



EZ - Ride Suspension

Part # 24863

1983 - 1997 Ford Ranger 4WD

1991 - 1994 Ford Explorer 4WD

4" extended radius arms

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
R4XRB-01	DS extended radius arm	1
R4XRB-02	PS extended radius arm	1
R4XRB-03	DS & PS extended radius arm drop bracket	2
R4XRB-NB	Hardware bag	1
24863NB	Hardware bag	1
24863INST	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
4" extended radius arms
1983 - 1997
Ford Ranger 4WD
1991 - 1994
Ford Explorer 4WD
Part # 24863

sj05232011rev.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 R4XRB-NB includes:

<u>Description</u>	<u>Quantity</u>
716112B (7/16" x 1 1/2" bolt)	10
716UN (7/16" unitorque nut)	10
38WA (3/8" USS flat washer)	20

Hardware bag 24863NB includes:

<u>Description</u>	<u>Quantity</u>
PB2408 (poly bushing)	4
S10081 (.875" x .563" x 2.080" sleeve)	2
CAM-02 (cam washer)	4
CAM-03 (9/16" x 4" cam bolt)	2
916UN (9/16" unitorque nut)	2
SERT (sert fitting)	2
LUBE (poly lube pack)	2
P19 (universal shock bolt)	2

Recommended tools selection:

Cut off wheel
Torque wrench
Standard socket set
Standard wrench set
Metric socket set
Metric wrench set
Tape measure
Hydraulic floor jacks
Air chisel

Please follow instructions carefully:

Extended radius arm installation:

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. **Special note: Place the jack stands on the body mounts.** Next, remove the front wheels and tires from both sides.

2. Working on the driver side, remove the shock from the upper and lower mounting location. Save the upper mounting hardware. The lower mounting hardware may be discarded. Set the shock aside. Repeat procedure on the passenger side.

3. Working on the driver side, remove the stock sway bar from the frame mounting location. Save the hardware. Repeat procedure on the passenger side. Let the stock sway bar hang freely.



4. Place a pair of hydraulic floor jacks under the driver and passenger side stock radius arms. Carefully raise up on the hydraulic floor jacks until they come into contact with the stock radius arms.

5. Working on the driver side stock radius arm bracket, remove the stock hardware or the stock rivets that connect the bracket to the frame rail. The stock hardware and rivets may be discarded. Repeat procedure on the passenger side. **Special note: Using a die grinder and making a cross cut on the rivets then using an air chisel will help make the removal of the rivets easier.**



6. Working on the driver side, remove the stock mounting hardware that connects the coil spring to the axle. Save the stock hardware and coil spring. Repeat procedure on the passenger side.



7. Working on the driver side, remove the stock radius arm from the stock location. Save the stock hardware and front sway bar bracket. The stock radius arm may be discarded. Repeat procedure on the passenger side.

8. Working on the driver side frame rail, locate the rear hole that attached the stock radius arm bracket to the frame rail. Measure towards the rear of the vehicle 15" and scribe a mark on the side of the frame rail. **Special note: Check and double check to make sure that this measurement is correct. If this measurement is not correct, once the new bracket and new extended radius arms are installed the**

front axles may be sitting to far forward or to far back.



9. Working on the driver side frame rail, carefully remove the stock brake cable bracket from the frame rail. **Special note: Using a die grinder and making a cross cut on the rivet then using a air chisel will help make the removal of the rivet easier. Take special care not to damage the stock cable.**



10. Using the 15" mark on the side of the frame rail as a guide and using a straight edge, scribe a mark on the bottom of the frame rail.



11. Locate the new driver side extended radius arm relocation bracket. Place the line that was scribed on the bottom of the frame rail in the center of the rearward hole that is in the bottom side of the new relocation bracket. Using a pair of vise grips, secure the bracket to the frame rail.

