Rough Country 639P Installation Instructions

4-Inch Lift Kit with N3 Shocks for 1999-2004 Jeep Grand Cherokee

Part number: 639P

trailfortress.com/rough-country-4-inch-lift-kit-639p

Scan for fitment, price and install help



WJ JEEP 4” Front and 3.5” Rear Lift Kit W/ Adj. Lower Control arms & Fr Adj. Track Rod

Thank you for choosing Rough Country for all 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 kit content list. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have the necessary tools to install this kit.

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.

Due to differences in manufacturing, dimension and inflated measurements, tire and wheel combinations should be test fit prior to installation. This suspension system was developed using a 265 / 75R-16 tire with factory wheels. If bigger/ wider tire are used with the factory wheels or factory offset wheels you must carefully check the clearance during turning between the tires and the lower control arm and the front sway bar link before driving. Installing wider than recommended tires can cause the tire to come in contact with the rear shock. Always double check for clearance on all tire / wheel packages.

We hope installing your Rough Country lift kit is a positive experience. Please note that variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. If you are uncertain about some aspect of the installation process, please feel free to call our tech support department at 800-222-7023. We do not recommend that you modify the Rough Country parts in any way as this will void any warranty expressed or implied.

IMPORTANT PRE—INSTALLATION INSTRUCTIONS

Prior to beginning this installation it is always good to use a penetrating oil and spray all fasteners that will be removed. Typically the cross member, control arm bolts and the pitman arm are difficult to remove without having done this step.

Tools Needed:

- 13mm Socket / Wrench
- 14mm Socket / Wrench
- 15mm Socket / Wrench
- 18mm Socket / Wrench
- 19mm Socket / Wrench
- 21mm Socket / Wrench
- 22mm Socket / Wrench
- 33mm Socket
- 5/8” Wrench
- Pitman Arm Puller
- Drill Motor
- 3/8” Drill Bit
- Pry Bar
- Floor Jack
- Jack Stands
- Spring Compressor
- Lithium Based Grease

Torque Specs:

Size	Grade 5	Grade 8
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

	Class 8.8	Class 10.9
8MM	18ft/lbs	23 ft/lbs
10MM	32ft/lbs	45ft/lbs
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs

KIT CONTENTS



Kit Contents:

1698C Containing:
- 2-Front Coil Springs (A)
- 2-Rear Coil Springs (B)

1639 Kit Box Containing:
- 2-Front Adj Lower Control Arms (C)
- 4-Front Bump Stop Brackets (D)
- 2-Front Sway Bar Links (E)
- 4-Rear Sway Bar Brackets (F)
- 2-Rear Bump Stop Spacers (G)
- 1-Rear Upper Control Arm Bracket (H)
- 2-Rear Lower Shock Brackets (I)
- 1-1698Bag1-Hardware Bag
- 1-1698Bag2-Bushing Bag
- 1-1639Bag3 Inst Sheet Bag
- Transfer Case hardware (J)

1084-Adjustable Fr Track Bar Kit:(K)
- 1-Track Bar Body
- 1-Heim End
- 2-Heim Spacers
- 1-12mm x 65mm Bolt
- 1-Flat Washer
- 1-Flange Lock Nut

1639Box1 Containing:
- 2-Fr 3.0 Shocks-660743(L)
- 2-Rr 3.0 Shocks-660769 (M)
- 1-1698Bag3-Rr Shock Hardware
- 2-Frt Upper Shock Hardware Bags

1639 Bag1:

For Front Bump Stops:
- 4-8mm x 95mm Bolt
- 4-8mm Washers

For Front Shock Absorbers:
- 4-5/16” x 1” Bolt
- 8-Flat Washers
- 4-Lock Nuts

For Front Sway Bar Disconnects:
- 2-1/2” Lock nuts
- 2-Hitch Pins
- 2-1/2” Flat washers
- 2-Disconnect Mounting Pins
- 2-12mm Flange Lock Nuts
- 2-12mm Jam Nuts
- 2-Rod Ends
- 2-Crush Sleeves
- 2-Frame Brackets

