# Jeep Cherokee 1984-2001 5.5" or 6.5" Short Arm Lift Kit Installation Instructions



Iron Rock Off Road, Inc. 952-210-7185 Website: <u>www.ironrockoffroad.com</u> E-mail: Contactus@ironrockoffroad.com

## **Safety Warning:**

Installing a suspension lift kit raises the center of gravity of the vehicle. This increases the possibility of a rollover accident. Avoid sudden maneuvers at high speed and avoid all situations where a side rollover may occur. In addition larger tires decrease braking performance, please drive accordingly. We recommend a tire and wheel combination that make the vehicle's track width wider (wheels with less backspacing). This will lower the center of gravity and add stability. We also recommend that this system be installed by a qualified professional. Knowledge of suspension component function is necessary for safe installation and post installation inspections. Be sure to re-torque all suspension components and lug nuts after the first 100 miles of use, and frequently inspect all safety critical suspension components.

## Before you begin:

- Read all safety warnings.
- $\circ$  Read and understand installation instructions.
- Check all steering and suspension components for wear and replace as needed.
- Contact Iron Rock Off Road with any questions before, during, or after installation.
- Ensure that all parts are present and in good condition:

## **Front suspension:**

- 1. Lift front of vehicle and support with tall jack stands under the unibody frame. \*Tip: break lug nuts loose before lifting vehicle.
- 2. Ensure that vehicle is safely supported.
- 3. Remove front tires.
- 4. Remove front shocks.
- 5. Remove front sway bar links.
- 6. Remove track bar. A ball joint separator tool is helpful for removing the unibody end.
- 7. Loosen all upper control arm bolts (do not remove).
- 8. Place a floor jack under the driver's side of front axle for support (do not lift vehicle).
- 9. Remove one lower control arm.
- 10. Remove the coil spring clamp (at the axle).
- 11. Lower axle as far as needed to remove coil spring.
- 12. Install new spring in vehicle being careful to align the spring to the spring bucket on the axle.
- 13. Install new lower control arm, do not tighten bolts at this time. If needed, remove other side lower control arm to allow enough movement to install the new longer control arm. Be sure to have a jack under the axle and beware that the axle can shift or move with both control arms removed. Use a floor jack and ratcheting straps as needed to position axle.
- 14. Install second coil spring being careful to align the spring to the spring bucket on the axle.
- 15. Remove upper control arms and install new upper control arms. Do this one at a time if possible. Do not tighten bolts at this time. For fixed length control arms with 2 mounting holes on the axle end, use the hole that provides a shorter control arm length. Orientation of the control arm does not matter.
- 16. If you have the tie rod end style track bar install the jam nut on the tie rod end install the grease zerk. Pre-grease the tie rod end, cycle the tie rod end through its entire range of motion and grease again. Thread the tie rod end into the track bar and adjust the length to 34" from outside edge to outside edge for 5.5" kit and 34-1/4"for the 6.5" kit. If you have the double shear track bar with poly bushings at both ends and new bracket, adjust the track bar length to 32-7/8" center to center for the 5.5" kit and 33-1/8" for the 6.5" kit. This is a starting length and may need to be adjusted after a test drive.
- 17. Grease and install the polyurethane track bar bushings.
- 18. If equipped, install the replacement track bar bracket using the original hardware.
- 19. Install the track bar and using the provided 7/16" x 2-1/4 bolt and nut for the axle end and provided hardware for the uni-frame end. Use a floor jack and ratcheting straps as needed to position axle.
- 20. Install new front shocks using provided bolts, washers, and nuts. Tighten upper stud mount nuts just enough to slightly compress the bushings. Overcompressing these bushings will result in damage to the bushings and premature bushing failure.
- 21. Locate front sway bar links (8.75" or 10.75" center to center), 2 u-brackets, and hardware kit 10.
- 22. Install sway bar link u-brackets to the sway bar using  $1/2 \ge 1 1/2$ " grade 8 hex bolts, lock washers, and nuts. Brackets mount to the bottom of the sway bar with the bolt facing up and the lock washer and nut on top of the sway bar. Align brackets to be offset toward the outside of the vehicle, tighten bolts.
- 23. Lubricate sway bar link bushings and bushing sleeves with multi-purpose grease and install into sway bar links.

