Rough Country 670X70 Installation Instructions

3-Inch Lift Kit with V2 Monotube Shocks for 1984–2001 Jeep Cherokee, Part 670X70

Part number: 670X70

trailfortress.com/rough-country-3-inch-lift-kit-670x70

Scan for fitment, price and install help

ROUGH COUNTRY SUSPENSION SYSTEMS®

1670XBAG3

JEEP XJ 84-01 3” FRONT & 2” REAR SUSPENSION 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 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

⚠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.

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.

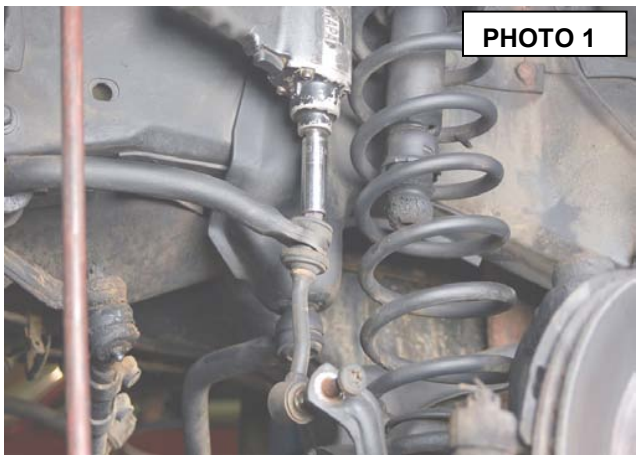
⚠NOTICE NOTICE TO DEALER AND VEHICLE OWNER

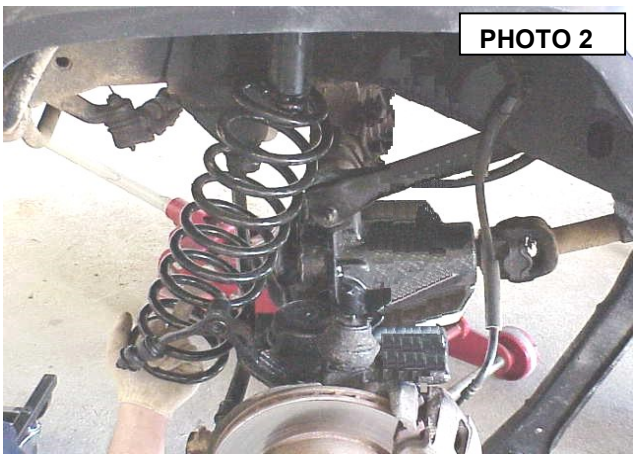
Any vehicle equipped with any Rough Country product should have a “Warning to Driver” decal installed on the inside of the windshield or on the vehicle’s dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

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.

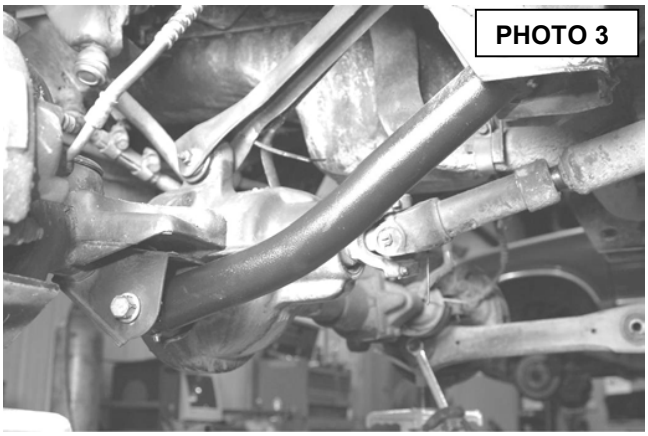
INSTALLATION INSTRUTIONS

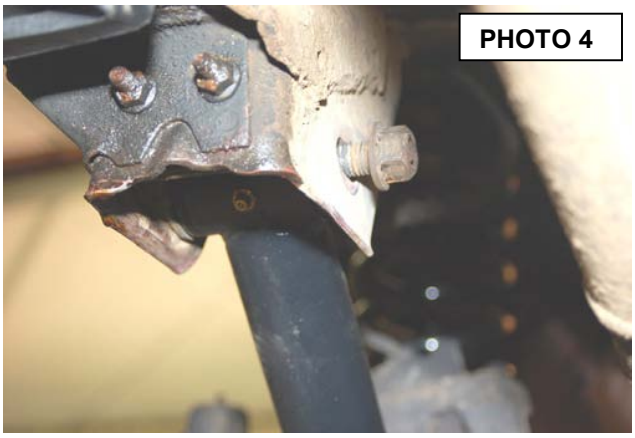
1. Secure and properly block the tires on the vehicle on a level concrete surface. Jack up the vehicle and place the front of the vehicle on jack stands.
2. Remove the front wheels and tires. Support the axle with a floor jack.
3. Remove the stock shock absorbers using a 15mm wrench. The stock bolts 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. Remove the stock control arms and install the new Rough Country control arms as shown in **Photo #3** with the factory hardware.
8. Using a strut compressor, compress the new Rough Country coil spring s and install. 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 front 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 #4** shows the caster adjustment on the lower control arms. The caster will have to be adjusted to insure proper alignment.





