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Rough Country 50108 Installation Instructions

1.5-Inch Torsion Bar Leveling Kit for Ford Ranger 4WD

Part number: 50108

trailfortress.com/1-5-inch-torsion-bar-leveling-kit-ford-ranger-4wd-rough-country-50108

Scan for fitment, price and install help

921501080

Ford 1998-2010 Ranger Torsion Bar Adjusters

Thank you for choosing Rough Country for your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation.

⚠WARNING As a general rule, the taller a vehicle is, the easier it will roll. Offset, as much as possible, what is lost in rollover resistance by increasing tire track width. In other words, go "wide" as you go "tall".

Do not add, alter, or fabricate any factory or after-market parts to increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands, lifts, and/or combining body lift with suspension lifts voids all warranties. Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

Braking performance and capability are decreased when significantly larger/heavier tires and wheels are used. Take this into consideration while driving.

The required installation time for this system is approximately 2 hours. This suspension system was developed using 285x75R16 tire on an 8" wheel. Before installing other combinations, please consult your local tire and wheel specialist.

If questions exist on the design, function, and correct use of our products please contact us at 800-222-7023.

⚠NOTICE **NOTICE TO DEALER AND VEHICLE OWNER**

Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

INSTALLING DEALER - it is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service.

RECOMMENDED TOOLS

• Floor jack • Heavy duty jack stands • Safety glasses	• Wheel chocks • Torsion Bar Tool: **Rough Country Part # 1067**	• Impact gun • 13 mm socket

FRONT INSTALLATION INSTRUCTIONS

1. Place the vehicle in neutral. Raise the front of the vehicle with a jack to slightly raise the tires of the ground and support the frame with jack stands beneath each frame rail behind the lower control arms. Installation is done one side at a time, starting with the driver side. The torsion bar adjusters are under the cab of the vehicle at the rearward end of the torsion bars.
2. Using a 13mm socket, remove the torsion key protection plate. **See Photo 1.** Retain hardware for re-use.

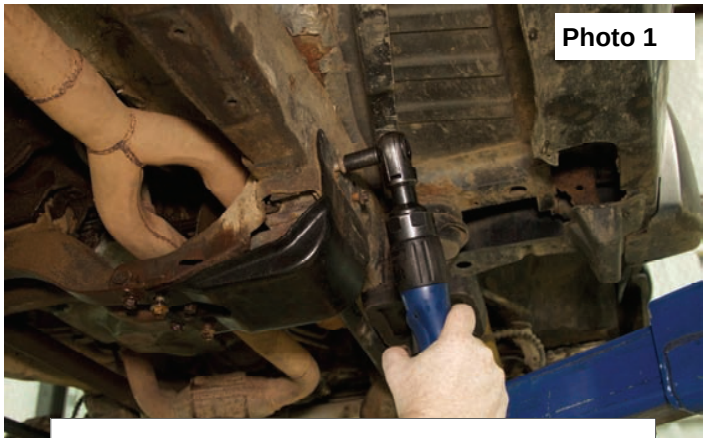
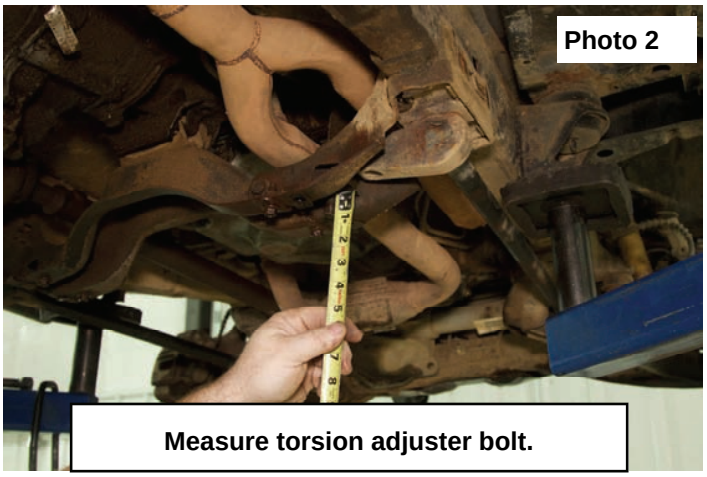


Photo 1

Remove the Torsion bar protector plate.

