



**TUFF  
COUNTRY**

**EZ - Ride Suspension**

**Installation manual**  
**2" Suspension system**  
**2002 - 2007 Jeep Liberty**  
**(excludes diesel engine models)**  
**Part # 42025**

sj11212011rev.02

**Part # 42025**  
**2002 - 2007 Jeep Liberty**  
**(excludes diesel engine models)**  
**2" Suspension system**

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
42025-01	Pre-load spacer	2
42025-02	Rear poly spacer	2
42025SL	Hardware bag	1
42025INST	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 are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us, and our product.**

**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.**

**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.**

**Make sure to use loctite on all new and stock hardware associated with this installation.**

**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 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.**

**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.**

### 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 recommends a wall mounted strut compressor be used when performing the steps that talk about installing the strut spacer into the strut. If you do not have a wall mounted strut compressor, please have these steps performed by your local Jeep Dealership.

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.

Hardware bag 42025SL includes:

<u>Description</u>	<u>Quantity</u>
S10090 (1.000" x .500" x .400" sleeve)	8

Recommended tools selection:

Torque wrench  
Standard socket set  
Standard wrench set  
Metric socket set  
Metric wrench set  
Tape measure  
Hydraulic floor jacks  
Wall mounted strut compressor  
Coil spring compressor

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.

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: \_\_\_\_\_

Front end installation:

1. To begin installation, working in the engine compartment, carefully remove the air filter and box from the OE location. Set the air filter and box aside.

2. Block the rear tires of the vehicle so the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the frame with a pair of floor jacks. Place a jack stand on both the driver and passenger side. Next, remove the wheels and tires from both sides.

3. Working on the passenger side, remove the nut and bolt from the bottom of the strut fork and save the hardware. Next, remove the bolt from the top of the strut fork and set aside. **Special note: Remove the bolt from the strut fork not the strut.**

4. Working on the passenger side, remove the upper ball joint nut from the upper control arm and save the nut for later installation. Carefully break the taper on the ball joint and upper control arm. **Special note: Take special care not to damage the ball joint dust boot. If damage occurs during removal, Tuff Country highly recommends replacing the ball joint boot.**

5. Working on the passenger side, carefully remove the strut fork from the strut assembly. Place the strut fork aside. **Special note: Using a pry bar may be helpful in the removal on the strut fork.**

6. Working on the passenger side, carefully remove the (2) nuts holding the cruise control bracket to the OE location above the strut and save the hardware. Carefully lift the cruise control bracket up and out of the way to make access to the hardware on top of the strut.

7. Working on the passenger side, carefully remove the nuts that secure the strut into the upper location and save the hardware. Remove the strut from the vehicle and set

aside.

8. Working on the passenger side strut, scribe a line down the entire strut from the top of the strut to the bottom. **Special note: If this step is not performed properly, re-installing the strut back into the vehicle will be difficult.**

**Tuff Country EZ-Ride Suspension recommends a wall mounted strut compressor be used when performing the steps that talk about installing the strut spacer into the strut. If you do not have a wall mounted strut compressor, please have these steps performed by your local Jeep Dealership.**

9. Working on the passenger side strut and using a wall mounted strut compressor, carefully compress the strut and remove the nut and washer holding the strut together. Set the nut aside. Carefully release the tension from the strut.

10. Working on the passenger side, carefully remove the top plate and remove the rubber isolator from the top plate.

11. Locate (1) new front strut spacer. Install the rubber isolator to the new front strut spacer and insert to the both into the OE spring with the small diameter facing downward.

12. Working on the passenger side strut and using a wall mounted strut compressor, carefully compress the strut enough so that the strut upper plate can be installed.

13. Locate the strut upper plate. Working on the passenger side strut assembly, install the top plate onto the new strut spacer. **Special note: Make sure that you align the alignment marks that were completed earlier in the installation. If this is not done properly, re-installation of the strut will not be possible.**

14. Locate (4) S10090 spacer sleeves from hardware bag 42025SL. Working on the passenger side strut assembly, install the new S10090 spacer sleeves over the studs on the top of the strut.

15. Working on the passenger side, install the modified strut back into the vehicle using the OE hardware. Special note: Make sure that the key way on the lower strut is facing towards the outside of the vehicle. Make sure to use loctite and torque to **80 ft lbs.**

16. Working on the passenger side, install the cruise control bracket back into the OE location and secure using the OE hardware. Make sure to use loctite and torque to **30 ft lbs.**

17. Working on the passenger side, install the lower strut forks and make sure that the key way is lined up and seated properly to the stops.

18. Working on the passenger side, secure the lower strut forks into the OE location and secure using the hardware. Make sure to use loctite and torque to **100 ft lbs.** Next,

install the bolt to the top of the strut fork. Make sure to use loctite and torque to **100 ft lbs.**

19. Working on the passenger side, install the upper ball joint to the upper control arm and secure using the OE hardware. Make sure to use loctite and torque to **60 ft lbs.**

**Complete step # 3 - step # 19 on the driver side. Special note: There is not a cruise control bracket on the driver side. Please skip the steps that talk about the cruise control bracket.**

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

21. Locate the air filter, box and hardware. Install the air filter and box into the OE location using the OE hardware.

**Special note: If installing after market wheels, you may need to remove the retaining clips on the OE wheels studs for trueness of wheels.**

22. To begin installation, make sure that the parking break is on. Block the front tires of the vehicle so that the vehicle is stable and will not roll forward. Safely lift the rear of the vehicle and support the frame with a pair of floor jacks. Place a floor jack on the driver and passenger side. Now remove the tires and wheels from the vehicle.

23. Position a pair of hydraulic floor jacks under the rear axle. Place one on the driver and passenger side. Raise up on both hydraulic floor jacks at the same time until they make contact with the rear axle.

24. Working on the driver side, remove and save the upper hardware that connects the shock into the OE location. Repeat procedure on the passenger side.

25. Carefully lower down on both hydraulic floor jacks at the same time until the rear suspension is fully dropped down.

26. Working on the driver side, carefully remove the bump stop out of the bump stop location and save. Repeat procedure on the passenger side.

27. Working on th driver side, carefully remove the rear coil spring and save. Repeat procedure on the passenger side.  
**Special note: Tuff Country recommends using a coil spring compressor to make removal of the rear coil spring easier.**

28. Working on the driver side, remove the lower isolator pad located on the rear differential and discard. Repeat procedure on the passenger side.

29. Locate the new coil spring spacer. Working on the driver side, install the new rear coil spring spacer on the rear differential in place of the OE isolator with the small diameter facing up. Repeat procedure on the passenger side.

30. Working on the driver side, install the rear coil spring

into the OE location. Repeat procedure on the passenger side. **Special note: Tuff Country recommends using a coil spring compressor to make installation of the rear coil spring easier.**

31. Working on the driver side, install the bump stop back into the OE location. Repeat procedure on the passenger side.

32. Carefully raise up on both hydraulic floor jacks that the same time until the shocks can be installed. Working on the driver side, install the shock into the upper location using the OE hardware. Make sure to use loctite and torque to 30 ft lbs. Repeat procedure on the passenger side.

33. Carefully remove the hydraulic floor jacks from under the vehicle.

34. 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.**