TRAIL FORTRESS

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Rough Country 198.23RED Installation Instructions

3.5-Inch N3 Lift Kit with Red Control Arms for Sierra 1500 2WD

Part number: 198.23RED

trailfortress.com/3-5-inch-n3-lift-kit-sierra-1500-2wd-rough-country-198-23red

Scan for fitment, price and install help



GM 2007-16 2WD 1500 (3.5” Front / 1.5” Rear) Lift Kit

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. Check the kit hardware against the parts list on the rear cover of these instructions. 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

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

This kit is packaged as a leveling kit—raising the front 3.5” and the back 1.5”. If you desire a different look or if the vehicle has a tool box or added weight in the rear, please consult with your sales representative about other block and u-bolt options.

This suspension system was developed using a 32 x 11.5 tire with factory wheels. Examples of tire sizes that can be used are 285/75R17, 285/65R18, or 285/55R20. **Note** if wider tires are used, offset wheels will be required and trimming may be required.

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 life.

TOOLS NEEDED:

18MM Wrench
17MM Wrench
15MM Wrench
21MM Wrench
11MM Wrench
9/16” Wrench
Floor Jack
Jack stands

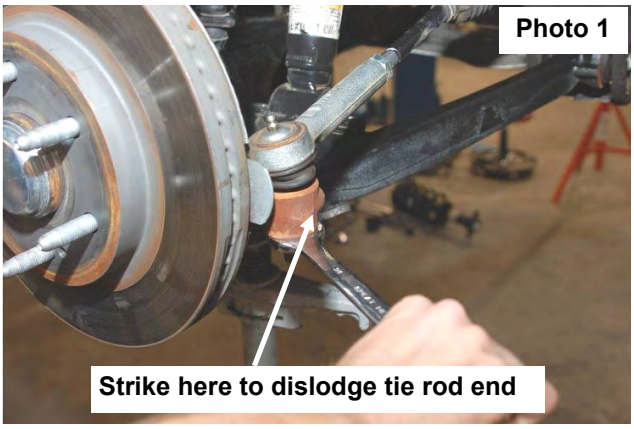
TORQUE SPECS:

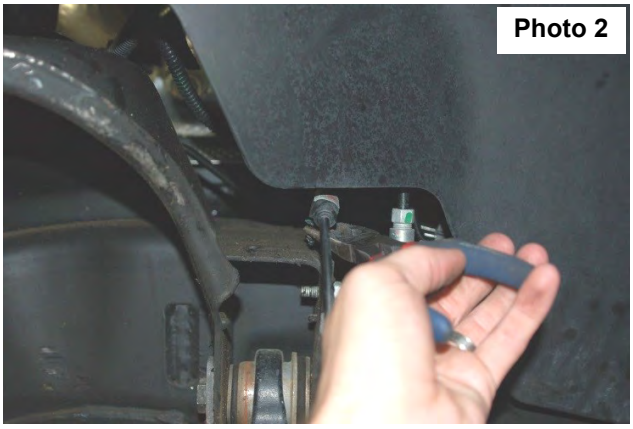
Size	Class 8.8	Class 10.9
10MM	32ft/lbs	45ft/lbs
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs

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FRONT INSTALLATION

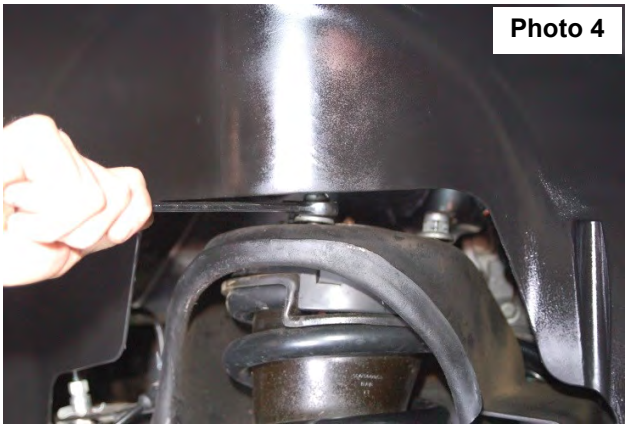
1. Park the vehicle on a level surface and chock the rear wheels.
2. Jack up the front of the vehicle. Place jack stands under the frame rails and lower onto jack stands letting the front suspension hang.
3. Remove the tires and wheels. Remove the upper and lower factory skid plates using a 15mm wrench. Retain factory hardware and front skid plate for reuse.
4. Using a 21mm wrench, remove the tie-rod nut as shown in **Photo 1**. Strike the side of the mount to dislodge the tie rod end. Remove from the knuckle.
5. Remove and unplug the ABS sensor wire from the frame as shown in **Photo 2**.





