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# Rough Country 83430 Installation Instructions

3 Inch Lift Kit for Nissan Titan and Titan XD (2004-2024)

Part number: 83430

trailfortress.com/rough-country-3-inch-lift-kit-83430

Scan for fitment, price and install help

921834300

ROUGH COUNTRY SUSPENSION SYSTEMS®

83430BAG

# Nissan 2004-18 Titan 3” Suspension Kit

**Thank you for choosing Rough Country for all 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. Check the kit hardware against the parts list. Be sure you have all needed parts and know where they go. Also please review the tool list and make sure you have the necessary tools to install the kit.

## PRODUCT USE INFORMATION

**⚠WARNING** As a general rule, the taller a vehicle is, the easier it will roll. We strongly recommend, because of rollover possibility, that seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur. Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. 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 is not recommended.

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. We will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed using a **33X12.50/17**, tire with factory wheels.

**⚠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. 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 life.

**⚠NOTICE** Note to installer : Before installation begins we recommend that a test drive be performed. While driving check for uncommon sounds and/or vibrations . What you feel and hear during the test drive will only magnify once lift kit is installed. Advise you to discuss possible issues identified from drive with customer before proceeding to install this kit.

**Tools Needed:**

19 mm Socket
13/16” Socket
22 mm Socket
Hammer
17 mm Wrench
14 mm Socket
18mm Wrench
19 mm Wrench
Grinder
Torque Wrench

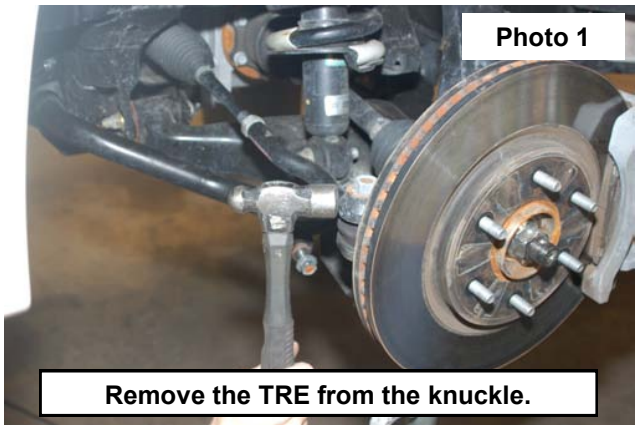
**Torque Specs:**

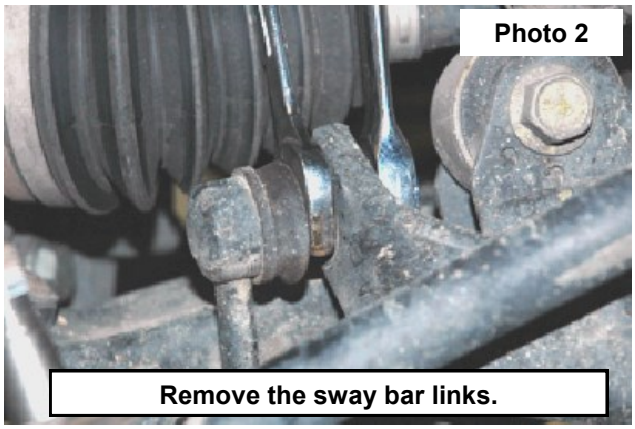
| Size | Grade 5 | Grade 8 |
|---|---|---|
| 5/16” | 15 ft/lbs | 20 ft/lbs |
| 3/8” | 30 ft/lbs | 35 ft/lbs |
| 9/16” | 95 ft/lbs | 130 ft/lbs |
| 5/8” | 135 ft/lbs | 175 ft/lbs |
| 3/4” | 185 ft/lbs | 280 ft/lbs |

| | Class 8.8 | Class 10.9 |
|---|---|---|
| 10MM | 32ft/lbs | 45ft/lbs |
| 12MM | 55ft/lbs | 75ft/lbs |
| 14MM | 85ft/lbs | 120ft/lbs |
| 16MM | 130ft/lbs | 165ft/lbs |
| 18MM | 170ft/lbs | 240ft/lbs |