For Rear Upper Arm Bracket:
- 3-14mm x 75mm Bolts
- 3-Flat Washers
- 3-Crush Sleeves

For Rear Sway Bar Spacer:
- *4-10mm x 95mm Bolts*
- *4-10mm Flat Washers*

For Rear Bump stop Spacer
- 2-3/8” x 3 1/2” Self Tap Bolts
- 2—2” Body Blocks

For Rear Sway Bar Bracket:
- 4-10mm 90mm Bolts
- 4-Flat Washers

1639Bag1 Continued:

For Rear Shocks:
- 2-12mm x 100mm Bolts
- 2-Crush Sleeves
- 2-Flat Washers

1639 Bag2:

For Fr Lower Control Arms:
- 4-Control Arm Bushings
- 2-Sleeves
- 2-90 degree grease fittings

1698 Bag3:

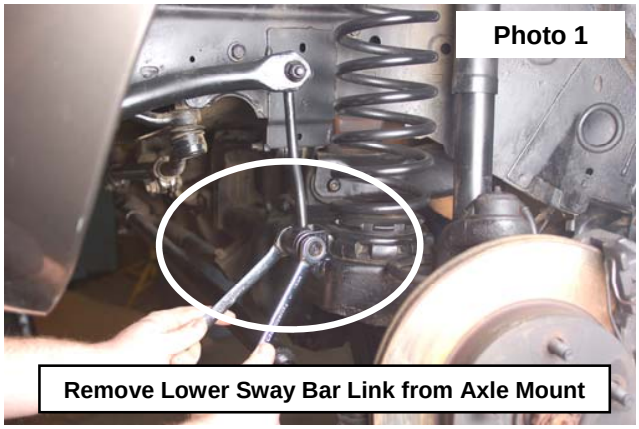
For Rear Shocks:
- 4-Bushings
- 2-Lower Sleeves
- 2-Offset Sleeve/Washer

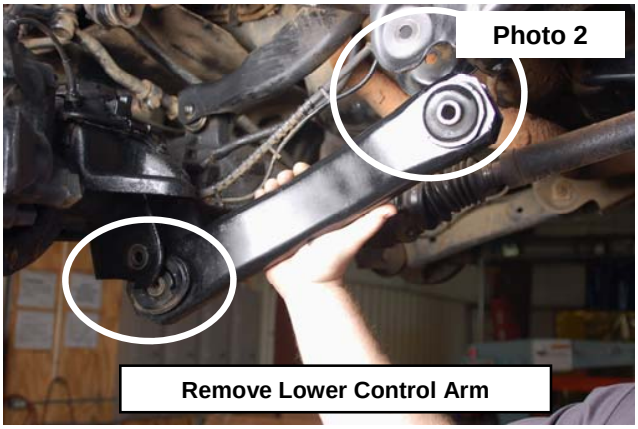
1639 Bag 4:

For Cross-Member Transfer Case Drop
- 4-10mmx 140mm Bolts
- 8-1 1/4” Spacers
- 4-10mm Flat Washers