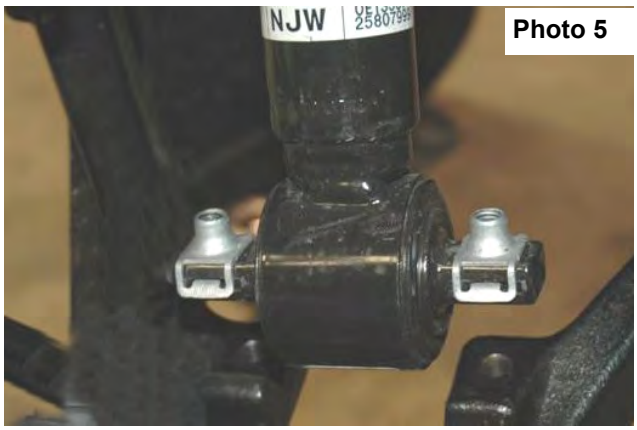
6. Remove the upper ball joint nut using a 18mm wrench. **See Photo 3**. Strike the knuckle as shown to dislodge the ball joint. Separate the upper control arm from the knuckle.
7. Using a 18mm wrench, remove the upper strut nuts as shown in **Photo 4**. Retain factory hardware for reuse.
8. Using a 15mm wrench, remove the 2 bolts securing the lower strut mount to the lower control arm and remove the strut

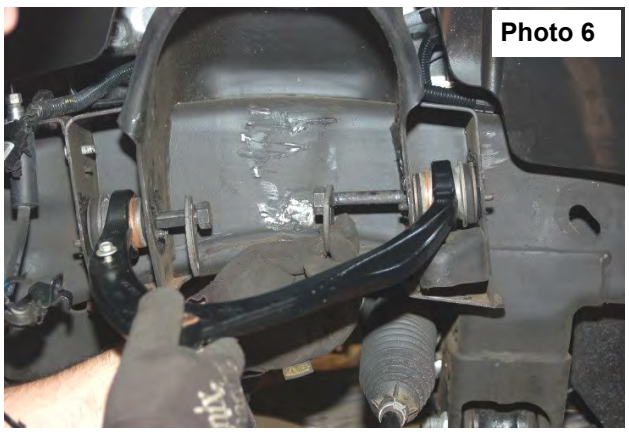




from the vehicle. Remove and discard the factory lower retainer clips. New hardware will be used. **See Photo 5**.

9. Mark location of alignment cams on upper control arms for reference of reinstallation of factory arms. Using a 21mm wrench and 21mm socket, remove the upper control arms from the vehicle. **See Photo 6**. Retain the hardware for reuse.





10. Cut the bump stop from the upper control arm mount on the passenger and driver side as shown in **Photo 7** using a reciprocating saw. **Passenger side shown.**
11. After the bump stop has been cut from the control arm mount, grind and apply paint to the cut surface to prevent rusting. **See Photo 8.** Reinstall the factory control arm in the factory location using the factory hardware. Tighten using a 21mm Socket / wrench. Be sure to use the marks made earlier for alignment reference.

Photo 7

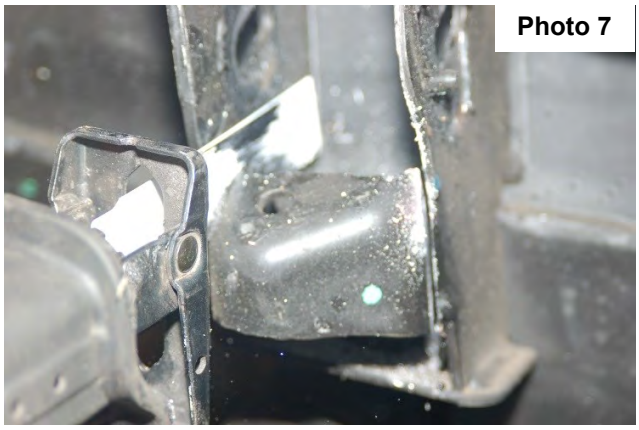
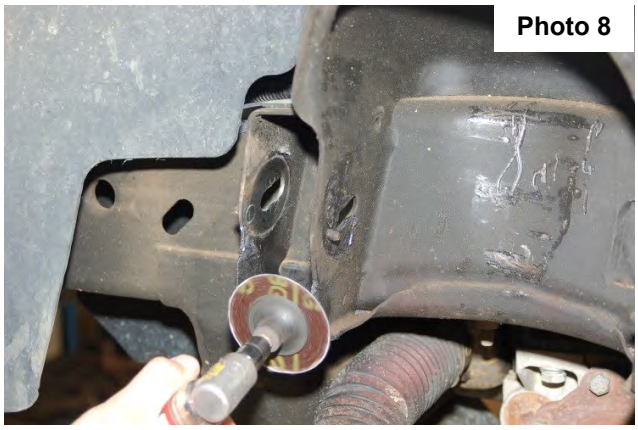


