

# RIDE

## SHOCKS™

INST-1000-027

2003-2024 4Runner / 2007-2014 FJ / 2003-2023 GX



### Rear Spring Installation Guide

P/N: 312011301, 312011302, 312011303

## A FEW WORDS ON PRODUCT SAFETY AND MESSAGING:

*Motor vehicles and off road motor sports/use involve high levels of risks and variables including speed, terrain, overall suspension component choice, driver behavior and other variables outside Ride Shocks knowledge or influence. It follows that Ride Shocks is unable to foresee every combination of variables and these installation instructions do not reflect all product safety information which may be required to reduce risk of accident or injury related to your vehicle and selected modifications.*

*Before installation, please review the following safety information and installation instructions. Within these Instructions important safety information is generally preceded by one of three signal words indicating the relative risk of injury.*



The signal words mean:

**⚠️ WARNING** A hazardous situation which, if not avoided, could result in death or serious injury. You CAN be Killed or Seriously Hurt if you don't follow instructions.

**⚠️ CAUTION** A hazardous situation which, if not avoided, could result in minor or moderate injury. You CAN be moderately HURT and also may suffer property damage if you don't follow instructions.

**NOTICE** Careful attention is required to this instruction or operation but does generally not relate to personal injury. Damage to your Ride Shocks product or other property may result if you don't follow instructions.

**⚠️ WARNING** Suspension Modified with Tuned Shock Components/Higher Risk of Roll-over or Other Accident

<b>⚠️ WARNING: HIGHER ROLLOVER RISK</b>		
	<b>Avoid Excessive Speeds, Abrupt Maneuvers, Surfaces/Obstacles Which May Induce a Tripping Moment. All Occupants Buckle UP &amp; USE Supplemental Restraints.</b>	

The suspension of this vehicle has been optimized for off-road utility through installation of Ride Shocks products, which may increase ride height, modify damping/rebound and other suspension parameters. The suspension feel and handling may be different than an unmodified vehicle.

To reduce risk of roll-over or other accident always:

- Routinely inspect suspension components. **IF DAMAGED, DO NOT USE UNTIL REPAIRED OR REPLACED.**
- Do Not modify or substitute components of the Ride Shocks suspension products.
- Use of oversize tire/wheel combinations may increase stopping distances, ride height and/or compromise performance of vehicle stability control and other systems.
- Many states have restrictions on height and suspension modifications for highway use vehicles. Owners & drivers are exclusively responsible for construction and compliance of their vehicles.
- For additional safety messaging consult your OEM owners manual and off road supplements.



**WARNING** (CA residents) Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). Handling passenger or off-highway motor vehicle parts can expose you to chemicals such as phthalates and lead, which can cause cancer and reproductive harm. To minimize exposure, service the vehicle in a well-ventilated area, wear gloves, and wash your hands. For more information see: <https://www.p65warnings.ca.gov/fact-sheets/motor-vehicle-parts>.

Read and follow all instructions and understand all safety messaging before beginning Installation. This installation requires intermediate mechanical skills and should be performed by a professional mechanic with access to a lift and means of securing the vehicle.

#### WARRANTY:

#### 3 YEAR / 50,000 MILES WORRY-FREE LIMITED WARRANTY

*For warranty details please see: [www.rideshocks.com/terms-conditions](http://www.rideshocks.com/terms-conditions)*

#### PRODUCT REGISTRATION:

*To register your product, visit: [www.rideshocks.com/product-registration](http://www.rideshocks.com/product-registration)*

Benefits include:



*(scan to register products)*

- Information about product updates/valuable safety notices.
- Access to product installation videos/updated installation guides.
- Fast-tracked customer support.
- Option to opt-in to special customer incentives/discounts.

Read all instructions from start to finish before beginning the installation process. Confirm you have all tools necessary to complete the job.



### TOOLS NEEDED:

Floor Jack, Tall Jack Stands, Bottle Jack, Torque Wrench, 17mm Socket, 17mm Wrench, 12mm Socket

