

Jeep Grand Cherokee 93-98 ZJ 4" Longarm

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

Certain Rough Country Suspension products especially long arm kits are intended to improve off-road performance. The addition of this kit may result in the vehicle handling differently than a factory equipped vehicle. As a rule 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.

This kit features Rough Country's adjustable joint design. Adjustable end tool is included in kit. Assemble the joints per the separate instruction sheet Part # 92RCJ120 provided.

Due to inconsistency of vehicles when manufactures and various options available, the amount of actual lift gained by this lift kit could vary. Muffler modification or off-road mufflers are required on this kit.

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:		TOOLS NEEDED:		
Size	Grade 5	Grade 8	8mm wrench / socket	9/16" wrench / socket
3/8"	30 ft/lbs	35 ft/lbs	10mm wrench / socket	5/8" wrench / socket
7/16"	45 ft/lbs	60 ft/lbs	11mm wrench / socket	3/4" wrench / socket
1/2"	65 ft/lbs	90 ft/lbs	12mm wrench / socket	Crescent wrench
9/16"	95 ft/lbs	130 ft/lbs	13mm wrench / socket	T55 Torx Head
5/8"	135 ft/lbs	175 ft/lbs	15mm wrench / socket	T50 Torx head
			16mm wrench / socket	Safety Glasses
	Class 8.8	Class 10.9	18mm wrench / socket	Drill
8MM	18ft/lbs	23 ft/lbs	19mm wrench / socket	11/32 drill bit
10MM	32ft/lbs	45ft/lbs	21mm wrench / socket	1/4" drill bit
12MM	55ft/lbs	75ft/lbs	22mm wrench / socket	15/32" drill bit
14MM	85ft/lbs	120ft/lbs	Floor Jack	3/4" or step drill
			Jack stands	WD40
			Hammer	Coil Spring Compressor
			Reciprocating Saw	ROUG





HARDWARE BAGS

1905BAG1

<u>In 1905BOX3</u>: 4-10mm x 35mm Bolts 4-10mm Flat Washers 8-7/16" x 1 1/4" Bolt 10-7/16' Flat Washers 2-3/8" x 3 1/2" Self Tapping Bolt

1905BAG2

in 1905BOX1 2-9/16" x 4" Bolts 4-9/16" Flat Washers 2-9/16" Lock Nuts 2-10mm x 80mm Bolts 2-10mm Lock Nuts 4-10mm Flat Washers

1905BAG3

<u>in 1905BOX1</u> 4-1/2" ID x 3 3/8" Long Crush Sleeves 4-1/2" x 5" Bolts 8-1/2" Flat Washers 4-1/2' Lock Nut 4-7/16" x 1 1/2' Bolts 4-7/16" Flat Washers

1905BAG4

in 1905BOX4 4-9/16" x 4" Bolts 8-9/16" Flat Washers 4-9/16" Lock Nuts 94000968BAG / 94000968BAG2 / ES505BAG in 1905BOX1 2-1/2" Lock Nut 2-1/2" Flat Washer 2-1/2" Lock Nut 2-Double Wire Hitch Pin 2-3/8" x 1 1/4" Bolt 2-3/8" Lock Washer 4-5/16" x 1" Self Tapping Bolts 2-Upper Sway Bar Mounts 2-Lower Pins

2-3/8" Flat Washers

Continued... 1905BAG6

<u>In 1905BOX1</u> 4-3/8" x 1' Bolts 4-3/8" Flange Lock Nuts

1905BAG7

In 1905BOX4 2-3/8" x 1 3/4" x 2 5/8" U-bolt 4-3/8" Flange Lock Nut 1-5/16" x 1 1/2' Bolt 9-5/16" Flat Washers 1-Brake Line Clip 2-Cable Ties 4-5/16"x 1" Bolts 4-5/16" Lock Nuts 1-7/16" x 1' Bolt 1-7/16" Lock Nut 2-7/16' Flat Washer 1-12mm x 65mm Bolt 1-12mm Flat Washer 1-12mm Flange Lock Nut 1-Crush Sleeve 4-3/8" x 1" Bolts

1905BAG8

In PERF2.24ZJLA Shock Box 2-Rear Lower Sleeves 2-Front Upper Stud Bushing Bags

RCJ110Bag Large Joint Bags & RCJ111Bag– Small Joint bags-Qty 4 each Bags In 1905Box2 & 1905Box4

1-Threaded Ring 1-10/32"Set Screw 1-Flex Joint Flat Washer 1-Flex Joint Ball 2-Flex Joint Bushings 1-Snap Ring 1-1 1/4" Jam Nut 1-Grease Fitting

1079- Front Track Bar Bracket Box

In 1079 1-Track Bar Sleeve 2-Track Bar Bushings 1-3/4" Jam Nut 2-7/16" x 2 3/4" Bolts 4-7/16" Flat Washers 2-7/16" Lock Nuts 2-Heim End Spacers



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.



