

### **EZ - Ride Suspension**

PART NUMBER: 20855 1997 FORD F250 3/4 TON

4" TWIN "I" BEAM AXLE PIVOT DROP BRACKETS

#### PARTS LIST:

Part #	Description	Qty.
F4250-05	Rear Twin "I" Beam Axle Pivot	
	Drop Bracket	1
F4250-06	Front Twin "I" Beam Axle Pivot	
1	Drop Bracket	1
F405	Front Sway Bar Drop Brackets	2
F4250NB	Hardware Bag	1
F2507NB	Hardware Bag	1
CAM1NB	Hardware Bag	1
20855INST	Instruction Sheet	1

Refer to the end of the installation manual for a description of the parts included.

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.

Make sure to use thread locker or locktite on all new and stock hardware associated with this installation.

# **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" TWIN "I" BEAM AXLE PIVOT DROP BRACKETS

FORD F250 3/4 TON

1997

**PART # 20855** 

sj061703rev.03

#### 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 500 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 check every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension take 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.

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.

It is the responsibility of the installers to make sure that the rear view mirror hanger is hung from the rear view mirror. The rear view mirror hanger has instructions on proper post installation procedure.

### LIMITED LIFETIME WARRENTY

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 Country EZ-Ride conjunction with any Tuff 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 reinstalled 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.

Hardware	Bag	F4250NB	Includes:
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Disription	Quanity	
7/16" x 1 1/2" Bolts	4	
7/16" Unitorque Nuts	4	
7/16" Flat Washers	8	

#### Hardware Bag F2507NB Includes:

Disription	Quanity	
9/16" x 1 1/2" Bolts	10	
9/16" Unitorque Nuts	10	
9/16" Flat Washers	20	
9/16" Lock Washers	10	

### Hardware Bag CAM1NB Includes:

Disription	Quanity
9/16" x 3 1/2" Cam Bolts Cam Washers	2 4
9/16" Unitorque Nuts	2

#### Special Notes:

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 representative @ (800) 288-2190.

Drilling Required: Due to the inconsistencies and different variations in Ford's mounting location for the stock twin "!" beam axle pivot drop brackets, the new twin "!" beam axle pivot drop brackets will require (3) 9/16" holes drilled into each bracket prior to installation.

### Please Follow Instruction Carefully

Before installation begins, drive and check to make sure there are no uncommon sounds and or frame damage.

- 1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the frame with jack stands. Place a jack stand on both the driver and passenger side. Next, remove the tires and wheels from both sides.
- 2. Working on the driver side, remove the stock upper and lower shock hardware from the stock location and save the stock hardware and shock for later reinstallation. Repeat procedure on the passenger side.

Special Note: If the vehicle that you are working on does not have a stock front sway bar, please skip to step # 4

- 3. Working on the driver side, remove the (2) stock bolts that connect the stock sway bar to the stock frame mount. Save the stock hardware for later re-installation. Repeat procedure on the passenger side. Let the stock sway bar hang.
- 4. Place a hydraulic floor jack under the stock front twin "I" beam axle. Carefully raise up on the hydraulic floor jack until it makes contact with the stock front twin "I" beam axle.
- 5. Working on the stock front twin "I" beam axle pivot drop bracket, remove the stock bolt that connects the stock front twin "I" beam axle to the stock front twin "I" beam axle pivot drop bracket and discard the stock hardware.
- 6. Carefully lower down on the hydraulic floor jack enough so that the stock front twin "I" beam axle pivot bracket can be removed and the new front twin "I" beam axle pivot bracket can be installed.
- 7. Working on the stock front twin "I" beam, remove the stock front twin "I" beam axle pivot bracket from the stock location. The stock hardware and the stock front twin "I" beam axle pivot drop bracket may be discarded.
- 8. Locate the new front twin "I" beam axle pivot drop bracket, (5) 9/16" x 1 1/2" bolts, (10) 9/16" flat washers, (5) 9/16" lock washers and (5) 9/16" unitorque nuts from hardware bag F2507NB. Secure the new front twin "I" beam axle pivot drop bracket into the (2) upper stock holes using the new 9/16" x 1 1/2" bolts and hardware. Torque to 110 ft lbs. Make sure to use thread locker or locktite on these bolts. Using the (3) stock holes in the stock cross member as a guide, carefully drill (3) 9/16" holes into the new front twin "I" beam axle pivot drop bracket. Secure the new front twin "I" beam axle pivot drop bracket to the stock front cross member using the new 9/16" x 1 1/2" bolts and hardware. Torque to 110 ft lbs. Make sure to use thread locker or locktite on these bolts.