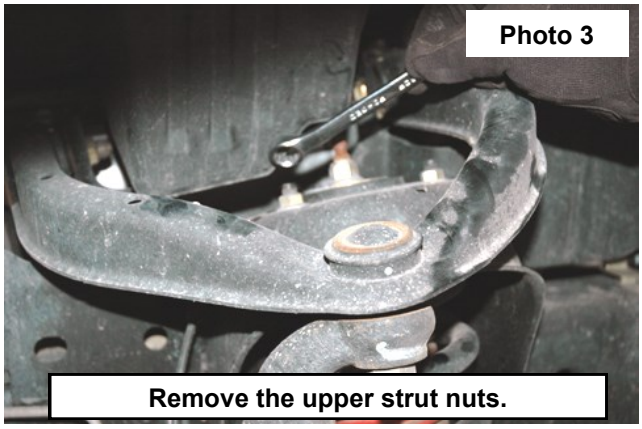
## INSTALLATION INSTRUCTIONS

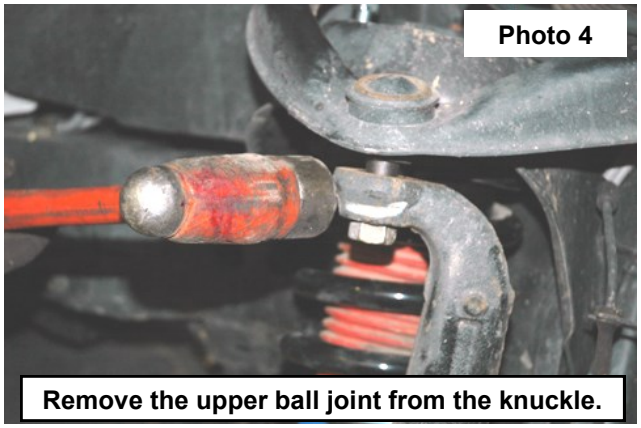
1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Using 13/16” socket remove the front tires/wheels.
3. Using 22mm socket remove the nut from the steering linkage. Using a hammer hit on the side of the knuckle as shown, and remove the linkage from the knuckle. Push linkage forward to make room for installation. Retain factory hardware **See Photo 1.**
4. Using a 17mm wrench, remove the sway bar nuts from the sway bar as shown in **Photo 2** and the axle allowing the sway bar to drop.



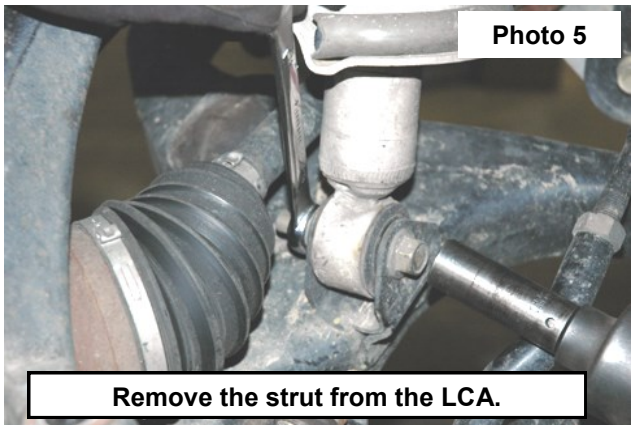




5. Using a 14mm socket, remove the (3) strut nuts on the upper strut tower that holds the assembly in place. **See Photo 3**. One nut can be left on the upper bolts to hold the strut in place .
6. Remove cotter pin from the upper control arm ball joint nut. Place jack stand under the knuckle for support. Using 22 mm socket remove nut. Using a hammer hit the knuckle as shown to allow the ball joint to separate from the upper control arm **See Photo 4**. Do not allow the knuckle to pull out far enough that it pulls the shaft out of the differential.



