TRAIL FORTRESS

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Rough Country 74550 Installation Instructions

3-Inch Lift Kit with Vertex Shocks for 2005-2023 Toyota Tacoma 4WD

Part number: 74550

trailfortress.com/rough-country-3-inch-lift-kit-74550

Scan for fitment, price and install help

ROUGH COUNTRY
SUSPENSION SYSTEMS®

TOYOTA 2005-21 Tacoma 3” and 3.5” Lift Kits

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 disassembly/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 on this page and the product layout on the last page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have needed tools.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is, the easier it will roll. 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.

If questions exist 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 Maximum tire size of 265/70R-17with factory wheels. For aftermarket wheel and tire combinations consult your tire and wheel specialist.

⚠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

Tools Needed:

12 mm Wrench/Socket
14 mm Socket
17 mm Socket
17 mm Wrench
19 mm Socket
19 mm Wrench
Hammer
16mm Wrench
21mm Socket
22mm Socket
Reciprocating Saw

Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16”	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8”	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16”	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2”	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16”	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8”	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4”	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

trailfortress.com/rough-country-3-inch-lift-kit-74550

Leaf Springs Kit Contents

74232 (N3 Struts & N3 Rr Shocks):

745BOX2
- 745INSTBAG1
  - Instructions
- 745N2BAG2
  - 4in Diff Spacer x2
  - 1/2”-13x5.5” Bolts x2
  - 1/2”-13 Lock Nuts x2
  - 1/2” Flat Washers x4
- 9/16BAG - For U-bolts
  - 9/16” Flat Washers x8
  - 9/16”-18 Lock Nuts x8
- U-bolts x4

501094 - Loaded Strut Pair x1

74201
- Dr Side Upper Control Arm x1
  - Bushings x2
  - Ball Joint x1
- Pass Side Control Arm x1
  - Bushings x2
  - Ball Joint x1
- 74201BAG
  - Instructions x1
- 74201BAG1
  - 1/4”-20 Lock Nuts x2

23213
- N3 Shocks x2
- 8127BAG1
  - Stem Bushings x2
  - 3/8” I.D. Retainers x2
  - 3/8”-24 Nut x1

8075 - Leaf Springs x2

74252 (Vertex Coilovers & Vertex Rr Shocks):

745BOX2
- 745INSTBAG1
  - Instructions
- 745N2BAG2
  - 4in Diff Spacer x2
  - 1/2”-13x5.5” Bolts x2
  - 1/2”-13 Lock Nuts x2
  - 1/2” Flat Washers x4
- 9/16BAG - For U-bolts
  - 9/16” Flat Washers x8
  - 9/16”-18 Lock Nuts x8
- U-bolts x4

680035L - Front LH Vertex Coilovers x1

680035R - Front RH Vertex Coilovers x1

74201
- Dr Side Upper Control Arm x1
  - Bushings x2
  - Ball Joint x1
- Pass Side Control Arm x1
  - Bushings x2
  - Ball Joint x1
- 74201BAG
  - Instructions x1
- 74201BAG1
  - 1/4”-20 Lock Nuts x2

690010 - Rear Vertex Shocks x2

8075 - Leaf Springs x2

74272 (N3 Struts & V2 Rr Shocks):

745BOX2
- 745INSTBAG1
  - Instructions
- 745N2BAG2
  - 4in Diff Spacer x2
  - 1/2”-13x5.5” Bolts x2
  - 1/2”-13 Lock Nuts x2
  - 1/2” Flat Washers x4
- 9/16BAG - For U-bolts
  - 9/16” Flat Washers x8
  - 9/16”-18 Lock Nuts x8
- U-bolts x4

501094 - Loaded Strut Pair x1

74201
- Dr Side Upper Control Arm x1
  - Bushings x2
  - Ball Joint x1
- Pass Side Control Arm x1
  - Bushings x2
  - Ball Joint x1
- 74201BAG
  - Instructions x1
- 74201BAG1
  - 1/4”-20 Lock Nuts x2