### See Illustration #1

9. Locate (1) 9/16" x 3 1/2" cam bolt, (2) cam washers and (1) 9/16" unitorque. Carefully raise up on the hydraulic floor jack until the stock front twin "I" beam axle seats properly into the newly installed front twin "I" beam axle pivot drop bracket. Secure the stock front twin "I" beam axle to the newly installed front twin "I" beam axle pivot bracket using the new 9/16" x 3 1/2" cam bolt and hardware. Torque to 115 ft lbs. Make sure to use thread locker or locktite on this bolt. Special Note: For now, adjust the new cam bolt to the center position. Once the installation is complete, take the vehicle directly to alignment shop for a proper front end alignment.

### See Illustration # 2

10. Carefully remove the hydraulic floor jack from under the stock front twin "I" beam axle.

- 11. Place a hydraulic floor jack under the stock rear twin "I" beam. Carefully raise up on the hydraulic floor jack until it makes contact with the stock rear twin "I" beam axle.
- 12. Working on the stock rear twin "I" beam axle pivot drop bracket, remove the stock bolt that connects the stock rear twin "I" beam axle to the stock rear twin "I" beam axle pivot drop bracket and discard the stock hardware.
- 13. Carefully lower down on the hydraulic floor jack enough so that the stock rear twin "I" beam axle pivot bracket can be removed and the new rear twin "I" beam axle pivot bracket can be installed.
- 14. Working on the stock front twin "I" beam, remove the stock front twin "I" beam axle pivot bracket from the stock location. The stock hardware and the stock front twin "I" beam axle pivot drop bracket may be discarded.
- 15. Locate the new rear twin "I" beam axle pivot drop bracket, (5) 9/16" x 1 1/2" bolts, (10) 9/16" flat washers, (5) 9/16" lock washers and (5) 9/16" unitorque nuts from hardware bag F2507NB. Secure the new rear twin "I" beam axle pivot drop bracket into the (2) upper stock holes using the new 9/16" x 1 1/2" bolts and hardware. Torque to 110 ft lbs. Make sure to use thread locker or locktite on these bolts. Using the (3) stock holes in the stock cross member as a guide, carefully drill (3) 9/16" holes into the new rear twin "I" beam axle pivot drop bracket. Secure the new rear twin "I" beam axle pivot drop bracket to the stock rear cross member using the new 9/16" x 1 1/2" bolts and hardware. Torque to 10 ft lbs. Make sure to use thread locker or locktite on these bolts.

#### See Illustration #3

16. Locate (1) 9/16" x 3 1/2" cam bolt, (2) cam washers and (1) 9/16" unitorque. Carefully raise up on the hydraulic floor jack until the stock rear twin "I" beam axle seats properly into the newly installed rear twin "I" beam axle pivot drop bracket. Secure the stock rear twin "I" beam axle to the newly installed rear twin "I" beam axle pivot bracket using the new 9/16" x 3 1/2" cam bolt and hardware. Torque to 115 ft lbs. Make sure to use thread locker or locktite on this bolt. Special Note: For now, adjust the new cam bolt to the center position. Once the installation is complete, take the vehicle directly to alignment shop for a proper front end alignment.

