



## Jeep Grand Cherokee 93-98 ZJ 4" Suspension Kit

**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 parts list on this page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have needed tools. Always wear safety glasses.

### 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.

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.

Due to inconsistency of vehicles when manufactures and various options available, the amount of actual lift gained by this lift kit could vary.

This suspension system was developed using a 31 x 10.50 x 15 tire with factory wheels. After market wheel will fit with 3 5/8" back spacing. Larger tire and wheel combinations may increase leverage on suspension, steering and related components. Consider the additional stress you could be adding on the OE components, when selecting combinations larger than OE.

### 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.

#### 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

#### TOOLS NEEDED:

- 13mm wrench
- 13mm socket
- 15mm wrench
- 15mm socket
- 16mm socket
- 18mm socket
- 18mm wrench
- 21mm wrench
- 21mm socket
- 19mm wrench
- 19mm socket
- 17mm wrench
- Floor Jack
- 13/16" Socket
- 9/16" Socket
- 7/16" Drill Bit
- T55 Torx Head
- T50 Torx head
- Jack stands
- Safety Glasses
- Drill
- WD40
- Coil Spring Compressor



## KIT CONTENTS



### Kit Contents:

**9288-Front Coil Springs**

**9289-Rear Coil Springs**

**1900 Kit Box Including:**

- 2-Fr Lower Arms (A)
- 2-Rear Upper Arms (B)
- 2-Rear Lower Arms (C)
- 2-Front Sway Bar Links (D)
- 2-Front Sway Bar Link Brackets (E)
- 1-Rear Track Bar Bracket (F)
- 2-Rear Sway Bar Brackets (G)
- 2-Rear Bump Stop Brackets (H)
- 2-Front Bump Stop Spacers (I)
- 1-Rear Brake Line Bracket (J)

**1687Hydro Box containing:**

Fr Shock-#651896BP (K)

Rr Shock-#650328 (L)