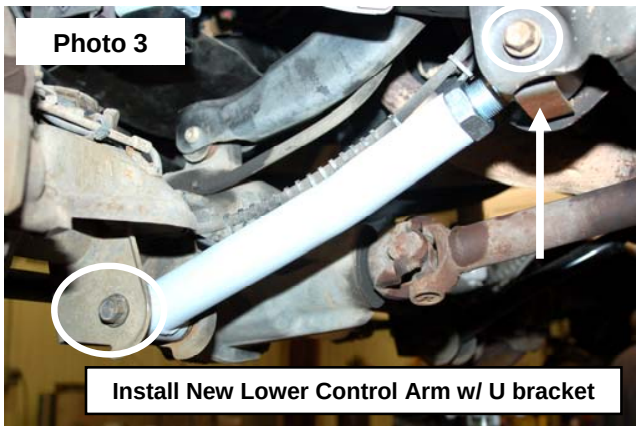
FRONT INSTALLATION INSTRUCTIONS

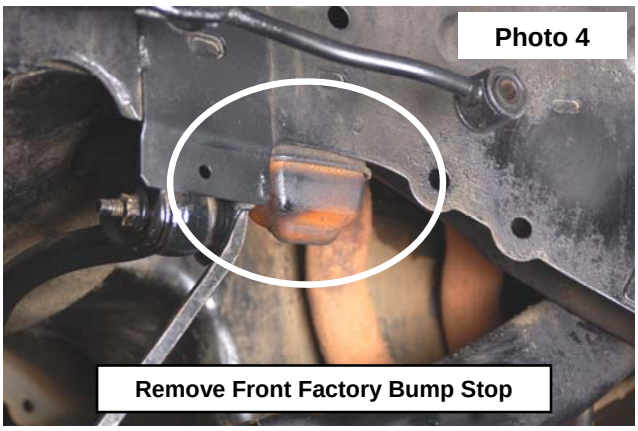
1. Chock the rear wheels and jack up the front of the vehicle and support the vehicle with jack stands.
2. Support the front axle with a floor jack.
3. Remove the lower sway bar link from the axle and the sway bar using a 15mm & 18mm wrench. **See Photo 1.**
4. Remove the shocks using a 15mm wrench/socket for the top mount and a 13mm wrench/socket for the bottom mount.
5. Lower the axle using the floor jack and remove the coil springs.
6. Remove the stock lower control arm using a 21mm wrench/socket. Retain factory hardware for re-use **See Photo 2.**





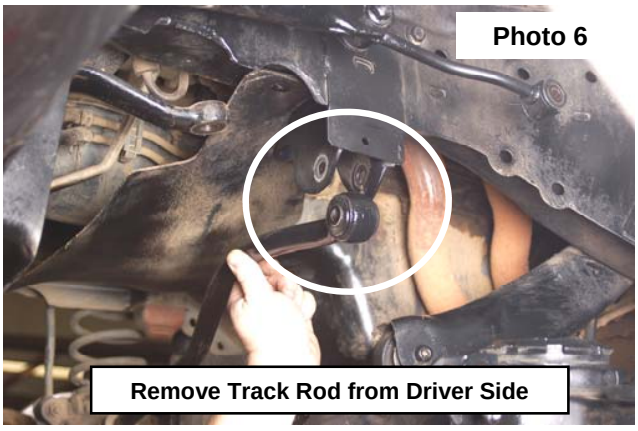
7. Lubricate, using a lithium non-water soluble grease, the supplied control arm bushings and sleeves and install them in the new lower control arms. Also install the supplied grease fittings at this time.
8. Adjust the lower control arm to a length of 16” from hole to hole and install the lower control arm on the vehicle with the **heim joint on the frame with the supplied U bracket.** Secure using the factory hardware. **See Photo 3.** Do not fully tighten at this time.
9. Using a pry bar, remove the bump stop and remove the bump stop mounts using a 13mm wrench. **See Photo 4 & 5.**



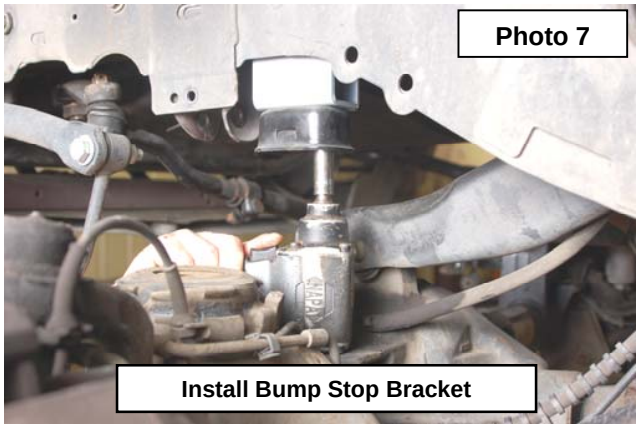


10. Remove the track bar using a 19mm wrench/socket from the driver side mount as shown in **Photo 6** and remove from the axle using a 15mm socket. Retain the axle hardware for reuse.





