extended cellular gas shock in the front. tering bolt and nut holding the axle shim to the new rear Locate the new poly bushings and proper sleeve from the springs. The centering bolt, nut and axle shim may be dishardware bag supplied with the new front shocks and install card. Next, install the new 4 degree shims to the new rear the new poly bushings and crush sleeve into the bottom part springs and secure using the new 3/8" centering bolt and of the new shock. **Special note: Make sure to use a lithi-l**nuts. Torque the new hardware to **40 ft lbs.** With a suitable um or moly base grease prior to inserting the new bush-|cutting tool, carefully cut off the excess thread off the cenings and sleeves into the new lower eyelet of the new tering bolt. Special note: Make sure that when you shock. This will increase the life of the bushing as well installed the new 4 degree shim that the thicker part of the shim is installed towards the transfer case.
- 26. Locate the stock lower mounting shock hardware that 32. To begin installation, block the front tires of the vehicle so was removed in step # 2. Working on the driver side, install that the vehicle is stable and can not roll forward. Safely lift the new shock into the stock lower mounting location and the rear of the vehicle and support the frame with a pair of secure using the stock hardware. Make sure to add thread jack stands. Place one on the driver side and one on the locker or lock tite and torque the lower mounting hardware to passenger side. Next, remove the tires and wheels from the
- with the new shock. Make sure to add some thread locker or 33. Working on the driver side, remove the stock shock from

the stock upper and lower mounting location. Save the stock ing the rear axle at the same time until the rear axle perch mounting hardware. The stock shock may be discarded seats properly with the newly installed rear springs. Special note: New longer rear shocks are needed after in the rear. Repeat procedure on the passenger side.

- 34. Place a pair of hydraulic floor jacks under the rear axle. Place one on the driver side and one on the passenger side. make contact with the rear axle.
- is located inside the stock track bar pocket and discard.
- going to need to be added.
- the stock location. The stock u-bolts and hardware may be some thread locker or lock tite and torque to 75 ft lbs. discarded. Save the stock u-bolt plate for later re-installation. Repeat procedure on the passenger side.
- be discarded. Repeat procedure on the passenger side.
- rear springs, please contact Tuff Country or your local ground. Tuff Country dealer and order (2) 49380 (old number TCI-YJ3R). Remove the new bushings and sleeves from the new re-install the bushings and sleeves back into the new rear of the bushings as well as help prevent squeaking.
- 40. Locate the stock spring hardware that was removed in step # 38. Working on the driver side, install the new spring 46. Locate the new rear shocks. Special note: New longer into the stock location and secure using the stock hardware. tighten the spring shackle hardware. We will do this once the weight of the vehicle is on the ground. Repeat procedure on the passenger side.
- 41. Carefully lower down on both hydraulic floor jacks hold-

- this suspension system has been installed and the rear 42. Locate (4) 1/2" x 2 1/2" x 7" round u-bolts. Locate (8) 1/2" shocks need to be ordered as a separate part #. If you u-bolt high nuts and (8) 1/2" u-bolt harden washers from have not already ordered your rear shocks, please feel hardware bag 12NW. Also, locate the stock u-bolt plate that free to contact Tuff Country or your local Tuff Country was removed from step # 37. Working on the driver side, dealer and order your rear shocks. Tuff Country recom-linstall the new u-bolts into the stock location and secure mends installing a 23" fully extended cellular gas shock using the new u-bolts, hardware and stock u-bolt plate. Torque the new u-bolts to 85 ft lbs. Repeat procedure on the passenger side.
- 43. Locate the new rear track bar relocation bracket. Locate Carefully raise up on both hydraulic floor jacks until they the stock track bar mounting hardware that was removed in step # 35. also, locate (1) 1/2" x 3 1/2" bolt, (2) 7/16" USS flat washers and (1) 1/2" unitorque nut from hardware bag 35. Working on the driver side, remove the stock track bar 44800NB. Working on the driver side, slide the new track bar from the stock track bar mounting location. Save the stock relocation bracket into the stock track bar pocket. Special hardware. Also at this time, remove the stock inner plate that note: Make sure that the washer that is welded on to the side of the new bracket is installed towards the driver side of the vehicle once the new track bar relocation 36. Working on the driver side, remove the stock brake line bracket is installed into the stock pocket. Secure the new from the stock brake line bracket. Special note: Brake fluid bracket to the stock pocket using the stock hardware. Do not will leak out, use something to catch the brake fluid as it tighten at this point. Using the new rear track bar bracket leaks out. Also, once the installation is complete, the brake as a guide, carefully drill a 1/2" hole into the stock bracket lines are going to have to be bleed and proper brake fluid is and secure using the new 1/2" x 3 1/2" bolt and hardware. Make sure to use thread locker or lock tite and torque to 75 ft lbs. Now more back to the stock hardware holding the new 37. Working on the driver side, remove the stock u-bolts from track bar relocation bracket to the stock location and add

