# Thank you for choosing Rough Country for your suspension needs.

Rough Country recommends a certified technician installs 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 all the instructions before beginning the installation. Check the kit hardware against the parts list. Be sure you have all the needed parts and understand where they go. Also please review the 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. We strongly recommend, because of rollover possibility, that seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Braking performance and capabilities are decreased when significantly larger/heaver tires and wheels are used. Take this into consideration while driving. Also, speedometer recalibration is necessary when larger tires are installed.

Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands, lifts, and/or combining body lift with suspension lifts voids all warranties. 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.

This kit is packaged as a leveling kit—raising the front 3" and the back 2". If you desire a different look or if your truck has a tool box or added weight in the rear please consult with your sales repetitive about option higher block and u-bolt options or the use of an add-a-leaf.

The 3" suspension system was developed for 33x12.50x15 tire on an after market wheel with 5" of back spacing.

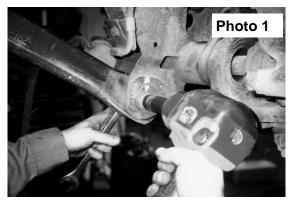
## NOTICE TO DEALER AND VECHICLE OWNER

Any vehicle equipped with any Rough country product must have the "Warning to Driver" decal installed on the sun visor or dash. The decal is to 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 to forward these installation instructions on too the vehicle owner for review and to be kept in the vehicle for its service life.

Kit Contents:	Tools Needed:	Torque		
9281:Front Coil Springs 7566:  Upper Control Arms Lower Control Arms Sway bar Brackets 6522: 2" Blocks U-bolt 8157: Front Shock 8158: Rear Shock	Torque Wrenches 1/2" Drive Rachet and Sockets Assorted Combination Wrenches Heavy Duty Jack Stands Hydraulic Floor Jacks Channel Locks Drill 13/32" Bit Hammers C-Clamps Center Punch Rubbing Alcohol Safety Glasses Anti-Seize Compound	Size 5/16" 3/8" 7/16" 1/2" 9/16" 5/8" 3/4" 6MM 8MM 10MM 12MM 14MM 16MM 18MM	Grade 5 15 ft/lbs 30 ft/lbs 45 ft/lbs 65 ft/lbs 95 ft/lbs 135 ft/lbs 185 ft/lbs Class 8.8 5 ft/lbs 18ft/lbs 32ft/lbs 55ft/lbs 130ft/lbs 170ft/lbs	Grade 8 20 ft/lbs 35 ft/lbs 60 ft/lbs 90 ft/lbs 130 ft/lbs 175 ft/lbs 280 ft/lbs  Class 10.9 9 ft/lbs 23 ft/lbs 45ft/lbs 75ft/lbs 120ft/lbs 165ft/lbs 240ft/lbs
• . •	C-Clamps Center Punch Rubbing Alcohol Safety Glasses	8MM 10MM 12MM 14MM 16MM	5 ft/lbs 18ft/lbs 32ft/lbs 55ft/lbs 85ft/lbs 130ft/lbs	9 ft/lbs 23 ft/lbs 45ft/lbs 75ft/lbs 120ft/lb. 165ft/lb

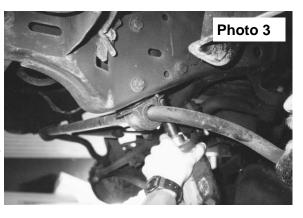
#### FRONT INSTALLTION INSTRUCTIONS

- 1. Block the rear wheels of the vehicle. Raise the front of the vehicle and support the frame with jack stands. Remove the front wheels and tires and set aside. Position a hydraulic jack under the front axle and raise the jack until the front suspension begins to compress
- 2. On both sides of the vehicle, scribe alignment marks on the adjustment cam and axle bracket at the lower link to axle attachment point for later reference. **See Photo 1**
- 3. Unbolt the brake line brackets from the axle to ensure brake line free play during the suspension system installation. Remove the center disconnect vacuum lines from the clamp on the axle.
- 4. Remove the nut, retaining washer and rubber bushing from the both upper shock mounts located inside the engine compartment.
- 5. Remove the lower shock bolts on the axle as shown in **Photo 2** and save for later installation. The shock absorbers will be removed from the vehicle at the same time the coils are removed from the vehicle.





- 6. Remove the (4) bolts on the sway bar to frame brackets and allow the sway bar to rotate down. Save these bolts for later installation. **See Photo 3**.
- 7. Carefully lower the jack until the coil springs are free (the upper suspension arm will be contacting the axle bracket) Remove the coil springs and shocks from the vehicle. Note: use of a coil spring compressor may be required for spring removal.
- 8. Remove the lower suspension arm nut, cam and cam bolt from the axle. Remove the nut and bolt from the frame attachment point as shown in **Photo 4** and remove the lower suspension arm from the vehicle. Repeat this step for the opposite side of the vehicle. Note: save bolts, nuts and washers for later installation.







