



## 2007-15 2WD GM Tahoe, Yukon and Suburban 1500 3.5" LIFT KIT– Steel Knuckles

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

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

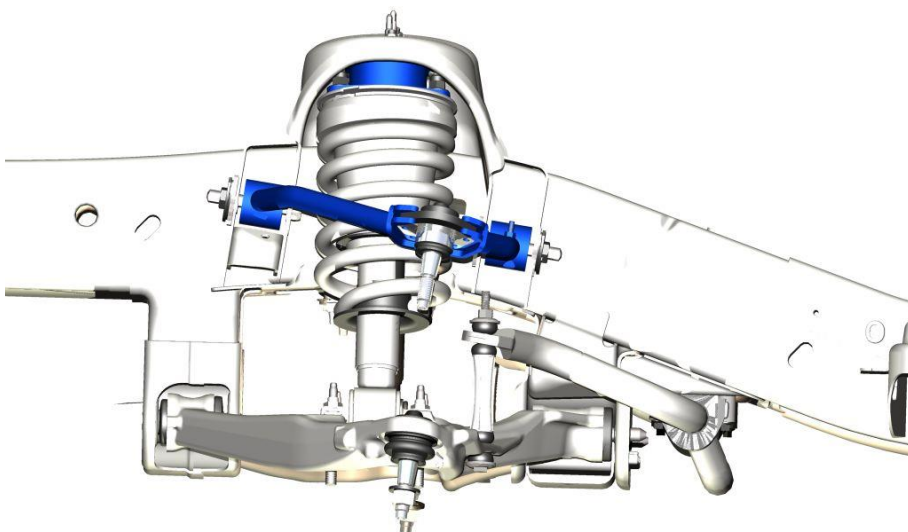
**⚠ NOTICE** This kit will not fit trucks with aluminum knuckles.

The electric power steering must be unplugged before any of the steering components are removed. Failure to do so may cause damage to the electric power steering.

Vehicles with a mass damper on the front diff, the damper will have to be removed.

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 285/65R18, 285/55R20, or 285/45R22. **Note** if wider tires are used, offset wheels will be required and trimming may be required.



## A NOTICE

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  
10MM Wrench  
Floor Jack  
Jack stands

### TORQUE SPECS:

Size	Class 8.8	Class 10.9
6MM	5 ft/lbs	9 ft/lbs
8MM	18ft/lbs	23 ft/lbs
10MM	32ft/lbs	45ft/lbs
12MM	50ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs

**NOTES:**

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## FRONT INSTALLATION

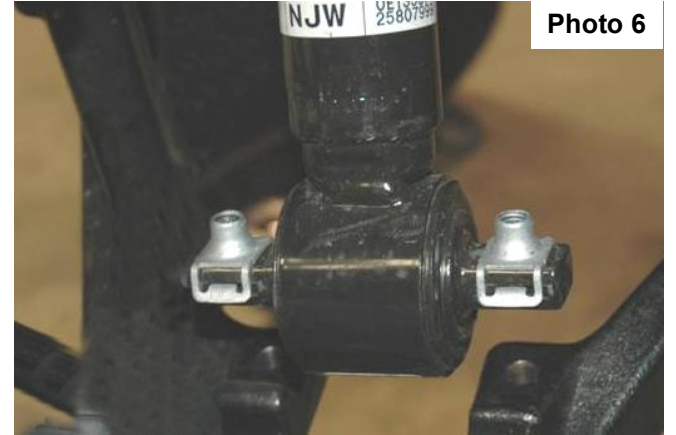
1. Park the vehicle on a level surface and chock the rear wheels.
2. Jack up the front of the vehicle. Place jack stands under the frame rails and lower onto jack stands letting the front suspension hang.
3. Remove the tires and wheels. Remove the upper and lower factory skid plates using a 15mm wrench. Retain factory hardware and front skid plate for reuse. Unplug the 3 connectors powering the electric power steering.
4. Using a 21mm wrench, remove the tie-rod nut as shown in **Photo 1**. Strike the front of the mount to dislodge the tie rod end. Remove from the knuckle.
5. Remove the sensor wire from the plastic clip. Remove the bracket from the control arm using a 10mm wrench. **See Photo 2.**



6. Remove and unplug the ABS sensor wire from the frame as shown in **Photo 3**.
7. Remove the upper ball joint nut using a 18mm wrench. **See Photo 4**. Strike the knuckle as shown to dislodge the ball joint. Separate the upper control arm from the knuckle.



