



EZ - Ride Suspension

NEW PART NUMBER: 20990
 OLD PART NUMBER: SDLB
 1998—2001 FORD F250 / F350 SUPER DUTY
 REAR LADDER BARS
 PARTS LIST:

Part #	Description	Qty.
LD-02	Rear Ladder Bars	2
FD-01	Front Ladder Bar Mount	2
FR-02	Rear Ladder Bar Mount	2
MO2050	Poly Bushings	8
916218SL	Anti Crush Sleeve	4
12312B	1/2" x 3 1/2" Bolt	4
12114B	1/2" x 1 1/4" Bolt	8
12LN	1/2" Unitorque Nut	12
12WA	1/2" Flat Washers	24
20990INST	Instruction Sheet	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.

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

Product safety label must be installed inside the cab in plain view of all occupants.

It is the responsibility of the installers to make sure that the rear view mirror hanger is hung from the rear view mirror. The rear view mirror hanger has instructions on proper post installation procedures.

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.

INSTALLATION MANUAL FORD F250 / F350 SUPER DUTY REAR LADDER BARS 1998 - 2001 NEW PART # 20990 OLD PART # SDLB

SJ082901

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.

IMPORTANT CUSTOMER INFORMATION

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 check every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension take no responsibility for abuse, improper installation or improper suspension maintenance.

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.

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.

Please Follow Instruction Carefully

Before installation begins, drive and check to make sure there are no uncommon sounds and or frame damage.

Special Note: Rear ladder bars may be installed on stock of lifted vehicles. If you are installing the rear ladder bars on a stock vehicle, the ladder bars are going to limit your round clearance.

Rear Ladder Bar Installation:

1. To begin installation, block the front and rear tires of the vehicle so that the vehicle is stable and can't roll.
2. Position a hydraulic floor jack under the rear axle and raise up on jack until it comes into contact with the rear axle. Working on the driver side, remove the rear U-bolts and save hardware for later re-installation. Repeat procedure on passenger side.
3. Locate (1) rear ladder bar bracket, install the new rear ladder bar bracket between the U-bolts and the stock rear axle. Secure the U-bolts that were removed from step # 2 into the stock location and secure using the previously removed hardware. Torque to **130 ft. lbs.** Repeat procedure on passenger side.
See Illustration # 1
4. Carefully remove the hydraulic floor jacks from under the rear axle.
5. Locate (2) new rear ladder bars, (8) MO2050 poly bushings and (4) anti crush sleeves. Install the new poly bushings into each end of the new rear ladder bars. **Special Note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new rear ladder bars. This will increase the life of the bushing as well as prevent squeaking.** Next, install the new anti crush sleeves into each end of the newly installed poly bushings.
6. Locate (2) 1/2" x 3 1/2" bolt, (4) 1/2" flat washers and (2) 1/2" unitorque nuts. Working on the driver side, install the new rear ladder bar to the newly installed rear ladder bar bracket and secure using the 1/2" x 3 1/2" bolt and hardware. **Do not tighten at this point.** Repeat procedure on passenger side.
7. Locate (2) front ladder bar brackets, (8) 1/2" x 1 1/4" bolt, (2) 1/2" x 3 1/2" bolts, (20) 1/2" flat washers and (10) 1/2" unitorque nuts. Working on the driver side, install the front ladder bar bracket to the front of the newly installed rear ladder bar. Secure using the new 1/2" x 3 1/2" bolt. **Do not tighten at this point.** Holding the rear ladder bar into place, scribe a mark on the bottom and side of the frame rail where the front bracket is located. **Special Note: If you are installing the rear ladder bars with the vehicle on a hydraulic hoist, you**

must lower the vehicle off the hoist, so that the weight of the vehicle is on the ground when performing this step. Repeat procedure on passenger side.

8. Working on the driver side, carefully drill 1/2" holes on the side and bottom of the frame rail where you scribe the marks in step # 7. **Special Note: Make sure not to drill any wires and or lines on the inside of the stock frame rails.** Repeat procedure on passenger side.

9. Remove the front ladder bar brackets from the driver and passenger side rear ladder bars and save hardware for later re-installation.