Photo 8



18. Place the supplied 10mm x 70mm bolts into the hex shaped holes in the strut spacer facing upward. **See Photo 9.**
20. Place the strut spacer on top of the strut and tighten with the supplied 10mm lock nuts and flat washers and a 17mm socket. **See Photo 10.**

Photo 9

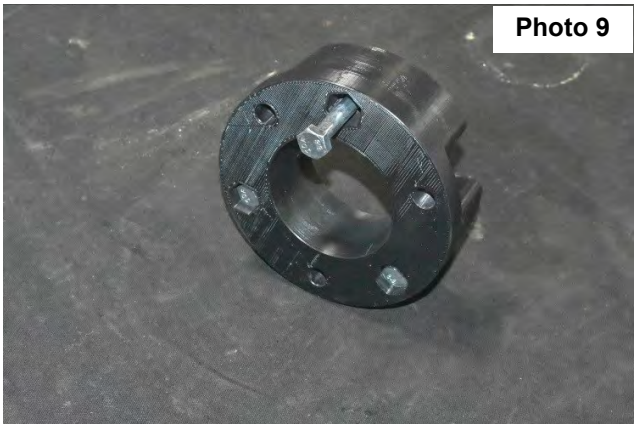
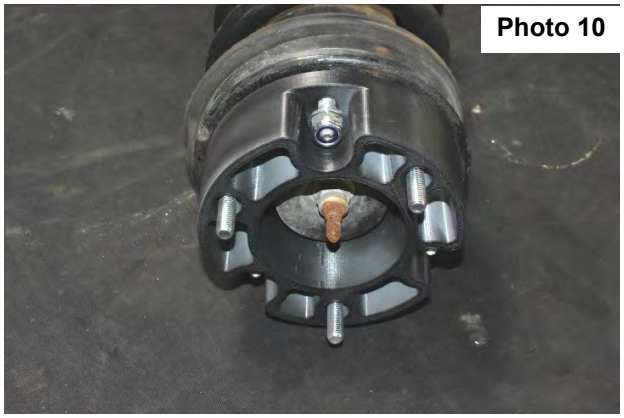


Photo 10



21. Install the strut assembly in the factory mount with the supplied 10mm flange lock nuts. Tighten using a 17mm wrench. **See Photo 11.**
10. Install the strut in the lower control arm using the supplied 3/8” 2 1/4” bolts /washers & nuts using a 9/16” wrench. **See Photo 12.** It may be necessary to jack up the lower control arm with a floor jack to align lower strut holes.

Photo 11



Photo 12



11. Reinstall the sway bar on the lower control arm using a15mm wrench**.**
12. Install the factory control arm on the knuckle with the factory hardware **.** Tighten using 3/4” wrench.
13. Reinstall the tie rod end into the knuckle with factory hardware and using a 21mm wench.
14. Reinstall the wheels/tires.

REAR INSTALLATION

1. Chock the front wheels.
2. Place a floor jack under the differential and jack up the rear of the vehicle.
3. Place jack stands under the frame rails and lower onto the jack stands.
4. Remove the tires/wheels.
5. Remove the factory shock absorbers using a 21mm wrench & socket. Retain the factory hardware for reuse.
6. Remove the factory u-bolts and blocks using a 21mm socket and lower the axle using the floor jack to allow for the 3" block to be installed.
7. Install the block on the factory spring pad with the flat part of the block on the spring and the thinner end towards the front. Jack up the axle to meet the springs, making sure to align the center pin. **See Photo 1.**
8. With the floor jack applying slight pressure to the rear axle to keep the pin aligned, install the new supplied u-bolts and tighten in a crossing pattern, using a 7/8" socket.
9. Locate the new shock absorbers part # 660738. Install the shock absorbers in the factory mounting locations using the factory hardware, Tighten using a 21mm wrench & socket
10. Install the tires/wheels.
11. Jack up the vehicle to remove the jack stands. Remove the jack stands and lower the vehicle to the ground.





Box Kit

- **2-Strut Spacers**
- **4-9/16" x 10 1/2" U-bolts**
- **2-1 1/2" spacer blocks**
- **2-Rear Shock Absorbers**

Kit Poly Bag:

- **4-3/8" x 2 1/4 bolts**
- **8-3/8" washers**
- **4-3/8" lock nuts**

19920Bag1

- **6-10mm x 70mm Bolts**
- **6-10mm Flange Lock Nuts**
- **7-10mm Hex Lock Nut**
- **6-10mm Flat Washers**

POST INSTALLATION INSTRUCITONS

1. Have a qualified alignment center align the vehicle immediately.
2. Have headlights adjusted to proper settings.
3. Wheels must be retighten at 50 miles.
4. All kit components must be retightened at 500 miles and then every three thousand miles after installation. Periodically check hardware for tightness.
5. Install "Warning to Driver" decal on sun visor.
6. On some vehicles the front lower skirting will need to be trimmed if using certain wheel /tire combinations and with heavy offset wheels. Trim only as needed.