REMOVE SHOCK FROM THE UPPER MOUNT



- 6. Using a 15mm wrench and 18mm wrench for the upper bolt and a T55 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 and the upper track bar bolt on the frame side, using a 15mm socket. See PHOTO 4.



REMOVE THE SWAY BAR FROM THE AXLE



REMOVE TRACK BAR BOLT

- 8. 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. Spray the line with WD40 to allow the mount on the wire to slide. See PHOTO 5.
- 9. 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. Retain the factory hardware fro reuse. See PHOTO 6.
- 10. Using a 15mm socket and T50 torx head, loosen and remove the upper control arms.







REMOVE THE LOWER CONTROL ARM

- 11. Remove lower control arm pockets with a cut off wheel. Cut down the dotted line as shown and along the back side of the control arm pocket flush with the bottom of the uni-body. Grind down all welds and burrs, then paint to prevent rusting. See PHOTO 7.
- 12. Place a jack or jack stand under the transmission, remove the 4 factory bolts holding the transmission mount to the cross-member. Using a 15mm socket. See PHOTO 8. Next remove the 2 outer bolts on each side of the factory cross-member, so the cross-member can be removed. Using a 15mm socket. See PHOTO 9. <u>If the vehicle has a 2</u> bolt transmission mount the steps on page 14 must be followed prior to installing the new cross-member.



13. Install the new cross-member with 4 -10mm x 35 bolts using a 16mm wrench. See PHOTO 10.



- 14. Using the cross-member as a template, drill 4-15/32" holes (2 each side) on each front side of the cross-member. **See PHOTO 11.**
- 15. Using the 4 short 7/16" thread flag nuts, insert two of them on each side of the cross-member. See PHOTO 12.





- 16. Install 4) 7/16" x 1 bolts and washers, tighten with a 5/8 socket. See PHOTO 13.
- 17. Next install the factory nuts on the cross-member holding the transmission mount with a 15mm socket. See PHOTO 14.



- 18. Using a body saw cut out the opening for the flagnuts by following the outside profile of the dimple in the frame. **See PHOTO 15.**
- 19. Using the cross-member as a template drill 4- 15/32" holes (2 Each Side) on each side of the factory 10mm bolts. See PHOTO 16.



- 20. Using the 94003181 flag nut for the driver side rear hole and the 94003182 flag nut for the passenger side rear hole as shown, tighten using a 7/16" x 1.25 bolt and washer and a 5/8 socket. See PHOTO 17. Note: The tabbed nuts can be held with pliers.
- 21. Using the 94003179 flag nut for the driver side middle hole and the 94003180 flag nut for the passenger side middle hole as shown. Tighten using a 7/16" x 1.25 bolt and washer and a 5/8 socket. See PHOTO 18. Note: The tabbed nuts can be held with pliers.





- 22. Thread the assembled 1 1/4" flex joint into lower arm and adjust the arm length to **29 5/16**" long center hole to center hole. Install the control arm into the cross-member using the supplied 9/16" X 4 bolts, washers, and nylocks. **See PHOTO 19.**
- 23. Insert the factory cam bolts into the rubber bushing end of the lower control arm, align the cam bolt markings made earlier. Tighten both ends of the lower control arm with a 21mm wrench and a 22mm socket. **See PHOTO 20.**



- 24. Thread the assembled 3/4" flex joint into the upper control arm and adjust the arm length to **15 3/8**" long center hole to center hole. Install the upper control arm as shown, using the supplied 10mm x 80 bolts, washers, and nylocks. **See PHOTO 21.**
- 25. Using the factory hardware bolt the upper control arm to the axle bushing as shown. Tighten both ends of the upper control arm with a 12mm socket and wrench. See PHOTO 22.



- 26. Tighten the upper jam nut with a 1 1/8" wrench and the lower jam nut with a 1 7/8" wrench or cresent wrench.
- 27. Repeat steps 20-24 on the passenger side.
- 28. Using the 4 supplied 3/8" x 1 bolts install the cross-member skidplate with a 9/16" socket.
- 29. Remove the 4 bolts holding the factory track bar bracket with a 18mm socket. Retain hardware for reused.
- 30. Install the supplied track bar bracket on the frame with the factory fasteners. Tighten with a 18mm socket. See PHOTO 23.
- 31. Install the sway bar link mounting bracket to the sway bar with a 3/8" x 1 1/4 bolt, washer, and lock washer. Tighten with a 9/16 wrench. See PHOTO 24.