760799 - V2 Monotube Shock Pair x1

8075 - Leaf Springs x2

Blocks Kit Contents

74530 (Kit w/ N3 Rr Shocks):
74530

74531 (Kit w/ N3 Struts & N3 Rr Shocks):
745BOX1
23025
20213 x 2

74570 (Kit w/ V2 Rr Shocks):
74570

74571 (Kit w/ N3 Struts & V2 Rr Shocks):
745BOX1
23025
760799

Box Kit

74530
Strut Spacers-2
U-Bolts-4
Rear Blocks-2
660799 Rear N3 Shocks-2
745INSTRBAG
8127BAG1-2
745N2BAG2
9/16BAG

745BOX1
U-Bolts-4
Rear Blocks-2
745INSTRBAG
8127BAG1-2
745N2BAG2
9/16BAG

74570
Strut Spacers-2
U-Bolts-4
Rear Blocks-2
760799 Rear V2 Shock Pair-1
745INSTRBAG
8127BAG1-2
745N2BAG2
9/16BAG

20213-Rear N3 Shock

23025-N3 Strut

760799-Rear V2 Shock

Kit Bags

745INSTRBAG
Instruction Sheet-1
Warning to Driver Sticker-1

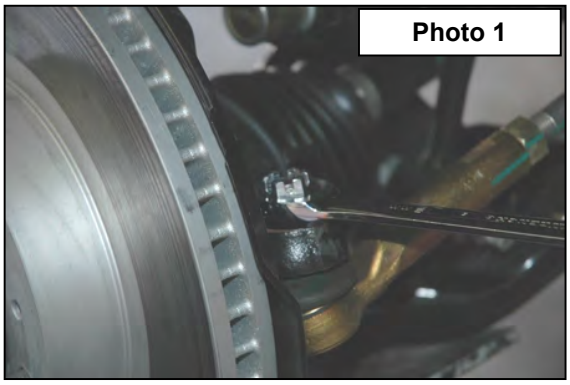
8127BAG1-*Shock Bag*-**2**
Shock stem bushings-4
Cup washers-4
3/8” nuts-2

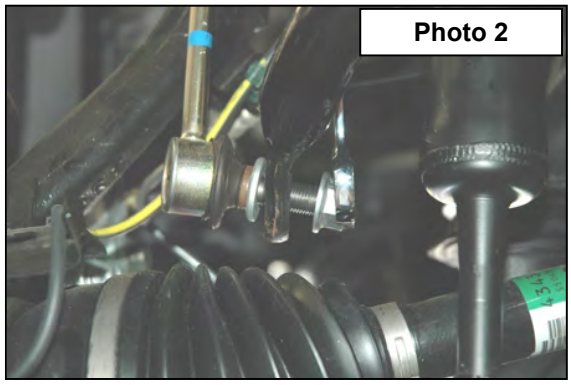
9/16BAG-*U-bolt Bag*
9/16” Washers-8
9/16” Nuts-8

745N2BAG2-*Kit Bag*
Diff Spacers-2
1/2” x 5.5” Bolts-2
1/2” Nylock Nuts-2
1/2” Washers-4

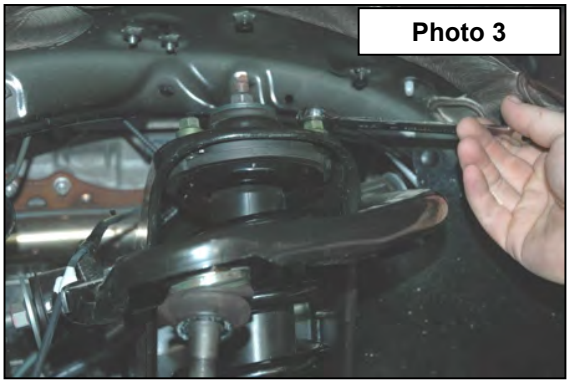
FRONT INSTALLATION

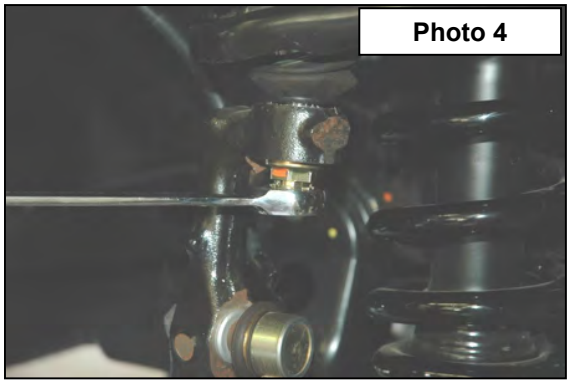
1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Remove the front tires/wheels. Using a 21mm deep well socket.
3. Remove cotter pin from the outer tie rod end on the steering linkage. Using 19mm socket remove the nut. Using a hammer hit on the side of the cast knuckle to allow the tie rod end to separate from the knuckle. Remove the linkage from the knuckle. Push linkage forward to make room for installation. Retain factory nut & cotter pin. **See Photo 1.**
4. Using a 17mm wrench, remove the sway bar bolts, allowing the sway bar to drop. Retain factory hardware. **See Photo 2.**