8. Using a 18mm wrench, remove the upper strut nuts as shown in **Photo 5**. Retain factory hardware for reuse.
9. 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 6.**





10. Mark location of alignment cams on upper control arms to allow installation of new arm to same position. Using a 21mm wrench and 21mm socket, remove the upper control arms from the vehicle. **See Photo 7.** Retain the hardware.
11. Install the new control arm in the factory mount as shown in **Photo 12** with the factory hardware and tighten using mark made as a reference in Step 10 and using a 21mm wrench & socket.



Photo 7



Photo 8

12. Locate the supplied strut spacer and install the supplied 10mm stud extensions. Using a 17mm socket snug self clinching stud in the new spacer as shown in **Photo 9.**
13. Install the strut spacer on the factory strut with factory hardware and using a 18mm wrench. **See Photo 10.**



Photo 9

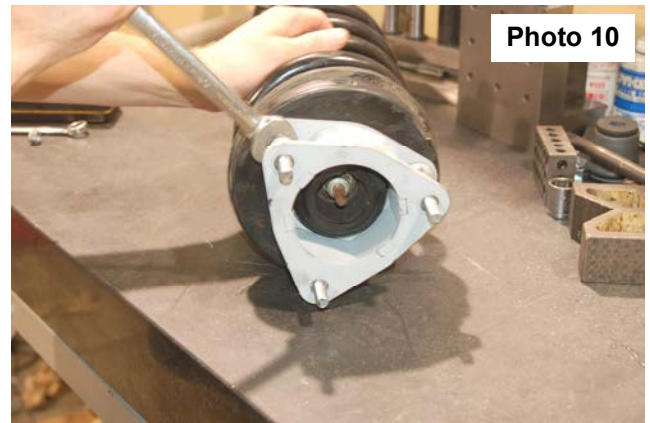


Photo 10

14. Install the strut assembly in the factory mount with the supplied 10mm nuts/washers & lock-washers on the upper mount. Tighten using a 17mm wrench. **Flat washer must be installed on stud as shown in Photo 11.**
15. 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.

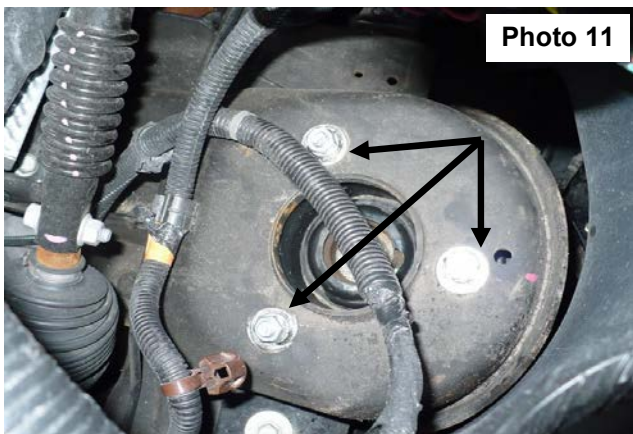


Photo 11

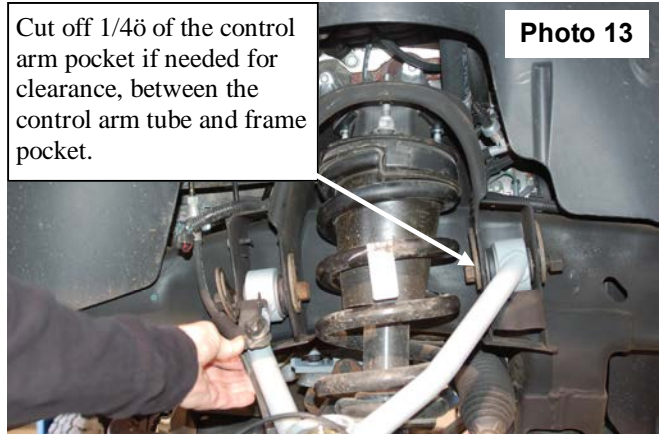


Photo 12

15. Reinstall the sway bar on the lower control arm using a 15mm wrench.
16. Install the upper control arm / ball joint assembly onto the knuckle with the supplied and castle nuts/cotter pins. Tighten using 3/4" wrench to **50 ft/lbs. DO NOT OVER-TORQUE THE CASTLE NUT.**
17. Reinstall the tie rod end into the knuckle with factory hardware and using a 21mm wrench.
18. Reinstall the 3 connectors to the electric power steering.
19. Install the brake line bracket on the new control arm with the supplied 1/4" lock nut / washer and using a 7/16" wrench. **See Photo 13.**
20. Reinstall the wheels/tires.
21. Jack up the vehicle and remove the jack stands.
22. Lower the vehicle to the ground.