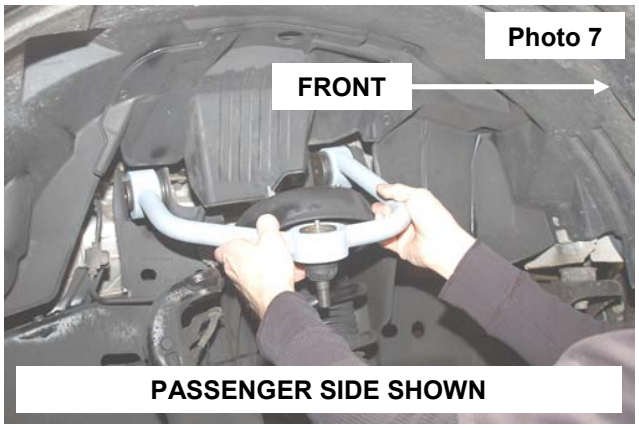



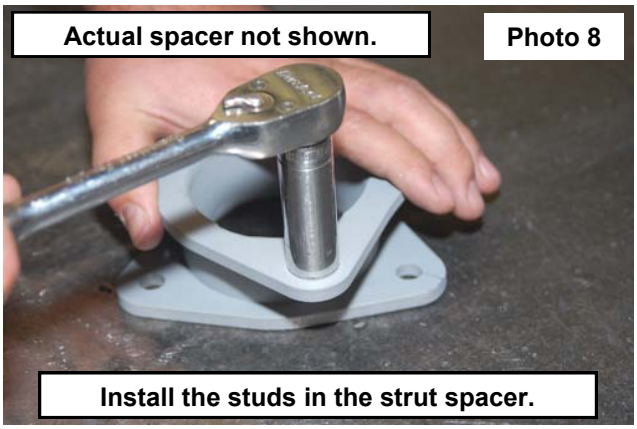

7. Using a 19mm socket and wrench, remove the strut bolt from the lower control arm and remove the strut assembly from the vehicle. Retain the factory lower bolt for reassembly. Note the direction of the bolt for reassembly. **See Photo 5.**
8. Remove the upper control arm as shown in **Photo 6** using a 19mm wrench. Retain the factory hardware for reuse.



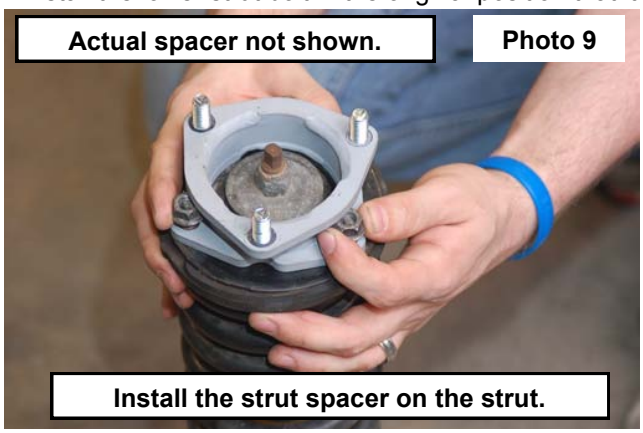


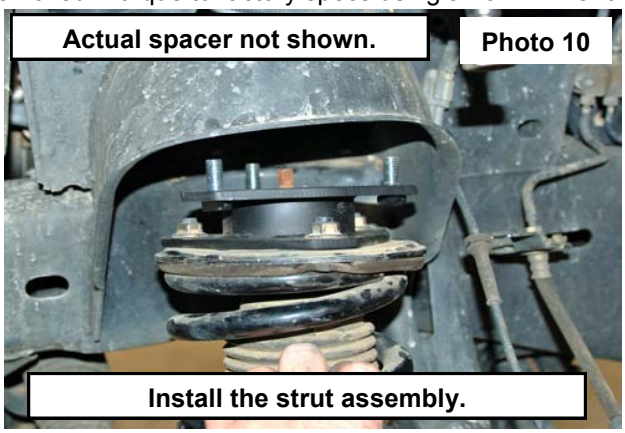

9. Grind the tabs on the inner side of the control arm pockets to allow the new control arms to be installed. **Failure to complete this task will not allow the new control arms to be installed.**
10. Install the control arms in the factory location with the factory hardware. **See Photo 7**. Do not tighten at this time.
11. Locate the supplied 10mm stud extensions. Using a 17mm socket snug self clinching stud in the new spacer as shown in **Photo 8.**