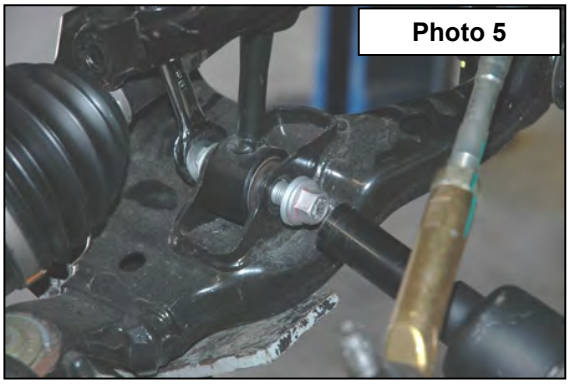


5. Using a 14mm socket, remove the strut nuts on the upper strut tower that holds the assembly in place. **See Photo 3**. One nut can be left on an upper stud to hold the strut in place.
6. Place jack stand under the knuckle for support. Using 19 mm socket remove nut from the ball joint on the upper control arm. Using a hammer hit the knuckle 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 CV shaft out of the differential.

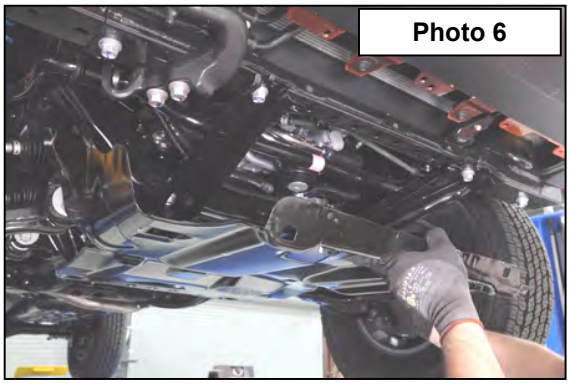


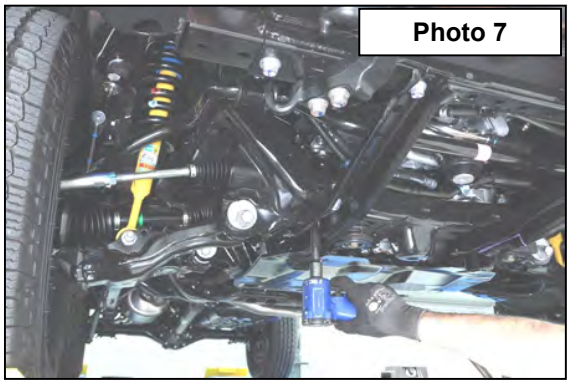


7. Using a 19mm socket and wrench, remove the strut bolt from the lower control arm and remove the strut assembly from the vehicle. Retain the factory lower hardware for reassembly. Note the direction of the bolt for reassembly. **See Photo 5.**



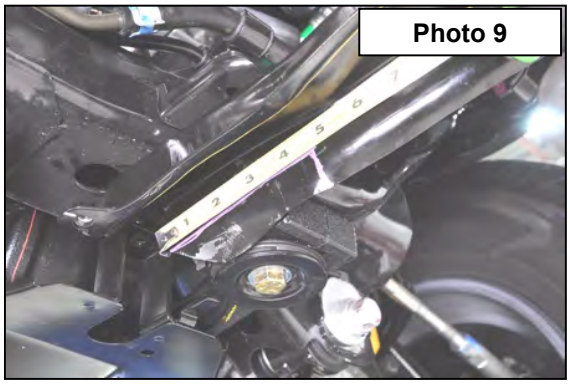
8. Using a 12mm socket, remove the 4 bolts holding the front skid plate. Remove the skid plate. **See Photo 6.**
9. Using a 12mm socket, remove the front 2 bolts from the rear skid plate. **See Photo 7.**