- 32 Install sway bar link into upper sway bar mounting bracket as shown. Tighten with a 18mm and 5/8 wrench. See PHOTO 25.
- 33 Mount supplied disconnect pin to the axle bracket with 1/2" nylock and washer. Use a screwdriver through the hole of the disconnect pin and a 19mm socket to tighten.
- 34 Next rotate the sway bar link up to hold the sway bar, mark and drill holes for the sway bar link mounting bracket using a 1/4" drill bit. Install the 2 supplied 5/16" x 1 self tapping bolts. Tighten with a 1/2" socket, do not over tighten. See PHOTO 26.



- 35 Drill a 11/32 hole in the center of the axle bumpstop pad.
- 36 Install the new coil springs with new 3" tall bump stop extention inside, using the supplied 3/8" x 3.5 self tapping bolt. Tighten with a 9/16 wrench. Using a 13mm wrench install the driver and passenger side coil retainer. See PHOTO 27.
- 37 Assemble the track bar with the bushing and sleeves in one end and the heims and jam nut on the other. Adjust the bar length to 31 7/8", then tighten jam nut with a 1 1/8" wrench. Using the 7/16" x 2 3/4 bolt, washer, and top-lock attach the track bar bushing end to the frame bracket. Tighten with a 5/8 and 11/16 wrench. **See PHOTO 28.**



- 38 Assemble misalignment spacer into heims joint and bolt into the axle bracket using a 7/16" x 2 3/4 bolt, washer, and nut. Tighten with a 5/8 and 11/16 wrench. **See PHOTO 29.** It may be necessary to lower vehicle to the ground to align the bolt hole.
- 39 Assemble front shocks and install as shown with a 13mm wrench for the bottom and a 14mm wrench for the top mount. See PHOTO 30.
- 40 Install the tires/wheels, using a 13/16" socket. Lower the vehicle to the ground.



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**. Using a 8mm wrench for the sway bar link and a 15mm wrench on the nut, remove the link from the axle. **See PHOTO 2**. The rear sway bar will not be used in this kit.





- 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. See PHOTO 3. Retain the factory hardware.
- 9. Remove the brake line bracket from the drive side upper control arm with a 10mm wrench, next remove the brake line clip holding the brake line to the bracket. See PHOTO 4 & 5. Discard the factory bracket.



10. With a 10mm wrench remove the e-brake bracket from the passenger side upper control arm. See PHOTO 6.





- 11. Remove the upper control arm using a 15mm wrench and a T55 torx head.
- 12. Remove the lower control arm pocket with a cut off wheel. Cut down the line shown in **PHOTO 8** and along the back side of the bracket flush with the bottom of the unibody. Grind down all welds and burrs, then paint to prevent rust-ing.



13. Using a cutting blade remove the factory muffler, this muffler can not be used with the longarm kit. A smaller aftermarket muffler is required. See PHOTO 9 &10.



- 14. With a 11mm socket remove the 5 rear nuts of the studs holding the heat shield to the bottom side of the body. This will provide you will more room to cut off the rear upper control arm mounts. **See PHOTO 11.**
- 15. Remove the factory brake line bracket from the driver side upper control arm pocket with a 10mm wrench. Next remove the brake line clip so the line can be pulled out of the bracket. Take care not to kink or bind the steel line. The two ABS wire will also nee to be removed from this bracket. This bracket is later re-installed on the control arm. See PHOTO 12.





- 16. Using a cutting blade remove upper control arm mounting pockets, cut the pockets flush with the inside of the unibody. Grind down all welds and burrs, then paint to prevent rusting. **See PHOTO 13.**
- 17. Next install one of the 94003183 flag nuts on the driver side toward the rear and one of the 94003184 flag nuts to the front. See PHOTO 14.



- 18. Using 2) 7/16" x 1.25 bolts and washers, bolt the upper control arm mount to the body. Tighten using a 5/8 socket **See PHOTO 15.**
- 19. Using the bracket as a template drill through the body on both sides with a 17/32 drill bit. Next remove the bracket with a 5/8 socket so that the outer holes can be enlarged. **See PHOTO 16.**



- 20. With a 3/4" drill bit or a step drill bit, open up the 2 outer holes of the body so a crush sleeve can be installed. **See PHOTO 17.**
- 21. Using 2 of the 3/4 x 3 3/8 crush sleeves insert them into the outer drilled holes. It may be required to use a hammer to install these sleeves. See PHOTO 18.



