

# ROUGH COUNTRY

## SUSPENSION SYSTEMS®

### 2010-2018 4 Runner w/X-REAS -2" Front 1" Rear Leveling 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 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 and the product layout on this page. Be sure you have all needed parts and know where they go, before you begin disassembly. 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-17 tire with factory wheels. For aftermarket wheel and tire combinations consult your tire and wheel specialist.

#### 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.

**▲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.

#### Kit Contents:

767 Contents:  
 2-Front Strut Spacers  
 2-Rear Coil Spacers  
 1-Rear Coil Spacer Bag that includes:  
   2- 1/2" x 1 1/4" bolts  
   2- 1/2" Nylock Nuts  
   4- 1/2" flat washers  
 2-Rear Shock Brackets  
 1-Rear Shock Bracket bag includes:  
   2- 3/4" x 3.5" Bolts  
   2- 3/4" Lock Nuts  
   4- 3/4" Washers  
   2- 3/8" x 1 1/4" bolts  
   2- 3/8" Flat Nuts  
   2- Square Washers

#### Tools Needed:

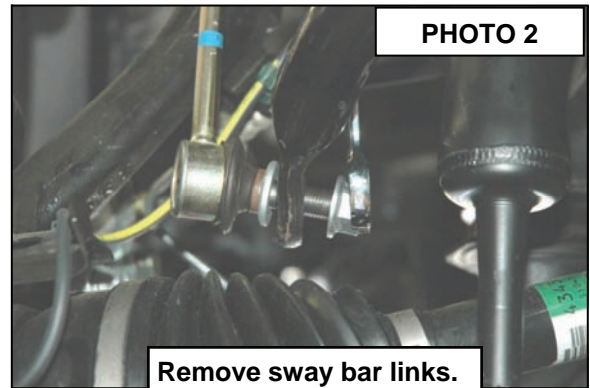
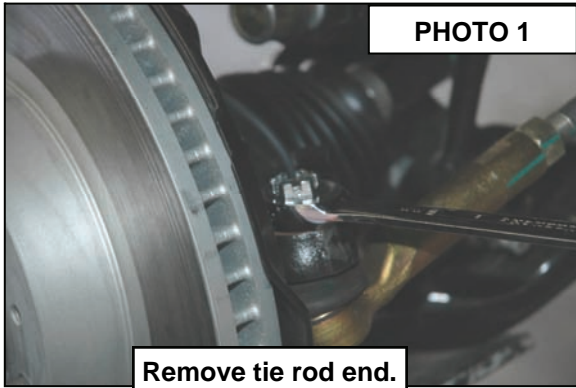
10mm Wrench  
 12 mm Wrench  
 14 mm Socket  
 16mm Wrench  
 17 mm Socket  
 17 mm Wrench  
 19 mm Socket  
 21mm Socket  
 9/16" wrench  
 1-1/16" Wrench  
 1-1/8" Socket  
 Torque Wrench  
 Hammer

#### Torque Specs:

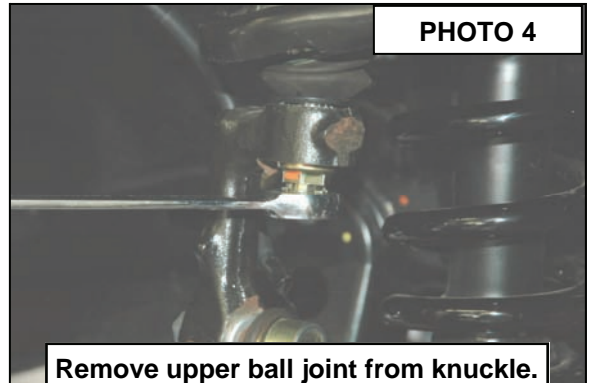
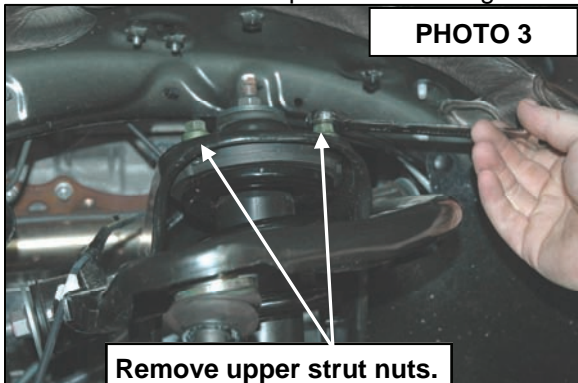
Size	Grade 5	Grade 8
5/16"	15 ft/lbs	20 ft/lbs
3/8"	30 ft/lbs	35 ft/lbs
7/16"	45 ft/lbs	60 ft/lbs
1/2"	65 ft/lbs	90 ft/lbs
9/16"	95 ft/lbs	130 ft/lbs
5/8"	135 ft/lbs	175 ft/lbs
3/4"	185 ft/lbs	280 ft/lbs
	Class 8.8	Class 10.9
6MM	5 ft/lbs	9 ft/lbs
8MM	18ft/lbs	23 ft/lbs
10MM	32ft/lbs	45ft/lbs
12MM	55ft/lbs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