#### Illustration # 5

44. Locate (1) 12 mm x 75 mm bolt, (2) 12 mm flat washers 38. Working on the driver side, remove the stock spring from∥and (1) 12 mm unitorque nut from hardware bag 44800NB. the stock spring hanger and the stock shackle. Save the Install the stock track bar to the newly installed track bar relostock hardware for later re-installation. The stock spring may cation bracket and secure using the new 12 mm x 75 mm bolt and hardware. Make sure to use some thread locker or lock tite and torque to 75 ft lbs. Special note: If you are not 39. Locate the new rear springs. Special note: The new able to install the stock track bar to the newly installed rear springs need to be ordered as a sperate part # from track bar relocation bracket, this step may need to be the box kit. If you have not already ordered your new performed once the weight of the vehicle is on the

#### Illustration #6

- rear spring pack. Using some lithium or moly base grease, 45. Locate (1) BLR03, (1) 5/16" x 1" bolt, (2) 1/4" USS flat spread a fair amount of grease onto the new bushings and washers and (1) 5/16" unitorque nut from hardware bag 44800NB2. Install the new brake line relocation bracket to springs. Special note: Using the lithium or moly base the stock location and secure using the new 5/16" x 1" bolt grease will help on performance of the springs, the life and hardware. Make sure to use thread locker or lock tite and torque to 12 ft lbs. Next, install the stock brake line to the newly installed brake line relocation bracket.
- rear shocks are needed after this suspension system Add some thread locker or lock tite to the spring hanger has been installed and the rear shocks need to be hardware and torque to 90 ft lbs. Special note: Do not ordered as a separate part #. If you have not already ordered your rear shocks, please feel free to contact Tuff Country or your local Tuff Country dealer and order your rear shocks. Tuff Country recommends installing a 23" fully extended cellular gas shock in the rear. Locate the new poly bushings and proper sleeves from the hardware

bag supplied with the new rear shocks and install the new poly bushings and crush sleeve into the top and 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.

- 47. Locate the stock upper and lower shock mounting hardware that was removed in step # 35. Working on the driver side, install the new shock into the stock location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque the stock upper and lower mounting hardware to 80 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, damaged my occur to the piston of the new shock. Repeat procedure on the passenger side.
- 48. Carefully remove the hydraulic floor jacks from under the rear differential.
- 49. Place a hydraulic floor jack under the transfer case cross member. Working on the driver side, remove the (3) stock bolts holding the stock transfer case cross member to the stock frame rail. The stock hardware may be discarded. Repeat procedure on the passenger side.
- 50. Locate (6) S10025 transfer case lowering sleeves from hardware bag 44800SL. Also, locate (6) 1/2" x 3" flat head allen bolts from hardware bag 44800NB. Working on the driver side, install (3) transfer case lowering sleeves between the stock transfer case cross member and the stock frame rail and secure using the new 1/2" x 3" flat head allen bolts. Make sure to use thread locker or lock tight. Repeat procedure on the passenger side. Torque the new 1/2" x 3" allen head allen bolts to 85 ft lbs. Special note: Tuff Country highly recommends NOT using a air gun when installing the new 1/2" x 3" flat head allen bolts, if an air gun is used the bolt may strip in the frame of the vehicle.

#### Illustration #7

- 51. Carefully remove the hydraulic floor jack from under the transfer case cross member.
- 52. Install the tire and wheels and carefully lower the vehicle to the ground.
- 53. If you were not able to install the stock track bar to the newly installed track bar relocation bracket in step # 44, perform this step now that the weight of the vehicle is on the ground.
- 54. With the help from a buddy, carefully bleed the stock brake lines. Also, make sure to fill the brake fluid reservoir with proper brake fluid.
- 55. Check and double check to make sure that all steps were performed properly and check again.

