



EZ - Ride Suspension

Part # 20813

1983 - 1997 Ford Ranger

1991 - 1994 Ford Explorer

2.5" twin eye beam axle pivot relocation bracket

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
R2001	Front axle pivot relocation bracket (large)	1
R2002	Rear axle pivot relocation bracket (small)	1
F405	Rear axle pivot relocation support bracket	1
R2APNB	Hardware bag	1
CAM1NB	Hardware bag	1
20813INST	Instruction manual	2
MIRRORHANGER	Rear view mirror hanger	1
WARNINGDECAL	Warning decal	1

Congratulations on your selection to purchase a Tuff Country EZ-Ride Suspension System. We at Tuff Country EZ-Ride Suspension are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us and our product.

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

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.

Please see the end of the installation manual for a picture of the hard parts that are included in this suspension system.

Installation manual 2.5" twin eye beam axle pivot relocation bracket

1983 - 1997

Ford Ranger

1991 - 1994

Ford Explorer

Part # 20813

sj022410rev.01

Important customer information:

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

It is the responsibility of the customer/installer to wear safety glasses at all times when performing this installation.

It is the customers/installers responsibility to read and understand all steps before installation begins. 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.

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 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.

Make sure to use thread locker or loctite on all new and stock hardware associated with the installation of this suspension system.

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.

Hardware bag R2APNB includes:

<u>Description</u>	<u>Quantity</u>
716112 (7/16" x 1 1/2" bolt)	6
716UN (7/16" unitorque nut)	6
38WA (3/8" USS flat washer)	12
12112B (1/2" x 1 1/2" bolt)	1
12UN (1/2" unitorque nut)	1
716WA (7/16" USS flat washer)	2

Hardware bag CAM1NB includes:

<u>Description</u>	<u>Quantity</u>
CAM-01 (9/16" x 3 1/2" cam bolt)	2
CAM-02 (cam washer)	4
916UN (9/16" unitorque nut)	2

Recommended tools selection:

Torque wrench
Standard socket set
Standard wrench set
Metric socket set
Metric wrench set
Hydraulic floor jacks
Drill bits
Drill
Air chisel

Twin "I" beam axle pivot relocation bracket installation:

Special note: The brackets in the pictures were taken of the 4" twin eye beam axle pivot brackets. The 2.5" brackets are the same but there is not as much of a drop. If there is any confusion, please contact Tuff Country at 801 280 2777.

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 vehicle with a pair of jack stands. Place a jack stand on both the driver and the passenger side.

2. Place a pair of hydraulic floor jacks under the front driver and passenger side twin eye beam axles. Carefully raise up on the hydraulic floor jacks until they come into contact with the front twin eye beam axles.

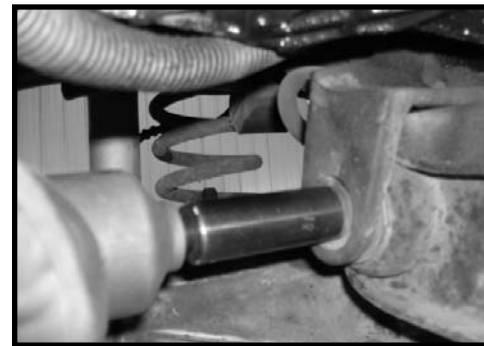
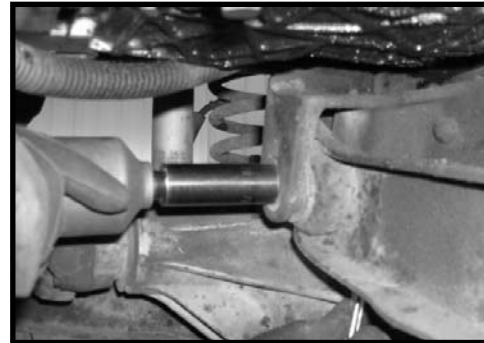
3. Working on the front driver side twin eye beam axle, remove the stock mounting hardware that connects the front twin eye beam axle to the stock bracket. The stock hardware may be discarded.



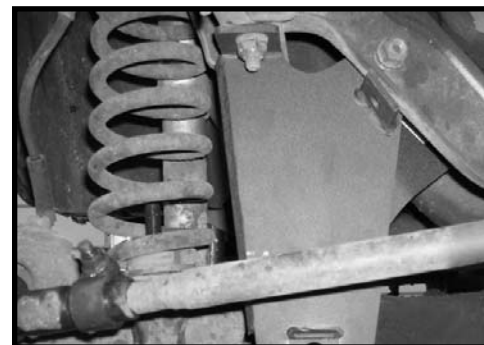
4. Working on the front driver side twin eye beam axle bracket, remove the stock bracket from the stock location. Save the stock hardware but the the stock bracket may be discarded.



5. Working on the rear passenger side twin eye beam axle, remove the stock mounting hardware that connects the rear axle to the stock location. The stock hardware may be discarded.