## FRONT INSTALLATION

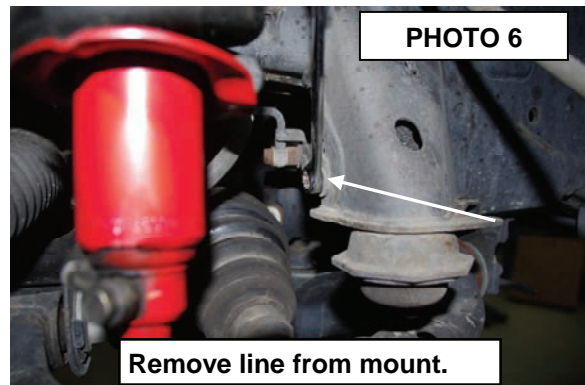
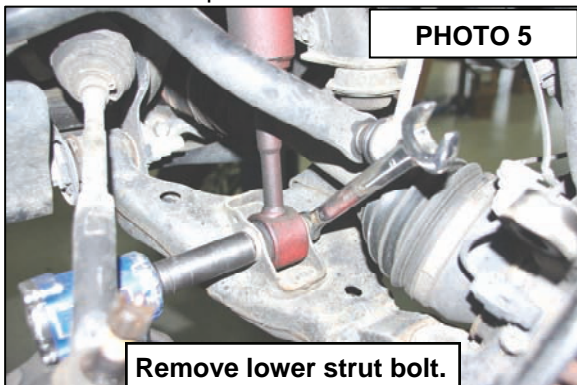
1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Remove the front tires/wheels. Using a 21mm deep well socket.
3. Remove cotter pin from the outer tie rod end on the steering linkage. Using 19mm socket remove the nut. Using a 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.**



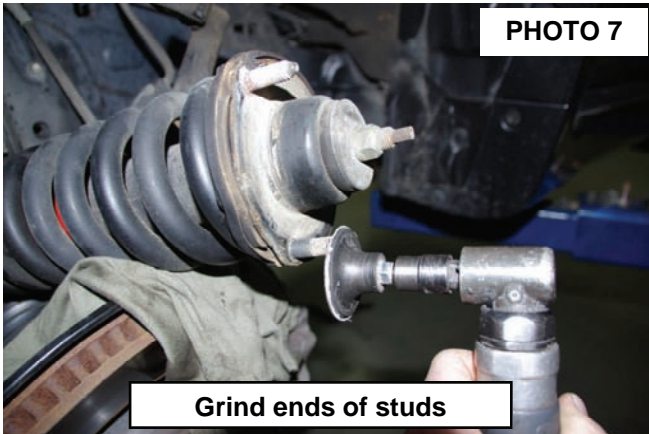
5. Using a 14mm socket, remove the strut nuts on the upper strut tower that holds the assembly in place. **See PHOTO 3.** One nut can be left on an upper stud to hold the strut in place.
6. Place jack under the knuckle for support. Using 19 mm socket remove nut from the ball joint on the upper control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