Cut off 1/4" of the control arm pocket if needed for clearance, between the control arm tube and frame pocket.

**Photo 13**





## 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. Locate and remove the ABS wire from the frame. **See Photo 1.**
6. Remove the upper and lower shock from the axle using a 21mm socket/ wrench. **See Photo 2.**

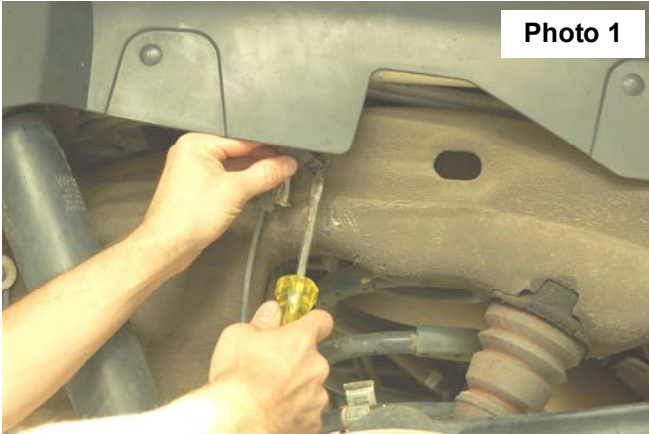


Photo 1



Photo 2

7. Remove the upper sway bar link using a 18mm socket/ wrench. **See Photo 3.**
8. Remove the e-brake mount using a 13mm socket / wrench. **See Photo 4.**



Photo 3

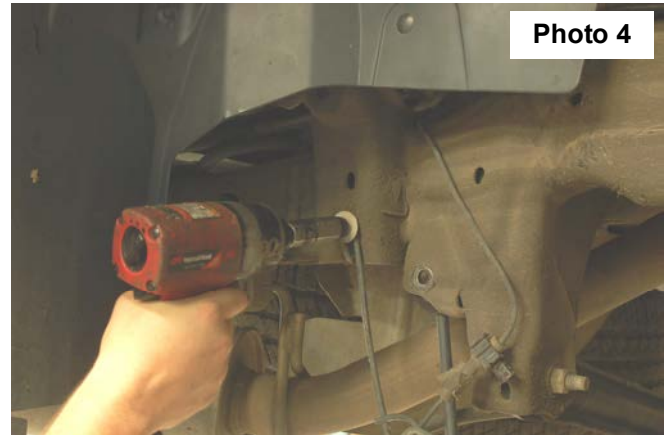


Photo 4

9. Remove the brake line with a 13mm wrench. **See Photo 5.**
10. Remove the coil.
11. Install the spring spacer washer on top of the mount as shown in **Photo 6.**

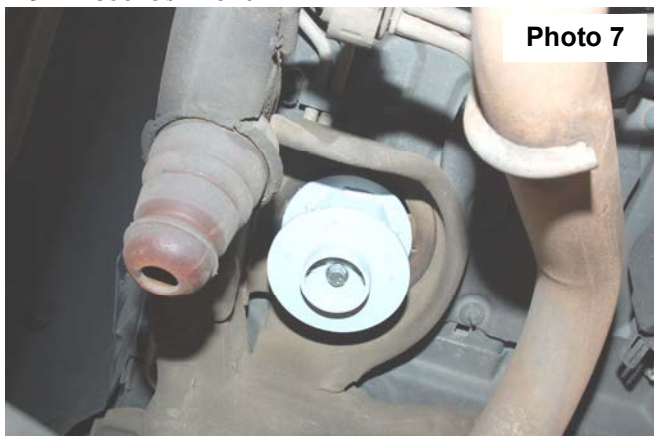


Photo 5



Photo 6

12. Secure the spacer in the mount and washer using the supplied 3/8"x 3 3/4" bolts and lock nuts. **See Photo 7.**
13. Reinstall the coil spring making sure the coil isolator is between the coil and new spacer.
14. Install the brake line spacer as shown in **Photo 8** with the supplied 8mm x 65mm bolt and locking nut. Tighten with a 13mm socket/ wrench.