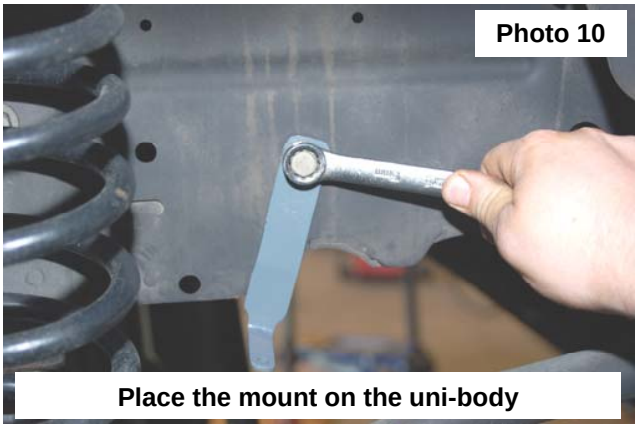
11. Install the new bump stop mounts with the supplied 8mm x 95mm (approx 3.75")bolts and washers from Bag1 using a 13mm wrench/socket. **See Photo 7.** Reinstall the factory rubber bump stops into the factory bump stop cups.
12. Install the new front coil spring using a coil spring compressor. On lower surface make sure coil end is rotated to stop and on upper mount re-use stock rubber coil isolator.
13. Install the new shock absorbers using the supplied 5/16" x 1" bolts in bag 2, washers and nuts on the bottom bar pin mount. Tighten using a 14mm wrench at the top using supplied stem bushings, washers and nuts and a 13mm wrench on the bottom.
14. Install the tires and wheels and tighten to factory specifications.
15. Jack up the vehicle ,remove the jack stands and lower the vehicle to the ground.
16. Install supplied pin on the axle with supplied crush sleeve. See **Photo 8**. Hold using a screwdriver & tighten 1/2" lock nut using a 3/4" wrench.



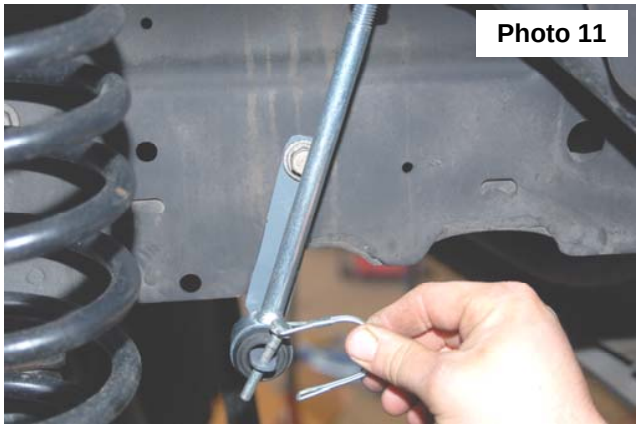


17. Assemble the sway bar link with the link body, the jam nut and rod end Adjust the sway bar to a length of 11 1/4" from top to bottom. Tighten the jam nut against the rod end using a 19mm & 5/8" wrench.
18. Install the sway bar link on the upper sway bar mount with the supplied 12mm flange lock nut. **See Photo 9**. Tighten using a 18mm & 5/8" wrench.
19. Remove the stock bolt from the vehicle on both driver and passengers side and install the sway bar bracket with stock hardware. Tighten bolt using a 15mm wrench. See Photo 10.

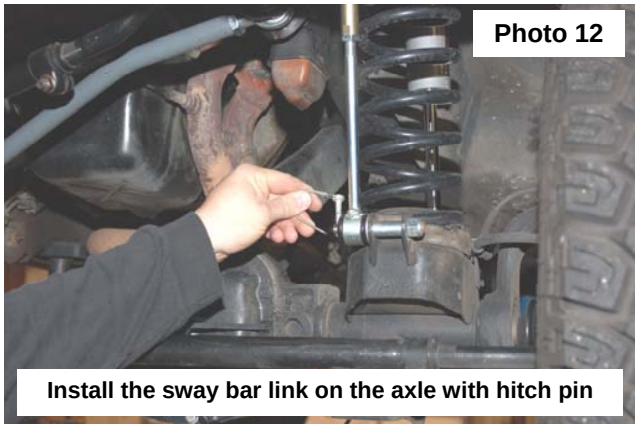




20. With the sway bar link installed on the supplied frame bracket, swing the bracket and sway bar link up and position the bracket on the frame as shown in **Photo 11**.