10. Working on the driver side, install the new front bracket into the newly drilled holes and secure using the new 1/2" x 1 1/4" bolt and hardware. Torque to **80 ft. lbs.** Repeat procedure on passenger side.

See Illustration # 2

11. Working on the driver side, install the new rear ladder bar to the newly installed front ladder bar bracket and secure using the new 1/2" x 3 1/2" bolt and hardware. Repeat procedure on passenger side.

See Illustration # 3

12. Working on the driver side, torque the back 1/2" x 3 1/2" bolt that is securing the rear ladder bar to the new rear ladder bar bracket to **80 ft lbs.** Also torque the front 1/2" x 3 1/2" bolt that is securing the rear ladder bar to the front mount to **80 ft lbs.** Repeat procedure on passenger side.

Congratulations Installation Complete

Check and double check to make sure that alls steps were performed properly

Special Note: Make sure to use proper post installation care with the rear ladder bar kit. If you have any questions on post installation care, please feel free to contact Tuff Country or your local Tuff Country dealer.

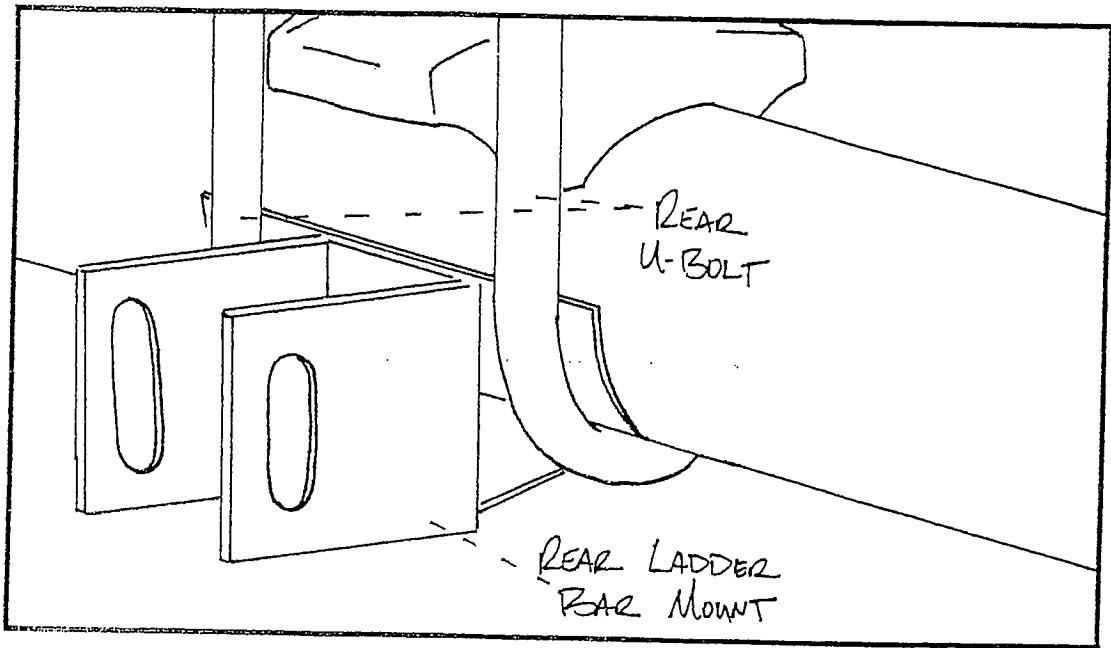


ILLUSTRATION # 1

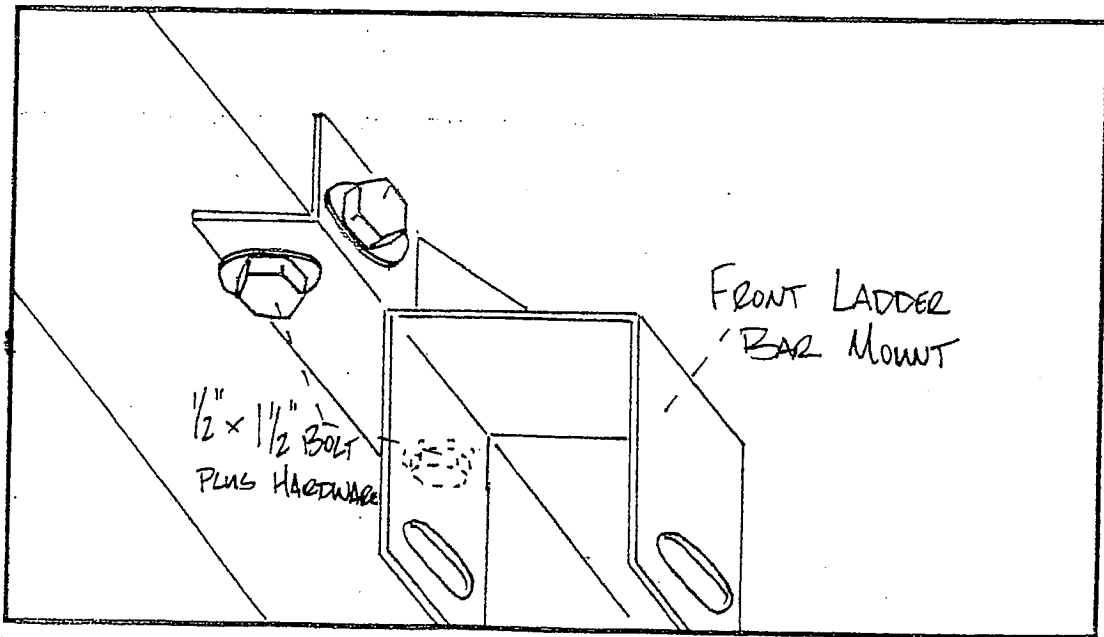


ILLUSTRATION # 2

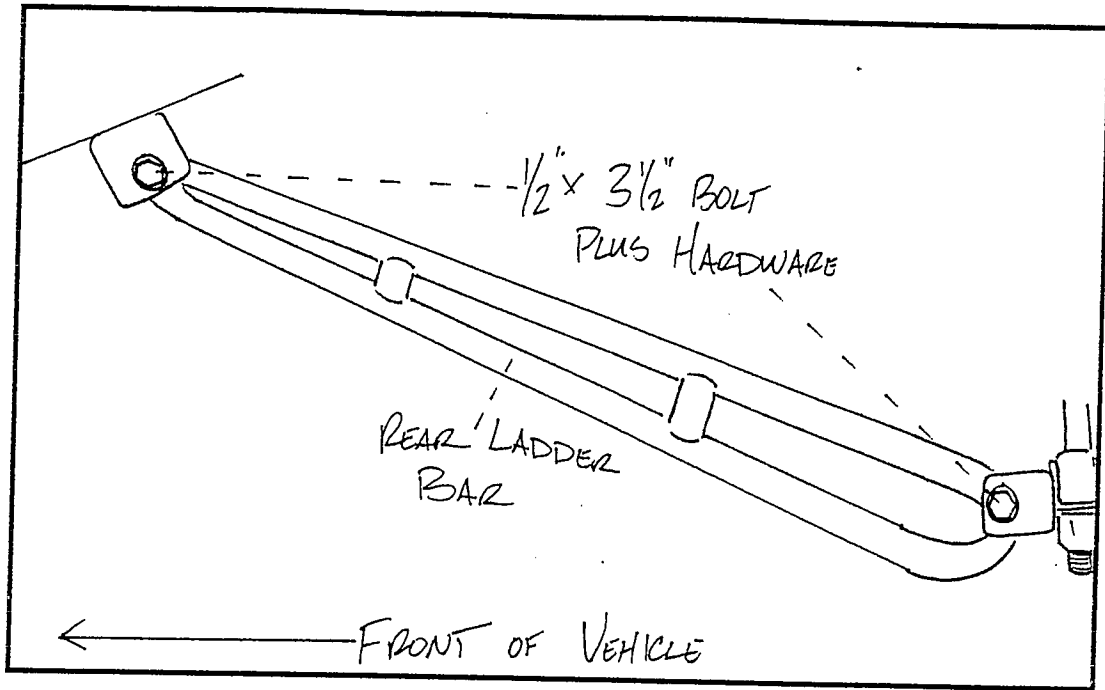


ILLUSTRATION # 3