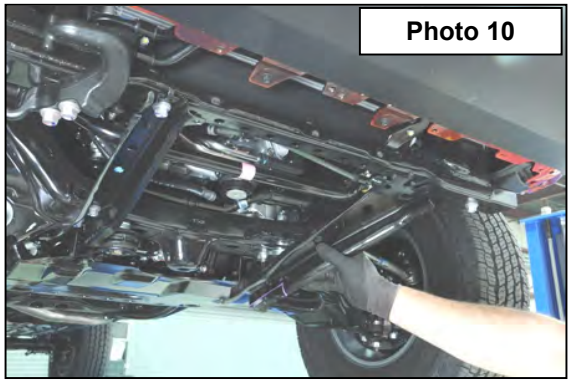


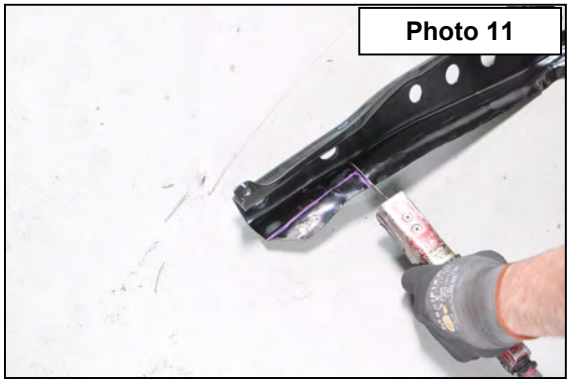
10. Measure 1” up and 4.5” from the rear of the skid brace. **See Photo 8 & 9**.



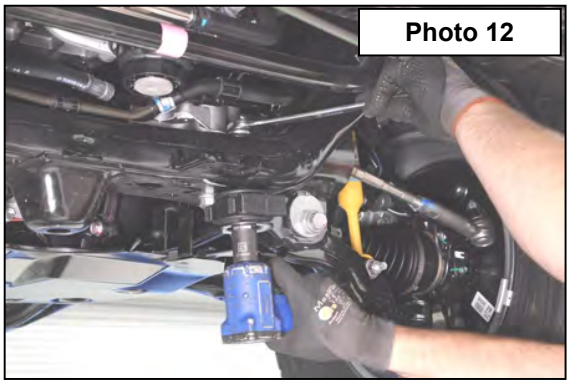


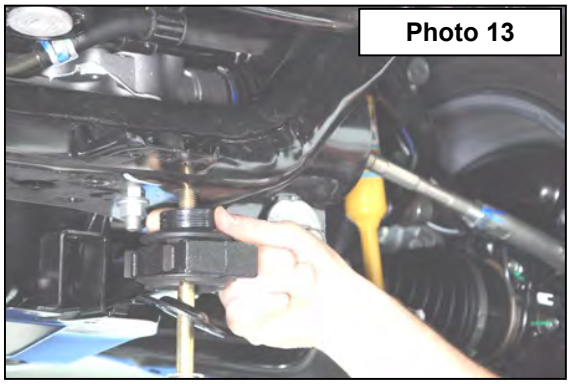
11. Using a 17mm socket, remove the driver side skid brace. **See Photo 10**.
12. Using a reciprocating saw, cut along marks from step 10. **See Photo 11.**



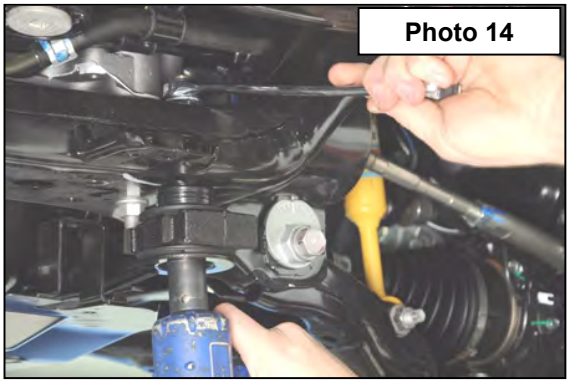


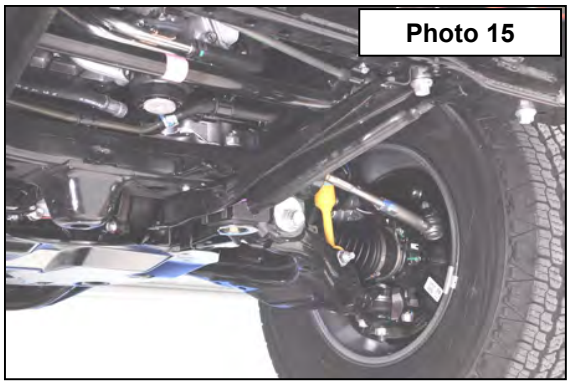
13. Using a 19mm wrench and 22mm socket, remove the 2 front differential bolts. **See Photo 12.**
14. Insert supplied spacer between front differential mounts and the frame. **See Photo 13.**





