

# 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. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have all of the 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.

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 designed to level the vehicle, if additional list is desired contact you nearest Rough Country distributor to discus options available.

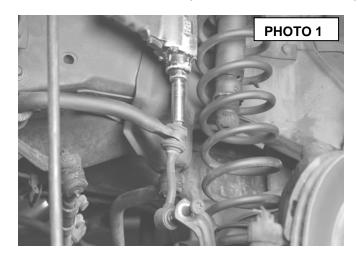
# NOTICE TO DEALER AND VEHICLE OWNER

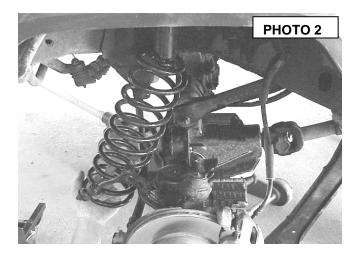
Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

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.

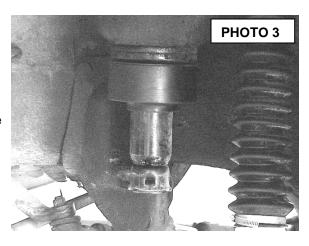
# **INSTALLATION INSTRUTIONS**

- 1. Secure and properly block the tires on the vehicle on a level concrete surface. Jack up the vehicle and place the front of the vehicle on jack stands.
- 2. Remove the front wheels and tires. Support the axle with a floor jack.
- 3. Remove the stock shock absorbers using a 15mm wrench. The stock bolts and nuts on the bottom of the shock will be reused. Note: Access to the upper shock studs will be obtained through the engine compartment. It also may be necessary to temporarily remove the washer fluid reservoir to access the driver side upper shock mount nut.
- 4. Remove the sway bar links on both sides using a T-55 torx bit /19mm wrench and a 15mm for the upper nut .**See Photo 1.**
- 5. Locate and remove the coil clip on the lower coil spring seat. Lower the axle to allow for removal of the coil spring. Do not over extend the brake lines. The caliper can be removed from the rotor to allow the axle to lower.
- 6. If needed, use a strut compressor to remove the coil springs. Remove stock coil springs See Photo 2.



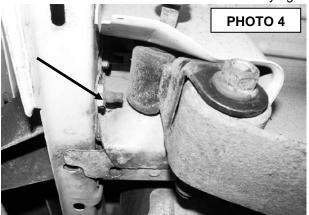


- 7. Place the supplied coil spacer on the upper mount and reinstall the coil spring on the spacer and on the axle.
- 8. Install coil spring clip back onto the lower coil spring seat.
- 9. Attach sway bar end links to sway bar and tighten.
- 10. Install new Rough Country shock absorbers.
- 11. Install wheels and tires.
- 12. Jack up the vehicle, remove the jack stands and lower the vehicle to the ground.
- 13. **Photo #3** shows the caster adjustment on the lower control arms. The caster will have to be adjusted to insure proper alignment.



## LIFTED SHACKLE INSTALLATION INSTRUCTIONS

- 1. Remove the stock shackle from the frame mount using a 21mm wrench. Locate and either grind or cut off the excess from the bolt pictured in **Photo 4**. This will allow the shackle to move rearward
- 2. Install the new Rough Country lifted shackle and secure with supplied 9/16" x 4" hardware in the top hole and the 14mm x 110mm in the bottom hole.. Do not fully tighten the hardware at this time. **See Photo 5.**





- 3. Install the new shocks with factory hardware. Torque the upper using a 13mm wrench and lower bolts using 3/4" wrench to factory specs. Repeat for other side.
- 4. Install the tires and wheels. Jack up the vehicle and remove the jack stands. Lower the vehicle to the floor.
- 5. Torque the frame bolts, and shackle bolts to factory specs using a 21mm wrench.
- 6. Install the new Rough Country shock absorbers
- 7. Install the tires/wheels. Remove the jack stands and lower the vehicle to the ground.
- 8. Tighten factory hardware.



#### LIFT KIT TROUBLESHOOTING

#### Rear driveline:

<u>Acceleration vibration:</u> Caused by the pinion being too high in relation to the transfer case output shaft. On leaf sprung vehicles, install axle shims to lower pinion accordingly.

<u>Deceleration vibration:</u> Caused by the pinion being too low in relation to the transfer case output shaft. On leaf sprung vehicles, install axle shims to raise pinion accordingly.

### High speed wobble:

This is fairly common with y-type steering on lifted XJ's. It is a condition where front tires will shimmy after hitting a bump. Avoid bias ply tires and wheels with excessive offset. Check for worn or loose parts. In most cases a reduction of positive caster will eliminate this condition. A good rule of thumb is minimum factory caster and maximum factory toe in. Note that lift heights increased with coil spacers (or taller coils) may exhibit wobble that cannot be corrected with alignment. **Bump steer:** 

Caused by improper relationship of drag link and track bar. To correct, center axle again following the instructions supplied with the track bar. Next determine the neutral position of the steering wheel. Adjust the drag link to center the steering wheel

#### POST INSTALLATION INSTRUCTIONS

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.

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.

Bump stops and extensions must be in place on all vehicles! Note: allowing suspension to over extend by neglecting to install or maintain stops and extensions may cause serious damage to OE and related components.

Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.

### **MAINTENANCE INFORMATION**

It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 100 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.





We have most of the additional accessories you need for your Cherokee. We have Rock Sliders, Diff Guards, Slip Yoke Eliminator, Drive Shafts, Steering Stabilizers, Adjustable Controls Arms, Etc.



Thank you for purchasing a Rough Country Suspension System.