**OR**

**1687Nitro Box Containing:**

Fr Shock-#651997

Rr Shock-#650380

### Kit Bags:

**1687BAG1:**

**For Front Bump-stop:**

2-3/8" x 3 1/2" Self Tapping Bolt

**For Front Sway Bar Bracket:**

2-3/8" x 1 1/4" Bolt

2-3/8" Large OD Flat Washer

2-3/8" Flange Locknut

**For Front Sway Bar Link:**

2-12mm x 65mm Bolts

2-12mm Flange Lock Nuts

4-12mm ID Sleeves

4-Flat Washers

**1687BAG2:**

**For Rear Arm Brake Bracket:**

2-5/16" x 3/4" Bolts

2-Flat Washers

2-Flange Lock Nuts

**For Rear Bump Stop:**

4-8mm x 70mm Bolts

4-Flat Washers

**For Rear Sway Bar Drop Brackets:**

4-10mm x 55mm Bolts

4-Flat Washers

**For Rear Track Rod Bracket:**

1-7/16" x 1" Bolt

2-Flat Washer

1-Crush Sleeve

1-12mm x 65mm Bolt

1-12mm Flange Lock Nut

1-Flat Washer

**1696BAG3:**

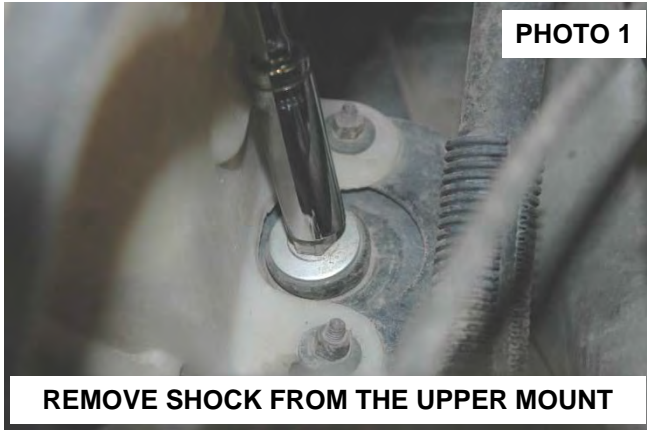
**For Rear Upper Control Arms**

8-Bushings

4-Sleeves

## FRONT INSTALLATION

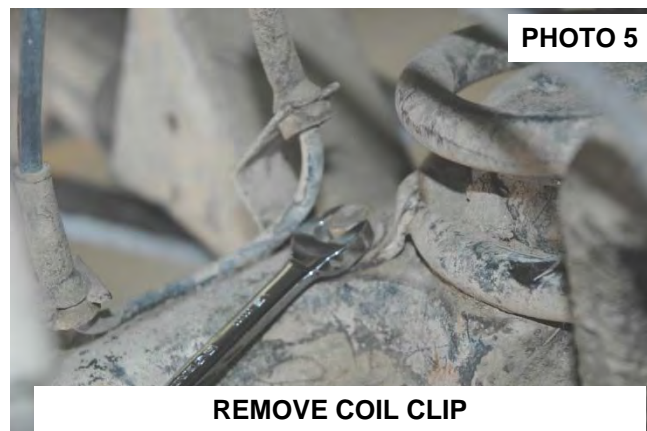
1. Place the vehicle on a level surface. Set the parking brake. Center the front wheels and chock the rear wheels.
2. From inside the engine compartment, using a 13mm deep well socket, remove the upper stud nut, washer and bushings from the front shocks. **See PHOTO 1.**
3. Jack up the vehicle and place jack stands on the frame rail behind the lower control arm mount.
4. Remove the front tires/wheels, using a 13/16 deep well socket.
5. Place a floor jack underneath the axle for support and remove the lower shock bolts from the front shocks using a 13mm socket and wrench. Retain the factory lower bolts for reuse. **See PHOTO 2.**



6. Using a 15mm wrench and 18mm wrench for the upper bolt and a T-55 torx head for the lower bolt, remove the sway bar links. **See PHOTO 3.**
7. Remove the lower track bar bolt on the axle side using a 15mm socket. Retain the factory hardware for reuse.
8. The track rod will be repositioned on the axle. To do this measure directly over 3/4", mark and drill using a 7/16" drill bit. **See PHOTO 4.**



9. Using a 13mm wrench remove the driver and passenger side coil retainer. Lower the axle and remove the coil spring. A coil spring or strut compressor may be needed to remove the stock coil. Pull the ABS sensor wire from the stock mount. If needed, spray the line with WD40 to allow the mount on the wire to slide. **See PHOTO 5.**
10. Mark the original position of the eccentric cams on lower control arm. Using a 21mm socket & 18mm wrench remove the stock lower bolt from the axle. Using a 21mm socket and wrench, remove the frame bolt from the lower control arm. Remove the arm. Retain the factory hardware for reuse. **See PHOTO 6.**



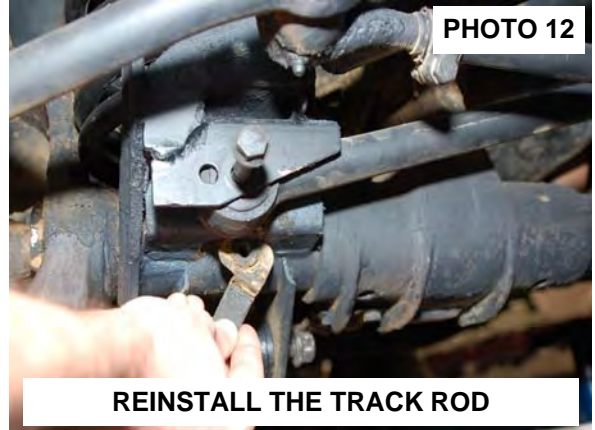
11. Install the lower control arm in the frame mount with the stock hardware. Do not tighten at this time. **See Photo 7.**
12. Install the lower control arm in the axle mount with the stock hardware. Do not tighten at this time. **See Photo 8.**