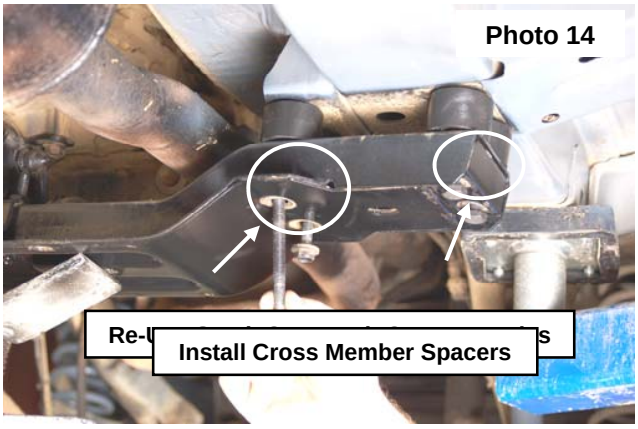


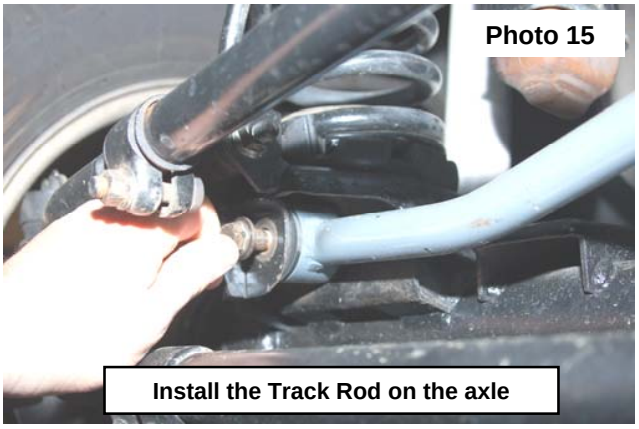
21. Install on the lower axle mounting pin. Install the disconnect pin. **See Photo 12. Note: When disconnected the hitch pin will be used on the upper mount to secure the sway bar link to the mount.**
22. Tighten the lower control arm hardware using a 21mm socket/wrench to factory specifications. **Note** Make sure flex joint housing is centered in mount before tightening jam nut. Should not be touching either side.****
23. Support the transmission cross member and remove the 4 bolts on each side using a 15mm socket**. See Photo 13.**



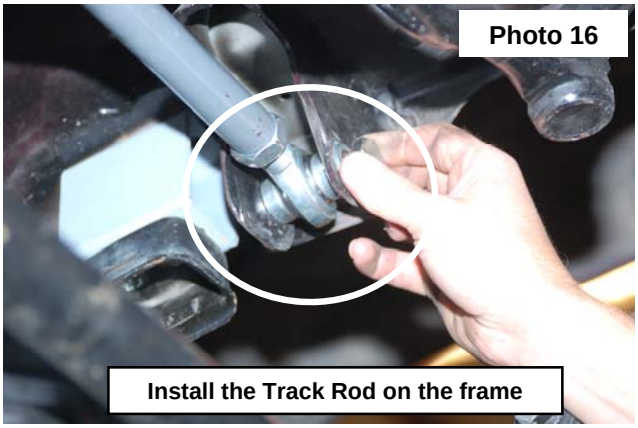


24. Lower cross member carefully leaving bolts installed but loose on one side. Install the transmission cross member spacers as shown in **Photo 14** and secure with the supplied 10mm x 140mm(approx. 5.5") bolts and washers from Bag 4 and re-using the stock outside factory bolts on the inside mount.
25. Assemble supplied bushings and sleeves in track rod and install the track bar on the axle mount with the factory hardware. **See Photo 15.** Do not tighten at this time.