#### See Illustration #4

17. Carefully remove the hydraulic floor jack from under the stock rear twin "I" beam axle.

Special Note: If the vehicle that you are working on does not have a stock front sway bar, please skip to step # 20

18. Locate (1) new front sway bar drop bracket and (2) stock bolts and hardware that was removed from step # 3. Working on the driver side, install the new sway bar drop bracket to the stock frame mount. Secure using the stock hardware. Special Note: Do not tighten at this point. Make sure to use thread locker or locktite on these bolts. Repeat procedure on the passenger side.

See Illustration # 5

19. Locate (4) 7/16" x 1 1/2" bolts, (4) 7/16" unitorque nuts and (8) 7/16" flat washers from hardware bag F450NB. Working on the driver side, secure the stock front sway bar to the previously installed sway bar drop bracket using the new 7/16" x 1 1/2" bolts and hardware. Special Note: Do not tighten at this point. Make sure to use thread locker or locktite on these bolts. Repeat procedure on the passenger side. Also, if you are not able to install the stock sway front bar to the new front sway bar drop brackets, you may need to perform this step once the weight of the vehicle is on the ground. Once the stock front sway bar is attached to the new front sway bar drop brackets torque the stock and new 7/16" hardware to 45 ft lbs.

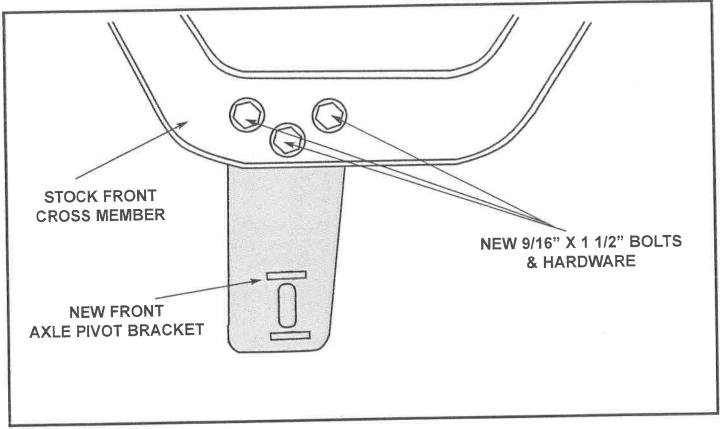
See Illustration # 5

- 20. Locate the stock shock hardware and the shock that was removed from step # 2. Working on the driver side, install the shock into the stock upper and lower location and secure using the stock hardware. Torque to 65 ft lbs. Make sure to use thread locker or lock tite. Repeat procedure on the passenger side.
- 21. Check and double check to make sure that all steps were preformed properly. Check and double check to make sure that all stock and new hardware is torque to proper torque specifications. Special Note: Refer to the owners manual and the torque setting sheet at the beginning of the installation manual for proper torque settings.
- 22. Install the tires and wheels and carefully lower the vehicle to the ground.
- 23. If you were not able to re-install the stock sway bar to the stock location in step # 19, perform step # 19 now that the weight of the vehicle is on the ground.

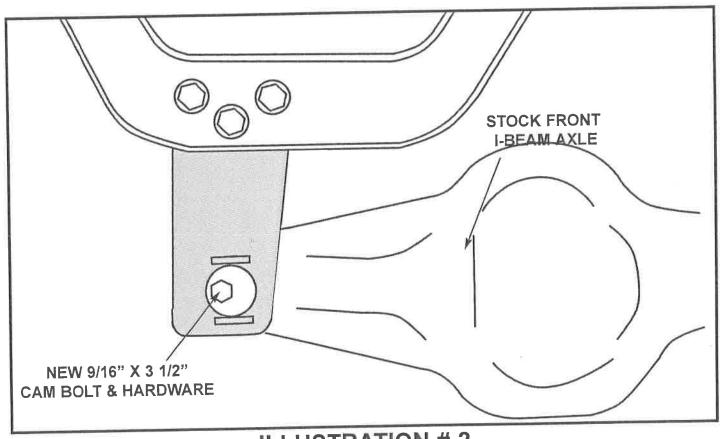
Congratulations: Twin "I" beam axle pivot drop bracket installation complete