### 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.

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

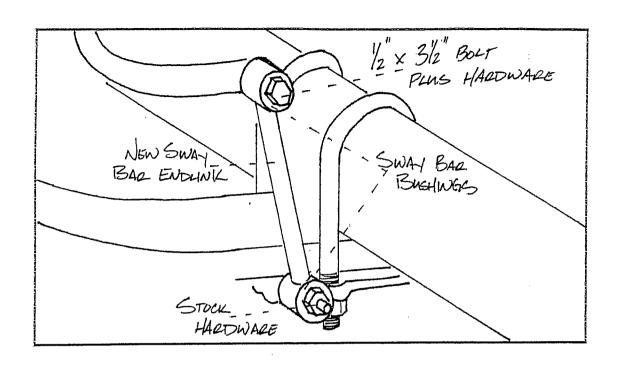


Illustration # 1

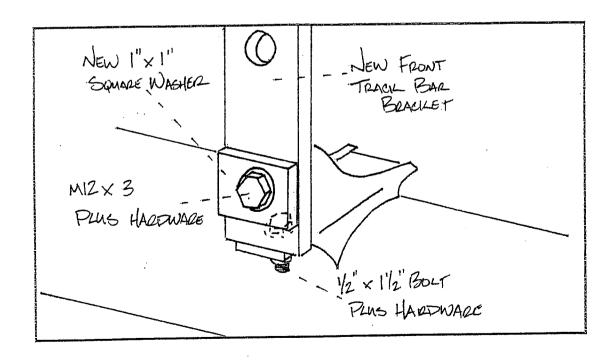


Illustration # 2

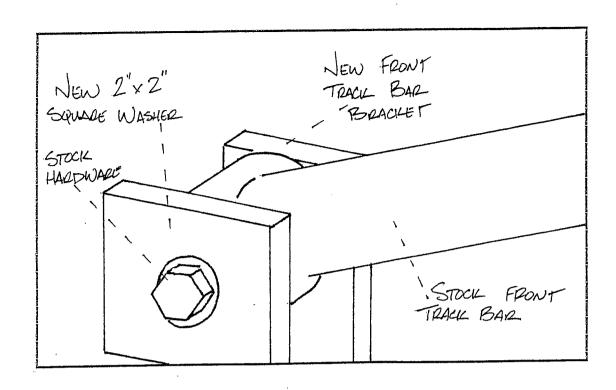


Illustration #3

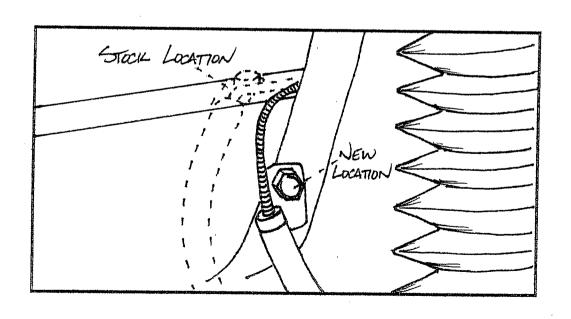


Illustration # 4

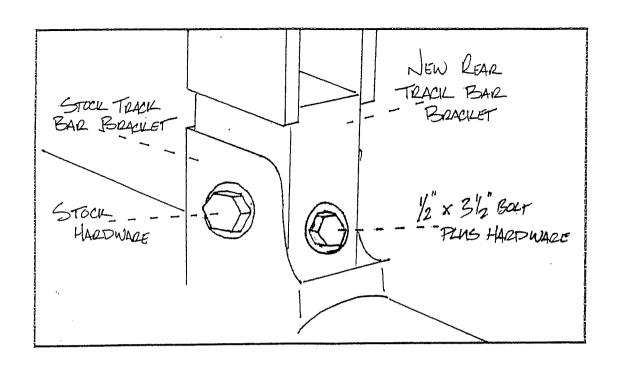


Illustration # 5

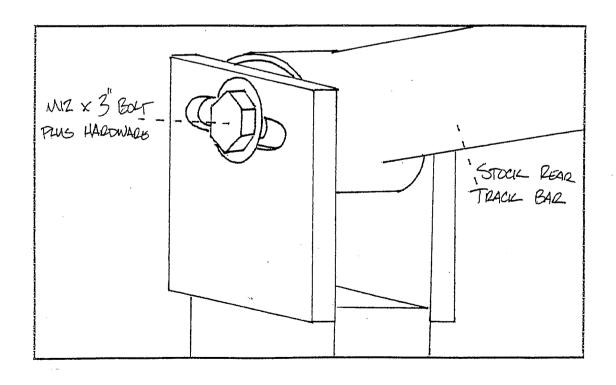
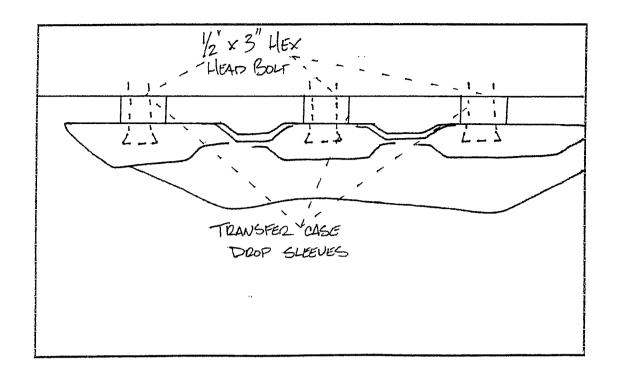
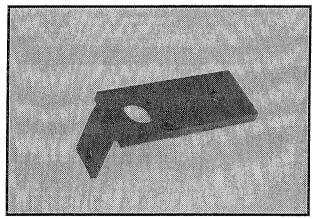


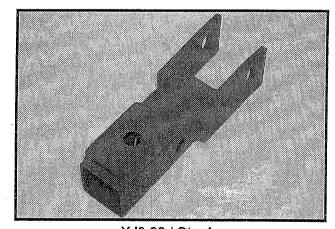
Illustration # 6



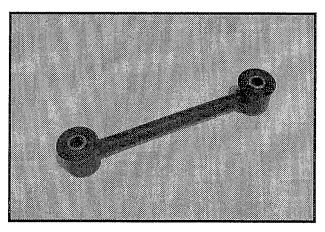
# Illustration # 7



YJ3-01 / Qty. 1
Front track bar relocation bracket



YJ3-02 / Qty. 1 Rear track bar relocation bracket



SB-01 / Qty. 2 Front sway bar end links