



## **EZ - Ride Suspension**

### **Installation manual**

**2" front and rear add-a-leaf**

**1987 - 1996 Jeep YJ**

**Old part # R35**

**New part # 84250**

sj091007rev.01

Old part # R35  
 New part # 84250  
 1987 - 1996 Jeep YJ  
 2" front and rear add-a-leafs

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
TCI-R35	Add-a-leafs	2
CB516	Hardware bag	1
MIRRORHANGER	Rear view mirror hanger	1
WARNINGDECAL	Warning decal	1
84250INST	Instruction manual	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.

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

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

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.

#### **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.

### 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:

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.

This part # works on the front and the rear end. Also, this add-a-leaf will not work on vehicles with an after-market lifted springs. These add-a-leaves will only work on stock vehicles.

It is the installers responsibility to make sure that the customer relieves a copy of the Mirror hanger and the Warning decal. This information has special post installation procedures that need to be followed.

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:

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

Hardware bag CB516 includes:

<u>Description</u>	<u>Quantity</u>
5/16" x 6" centering bolt	2
5/16" fine nuts	2

**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:** \_\_\_\_\_

**If you are installing these add-a-leaves on the front of your YJ, please follow step # 1 - 14.**

**If you are installing these add-a-leaves on the rear of your YJ, please follow step # 15 - 26.**

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 a pair of jack stands. Place a jack stand on both the driver and the passenger side. Next, remove the front wheels and tires from both sides.

2. Place a pair of hydraulic floor jacks under the front axle. Carefully raise up on both hydraulic floor jacks at the same time until they come into contact with the front axle.

3. Working on the driver side, remove the stock lower shock mounting hardware that attaches the stock shock into the stock lower location. Save the stock hardware for later re-installation. Remove the stock shock from the stock lower location and let hang. Repeat procedure on the passenger side.

4. Working on the driver side, remove the stock lower sway bar mounting hardware that attaches the stock lower sway bar end link to the stock location. Save the stock hardware for later re-installation. Remove the stock lower sway bar end link for the stock lower location and let hang. Repeat procedure on the passenger side.

5. Working on the driver side, remove the stock u-bolts from the stock location. Save the stock u-bolts and hardware for later re-installation. Also, set the stock u-bolt plate aside for later re-installation. Repeat procedure on the passenger side.

6. Carefully raise up on both hydraulic floor jacks at the same time until the stock spring separates from the stock front axle.

7. Working on the driver side, place a pair of "C" clamp vise grips on each side of the stock centering bolt located on the stock front springs. Carefully remove the stock centering bolt and nut and discard. Carefully remove the "C" clamp vise grips that are holding the stock springs together. **Special note: Be very carefully when removing the "C" clamps, the stock springs are under tension and can be dangerous.** Repeat procedure on passenger side.

8. Locate (2) new add-a-leaves, (2) 5/16" x 6" centering bolt and (2) 5/16" fine nut from box kit 84250. Install the new add-a-leaf into the stock spring assembly. Secure the new add-a-leaf to the stock spring assembly using the new 5/16" centering bolt and nut. Torque to **24 ft. lbs.** Once the new add-a-leaf has been installed, carefully bend the new spring clamps around the stock springs. **Special note: The new add-a-leaf should be installed into the stock spring assembly in progression in order, from longest to shortest. If the stock clamps interfere with the new add-a-leaf, carefully cut off the stock clamp and discard. Also, Tuff Country EZ-Ride Suspension recommends not using any air tools when installing the new add-a-leaves into the stock spring assembly. If air tools are used the centering bolt may strip, causing the stock spring assembly to come apart. With a suitable cutting tool, cut off the extra thread from the new centering bolt.** Repeat procedure on passenger side.

9. Carefully lower down on both hydraulic floor jacks at the same time until the stock front axle seats properly onto the stock springs.

10. Locate the stock u-bolts, hardware and u-bolt plates that were removed in step # 5. Working on the driver side, install the stock u-bolts into the stock location and secure using the stock u-bolt plate and the stock hardware. Torque to **70 ft lbs.** Repeat procedure on the passenger side.