13. Drill the center of the coil seat using a 11/32" drill bit and install supplied 3/8" x 3.5" self tapping bolt from 1687 bag2 using a 9/16" wrench. screw bolt into the center of the coil spring plate to tap a hole for the bump-stop to be installed in the next step.
14. Install the new coil spring, with the nylon bump-stop and bolt from the above step in coil. A coil spring or strut compressor will be needed to install the new coil spring. Install the new spring into the upper and lower coil spring seat. Make sure the coil spring is seated properly on the coil seat, by rotating the spring until the pigtail end fits into the spring pocket. Using a 9/16" wrench secure the bump-stop back in place. **See PHOTO 9.** Install the coil spring clip using a 13mm wrench. Torque to 16ft/lbs.
15. Install the new sway bar hoop on the sway bar where the stock link was secured, using the supplied 3/8" x 1 1/4" bolt large OD flat washer and flange lock nut. **See PHOTO 10.**



16. Install the bushings and 12mm sleeves on the top and bottom of the sway bar link at this time. Install the upper part of the new link in the hoop bracket with the 12mm bolts and flange lock nuts. The bolt will be installed with the threads out and head toward the frame. Install the lower link in the stock mount with the 12mm bolts, washers and nuts. Hardware is in 1687Bag1. Tighten using a 18mm and 19mm wrench. **See PHOTO 11.**
17. Install the track bar in the axle mount location as shown in **PHOTO 12**. Install the stock bolt in the upper hole and tighten. Assemble the front shock absorbers, part # 651896 hydro / 651997 Nitro and install using the factory hardware on the bottom of the shock. Torque to 20 ft/lbs, Install the upper stud bushings and tighten the upper mounting point until bushing swells slightly Repeat for opposite side.



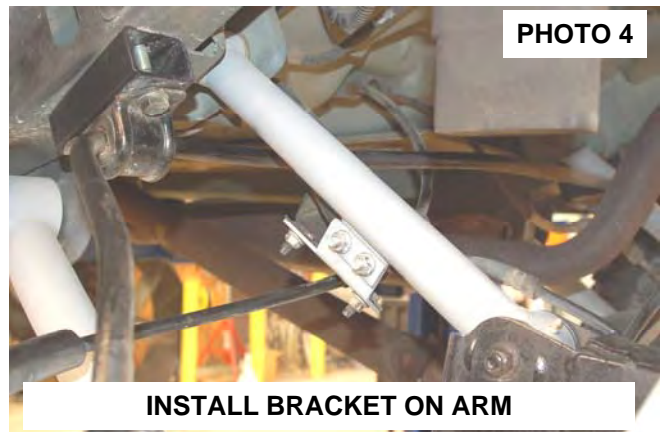
18. Install the tires/wheels and lug nuts, using a 13/16" deep wheel socket. Lower the vehicle to the ground.
19. Tighten the lower control arms, using a 21mm socket and 21mm /18mm wrench.
20. Tighten the upper control arms using a 15mm & T-50 bit.

## REAR INSTALLATION

1. Chock the front wheels. Jack up the rear of the vehicle and support the vehicle with jack stands, so that the rear wheels are off the ground.
2. Remove the rear tires/wheels, using a 13/16" deep well socket. Place a floor jack under the differential.
3. Remove the rear track bar from the frame mount on the passenger side using a 18mm wrench and T55 torx head. Loosen the track bar on the axle side using a T55 and 18mm wrench.
4. Using a 18mm socket and a 15mm wrench, remove the rear shocks. Retain the shock hardware for reuse.
5. Using a 15mm socket disconnect the sway bar bracket from the frame. **See PHOTO 1.**
6. Using a 13mm wrench remove the coil spring retainer. Retain factory hardware.
7. Lower the axle and remove the stock coil spring. A coil spring or strut compressor may be needed to remove the stock coil.
8. Using a 21mm socket and wrench remove the lower control arm. Retain the factory hardware.
9. Install the lower control arm on the axle and frame in the factory location using factory hardware. Do not tighten at this time. **See PHOTO 2.**



10. Using a 13mm wrench unbolt the brake line bracket from the upper control arm. **SEE PHOTO 3.**
11. Using a 15mm socket, wrench and a T-50 torx head, remove the upper control arm from the axle and frame mounts. Retain the factory hardware for reuse.
12. Apply light grease to bushings & sleeves and insert the supplied bushings and sleeves in the upper control arm.
13. Install the upper control arm in the factory mounts using factory hardware. Do not tighten at this time.
14. Using a 13mm wrench, reinstall the brake lines to the control arm with the supplied bracket as shown in **PHOTO 4.** Secure the brake line bracket to the arm with supplied 5/16" x 3/4" bolts, nuts & two flat washers.