- 9. Attach the grease fittings provided with the new Rough Country lower suspension arms using a 3/8" wrench. Note: install two 90° grease fittings into the lower suspension arms. Insert the two bushing halves into the lower suspension arm and press in the lower suspension arm sleeve provided. The 2000 and above will use the qty 4-short 14mm sleeves for the upper arm and the lower arm will use the qty 4-16mm longer sleeves. The installer can check this by using the stock arm bolt. The use of a vice or C-clamp may facilitate the insertion of the sleeve.
- 10. Install the new Rough Country lower suspension arms in place of the stock lower suspension arms as shown in **Photo 5**. Slight prying of the mounts may be necessary for arm installation. Install the original rear suspension arm bolt and slightly tighten the nut. Install the original front suspension arm bolt and slightly tighten the nut. Refer to the reference mark on the cam bolt and the axle when installing the cam bolt.

- 11. Remove the upper suspension arm nut and bolt at the axle a shown in **Photo 6**. Remove the nut and bolt at the frame and remove the upper suspension arm. Repeat this step for the opposite side of the vehicle. **Note: save bolts, nuts and washers for later installation.**
- 12. Attach the grease fittings provided to the new Rough Country upper suspension arms using a **3/8**" wrench. **Note:** install one 90° fitting and one straight fitting into the upper suspension arms. Insert the two bushing halves into the upper suspension arm and press in the upper suspension arm sleeve provided.
- 13. Install the upper suspension arms in place of the stock upper suspension arms as shown in **Photo 7**. Slight prying of the mounts may be necessary for arm installation. Install the original front and rear suspension arm bolt and slightly tighten the nuts.

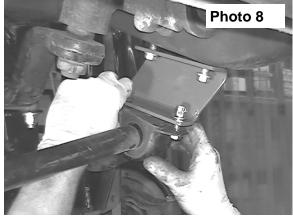




- 14. Assemble the shock absorbers Part #Hydro 651896 / Nitro 651997 with the supplied poly bushings and install the shock in the upper mount.
- 15. With the axle lowered, install the Rough Country coil springs. The use of a coil spring compressor will ease installation.
- 16. Jack up the axle until the spring can be seated in the mount. Check to be sure the spring is properly seated by checking the wrap on the coil spring in relation to the lower

mount.

- 17. If a coil spring compressor was used, remove it at this time.
- 18. With the floor jack still under the axle and compressed slightly.
- 19. Install the lower end of the shocks in the stock location and tighten using stock hardware.
- Attach the wheels and tires to the vehicle and lower it to the ground
- Install the drop sway bar brackets on the frame with the stock hardware. See Photo 8.
- 22. Install the sway bar to the bracket with the supplied 7/16" x 1" bolts, washers/nuts. **See Photo 8.**



If the vehicle you are working on is equipped with a stock steering stabilizer, remove the stabilizer from the stock location. Because of the pitman arm location you will not be able to reuse the stock steering stabilizer. Rough Country offers a replacement and a dual stabilizer part #87321 that can be used for this application. Call your local Rough Country dealer for more information.

## **REAR INSTALLTION**

- 1. Chock front wheels and jack up the rear of the vehicle. Secure with jack stands on the frame rail.
- 2. Place a floor jack under the rear differential on the rear axle. Using a 18mm socket and wrench, remove the stock shock absorbers, retain the stock hardware for reuse.
- 3. Using a 24mm socket, remove the stock u-bolts. Use the floor jack to lower the axle assembly to allow for lifted block installation.
- 4. Install the Rough Country block in between the leaf spring and the axle with the thick part of the block to the rear. Jack up the axle and align the pins in the blocks and axle seat. Secure with new u-bolts and torque evenly to 85 ft/lbs.
- 5. Locate shock part number 650341 hydraulic shock/ 650377 nitrogen charged shock and assemble poly bushings and sleeve in shock. Using a 18mm socket, and wrench, Install using factory hardware on upper and lower shock mount
- 6. Install the tires and wheels
- 7. Jack up the rear of the vehicle and remove the jack stands. Lower the vehicle to the floor.

#### POST INSTALLTION INSTRUCTIONS

- 1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering gear for interference and proper working order. Test brake system.
- 2. Perform steering sweep. Check to ensure brake hoses have sufficient slack and will not contact rotating, mobile, or fixed members, adjust lines/brackets to eliminate interference and maintain proper working order. 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. Readjust headlights to proper settings.
- 5. It is the buyer's responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then every 1000 miles. Suspension components every 3000 miles.



THANK YOU FOR CHOOSING ROUGH COUNTRY SUSPENSION FOR YOUR SUSPENSION NEEDS.