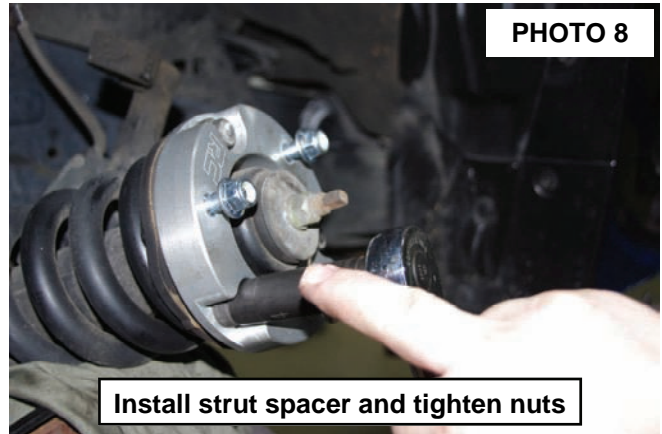
7. Using a 19mm socket and wrench, remove the strut bolt from the lower control arm. Retain the factory lower hardware for reassembly. Note the direction of the bolt for reassembly. **See PHOTO 5.**
8. Remove the flexible hose line bracket from the lower bump stop mount using a 10mm wrench to allow slack in the line. **See Photo 6.** Slightly lower the assembly with the floor jack to allow the strut assembly to be repositioned as shown in next step.



9. Lay the strut over the knuckle and grind the unthreaded ends of the studs off the strut studs. **See PHOTO 7.** Take care not to over extend the rubber strut lines. Check to make sure that enough material has been removed for the factory strut studs by positioning the new strut spacer on the strut. The stock threads should not extend past the spacer. If threads are above the spacer, remove spacer and lightly grind until they are below the spacer.
10. Install the strut spacer as shown in **PHOTO 8** using the factory nuts. Tighten nuts to 32ft lbs using 14mm socket.



**Grind ends of studs**

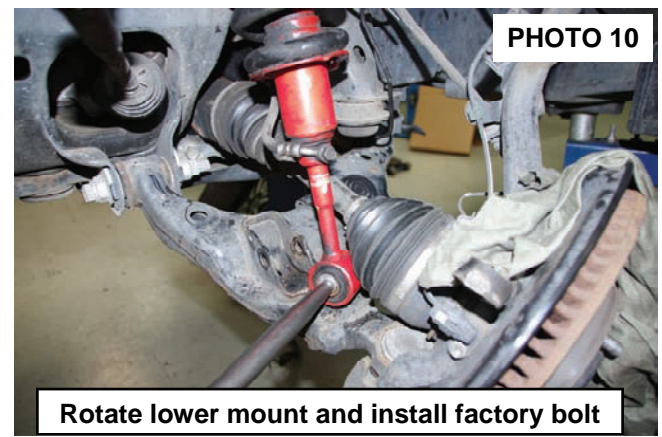


**Install strut spacer and tighten nuts**

11. Install the strut and spacer assembly in the upper strut mount and secure with supplied 10mm nuts, lock washers and flat washers. Tighten with a 17mm wrench, torque to 32ft-lbs. **See PHOTO 9.**
12. Using a large screwdriver or pipe wrench rotate the lower mount and reinstall in the lower control arm mount using the factory bolt . Tighten 100 to ft-lbs using a 19mm socket. **See PHOTO 10.**