15. Pull the stock rear bump stop out of the mount. Using a 13mm socket, unbolt the 2 bolts holding the bracket to the frame.
16. Using the 2-8mm x 70mm bolts and flat washers from 1687bag2, install the bump stop extension bracket along with the stock bracket to the frame. Tighten using a 13mm socket. Reinstall the factory rubber bump stop in the cup. **See PHOTO 5.**
17. Install the new spring into the upper and lower coil spring seat. **A coil spring or strut compressor will be needed to install the new coil spring.** Make sure the coil spring is seated properly into the coil seat, by rotating the spring until the pigtail end fits the spring pocket. Install the coil spring clip using a 13mm wrench, Torque to 16ft/bs.
18. Install the new sway bar drop brackets in between the frame and the sway bar mount as shown in **PHOTO 6.** Using the 10mm x 55mm bolts and washers supplied in 1687bag1. Tighten using a 17mm wrench.



**INSTALL BUMP STOP SPACER**

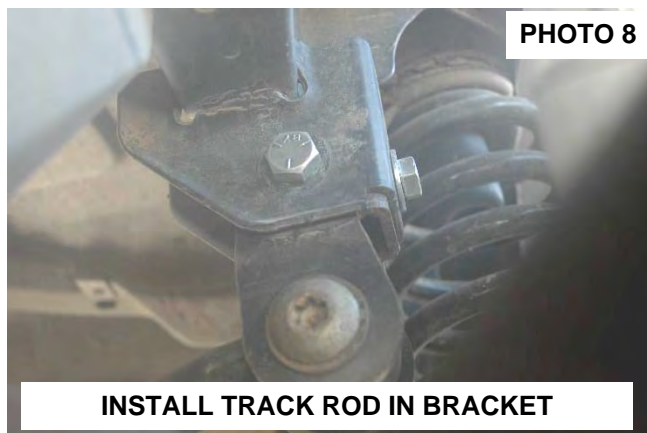


**INSTALL SWAY BAR BRACKETS**

19. Assemble the new shocks. Part 650328 hydro / 650380 Nitro with bushings /sleeves.
20. Install the shock into the factory location using the stock hardware. Tighten using a 15mm and 18mm socket. Tighten the upper to 25 ft/lbs and the lower to 55 ft/lbs.
21. Install the new track bar bracket into the stock frame mount on the passengers side using the 7/16" x 1" bolt, washers and nut from 1687bag2, using a 16mm socket and wrench. Bolt the new bracket to the mount. Insert the sleeve from 1687bag2 into the new bracket and insert the 12mm x 65mm bolt, washer through the bracket and sleeve where the track bar was bolted stock. Tighten using a 19mm wrench and socket. Flip the track bar from end to end and install into the new bracket and axle bracket with the stock track bar bolts.. Using a T55 and 18mm wrench torque to 50ft/lbs. **See PHOTO 7 & 8.**



**INSTALL THE TRACK ROD BRACKET**



**INSTALL TRACK ROD IN BRACKET**

22. Install the tires/wheels and lug nuts. Using a 13/16" deep well socket. Lower the vehicle to the ground.
23. Tighten the lower control arms using a 21mm socket and wrench.
24. Tighten the upper control arms using a 15mm socket and T-50 torx head bit.
25. Thoroughly grease all grease fittings in the suspension links

### **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. Ensure there is adequate clearance between exhaust and brake line, fuel lines, fuel tank, and wiring harnesses. Failure to perform inspections may result in component failure.
3. Check clearance between the inner side wall of tires and links. It may be necessary to adjust steering stops.
4. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
5. Readjust headlights to proper settings.
6. Vehicle will have to have an alignment.
7. Some vehicles may experience drive line vibrations. Angles may require tuning, shafts may need to be lengthened or trued, and u-joints may need to be replaced.

### **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**



When it comes to quality performance suspension parts, Rough Country is the brand you can depend on.