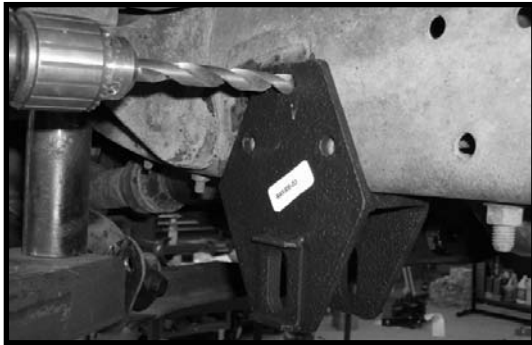


12. Using the bracket as a guide, carefully outline each hole of the bracket onto the frame rail. There are (3) on the side of the frame rail and (2) on the bottom side of the frame rail. Remove the bracket from the frame rail and set the bracket aside.



Repeat steps # 8 - # 12 excluding # 9 to make sure that the holes are in the correct location before drilling into the frame rail. This is an important step, so we want to make sure that the extended radius arm relocation bracket is in the correct location so when the extended radius arm is attached to it, the twin eye beam axle is not sitting to far forward or to far rearward.

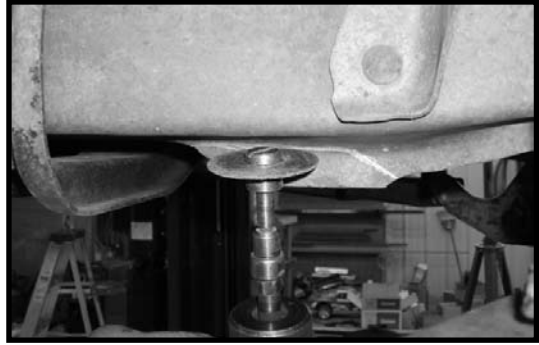
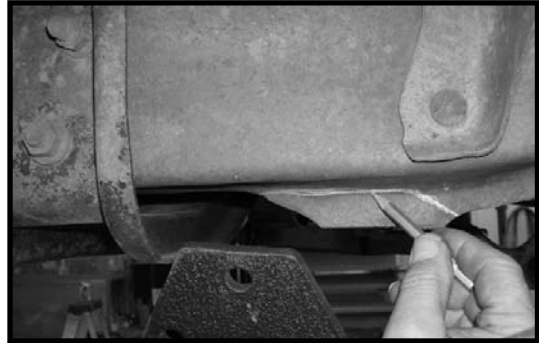
13. Vise grip the bracket back to the frame rail making sure that the hole in the bracket line up with the marks that were scribed earlier. Using the bracket as a guide, carefully drill (5) 7/16" holes into the frame rail. (3) on the side of the frame rail and (2) on the bottom side of the frame rail. **Special note: Take special care not to drill into any lines running down the inside of the frame rail.**



14. Locate (5) 7/16" x 1 1/2" bolts, (10) 3/8" USS flat washers and (5) 7/16" unitorque nuts from hardware bag R4XRB-NB. Secure the driver side extended radius arm to the new location using the new 7/16" x 1 1/2" bolts and hardware. Make sure to use thread locker or loctite and torque to **45 ft lbs.** **Special note: Make sure to secure the stock brake cable bracket to the front hole that connects the bracket to the side of the frame rail.**



15. On the passenger side where the new extended radius arm bracket will be located there is a lip on the bottom of the frame rail. This lip needs to be removed so that the extended radius arm relocation bracket will sit flush on the frame rail. Carefully cut lip off with a die grinder. **Special note: Tuff Country does not recommend using a torch when performing this step.**



16. Working on the passenger side, locate the rear hole that attached the stock radius arm bracket to the frame rail. Measure towards the rear of the vehicle 15" and scribe a mark on the side of the frame rail. **Special note: Check and double check to make sure that this measurement is correct. If this measurement is not correct, once the new bracket and new extended radius arms are installed the front axles may be sitting to far forward or to far back.**

17. Using the 15" mark on the side of the frame rail as a guide and using a straight edge, scribe a mark on the bottom of the frame rail.

18. Locate the new passenger side extended radius arm relocation bracket. Place the line that was scribed on the bottom of the frame rail in the center of the rearward hole that is in the bottom side of the new relocation bracket. Using a pair of vise grips, secure the bracket to the frame rail.