**Attach strut spacer to strut.**



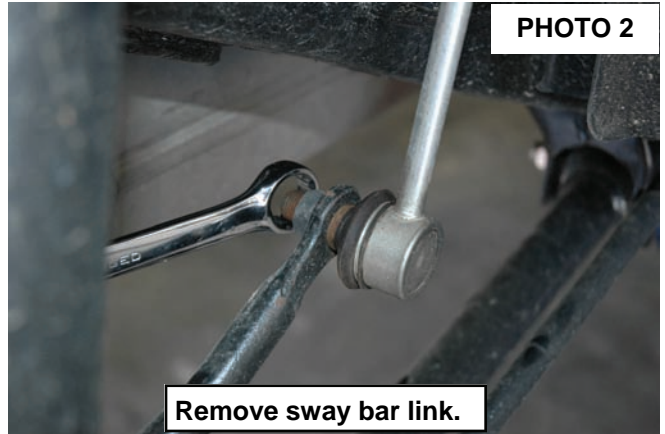
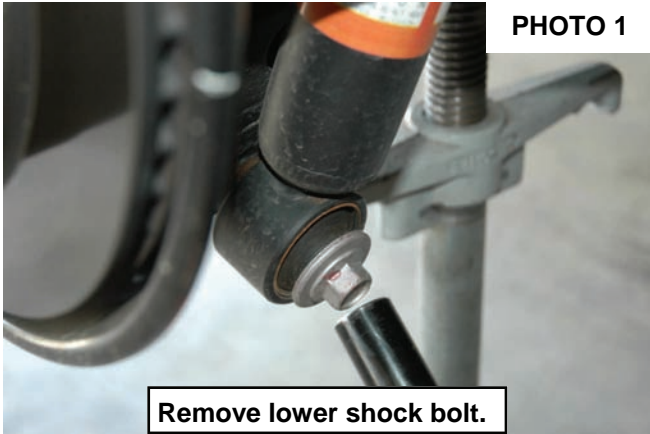
**Rotate lower mount and install factory bolt**

10. Using a floor jack, raise the lower control arm and connect the upper ball joint on the upper control arm to the spindle. Using an original nut and a 19mm socket, torque to 40ft lbs.
11. 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.
12. Reinstall the brake line bracket on the lower bump stop mount and tighten using a ??mm wrench.
13. Repeat steps 3-12 on opposite side of vehicle.
14. Using 17 mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.
15. 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.
16. 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.

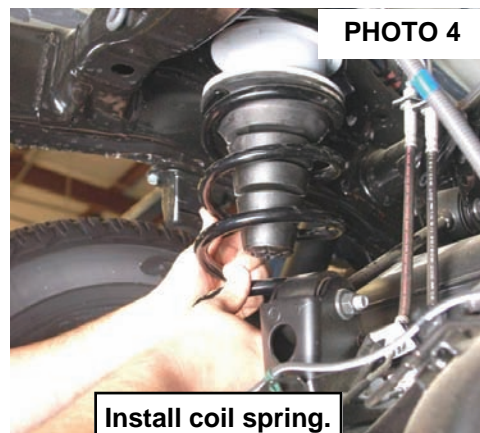
Rear Installation Instructions on next page.....

## REAR INSTALLTION

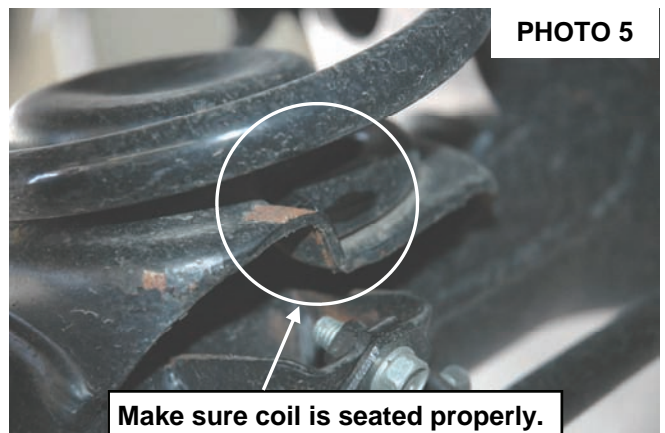
1. Jack up the rear of the vehicle and support the vehicle with jack stands, so that the rear tires are off the ground
2. Remove the rear tires/wheels. Using a 21mm deep well socket.
3. Place a jack under the axle. Using a 17mm socket remove the rear lower shock hardware. Retain lower shock hardware for reuse. **See PHOTO 1.**
4. Using a 17mm socket or wrench disconnect the bottom of the sway bar links. **See PHOTO 2.**