14. Remove the sway bar from the frame if not already removed.
15. Place bracket on the frame rail and secure using the stock bolts. **Photo #5** shows the position of the bracket.
16. Place the sway bar on the bracket and install the supplied 7/16” x 1” bolts, washers and lock nuts.



REAR SPRING INSTALLATION

If purchased with kit, if not proceed to add-a-leaf instructions

1. Jack up the rear of the vehicle and place the jack stands under the frame.
2. Support the axle with a floor jack.
3. Remove the stock shocks.
4. Remove the stock rear u-bolts and remove the springs from the spring mounts. Retain the stock hardware.
5. Install the new springs as the stock springs were removed and secure with the factory hardware. Do not tighten at this time.
6. Install the supplied u-bolts on the axle and tighten. Install rear shock absorbers.
7. Install tires / wheels and lower to the ground.
8. Tighten spring bolts.

ADD-A-LEAF INSTALLTION INSTRUCTIONS

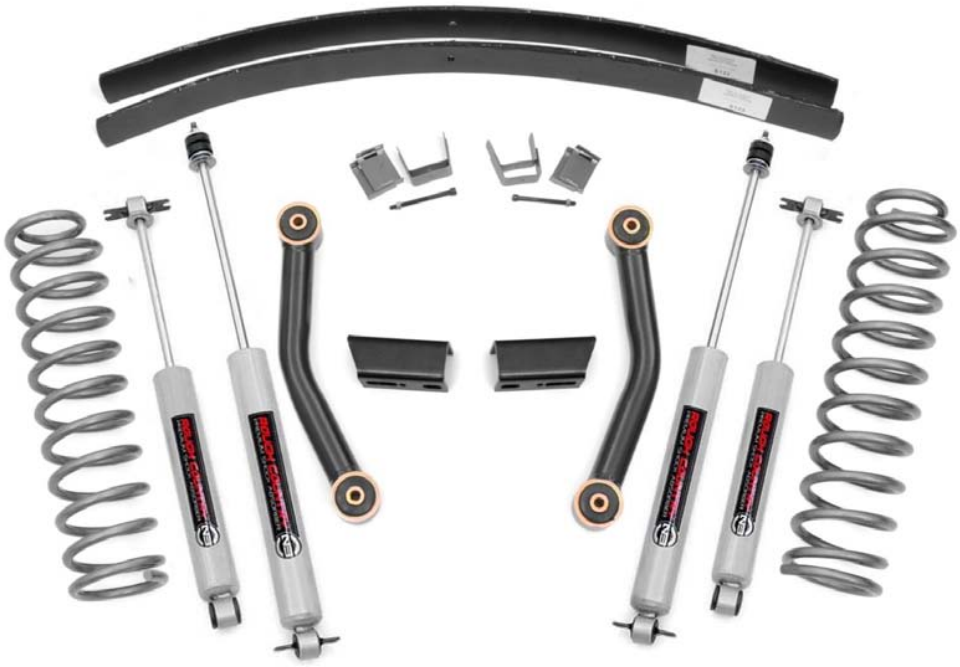
1. Remove rear factory shocks using a 13mm wrench on top and a 3/4” wrench on bottom and retain hardware.
2. Chock the front wheels and jack up the rear of the vehicle and place the vehicle on jack stands. Remove the wheels and tires.
3. Working from the drivers side, remove the factory u-bolts and lower the axle with a floor jack. Repeat for passenger side.
4. Separate the springs and install the provided add-a-leaf in the spring pack using a pyramid pattern smallest on the bottom graduating to largest on top. The factory flat overload leaf should remain on the bottom of the pack (if equipped).
5. Clamp the spring with the c-clamp and tighten with the supplied center bolt with the nut on top of the spring and to not leave a gap between the springs. Cut the thread of the bolt smooth with the nut.
6. Realign the center pin in the leaf spring pack to the centering hole on the axle perch.
7. Install new bend clips on spring.
8. Install the new rear shock absorbers.
9. Install the tires/wheels.
10. Remove the jack stands and lower the vehicle to the ground. Tighten factory hardware.

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.

LIFT KIT TROUBLESHOOTING

Rear driveline:
Acceleration vibration: 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.
Deceleration vibration: 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.
Slip yoke vibration: Caused by excessive angle on the transfer case slip yoke. Very common on vehicles with 2” or more of lift. Lifts of 2”-3.5” can sometimes be cured with a transfer case drop kit (pinion adjustment may also be required- see acceleration and deceleration vibration troubleshooting above). If this does not cure it, it will likely require installing a slip yoke eliminator (SYE) kit and CV drive shaft. Adjust pinion so it is 2 degrees below parallel with CV drive shaft (see acceleration and deceleration vibration troubleshooting above). A transfer case drop kit can usually be omitted with a CV drive shaft.
Drive shaft bind (84-95 XJ’s): Condition of interference between slip yoke and tube yoke. This is usually only a problem with over 3.5” lifts. A high travel slip yoke may remedy this. Later XJ's already have the high travel slip yoke and may instead require an SYE and CV drive shaft (see above slip yoke notes).
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



Be sure to check out Rough Country's additional accessories for your Cherokee. Rough Country offers several products for your XJ. Rock Sliders, Diff Guards, Slip Yoke Eliminator, Drive Shafts, Steering Stabilizers, Adjustable Controls Arms, Etc.







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.