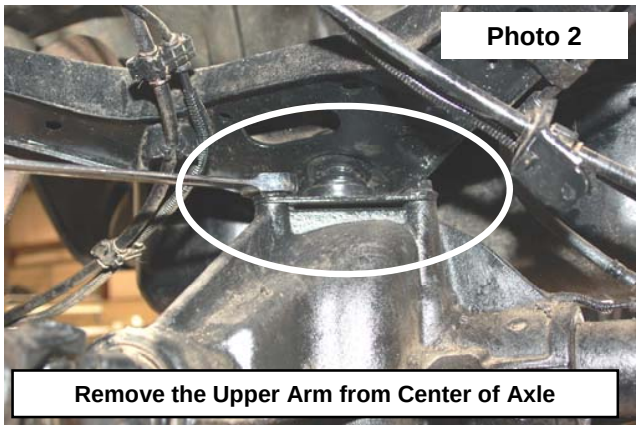
26. Assemble the spacers on the heim joint and install the track bar with supplied 12mm x 65mm (approx 2.6") bolt & flange locknut from track rod kit bag. Tighten using a 18mm & 19mm socket / wrench. **See Photo 16.**



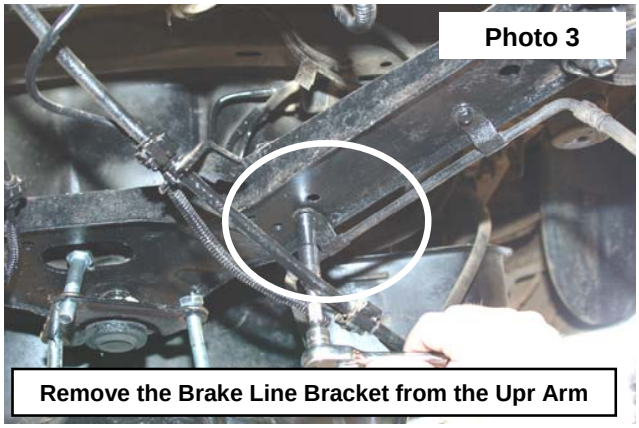
REAR INSTALLATION INSTRUCTIONS

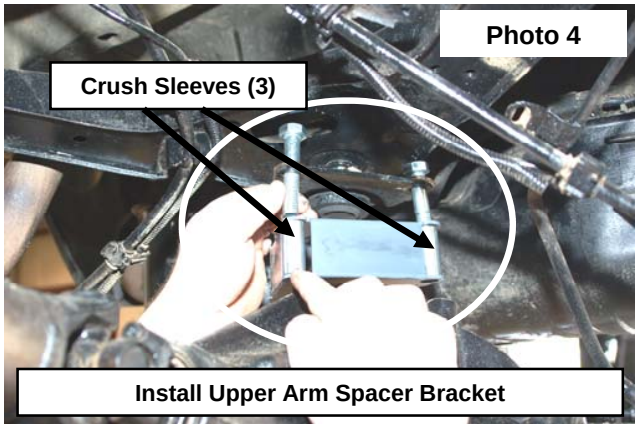
1. Chock the front tires and jack up the rear of the vehicle. Support the rear with jack stands.
2. Remove the rear shocks using a 15mm and 18mm wrench/socket.
3. Remove the top sway bar bolt using a 15mm wrench/socket. **See Photo 1.** Retain the factory hardware for reuse.
4. Using the floor jack, lower the rear end and remove the coil springs.
5. Using a 21mm socket remove the 3 bolts that secure the upper arm to the differential. **See Photo 2.**



