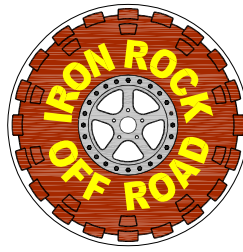


# 3.5” Lift Kit Installation Instructions, Jeep ZJ Grand Cherokee 1993-1998



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## **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 makes 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 after the first 100 miles of use, and frequently inspect all safety critical suspension components.

## **Before you begin:**

- Read all safety warnings.
- Read and understand installation instructions.
- A coil spring compressor will make installation much easier, but is not required. You may wish to borrow, rent, or buy one if you don't have one.
- 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 per attached shipping checklist.

## **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 if necessary.
2. Ensure that vehicle is safely supported.
3. Remove front tires.
4. Support front axle with a floor jack (do not lift vehicle).
5. Remove front shocks.
6. Remove front sway bar links.
7. Remove front track bar.
8. Loosen all front upper and lower control arm bolts (do not remove).
9. Allow axle to droop as much as possible.
10. Remove front coil spring clamps.
11. Using a coil spring compressor, remove front coil springs and install new ones. If one spring is taller install it on the driver's side of the vehicle. If you do not have a coil spring compressor you can unbolt the lower control arm at the unibody to achieve enough droop to install the spring. Re-connect the first lower control arm before unbolting the second.  
Tip: You may wish to disconnect the drag link from the passenger side knuckle for better access to the coil spring.
12. Save the OEM front coil spring for use in the rear.
13. Install coil spring clamps.
14. If you disconnected the drag link in step 11, re-connect it, torque to spec., and install cotter pin.
15. Locate front track bar, ES3096 rod end, and hardware kit 8.
16. Install M22 jam nut onto track bar rod end (these parts are left hand thread).
17. Adjust the track bar to a length of 33.5" from outside edge to outside edge as a starting point. This may need to be re-adjusted after a short test drive.
18. Install grease zerks into rod end. Pre-grease the rod end and cycle it through its travel range. Install grease seal.
19. Lubricate track bar bushings and bushing sleeves with multi-purpose grease and install.
20. Install track bar at axle end first using provided larger diameter (7/16") bolt and nut.
21. Install track bar at unibody, torque to spec., and install cotter pin.
22. Torque axle end track bar bolt to spec.
23. Tighten track bar rod end jam nut.
24. Grease rod end again.
25. Locate front sway bar links (8.75" center to center), 2 u-brackets, and hardware kit 10.
26. Install sway bar link u-brackets to the sway bar using 1/2 x 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, tighten bolts.
27. Lubricate sway bar link bushings and bushing sleeves with multi-purpose grease and install into sway bar links.

28. Install sway bar links driver's side first using provided M12 x 60mm class 8.8 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.
29. Locate front shocks, front shock boots, and hardware kit 9.
30. Install shock boots onto front shocks.
31. Install barpins into front shocks... Lubricate shock bushings and barpins with multi-purpose grease, clamp barpin vertically in a bench vise, and push shock onto barpin rotating the shock as you push down.
32. Install Front shocks. 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.
33. Raise vehicle and relocate the jack stands under the axle so that the vehicle's weight is on the suspension system.
34. Ensure that the vehicle is safely supported.
35. Torque upper and lower control arm bolts to spec.
36. Torque any remaining loose bolts to spec.
37. Install tires.
38. Remove vehicle from jack stands.
39. Torque wheel lug nuts to spec.

## **Rear Suspension:**

40. Lift rear of vehicle and support with tall jack stands under the unibody frame.  
Tip: break lug nuts loose before lifting vehicle if necessary.
41. Ensure that the vehicle is safely supported.
42. Remove rear tires.
43. Support rear axle with floor jack (do not lift vehicle).
44. Remove rear shocks.
45. Remove rear sway bar links.
46. Loosen all rear upper and lower control arm bolts (do not remove).
47. Allow axle to droop as much as possible.
48. Remove coil spring clamps.
49. Using a coil spring compressor, remove rear coil springs and install your OEM front springs in their place. If one spring is taller install it on the driver's side of the vehicle. If you do not have a coil spring compressor you can unbolt the lower control arm at the unibody to achieve enough droop to install the spring. Re-connect the first lower control arm before unbolting the second.
50. Install coil spring clamps.
51. Locate rear shocks, rear shock boots, and hardware kit 9.
52. Install shock boots onto rear shocks.
53. Install 12mm I.D. sleeves into lower end of rear shocks (opposite end from shock boot)... Lubricate shock bushings and 12mm I.D. sleeves with multi-purpose grease and press the sleeves into the shock bushings.
54. Lubricate upper shock bushings and upper shock mounting studs on the vehicle with multi-purpose grease.
55. Install rear shocks with shock boots facing up. Torque all bolts and nuts to spec.
56. Raise vehicle and relocate the jack stands under the axle so that the vehicle's weight is on the suspension system.
57. Ensure that the vehicle is safely supported.
58. Install rear sway bar links with nuts facing down. Tighten nut until snug but do not compress the bushings, the spacer sleeve in the center of the link should still be able to be rotated by hand after tightening.
59. Torque upper and lower control arm bolts to spec.
60. Torque any remaining loose bolts to spec.
61. Install tires.
62. Remove vehicle from jack stands.
63. Torque wheel lug nuts to spec.

## **Adjustments and Safety Inspection:**

64. 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.
  65. Go for a short test drive.
  66. Check if front tires are centered side to side under vehicle. Adjust the length of the front track bar as needed.
  67. A professional front end alignment is required after installation. Your toe-in will be affected and may cause unpredictable steering and accelerated tire wear.
- \* Re-torque all fasteners after 100 miles, and frequently inspect all safety critical suspension components.

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