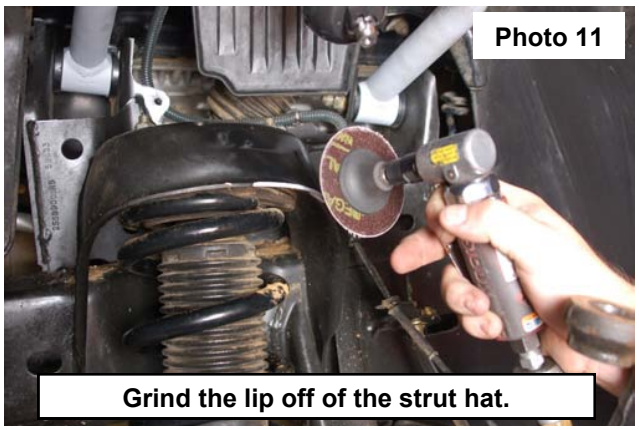



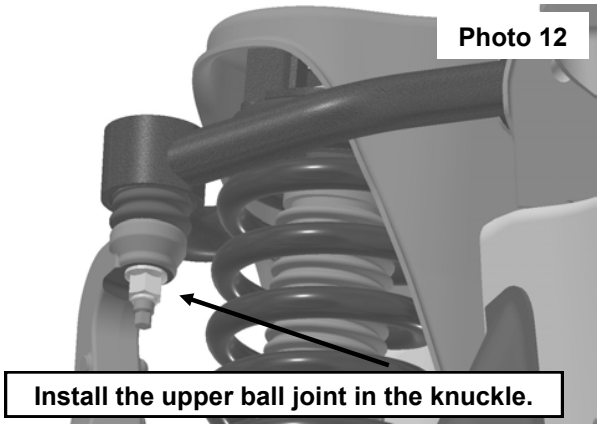

12. Install the new strut spacer on the strut using factory hardware and a 14mm wrench. **See Photo 9.**
13. Install the strut assembly into the strut tower and secure with the supplied 10mm nuts & lock washers. Tighten using a 17mm wrench. **See Photo 10**.
14. Install the lower strut bolt in the original position that it was removed. Torque to factory specs using a 19mm wrench.




15. On some vehicles it may be necessary to trim the upper strut tower to allow clearance for the ball joint. To check, pull down the control arm to check if the ball joint can pass the upper strut tower. If not grind the upper strut tower to allow for the arm / ball joint to pass the tower. **See Photo 11.**
15. Using a floor jack, raise the lower control arm to connect the ball joint on the upper control arm to the knuckle with supplied lock nut. **See Photo 12.**
16. Using a 22mm socket reinstall the steering linkage nut and cotter pin.



17. Install the supplied sleeves in the sway bar link bushings and install on the sway bar and the axle with the supplied 12mm x 65mm bolts and lock nuts. **NOTE: The washer will install on the upper sway bar link, as shown, on the head of the bolt. See Photo 13.** Tighten using a 18mm & 19mm wrench.
18. Repeat steps 3-17 on opposite side of vehicle.
19. Install the wheels / tires. Jack up the vehicle and remove the jack stands. Lower the vehicle to the floor and torque all bolts to factory specifications including upper control arms.