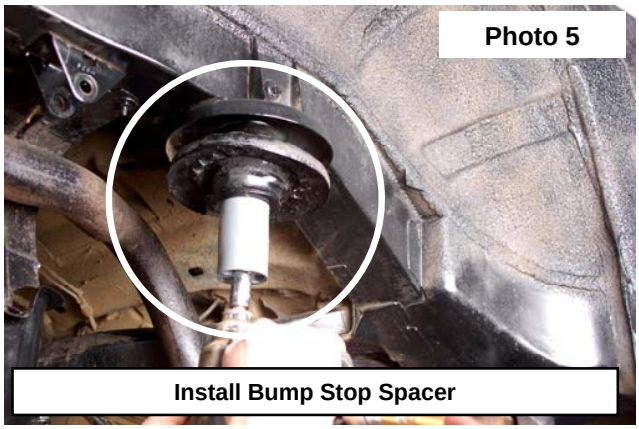


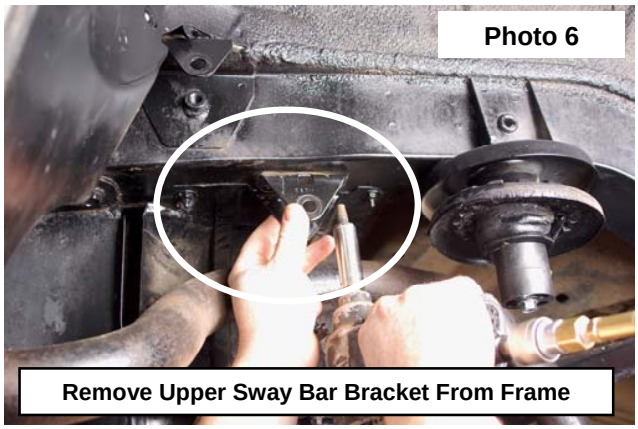
6. Remove the e-brake and brake line cable from the upper control arm using a 10mm socket to allow the control arm spacer to be installed in the next step. **See Photo 3.**
7. Lower axle enough to allow installation of control arm bracket. Install the upper control arm bracket using the supplied crush sleeves, and 14mm x 75mm (approx 3") bolts from Bag2. Tighten using a 22mm socket. **See Photo 4.**





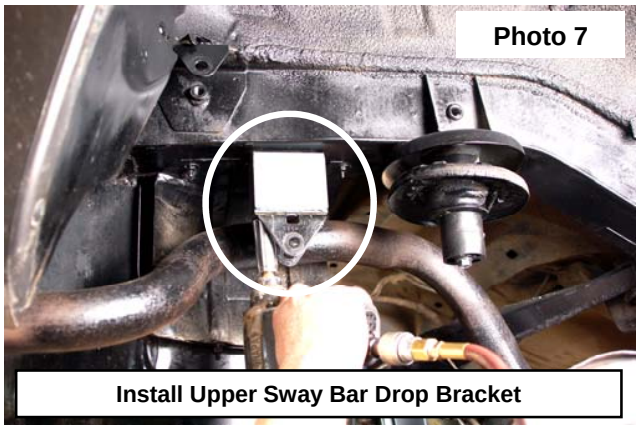
8. Install the bump stop using the supplied body puck and 3/8" x 3 1/2" self tapping bolts from Bag2. **See Photo 5. (**On vehicles with Up Country suspension remove the factory bump stop spacer.)
9. Remove the sway bar brackets from the vehicle using a 15mm wrench/socket. **See Photo 6.**



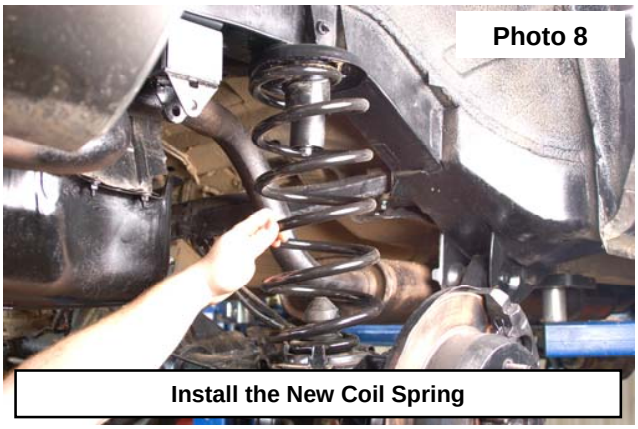


ROUGH COUNTRY
SUSPENSION SYSTEMS

10. Install the new sway bar drop brackets with the supplied 10mm x 90mm (approx. 3.5”) bolts and washers from Bag2. **See Photo 7.**
11. Install the new coil springs using a coil spring compressor to make installation easier. **See Photo 8.**
12. Reinstall the e-brake and brake line on the upper control arm and tighten using a 10mm wrench.