Estimated Install Time: 90 Minutes

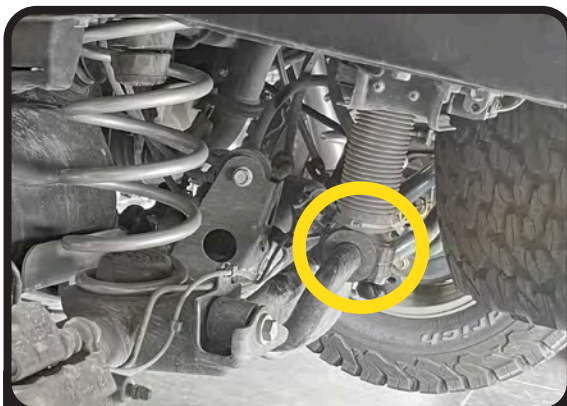
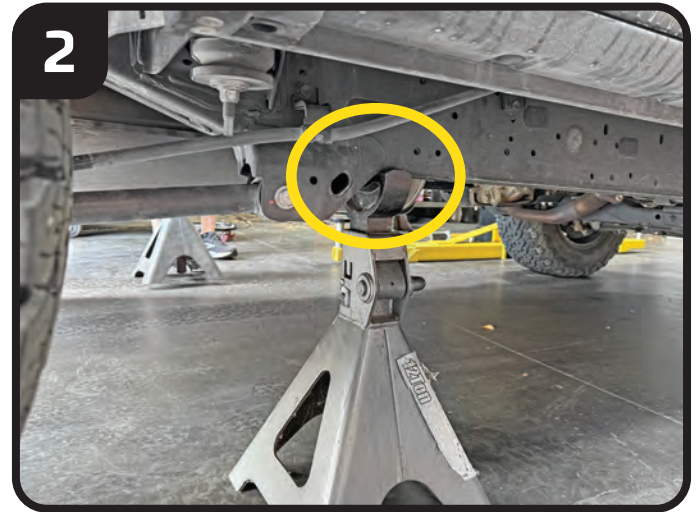
**⚠️ WARNING** 1. Park vehicle on flat level surface. Chock front tires and use a floor jack to lift the rear of the vehicle from the center of the axle. Tires must be a few inches off the ground.

2. Using tall jack stands, support the frame from the furthest back position. Leave the floor jack under the rear axle.

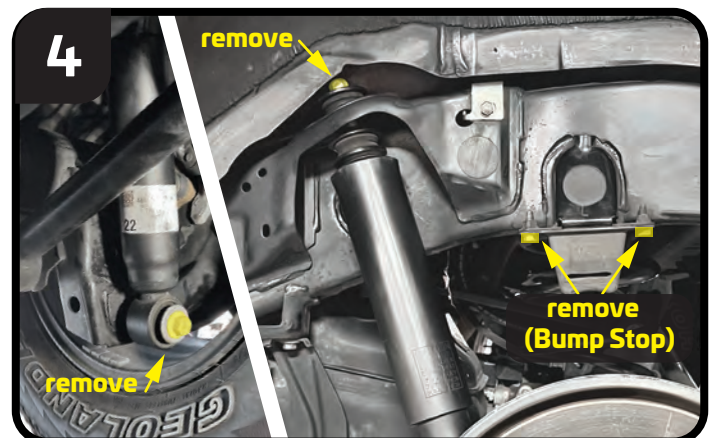
3. Replace one spring at a time starting with driver side first. Remove tire and wheel for easy access to shock and spring.

4. Remove shock from vehicle.

5. Remove bump stop.



KDSS Equipped Vehicles may need to detach sway bar links to allow axle to droop out further.



6. Use 12mm socket to remove bolt holding brake line bracket from chassis to relieve tension. This is located right behind the gas tank.



**⚠️ WARNING** 7. Slowly lower floor jack at axle, to lower the rear axle. Be sure to check for any ABS wiring or brake lines that become too tight.

8. Once axle is drooped out as far as it will go, position bottle jack between axle tube and chassis bump stop mount.

**⚠️ CAUTION** 9. Slowly use bottle jack to push axle further away from chassis until you are able to safely remove the coil spring.

10. Install new coil spring. Rotate spring in position until its seated properly in lower axle side spring perch.

11. Remove tension on bottle jack and remove.

12. Reinstall bump stop and torque to 20ft-lb.

13. Reinstall brake line bracket bolt. Torque bolt to 9ft-lb.

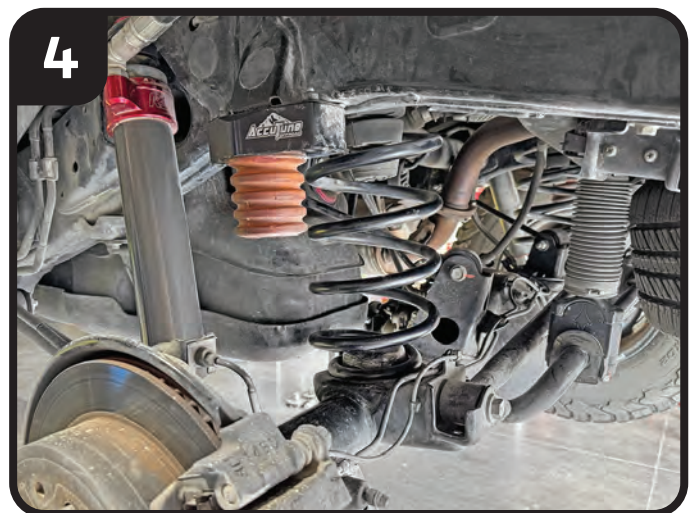
14. Reinstall shock. Torque axle side shock bolt to 72ft-lb. Tighten upper stem mount nut until bushing is flared out to match the outer diameter of the washer.

***\*If you removed KDSS sway bar link, reconnect at this time. Torque to 60ft-lb.***

15. Repeat process on passenger side.

16. Reinstall wheels.  
(OEM spec torque to 83 ft-lbs)

17. Remove jack stands and floor jack.



#### **FINISHING STEPS:**

- Reinstall Tires & Lug Nuts (OEM spec torque to 83 ft-lbs)
- Check All Torque Settings
- Retorque after 500 miles of driving.