



Installation manual

Front add-a-leaf

1980 - 2004 F250/F350

Old part # F52 / New part # 82112

Old part # F53 / New part # 82111

sj091307rev.02

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Front add-a-leaf

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
TCI-F52/TCI-F53	Front add-a-leafs	2
CB7640A	Hardware box	1

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.

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.

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:

Old part # F52 / New part # 82112 works on the F250

Old part # F53 / New part # 82111 works on the F350

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.

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 CB7640A includes:

<u>Description</u>	<u>Quantity</u>
CB7161 (7/16" x 4" centering bolt)	2
716FN (7/16" fine nuts)	2
TEFLON (Teflon inserts)	4
S10167 (7/16" x 4" spring clamp bolt)	2
S10168 (7/16" nut for spring clamp bolt)	2
S10169 (.550" x .440" x 3.085 sleeve)	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: _____

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: _____

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 shock from the stock upper and lower mounting location and remove the stock shock from the stock location. Save the stock hardware and stock shock for later re-installation. Repeat procedure on the passenger side.

4. Working on the driver side, remove the stock sway bar from the axle mount. Save the stock hardware for later re-installation. Repeat procedure on the passenger side. Let the stock sway bar hang. **Special note: If the vehicle that you are working on does not have a stock front sway bar, please skip this step.**

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

6. Carefully lower down on both hydraulic floor jacks at the same time allowing enough room for the new add-a-leaves to be installed. Take special care not to over extend or kink the stock brake lines.

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 danger-**

ous. Repeat procedure on passenger side.

8. Locate (2) new front add-a-leaves. **Special note: If the vehicle that you are working on is a F250, the TCI-F52 add-a-leaves will be installed. If the vehicle that you are working on is a F350, the TCI-F53 add-a-leaves will be installed.** Locate (4) teflon inserts from hardware box CB7640A. Install the new teflon inserts into each end of the new front add-a-leaves.

9. Locate (2) new 7/16" x 4" centering bolts and (2) new 7/16 fine nuts from hardware box CB7640A. Working on the driver side, install the new front add-a-leaf to the stock spring and secure using the new 7/16" x 4" centering bolt and nuts. **Special note: The new spring clamp on the new front add-a-leaf should be installed towards the rear of the vehicle and should be installed on the bottom of the stock spring pack. If the stock spring that you have comes with a small 6" plate, install the new add-a-leaf between the stock spring and the small 6" plate. Also, if the stock spring clamp makes contact with the new add-a-leaf, the stock spring clamp will need to be cut off.** Torque the new 7/16" centering bolt to **45 ft lbs.** **Special note: Tuff Country highly recommends not using any air tools when performing this step, if air tools are used, the new centering bolt may strip causing the spring to come apart. Also, to help make installation easier, use a pair of "C" clamp vise grips to pull the new add-a-leaves and the stock spring together.** Repeat procedure on the passenger side.

10. Locate (2) S10167, (2) S10168 and (2) S10069 from hardware box CB7640A. Working on the driver side, install the new hardware to the new spring clamps on the new add-a-leaves. Torque the new hardware to **35 ft lbs.** Repeat procedure on the passenger side.

11. Carefully raise up on both hydraulic floor jacks at the same time until the stock spring pack and the newly installed front add-a-leaves make contact with the stock axle.

12. Locate the stock u-bolts, u-bolt hardware and u-bolt plates that were removed from step # 5. Working on the driver side, install the stock u-bolts and u-bolt plates into the stock location and secure using the stock u-bolt hardware. Torque to **90 ft lbs.** Repeat procedure on the passenger side.

13. Locate the stock sway bar hardware that was removed in step # 4. Working on the driver side, secure the stock sway bar to the stock axle and secure using the stock hardware. Torque to **18 ft lbs.** Repeat procedure on the passenger side.

14. Locate the stock shock and the stock shock upper and lower mounting hardware that was removed in step # 3. Working on the driver side, install the stock shock to the stock location and secure using the stock hardware. Torque the stock shock to recommended torque specifications. Repeat procedure on the passenger side.

15. Remove both hydraulic floor jacks from under the vehicle.

16. Check and double check to make sure that all steps are performed properly and check again.

17. 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.

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