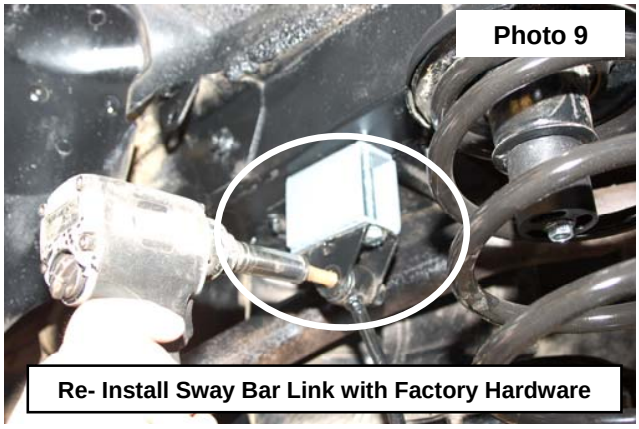


Install Upper Sway Bar Drop Bracket

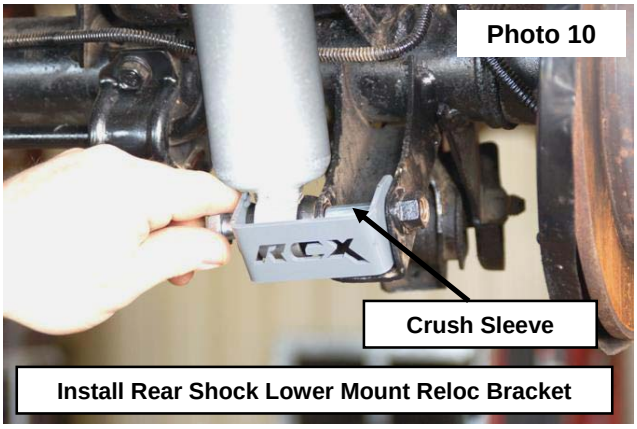


Install the New Coil Spring

13. Install the sway bar links in the sway bar bracket and tighten using a 15mm socket / wrench. **See Photo 9.**
14. Install the bushing and sleeves in rear shocks—a liquid soap may ease installation of bushing into shock eye. Install new rear shocks in the upper mount with the supplied shock sleeve /washer with the washer on the inside of the vehicle with the factory hardware. Tighten using a 15mm socket / wrench.
15. Install the lower shock brackets with the supplied 12mm x 100m (approx 4”) bolts, nuts/washers and sleeves from Bag2 and bushings/sleeve from Bag3. Tighten using a 19mm wrench. **See Photo 10.** The relocation of the shock is needed to run wider tires with stock offset wheels. Without the bracket the shock will rub the tire under travel given the 3 link design of the Jeep.



Re- Install Sway Bar Link with Factory Hardware



Install Rear Shock Lower Mount Reloc Bracket

16. Repeat steps on opposite side of vehicle.
17. Install the tires and wheels and tighten to factory specifications.
18. Jack up the vehicle and remove the jack stands.
19. Lower the vehicle to the ground.

POST INSTALLATION

1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
3. An alignment by a certified alignment professional with experience in aligning lifted vehicles must be performed. Align vehicle to factory specifications.
4. Readjust headlights to proper settings.
5. Check hardware after the first 500 miles and then every 1000 miles.

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.

DON'T FORGET YOUR ROUGH COUNTRY STEERING STABILIZER!!! CALL YOUR DEALER FOR DETAILS!!!



Part# 87317N2

Thank you for purchasing a Rough Country lift for your Jeep.

ROUGH COUNTRY
SUSPENSION SYSTEMS