3. Measure and make a note of how much thread is remaining on the torsion bar adjuster bolt. You will reset the bars at this same location with the new adjusters. **See Photo 2.**
4. Some grinding may be required for your torsion bar removal tool. **See Photo 3.**



Measure torsion adjuster bolt.

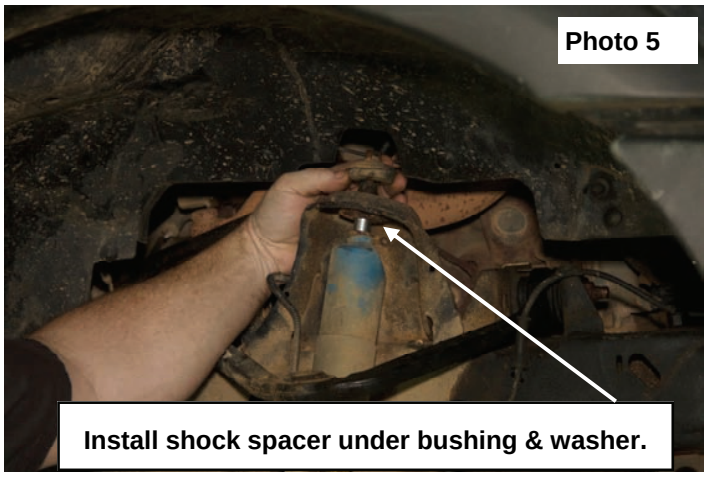


Grind crossmember for torsion removal tool.

5. **WARNING** Use extreme caution when loading and unloading the torsion bars; there is a tremendous amount of energy stored in them. Keep your hands and body clear of the adjuster arm assembly and the puller tool in case anything slips or breaks.
6. On the driver side, using a torsion bar removal tool, remove the stock torsion bar adjuster by loading the torsion bar using the tool and removing the bolt and nut block. Slide the torsion bar forward allowing the OE torsion key to fall out. **See Photo 4**.
7. Install the new torsion bar adjuster using the torsion bar tool. Reinstall the threaded block and adjuster bolt.
8. Adjust the adjuster bolt to the measurement you recorded in step 3.
9. Reinstall the torsion key protector plate. Torque to factory steps.
10. Repeat steps for passenger side. Making sure the driver and passenger side torsion bar adjuster bolts are adjusted the same amount. Fine-tuning is done in a later step.
11. Remove the factory shock absorbers and install sleeve as shown in **Photo 5** on top of stock shock absorber.
12. Reinstall the factory shock absorber using the factory hardware. Torque to factory specs.
13. Jack up the front of the vehicle and remove the jack stands. Lower the vehicle to the ground to where the torsion bars are supporting the weight of the vehicle.



Use torsion tool to remove and install torsion keys.



Install shock spacer under bushing & washer.

POST INSTALLATION INSTRUCTIONS

After the torsion bar adjusters have been installed and tightened to the factory measurement taken in step #2. additional adjustment may need to be performed to level the vehicle. This is done by either tightening or loosening the torsion bar adjuster bolts. Use a floor jack to support the side of the vehicle that is being adjusted, raising the tires slightly of the ground and only adjusting the bolt 1-2 turns at a time to ensure the leveling of the truck. After adjustment lower the vehicle to the ground and recheck for level. This may take several attempts. As with any lift installed, adjustment of the front headlights is required after installation. Note – the air dam on the front may need to be trimmed for additional clearance, depending on the tire size.

A front-end alignment should ALWAYS be checked after installing ANY vehicle suspension lift. This kit typically requires a slight toe-in adjustment. Record the ride height measurement at the time of alignment. If, in the future the torsion bars settle excessively, alignment can be restored by adjusting-up the bars to their original ride height.

Alignment Specs

Front			
Total Toe	-0.13°	+0.12°	+0.37°
Front Camber	-1.20°	-0.50°	+0.20°
Caster	+2.90°	+3.90°	+4.90°
King-Pin	_____	_____	_____
Incl. Angle	_____	_____	_____
Rear			
Total Toe	°	°	°
Rear Camber	°	°	°
Thrust Angle	-.025°	+0.00°	+0.25°

Thank You for choosing Rough Country for your suspension needs.

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