19. Using the bracket as a guide, carefully outline each hole of the bracket onto the frame rail. There are (3) on the side of the frame rail and (2) on the bottom side of the frame rail. Remove the bracket from the frame rail and set the bracket aside.

Repeat steps # 16 - # 19. This is an important step, so we want to make sure that the extended radius arm relocation bracket is in the correct location so when the extended radius arm is attached to it, the twin eye beam axle is not sitting to far forward or to far rearward.

20. Vise grip the bracket back to the frame rail making sure that the hole in the bracket line up with the marks that were scribed earlier. Using the bracket as a guide, carefully drill (5) 7/16" holes into the frame rail. (3) on the side of the frame rail and (2) on the bottom side of the frame rail. **Special note: Take special care not to drill into any lines running down the inside of the frame rail.**

21. Locate (5) 7/16" x 1 1/2" bolts, (10) 3/8" USS flat washers and (5) 7/16" unitorque nuts from hardware bag R4XRB-NB. Secure the passenger side extended radius arm to the new location using the new 7/16" x 1 1/2" bolts and hardware. Make sure to use thread locker or loctite and torque to **45 ft lbs.**

22. Locate (4) PB2408 poly bushings, (2) S10081 sleeve and (2) SERT fittings from hardware bag 24863NB. Install the new bushings, sleeves and sert fitting into each end of the extended radius arm. **Special note: Make sure to use a lithium or moly base grease prior to inserting the bushings and sleeves into the new extended radius arms. This will increase the life of the bushing as well as prevent squeaking. Also, take special care not to damage the sert fitting during installation.**

23. Working on the driver side, install the new driver side extended radius arm into the stock location on the driver side axle and secure using the stock hardware. **Make sure to install the stock sway bar bracket. Make sure to use thread locker or loctite and torque the upper and lower hardware to 135 ft lbs.** Repeat procedure on the passenger side.

24. Locate the front coil springs. Also, locate the stock lower coil spring washer and hardware. Working on the driver side, install the coil spring into the stock upper location then raise up on the hydraulic floor jack until the lower portion of the coil springs can be attached to the front axle. Secure using the stock hardware and add some thread locker or loctite and torque to **145 ft lbs.** Repeat procedure on the passenger side.

25. Locate (2) CAM-03, (4) CAM-02 and (2) 916UN from hardware bag 24863NB. Working on the driver side, secure the newly installed extended radius arm to the newly installed extended radius arm bracket using the new 9/16" x 4" cam bolt and hardware. Make sure to use thread locker or loctite and torque to **85 ft lbs.** **Special note: For now place the cam washer in the center position. Once the installation is completed and the vehicle is taken to the alignment center, they will set the alignment where it needs to be.** Repeat procedure on the passenger side.

26. Locate the stock sway bar lower hardware. Working on the driver side, install the stock sway bar end link into the stock lower location and secure using the stock hardware. Make sure to use thread locker or loctite and torque to **65 ft lbs.** Repeat procedure on the passenger side.

27. Locate the universal shock bolt from hardware bag 24863NB. Working on the driver side, install the new universal shock bolt to the newly installed extended radius arm. Make sure to use thread locker or loctite and torque to **55 ft lbs.** Now install the shock to the newly installed universal shock bolt and secure using the provided hardware. Secure the shock into the stock upper location using the hardware. Make sure to use thread locker or loctite and torque the bottom hardware to **35 ft lbs.** and the upper hardware to **18 ft lbs.** Repeat procedure on the passenger side.

28. If you have not already done so, remove all the hydraulic floor jacks from under the vehicle. Check and double check to make sure that all steps have been performed properly and check again. Install the tires and wheels 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.

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.



R4XRB-01 / Qty. 1
Driver side extended
radius arm



R4XRB-02 / Qty. 1
Passenger side extended
radius arm



R4XRB-03 / Qty. 2
DS & PS extended radius arm
relocation bracket