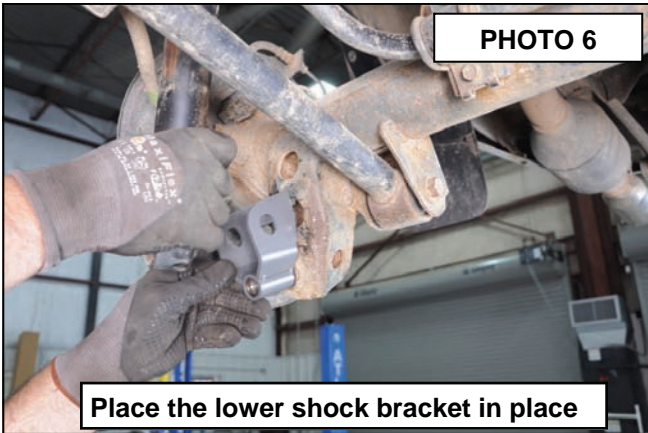
5. Using a 12mm wrench remove the bolt holding the brake line bracket to the frame on the drivers side, and the ABS wire on the passengers side.
6. Lower the axle and remove the factory coil spring.
7. Install new 1" coil spring spacer in the factory pocket with the supplied 1/2" x 1 1/4" bolts, washers & nuts (765BAG1), torque to 100ft-lbs. **See PHOTO 3.**
8. After the new 1" coil spacer has been secured to the frame, reinstall the stock coil spring as shown in **PHOTO 4.** Make sure the lower coil is positioned correctly in the lower spring seat. **See PHOTO 5.**



9. Using a 12mm wrench, reinstall the brake line bracket on the drivers side, and ABS bracket on the passengers side.
10. Using 17mm wrench reinstall sway bar links using factory hardware. Torque to 52 ft. lbs.

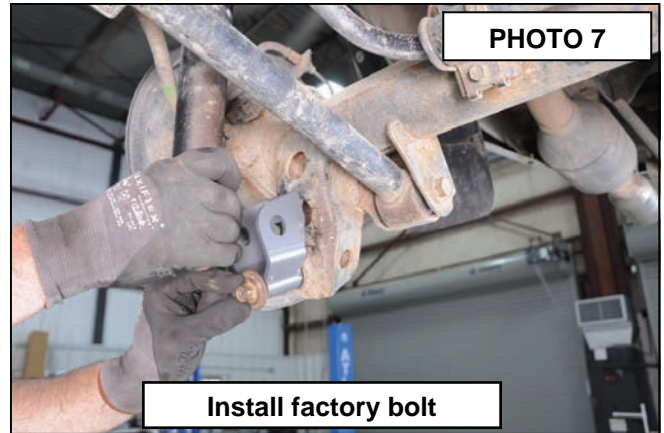


11. Place the supplied shock bracket onto the lower shock mount. **See PHOTO 6.**
12. Use factory hardware to attach the bracket on the lower mount. **See PHOTO 7.**



**PHOTO 6**

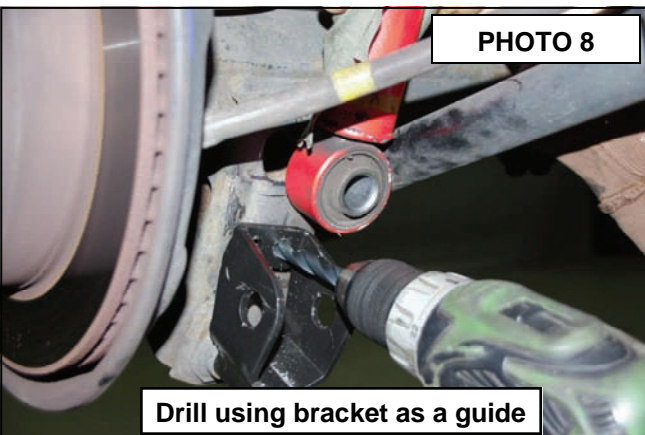
**Place the lower shock bracket in place**



