



**ROUGH
COUNTRY**
SUSPENSION SYSTEMS

2014-15 2WD GM 1500 3.5" KIT WITH ALUMINUM 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

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.

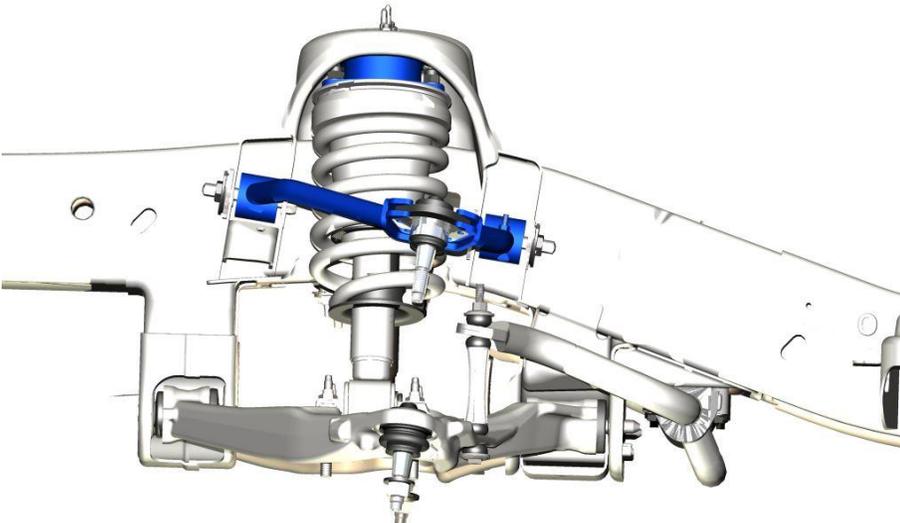
Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered. If question exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

****Note** This kit will not fit trucks with steel knuckles**

****Note**** 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.

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.



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FRONT INSTALLATION

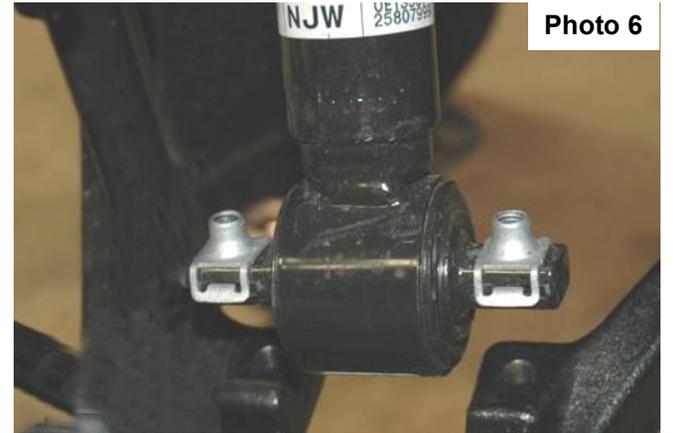
1. Park the vehicle on a level surface and chock the rear wheels.
2. Jack up the front of the vehicle. Place jack stands under the frame rails and lower onto jack stands letting the front suspension hang.
3. Remove the tires and wheels. Remove the upper and lower factory skid plates using a 15mm wrench. Retain factory hardware and front skid plate for reuse. 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.



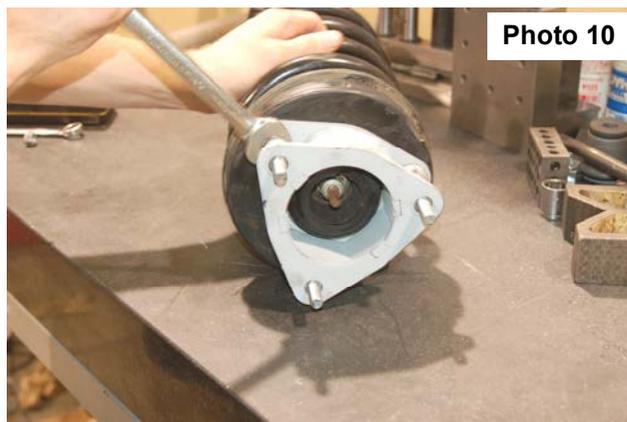
8. Using a 18mm wrench, remove the upper strut nuts as shown in **Photo 5**. Retain factory hardware for reuse.
9. Using a 15mm wrench, remove the 2 bolts securing the lower strut mount to the lower control arm and remove the strut from the vehicle. Remove and discard the factory lower retainer clips. New hardware will be used. **See Photo 6.**