11. Locate the stock lower sway bar end link mounting hardware that was removed in step # 4. 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 lock tite and torque to **70 ft lbs.** Repeat procedure on the passenger side.

12. Locate the stock lower shock mounting hardware that was removed in step # 3. Working on the driver side, install the stock shock into the stock lower location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to **55 ft lbs.** Repeat procedure on the passenger side.

13. Carefully remove the hydraulic floor jacks from under the front axle.

14. Install the tires and wheels and carefully lower the vehicle to the ground.

<p>15. 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.</p> <p>16. Place a pair of hydraulic floor jacks under the rear axle. Carefully raise up on both hydraulic floor jacks at the same time until they come into contact with the rear axle.</p> <p>17. Working on the driver side, remove the stock lower shock mounting hardware that attaches the stock shock into the stock lower location. Save the stock hardware for later re-installation. Remove the stock shock from the stock lower location and let hang. Repeat procedure on the passenger side.</p> <p>18. Working on the driver side, remove the stock u-bolts from the stock location. Save the stock u-bolts and hardware for later re-installation. Also, set the stock u-bolt plate aside for later re-installation. Repeat procedure on the passenger side.</p> <p>19. Carefully raise up on both hydraulic floor jacks at the same time until the stock spring separates from the stock rear axle.</p> <p>20. Working on the driver side, place a pair of "C" clamp vise grips on each side of the stock centering bolt located on the stock rear springs. Carefully remove the stock centering bolt and nut and discard. Carefully remove the "C" clamp vise grips that are holding the stock springs together. <b>Special note: Be very carefully when removing the "C" clamps, the stock springs are under tension and can be dangerous.</b> Repeat procedure on passenger side.</p> <p>21. Locate (2) new add-a-leaves, (2) 5/16" x 6" centering bolt and (2) 5/16" fine nut from box kit 84250. Install the new add-a-leaf into the stock spring assembly. Secure the new add-a-leaf to the stock spring assembly using the new 5/16" centering bolt and nut. Torque to <b>24 ft. lbs.</b> Once the new add-a-leaf has been installed, carefully bend the new spring clamps around the stock springs. <b>Special note: The new add-a-leaf should be installed into the stock spring assembly in progression in order, from longest to shortest. If the stock clamps interfere with the new add-a-leaf, carefully cut off the stock clamp and discard. Also, Tuff Country EZ-Ride Suspension recommends not using any air tools when installing the new add-a-leaves into the stock spring assembly. If air tools are used the centering bolt may strip, causing the stock spring assembly to come apart. With a suitable cutting tool, cut off the extra thread from the new centering bolt.</b> Repeat procedure on passenger side.</p> <p>22. Carefully lower down on both hydraulic floor jacks at the same time until the stock rear axle seats properly onto the stock springs.</p> <p>23. Locate the stock u-bolts, hardware and u-bolt plates that were removed in step # 18. Working on the driver side, install</p>	<p>the stock u-bolts into the stock location and secure using the stock u-bolt plate and the stock hardware. Torque to <b>70 ft lbs.</b> Repeat procedure on the passenger side.</p> <p>24. Locate the stock lower shock mounting hardware that was removed in step # 17. Working on the driver side, install the stock shock into the stock lower location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to <b>55 ft lbs.</b> Repeat procedure on the passenger side.</p> <p>25. Carefully remove the hydraulic floor jacks from under the front axle.</p> <p>26. Install the tires and wheels and carefully lower the vehicle to the ground.</p> <p><b>Congratulations, installation complete!</b></p> <p><b>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.</b></p> <p><b>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.</b></p> <p><b>It is the installers responsibility to make sure that the customer receives a copy of the Mirror hanger and the Warning decal. This information has special post installation procedures that need to be followed.</b></p> <p><b>If you have any questions or concerns, please feel free to contact Tuff Country or your local Tuff Country dealer.</b></p>
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