**PHOTO 7**

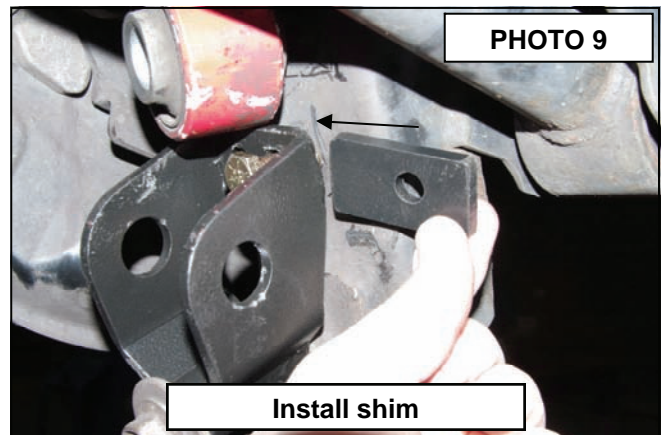
**Install factory bolt**

13. Temporarily install the shock in the relocation shock mount bracket and slide the supplied 3/4" x 3-1/2" bolt in the eye-ring of the shock.
14. Tighten the lower bolt on the stock shock mount using a 17mm wrench to make sure the bracket is properly aligned. Remove the 3/4" shock eye-ring bolt temporarily installed in step 14 and remove the shock from bracket.
15. Using the bracket as a guide and using a 3/8" bit, drill as shown in **Photo 8.** Driver side shown.
16. Place supplied 3/8" bolt into upper hole on shock bracket and install square shim between the new bracket and stock mount. **See PHOTO 9.**



**PHOTO 8**

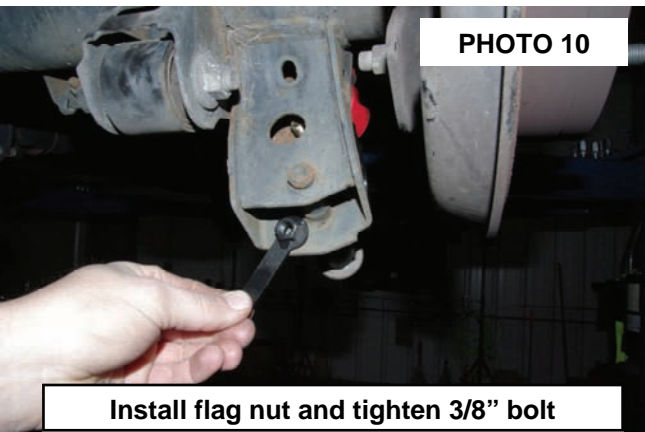
**Drill using bracket as a guide**



**PHOTO 9**

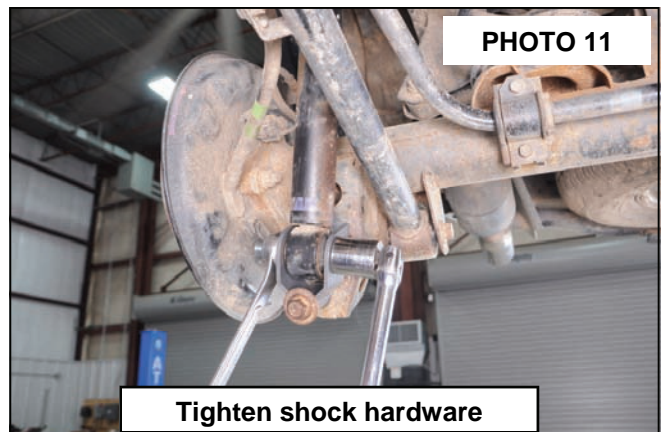
**Install shim**

17. Install the supplied flag nut on the 3/8" bolt as shown and tighten using a 9/16" wrench. **See Photo 10.**
18. Attach shock to bracket using supplied 3/4" x 3-1/2"bolts, nuts and washers. Tighten using 1-1/16" wrench and 1 1/8"socket. **See PHOTO 11.**



**PHOTO 10**

**Install flag nut and tighten 3/8" bolt**



**PHOTO 11**

**Tighten shock hardware**

19. Repeat process for opposite side.
20. Reinstall tire/wheels. Using a 21mm socket. Torque to 82 ft. lbs. Jack up the rear of the vehicle and remove the jack stands.
21. Lower the 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. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Adjust headlights to proper settings given increased vehicle height.
5. Have vehicle alignment performed by professional alignment shop.

## 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 purchasing a Rough Country Suspension System.**

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.