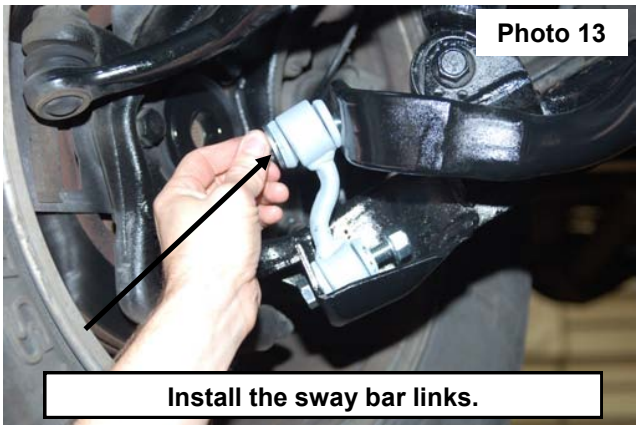
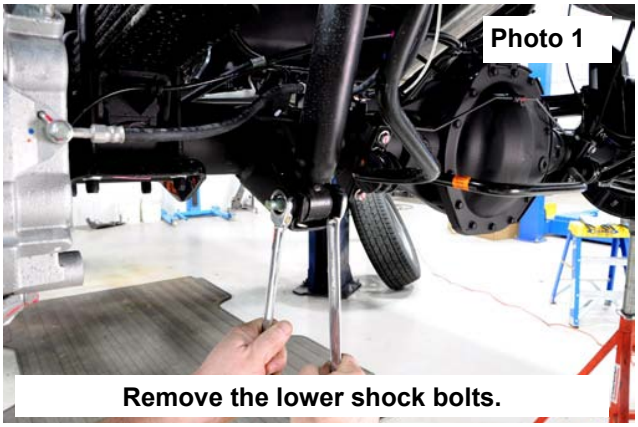


**Photo 13**

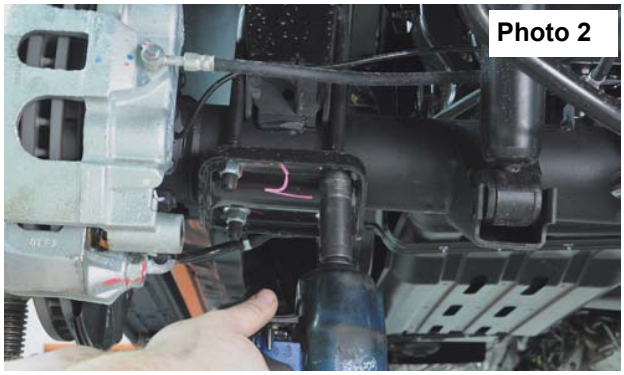
**Install the sway bar links.**

## REAR INSTALLATION INSTRUCTIONS

1. Chock the front tires and lift the rear of the vehicle, position jack stands under the rear frame rails of the vehicle and lower the vehicle on to the jack stands.
2. Place a floor jack in position under the rear differential for support.
3. Remove the wheels using a 21mm socket.
4. Using a 21mm and a 19 mm wrench, remove the rear shocks and retain hardware for reuse. **See Photo 1**.
5. Using a 19mm socket, remove the factory ubolts and lower the axle. **See Photo 2.**

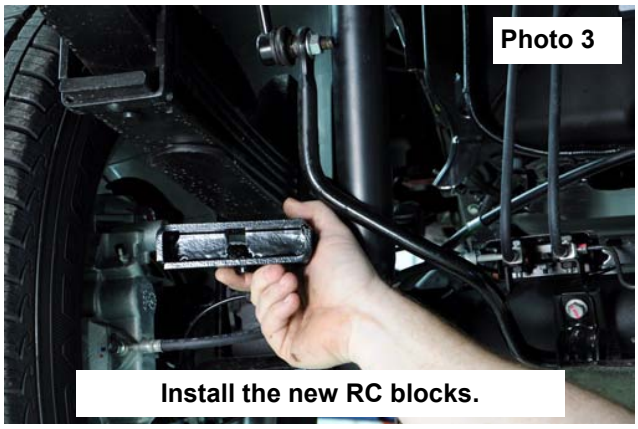


Remove the lower shock bolts.