- 22. Using 2) 7/16" x 1.25 bolts and washers, bolt the upper control arm mount to the body. Tighten using a 5/8 socket. Next install the 2) 1/2" x 5 bolts and washers through the bracket and crush sleeve. The bolt has to go in from the outside, holding the 1/2" toplock nut in a 3/4 wrench slide the nut inside the cut out to tighten. **See PHOTO 19.**
- 23. Install the assembled 3/4" flex joint into the rear upper control arm, adjust the length to 39" center to center. Install the rubber bushing end of the control arm into the frame bracket with a 9/16" x 4 bolt and washer. Holding the 9/16" toplock nut with a 22mm wrench slide the nut inside the cut out. Hand tighten. See PHOTO 20.



- 24. Install the upper control arm into the axle mount with factory hardware with the head of the torx bolt towards the outside. Tighten with a 15mm wrench **See PHOTO 21.**
- 25. Install the 1 1/4" flex joint into the lower control arm , adjust the length to **38 7/8**" center to center. Install the flex joint end of the lower control arm to the frame bracket with a 9/16" x 4 bolt, washer, and nut. Tighten with a 21mm and 22mm wrench. **See PHOTO 21.**





- 26. Install the rubber bushing end of the lower control arm to the axle with factory hardware. Hand tighten. **See PHOTO** 23.
- 27. Tighten the upper jam nut with a 1 1/8" wrench and the lower jam nut with a 1 7/8" wrench or cresent wrench.
- 28. Repeat steps 17-27 on the passenger side.
- 29. Slide the 3/8 x 1 3/4 long u-bolt onto the control arm bolting up the brake line bracket. Tighten with 2) 3/8 flangelocks and a 9/16 socket. See PHOTO 24. Next flip over the factory brake line bracket and use stock hardware to attach with a 10mm wrench.





- 30. Using the supplied brake line bracket and 5/16" x 1.5 bolt, washer, and nut, bolt the brake to the body. Tighten with a 1/2" wrench. Next insert the brake line into the bracket and attach with the supplied brake line clip. **See PHOTO 25.**
- 31. Next unclip the ABS wire on the axle tube, pull the wire over the track bar bracket. This will allow enough slack for a ABS wire not to pull tight when the suspension is extended. See PHOTO 26.



32. Use the 2 supplied cable ties to hold the ABS wires in place. See PHOTO 27 & 28.



- 33. Install the new track bar bracket into the stock frame mount on the passenger side using the 7/16" x 1 bolt, washer, and nut. Tighten using a 5/8 socket and wrench. Insert the crush sleeve inside the track bar bracket and bolt the bracket to the frame using a 12mm x 65 bolt, washer, and flangelock. Tighten using a 19mm socket and wrench. See PHOTO 29.
- 34. Install the bar with the stock hardware in the new bracket. Tighten with a 18mm wrench and a T55 torx torque to 50ft/lbs. See PHOTO 30. Installation on the axle can be completed with the vehicle on the ground.



- 35. Pull out the stock rear bump stops of the factory cup. Using a 13mm socket remove the 2 bolts holding the cups to the frame.
- 36. Install the extended bump stop bracket with the stock bolts. Make sure the bracket is angled to the rear axle. Tighten with a 13mm socket. See PHOTO 31.
- 37. Bolt the factory cup to the bump stop with the supplied 5/16" x 1 bolts, washer, and nylocks. Tighten with a 1/2" wrench and socket. See PHOTO 32.





- 38. Install the bump stop into the factory cup. See PHOTO 33.
- 39. Install the new coil spring, a coil spring compressor may be needed to install the new coil. Locate the factory coil spring clip and tighten using a 13mm wrench. See PHOTO 34.



- 40. Assemble the rear shock part # 660584 with the supplied sleeves. Install the shock as shown with factory hardware, using a 18mm socket on the top and a 15mm wrench and 18mm socket on bottom. **See PHOTO 35 & 36.**
- 41. Install the tires/wheels and lug nuts using a 13/16" socket., then lower the vehicle to the ground.
- 42. Using a 21mm and 22mm wrench tighten the rubber bushing on the upper and lower control arms.
- 43. Align the track rod with the axle mount by using a floor jack and install the track rod on the axle using factory hardware.





2 BOLT TRANSMISSION MOUNT

1. Using a 18 and 19mm wrench remove the bolt holding the transmission mount as shown. See **PHOTO 1 & 2**. Retain stock hardware for reuse.



- Next bolt the supplied transmission mount to the cross-member using the 4 supplied 3/8" x 1 bolts and flange locks. Tighten with a 9/16" socket and wrench. See PHOTO 3.
- 3. Install stock hardware using a 18mm and 19mm wrench. See PHOTO 4.







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.
- 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.

