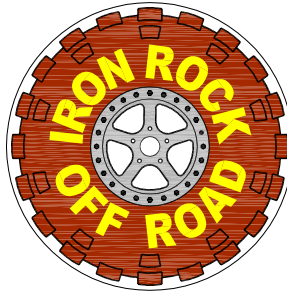


# 4" Lift Kit Installation Jeep Grand Cherokee 1999-2004



## Instructions

Iron Rock Off Road, Inc.

952-210-7185

Website: [www.ironrockoffroad.com](http://www.ironrockoffroad.com)

E-mail: [Contactus@ironrockoffroad.com](mailto: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 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.
- 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 using the included shipping checklist.
- Be sure you have the following tools and supplies:
  - Floor jack and jack stands
  - Basic hand tools
  - Multi-purpose grease (all poly bushings should be greased before installation)
  - A coil spring compressor makes installation easier but is not required.

### Prepare the parts for installation:

1. Install the shock boots on all 4 shocks.
2. Locate hardware kit 3 and the rear shocks.
3. Grease and install the 5/8" I.D. shock bushings included with the shocks.
4. Grease and install the 12mm shock bolt sleeves from hardware kit 3. The rear shocks use 12mm sleeves at the top and bottom.
5. Leave the rest of the hardware in the bag for future use.
6. Locate the front track bar and hardware kit 1.
7. Ensure that the jam nut is installed on the track bar.
8. Grease and install the track bar bushings.
9. Grease and install the track bar bolt sleeves.
10. Pre-adjust the track bar to a length of 32.75" center to center as a starting point. Do not tighten jam nut at this time.
11. Locate the rear sway bar links (13.5" center to center) and hardware kit 2.
12. Grease and install the hourglass bushings.
13. Grease and install the sway bar link bolt sleeves. Each link gets one 12mm I.D. sleeve and one 10mm I.D. sleeve.
14. Leave the rest of the hardware in the bag for future use.
15. Locate the front sway bar links (10.75" center to center) and hardware kit 4.
16. Grease and install the hourglass bushings.
17. Grease and install the sway bar link bolt sleeves. All sleeves are the same (12mm I.D.).

### Front suspension:

18. Lift front of vehicle and support with tall jack stands under the unibody frame.  
\*\*Tip: break lug nuts loose before lifting vehicle.
19. Ensure that vehicle is safely supported.
20. Remove front tires.
21. Place a floor jack under the center of the front axle for support (do not lift vehicle).
22. Remove front shocks.
23. Remove the track bar.
24. Remove front sway bar links.
25. Loosen all upper and lower control arm bolts (do not remove). This important step is done to eliminate rotational preload on the bushings.

26. With the axle hanging as low as possible, using a coil spring compressor, remove one coil spring and lower spring isolator. If you do not have a coil spring compressor, you may un-bolt the lower control arm to allow enough droop to remove the spring.
27. Snap the spring isolator into the new spring.
28. Install new spring in vehicle being careful to align isolator pin with the hole in the spring bucket.
29. If needed, re-install lower control arm at unibody, do not tighten bolt at this time.
30. Repeat for other front coil spring.
31. 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.
32. Install new sway bar links. Re-use the existing bolts and nuts. Torque to spec.
33. Install track bar. Torque to spec.
34. Tighten track bar jam nut very tight.
35. Note: The bend in the track bar is for clearance of the bracket on the axle. The bent end of the track bar attaches to the axle with the bend on the bottom. The straight end attaches to the uni-body. (It should look somewhat like a "J").
36. Install Front tires.
37. Lower vehicle from Jack stands.
38. With the vehicle on the ground, torque any loose bolts to spec. including Upper and Lower control arm bolts, lug nuts, etc...

### **Rear Suspension:**

39. Lift rear of vehicle and support with tall jack stands under the unibody frame.  
 \*\*Tip: break lug nuts loose before lifting vehicle.
40. Ensure that the vehicle is safely supported.
41. Remove rear tires.
42. Place a floor jack under the center of rear axle for support (do not lift vehicle).
43. Remove rear shocks.
44. Remove Sway bar links.
45. Loosen lower control arm bolts (do not remove). This important step is done to eliminate rotational preload on the bushings.
46. Allow suspension to droop as much as possible.
47. Remove coil springs.
48. Install new coil springs being careful to align the spring to the isolator.
49. Raise rear axle and install new shocks. Use provided 7/16" washers on the upper shock mounts, place one washer behind the shock bushing, and 2 washers in front of it (toward the outside of the vehicle).
50. Install sway bar links using the existing upper bolt and the new lower bolt, washer, and nut. Torque to spec.
51. Install rear tires.
52. Lower vehicle from Jack stands.
53. With the vehicle on the ground, torque any loose bolts to spec. including Lower control arm bolts and lug nuts.

### **Transfer case drop kit:**

54. Locate the transfer case drop spacers and hardware kit 5.
55. Place a floor jack under the center of the transmission/transfer case crossmember for support.
56. On one side remove the 4 bolts that hold the crossmember to the unibody.
57. Lower the crossmember away from the unibody enough to install the spacer.
58. Install the spacer using the 2 long existing bolts and the 2 new bolts and washers.
59. Repeat for the other side.
60. Torque bolts to spec.

### **Final Inspection:**

61. 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 lines, axle vent hoses, and ABS wires. Reposition as needed by bending the brackets.
62. Re-center steering wheel by adjusting the drag link (longer) until the steering wheel is centered.
63. Check if front tires are centered side to side under the vehicle. Adjust the length of the front track bar as needed.

\* A professional front end alignment is recommended after installation.

We recommend the following alignment settings:

**Caster:** +3.75 to +5.75 (+4.5 is preferred if possible)

**Toe-in:** +1/16" to +1/8"

\* Re-torque all fasteners after 100 miles, and frequently inspect all safety critical suspension components.