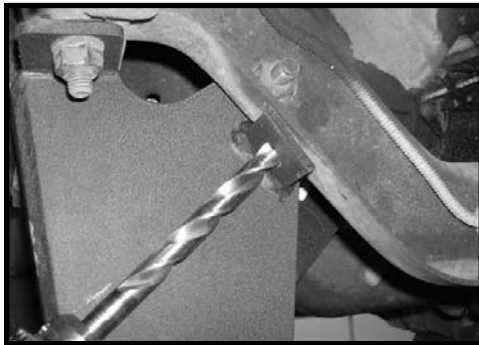


6. Locate the new front twin eye beam relocation bracket and the stock hardware. Install the new front relocation bracket to the stock location and secure using the stock hardware. Make sure to use thread locker or loctite and torque to **85 ft lbs.**

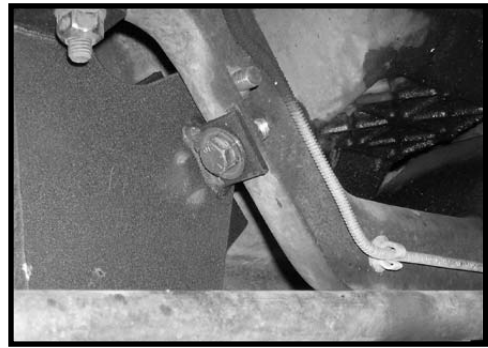




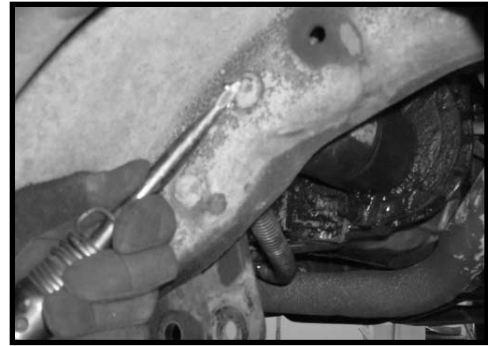
7. Using the hole on the tab of the front twin eye beam relocation bracket as a guide, carefully drill a 1/2" into the front cross member. **Special note: Take special care not to drill into the cooling lines that wrap around the front cross member.**



8. Locate (1) 1/2" x 1 1/2" bolt, (2) 7/16" USS flat washers and (1) 1/2" unitorque nuts. Secure the tab on the front twin eye beam relocation bracket to the front cross member using the new 1/2" x 1 1/2" bolt and hardware. Make sure to use thread locker or loctite and torque to **75 ft lbs.**



9. Working on the stock rear twin eye beam axle pivot bracket, carefully remove the (5) rivets holding the bracket to the cross member. **Special note: Making a cross cut on the head of the rivets then using an air chisel will make removal of the rivets easier.** Once the rivets have been removed the stock bracket may be discarded.

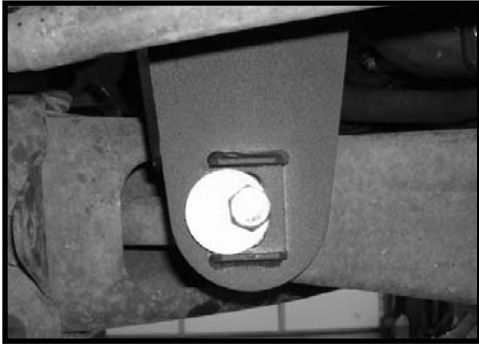


10. Locate the new rear twin eye beam axle pivot relocation bracket and the support bracket. Also, locate (6) 7/16" x 1 1/2" bolts, (12) 3/8" USS flat washers and (6) 7/16" unitorque nuts from hardware bag R2APNB. Install the new rear twin eye beam axle pivot bracket to the front of the stock cross member using the new 7/16" x 1 1/2" bolts and hardware. **Special note: The stock bracket was removed from the back side of the stock cross member. The new bracket will be installed on the front side of the stock cross member. Also, if the new 7/16" bolts do not fit into the stock cross member, you may have to drill them out to 7/16".** Also, during the installation, secure the support bracket to the center hole on the new bracket and to the top of the bracket using the new 7/16" x 1 1/2" bolts and hardware. Make sure to use thread locker or loctite and torque all (6) bolts to **50 ft lbs.**





11. Locate (1) 9/16" x 3 1/2" cam bolt, (2) cam washers and (1) 9/16" unitorque nut from hardware bag CAM1NB. Install the stock front twin eye beam axle into the newly installed front twin eye beam axle relocation bracket and secure using the new 9/16" x 3 1/2" cam bolt and hardware. **Special note: For now torque to 90 ft lbs and center the cam washer in the center of the cam slots. Once installation is complete, the vehicle will need a front end alignment and the alignment shop will set the cam bolt to where it needs to be.**



12. Locate (1) 9/16" x 3 1/2" cam bolt, (2) cam washers and (1) 9/16" unitorque nut from hardware bag CAM1NB. Install the stock rear twin eye beam axle into the newly installed rear twin eye beam axle relocation bracket and secure using the new 9/16" x 3 1/2" cam bolt and hardware. **Special note: For now torque to 90 ft lbs and center the cam washer in the center of the cam slots. Once installation is complete, the vehicle will need a front end alignment and the alignment shop will set the cam bolt to where it needs to be.**



13. Remove the hydraulic floor jacks from under the front and rear twin eye beam axles. Install the tires and wheel and carefully lower the vehicle to the ground.

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.

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



**R2001 / Qty. (1)
Front twin eye beam axle pivot
relocation bracket**



**R2002 / Qty. (1)
Rear twin eye beam axle pivot
relocation bracket**



**R405 / Qty. (1)
Rear twin eye beam axle pivot
relocation support bracket**