- 24. Install sway bar links driver's side first using provided M12 x 70mm hex bolt and nut through the u-bracket with the nuts toward the outside of the vehicle, and the original bolt, nut, and washer at the axle. Tighten all bolts to spec.
- 25. Install track bar bolt, do not tighten at this time.
- 26. Install front tires.
- 27. Lower vehicle from Jack stands.
- 28. With the vehicle on the ground, torque any loose bolts to spec. including upper and lower control arm bolts, track bar bolts (60ft-lbs for upper ball stud castle nut if equipped, 80ft-lbs for 12mm double shear upper poly bushing if equipped, and 65ft-lbs for lower bolt), sway bar links 80 ft-lbs, and lug nuts.
- 29. Install coil spring clamps.

#### **Rear Suspension:**

- 30. Lift rear of vehicle and support with tall jack stands under the unibody frame.
  - \*Tip: break lug nuts loose before lifting vehicle.
- 31. Ensure that the vehicle is safely supported.
- 32. Remove rear tires.
- 33. Remove rear shocks.
- 34. Allow suspension to droop as much as possible.
- 35. Remove retaining clip from rear brake line at the unibody.
- 36. Push the brake line forward until it can be pulled down out of the bracket.
- 37. Install rear brake line bracket using 5/16 x 1" bolt, nut, and 2 washers. Bracket should be oriented to extend the brake line down and back.
- 38. Gently bend the steel brake line into it's new location in the bracket. Be very careful to not create a crack or a kink. Any rusted, worn, cracked, or damaged rubber or steel brake line should be replaced at this time.
- 39. Install brake line retaining clip.
- 40. Place a floor jack under one side of the rear axle for support (do not lift vehicle).
- 41. Remove front leaf spring bolt at unibody.
- 42. Remove rear leaf spring bolt at shackle.
- 43. Remove rear shackle bolt at unibody.
- 44. Remove the u-bolts.
- 45. Allow axle to droop and remove leaf spring and shackle.
- 46. Grease and install leaf spring shackle bushings into the shackle.
- 47. Install leaf spring shackle into unibody. Do not tighten bolt at this time.
- 48. Install new leaf spring.
- 49. Install front bolt and rear bolts but do not tighten yet.
- 50. Clean any debris from axle seating surfaces.
- 51. Raise the axle up to the leaf spring, make sure the center pin drops into the axle and the axle seats flat against the leaf spring. Install u-bolts.
- 52. Repeat for passenger side.
- 53. Torque u-bolts to 90 ft-lbs.
- 54. Install new shocks.
- 55. Install rear tires.
- 56. Lower vehicle from jack stands.
- 57. With the vehicle on the ground, torque any loose bolts to spec. including leaf spring/shackle bolts, and lug nuts.

### **Transfer Case Drop Kit:**

- 58. Place a floor jack under the driver's side of transfer case crossmember for support.
- 59. Remove bolt and nut that hold the t-case crossmember to the unibody.
- 60. Lower t-case crossmember away from unibody and remove threaded stud from unibody. If you do not have a stud puller, you can install 2 nuts and tighten one against the other then remove using a box end wrench on the inner nut.
- 61. Install spacer using new bolts and washers. Torque to spec.
- 62. Repeat for passenger side.

### **Adjustments and Safety Inspection:**

- 63. Check all components for clearance for suspension to fully cycle up and down and wheels to turn lock to lock. Pay special attention to brake line length and location of all brake lines, axle vent hoses, and ABS wires. Reposition as needed.
- 64. A professional front end alignment is required after installation. Your toe-in will be affected and may cause unpredictable steering and accelerated tire wear. We recommend 1/8" toe-in and 5 to 7.5 degrees positive caster.
  - \*Re-torque u-bolts to 90-100 ft/lbs after 100 miles and again after 500 miles.
  - \*Re-torque all fasteners after 100 miles, and frequently inspect all safety critical suspension components.
  - \*Re-torque lug nuts after 100 miles.