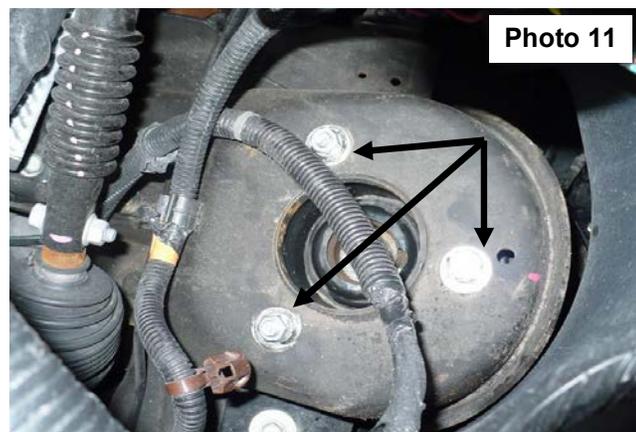
10. Mark location of alignment cams on upper control arms to allow installation of new arm to same position. Using a 21mm wrench and 21mm socket, remove the upper control arms from the vehicle. **See Photo 7.** Retain the hardware.
11. Install the new control arm in the factory mount as shown in **Photo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



12. Locate the supplied strut spacer and install the supplied 10mm stud extensions. Using a 17mm socket pull stud in the new spacer as shown in **Photo 9.** **Do not over torque the nut.**
13. Install the strut spacer on the factory strut with factory hardware and using a 18mm wrench. **See Photo 10.**
14. Install the strut assembly in the factory mount with the supplied 10mm nuts/washers & lock-washers on the upper



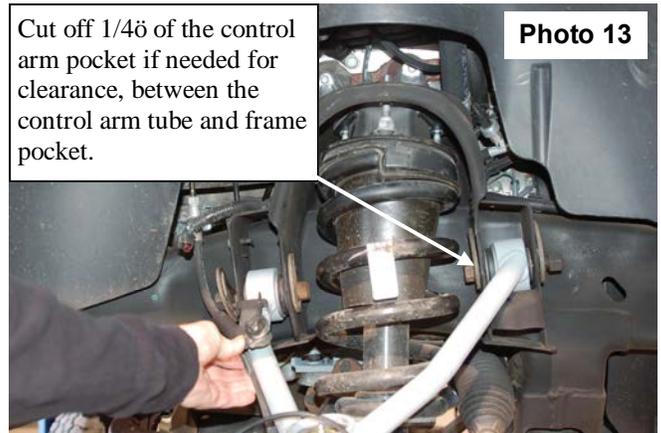
- mount. Tighten using a 10mm wrench. **Flat washer must be installed on stud as shown in Photo 11.**
15. Install the strut in the lower control arm using the supplied 3/8+2 1/4+bolts /washers & nuts using a 9/16+wrench. **See Photo 12.** It may be necessary to jack up the lower control arm with a floor jack to align lower strut holes.



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. Remove the factory shock absorbers using a 21mm wrench & socket. Retain the factory hardware for reuse.
6. Remove the factory u-bolts using a 21mm socket and lower the axle using the floor jack to allow for the 1 1/2" 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 # 658726. 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.

Photo 1



POST INSTALLATION INSTRUCTIONS

1. Lightly grease the ball joints. Do not over grease the ball joint as this could cause ball joint boot failure.
2. Have a qualified alignment center align the vehicle immediately.
3. Have headlights adjusted to proper settings.
4. Wheels must be retighten at 50 miles.
5. All kit components must be retightened at 500 miles and then every three thousand miles after installation. Periodically check hardware for tightness.
6. Install warning to Driver+decal on sun visor.
7. 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.

KIT CONTENTS



Box Kit

- 1-Driver Side Control Arm
- 1-Pass Side Control Arm
- 2-Strut Spacers
- 4-9/16" x 10 1/2" U-bolts
- 2-1 1/2" spacer blocks
- 2-Rear Shock Absorbers

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 Lock Washers
- 6-10mm Flat Washers
- 6-10mm Nuts
- 6-10mm Studs

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