Take the vehicle directly to an alignment shop for a proper front end alignment

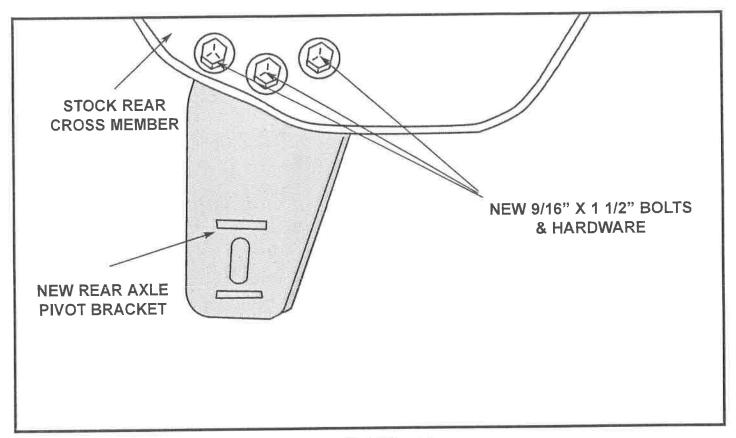
If you have any questions and or concerns on the twin "I" beam axle pivot drop bracket installation, please feel free to call one of our customer service representative @ (800) 288-2190



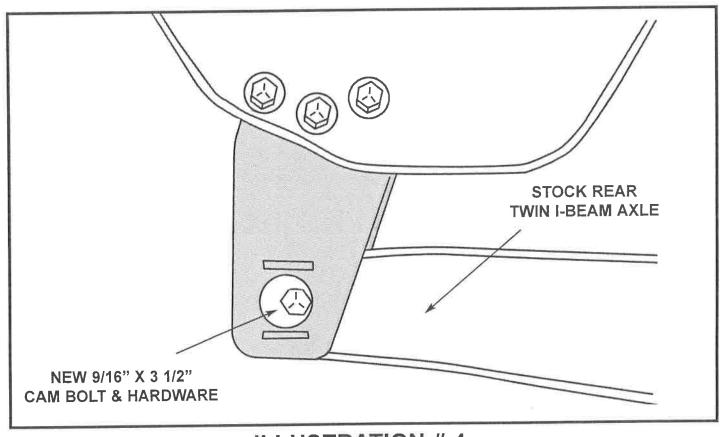
**ILLUSTRATION #1** 



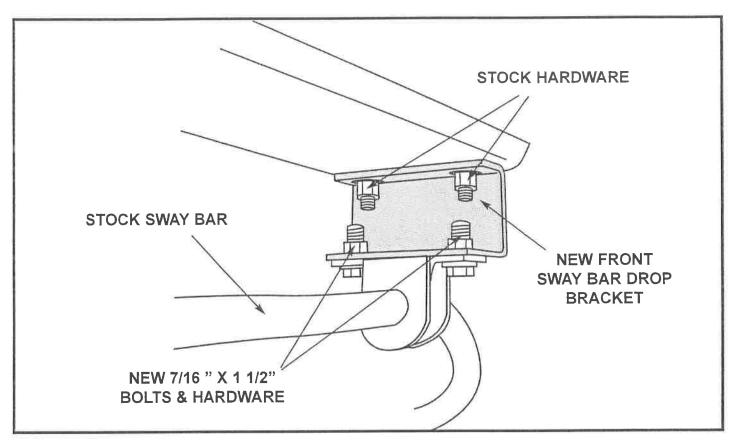
**ILLUSTRATION # 2** 



**ILLUSTRATION #3** 



**ILLUSTRATION #4** 



**ILLUSTRATION #5** 