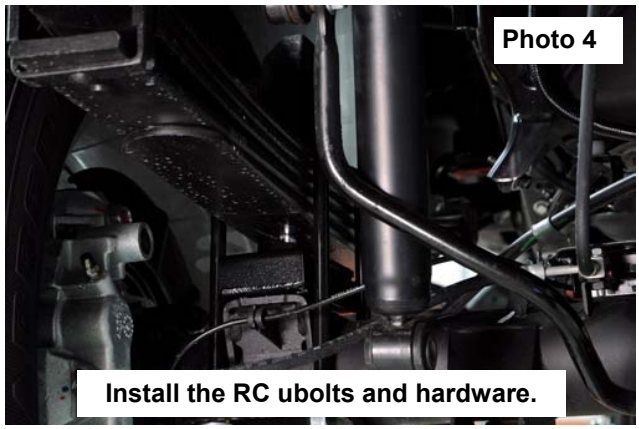


Remove the factory ubolts.

6. Install the supplied lift blocks with the **shorter side of the blocks to the front of the vehicle. See Photo 3.**
7. Install the supplied ubolts and hardware from 9/16Bag. **Photo 4.**

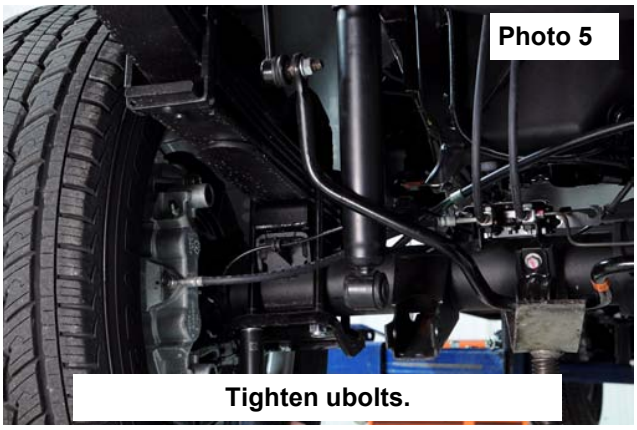


Install the new RC blocks.



Install the RC ubolts and hardware.

8. Using a 22mm socket, tighten the ubolts using an X pattern. Torque to 90ft-lbs. **See Photo 5.**
9. Install the supplied Rough Country shocks, **with the body to the axle**, using the factory hardware. Torque to factory specs using a 21mm socket and 19mm wrench.
10. Install the wheels using a 21mm socket and lower the vehicle to the ground.



Tighten ubolts.

## Post Installation

1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Readjust headlights to proper settings.
5. Vehicle will have to have a front-end alignment.

| | | |
|---|---|---|
| Alignment specs. | Caster | 1.6 to 3.1 degree |
| | Camber - | 3- to 1.2 degree |
| | Toe …… | 00 to .05 |
| | Total Toe | .05 to .10 degree |

## KIT CONTENTS




**Kit Contents:**

- 2-Front Strut Extensions
- 1-Driver Side Control Arm
- 1-Pass Side Control Arm
- 2-Sway Bar Links
- 1-10MMSTUDBAG
- 1-862BAG4
- 1-9/16BAG
- 2-Rear Blocks
- 4-Ubolts
- 2-Rear Shocks
- 2-6327BAG

10MMSTUDBAG containing:

- 6-10mm studs
- 6-10mm Nuts
- 6-10mm Lock Washers

862BAG4 Sway Bar link Bag:

- 4-12mm x 65mm Bolts
- 4-12mm Flange Lock nuts
- 4-12mm ID sleeves
- 2-Flat Washers

9/16BAG:

- 8-9/16 Nylock Nuts
- 8-9/16 Flat Washers

6327BAG:

- Ball Joint Hardware

By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable Federal, State, and Local laws and regulations regarding the purchase, ownership, and use of the item. It shall be the buyers responsibility to comply with all Federal, State and Local laws governing the sales of any items listed, illustrated or sold. The buyer expressly agrees to indemnify and hold harmless Rough Country, LLC for all claims resulting directly or indirectly from the purchase, ownership, or use of the items.