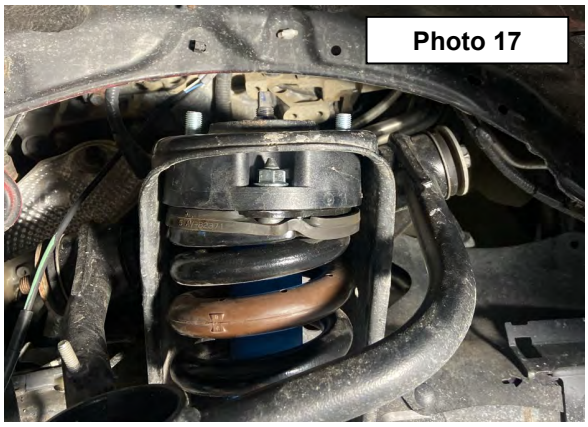
15. Using supplied 1/2” x 5.5” bolts, nuts, and washers from 745N2BAG2, tighten the front differential mounts. **See Photo 14**.
16. Install modified skid brace and tighten using a 17mm socket. **See Photo 15.**





17. **If installing the Rough Country lifted struts, refer to the instructions included with the strut and skip to step 20.**
18. Install the new spacer with the studs pressed in on the strut assembly and install the spacer on the strut assembly with the stock hardware. **See Photo 16**.
19. Install the strut assembly into the strut tower using the supplied 10mm nuts and lock washers. Using a 17mm wrench torque to 47ft. lbs **See Photo 17.** Note strut assembly has been rotated 180 degree from the way it was removed.





20. Position the strut assembly to reinstall the lower strut bolt in its original position that it was removed. Using original hardware and a 19mm socket torque to 100ft lbs.
21. Using a floor jack, raise the lower control arm and connect the upper ball joint on the upper control arm to the spindle. Using a original nut and a 19mm socket, torque to 40ft lbs.
22. Reinstall the tie rod end off steering linkage into knuckle using original factory nut using a 19mm socket torque nut to 65ft. Lbs. Install factory cotter pin.
23. Repeat on opposite side of vehicle.
24. Using 17 mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.
25. Install the wheels / tires. Using a 21mm socket. Torque to 85 ft. lbs. With vehicle on the ground, check the clearance between the tire and upper control arm to make sure the arm does not rub the tire.
26. Jack up the vehicle and remove the jack stands. Lower the vehicle to the ground and re-check all bolts, to assure they are tight.
27. This vehicle must have a front-end alignment after installation of the suspension kit. The vehicle will be aligned to factory specs.

Caster Left	Caster Right	Camber Left	Camber Right	Toe-in
1.5	1.75	0	-1/4	-1/32

REAR INSTALLATION

1. Jack up the rear of the vehicle and support the vehicle with jack stands, so that the rear tires are off the ground
2. Remove the rear tires/wheels. Using a 21mm deep well socket.
3. Using a 17mm socket and wrench remove the rear shocks. Retain the lower shock hardware for reuse.
4. Using a 19mm socket remove the rear U-bolts.
   If only installing blocks skip to step 7:
5. Lower the rear axle down and remove the front and rear leaf spring bolts using a 19mm socket/wrench.
6. Install the supplied leaf springs using the stock hardware.
7. Adjust the axle to allow for a 2 in block to fit beneath the leaf spring.
8. Install the rear block between the leaf spring and the spring perch on the axle. Make sure the block is sitting flat on the spring perch and leaf spring.
9. Raise axle back up and install new u-bolts using a 19mm socket. Tighten u-bolts in an x pattern. Torque u-bolts to 75-90 ft. lbs.
10. Install the rear shocks , using the stock hardware for the lower mount and new hardware provided for the upper mount. Tighten using a 17mm wrench. **If installing V2 rear shocks, refer to installation instructions included with those shocks.**
11. Reinstall wheels and tires using a 21mm deep well socket.
12. Lower vehicle to the ground.

POST INSTALLATION

1. Check and recheck all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check clearance between upper control arm and sidewall of tire for proper clearance. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
3. Have vehicle aligned to factory specifications.
4. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
5. Adjust headlights to proper settings given increased vehicle height.

MAINTENANCE INFORMATION

It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles.

Thank you for choosing Rough Country for your suspension needs.

By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable , 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.