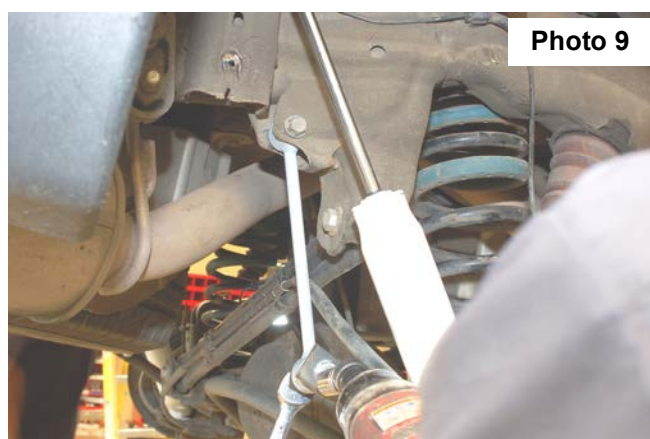


**Photo 7**



**Photo 8**

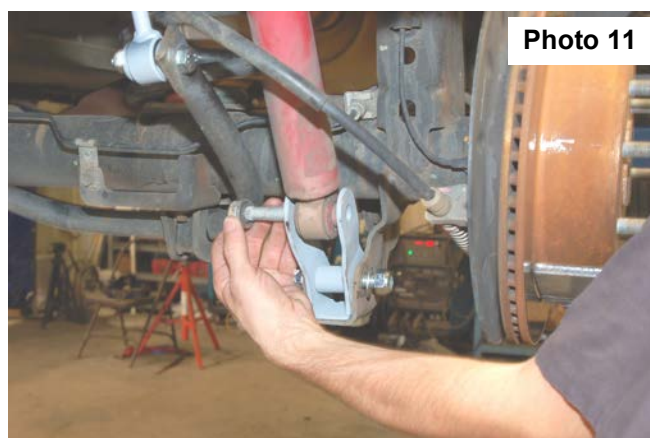
15. Install the supplied sleeves in the sway bar link and install on the frame using the stock hardware.
16. Place the supplied washer on the head of the supplied 12mm x 65mm bolt and install on the sway bar with the nut on the sway bar as shown in **Photo 9** using. Tighten using a 18mm & 19mm wrench.
17. Install the shock relocation bracket as shown in the factory shock location with the supplied 5/8"x 1 1/2" bolt, washers and lock nut on the bottom of the shock mount. **See Photo 10.**
18. Install the supplied 14mm x 75mm bolt, washers and lock nuts in the stock shock mount. **See Photo 11.**
19. Install the tires/wheels.
20. Jack up the vehicle to remove the jack stands. Remove the jack stands and lower the vehicle to the ground.



**Photo 9**



**Photo 10**



**Photo 11**

#### Alignment Specs:

		←	Optimal	→
<b>Total Toe</b>	Deg.	-0.10°	+0.10°	+0.30°
<b>Frt. Toe Partial</b>	Deg.	-0.05°	+0.05°	+0.15°
<b>Front Camber</b>	Deg.	-0.90°	-0.10°	+0.70°
<b>Caster</b>	Deg.	+1.90°	+2.90°	+3.90°



## KIT CONTENTS



### 217.20 Box Kit

- 1-Driver Side Control Arm
- 1-Pass Side Control Arm
- 2-Strut Spacers
- 2-Rear Shock Relocation Brackets
- 2-Rear Sway Bar Links
- 2-Rear Coil Spacers

### Poly Bag:

- 4-3/8" x 2 1/4 bolts
  - 8-3/8" washers
  - 4-3/8" lock nuts
  - 2-1/4" nut
  - 2-1/4" flat washers
  - 2-Cotter pins
- 10mmstudbag:
- 6-10mm Studs
  - 6-10mm Lock Washers
  - 6-10mm Flat Washers
  - 6-10mm Nuts

### 1-Rear Kit Bag:

- For Rear Coil Spacer:*
- 2-3/8" x 3 3/4" Bolts
  - 2-3/8" Flange Locknut

#### *For Rear Brake Line:*

- 1-Sleeve
- 1-8mm x 60mm Bolt

#### *For Rear Sway Bar Link:*

- 2-12mm x 65mm Bolt
- 2-12mm Flange Lock Nuts
- 2-Flat Washers
- 4-12mm ID Sleeves

#### *For Rear Shock Relocation Brackets*

- 2-14mm x 75mm Bolts
- 2-14mm Lock Nuts
- 2-Flat Washers
- 2-5/8" x 1 1/2" Bolts
- 4-5/8" Flat Washers
- 2-5/8" Lock Nuts

**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.

