



Part # 12903
1988 - 2006 Chevy or GMC 1500 6 lug 4x4
2" front torsion bar key kit

| <i>Part #</i> | <i>Description</i> | <i>Qty.</i> |
|---------------|---------------------|-------------|
| 12903-01 | Torsion bar key | 2 |
| S10009 | Shock spacer sleeve | 2 |
| 12903INST | 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.

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.

For a list of parts, please refer to the back of the installation manual for photos of parts that are included in this suspension system.

Make sure to use thread locker or loctite 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.

Installation Manual 1988 - 2006 Chevy or GMC 6 lug 4x4 2" front torsion bar key kit Part # 12903

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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.

IMPORTANT!

This kit will NOT work on vehicles equipped with Air Suspension. If your vehicle is equipped with this type of suspension, please contact the company you purchased the lift kit from and arrange for returning the parts.

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 or 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 requires that a proper torsion bar unloading tool be used when performing this installation. If you do not have one, please contact your local GM dealership to purchase one from them.

Tuff Country recommends NOT installing the torsion bar keys in conjunction with another aftermarket lifted suspension system. If the torsion bar keys are installed with another aftermarket lifted suspension system your warranty will be void.

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 Suspension kit comes with (1) installation manual and some post installation procedure literature and it is the installers responsibility to make sure that the customer receives the post installation procedure literature. If a customer would like a copy of the installation manual, please have them visit our website at www.tuffcountry.com. Have them go to the customer care section to download these instructions. If you have any questions, please feel free to call us at (801) 280-2777.

Recommended tool selection:

- Torsion bar removal tool
- Torque wrench
- Standard socket set
- Standard wrench set
- Metric socket set
- Metric wrench set
- Tape Measure

Please follow instructions carefully:

Pre Installation measurements:

Driver side front : _____

Passenger side front : _____

Front end 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 both the driver and passenger side with jack stands. Remove the tires and wheels from both sides.

2. Working on the driver side, remove the upper shock mounting hardware and save.

3. Working on the driver side, mark the torsion bar and the lower control arm. **Special Note: this is done so that the torsion bar can be put back into the same location on the lower control arm once the new torsion bar key has been installed.**



4. Working on the driver side and using a proper torsion bar removal tool. **Special note: Tuff Country EZ-Ride Suspension requires that a proper torsion bar unloading tool be used when performing this installation. If you do not have one, please contact your local GM dealer to purchase one from them.** Carefully remove the stock torsion bar bolt and block, and set aside. Remove the torsion bar unloading tool from the crossmember.



5. Working on the driver side, tap the torsion bar forward until the torsion bar key can be removed.

6. Locate the new torsion bar key and install into the stock location on the driver side. Tap the torsion bar back into the torsion bar crossmember until it properly seats into the new torsion bar key. **Special note: Make sure that the line that was scribed on the torsion bar and the lower control arm line back up again.** Using the torsion bar unloading tool, adjust the new torsion bar key up high enough so that the stock torsion bar block and bolt can be re-installed.

7. Locate the torsion bar bolt and block and install them back into the stock location. **Special note: Final adjustments will be made at completion of the install to achieve specified lift height and equal left to right balance.**

8. Locate a new S10009 shock spacer sleeve and install it over the top shock stud.



10. Re-install the OE shock using the OE bushings and hardware.

Repeat steps # 2-10 on the passenger side.

11. Install the tires and wheels and check to make sure that all steps were performed properly and check again. Carefully lower the vehicle to the ground.

12. At this time loosen both lower control arm pivot bolts and lower shock mounting bolt on each side to relieve bushing preload. **Special note: this step is important to relieve bushing tension, prolong bushing life and allow easier ride height adjustment.**

13. Torque the lower control arm pivot bolts and the lower shock mounting bolts to factory specification on both sides.

Pre Installation measurements:

Driver side front : _____

Passenger side front : _____

Congratulations, installation complete!

After the completion of this installation, Tuff Country EZ-Ride Suspension recommends taking the vehicle to an alignment shop and having the proper front end alignment performed.

Tuff Country Ez-Ride Suspension recommends that a complete re-torque is done on all the 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 the installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every offroad use.