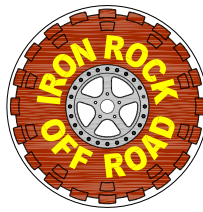


3" Lift Kit Installation Instructions, Jeep WJ Grand Cherokee 1999-2004



Iron Rock Off Road, Inc.

952-210-7185

Website:

www.ironrockoffroad.com

E-mail: Contactus@ironrockoffroad.com

Shipping Checklist:

Box 1

- 3" Front springs (2)
- 3" Rear springs (2)

Box 2

- Instructions
- Invoice
- Iron Rock Off Road logo decal (1)
- Ironrockoffroad.com decal (1)
- Track bar, 32.7" center to center (1)
- Rear sway bar links, 11.25" center to center (2)

Hardware kit 1 (Front Track Bar)

- Track bar bushing half (4)
- 12mm track bar bushing sleeve (2)

Hardware kit 2 (Rear Sway Bar Links)

- 3/4" hourglass bushings (4)
- 12mm sway bar bolt sleeves (2)
- 10mm sway bar bolt sleeves (2)
- M10 x 60 sway bar link bolt (2)
- M10 X 1.5 hex nut (2)
- 7/16 USS washer (2)

Hardware kit 3 (Shocks)

- 12mm shock bolt sleeves (2)
- 7/16" washer (6)
- 5/16 x 1 hex bolts (4)
- 5/16-18 hex nuts (4)
- 5/16 washers (8)

Standard shocks (without shock upgrade)

- Front shocks RC 8177 (2)
- Rear shocks RC 8114 (2)

With nitro shock upgrade only

- Front shocks RC 9177 (2)
- Rear shocks RC 9114 (2)

With DT8000 shock upgrade only

- Front shocks DT 8352 (2)
- Rear shocks DT 8336 (2)

Hardware kit 9 (shocks)

- Front shock barpin BP7 (2)

Installation Instructions:

Safety Warning: *Important! Read before installation.*****

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 shipping checklist.**
- A coil spring compressor makes installation faster, but is not required. You may wish to borrow, rent, or buy one if you do not have one.

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 track bar.
6. Loosen front sway bar links top and bottom (do not remove).
7. Loosen all upper and lower 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. Allow axle to droop completely.
10. Using coil spring compressor, remove one coil spring and lower spring isolator. If you do not have a coil spring compressor, unbolt lower control arm at unibody side, and sway bar links.
11. Snap the spring isolator into the new spring.
12. Install new spring in vehicle being careful to align isolator pin with the hole in the spring bucket.
13. If needed, re-install lower control arm at unibody, do not tighten bolt at this time.
14. Repeat for passenger side of vehicle.
15. Locate front shocks and hardware kit 3.
16. If equipped with Doetsch Tech 8000 shocks, locate hardware kit 9 and install barpins into lower shock bushings. Lubricate shock bushings and barpins with multi-purpose grease. Place barpin vertically in a bench vise. Push shock onto barpin rotating shock back and forth as you go.
17. Install new front shocks using provided bolts, washers, and nuts. Tighten upper stud mount nuts just enough to slightly compress the bushings.
*Note: Overcompressing these bushings will result in damage to the bushings and premature bushing failure.
18. If needed, reconnect sway bar links. Do not tighten at this time.
19. Locate track bar and hardware kit 1.
20. Lubricate track bar bushings and steel bushing sleeves with multi-purpose grease, and install into track bar.
21. Install track bar. Torque both bolts to 80 foot pounds.
Note: The steep bend in the track bar is for clearance of the bracket on the axle. The steeply bent end attaches to the axle with the bend on the bottom. The slightly bent end attaches to the unibody. (It should look somewhat like a "J").
22. Any remaining loose bolts will be tightened after rear suspension.

Rear Suspension:

23. Lift rear of vehicle and support with tall jack stands under the unibody frame.
*Tip: break lug nuts loose before lifting vehicle.
24. Ensure that the vehicle is safely supported.
25. Remove rear tires.
26. Place a floor jack under the center of rear axle for support (do not lift vehicle).
27. Remove rear shocks.
28. Remove rear sway bar links.
29. Loosen lower control arm bolts (do not remove).
30. Allow suspension to droop as much as possible.
31. Remove coil springs.
32. Install new coil springs being careful to align the spring to the isolator.
33. Locate rear shocks and remainder of hardware kit 3.
34. 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 two washers in front of it (toward the outside of the vehicle).
35. Locate rear sway bar links and hardware kit 2.
36. Lubricate and install rear sway bar link bushings and steel bushing sleeves (note the upper and lower bushing sleeves have different inside diameters – the smaller inside diameter faces down).
37. Install sway bar links using the new lower bolt and nut and existing upper bolt.
38. Torque upper sway bar link bolts to 78 foot pounds.
39. Torque lower sway bar link nuts to 50 foot pounds.
40. Raise vehicle and support with jack stands under the front and rear axles. Rubber bushing bolts should be torqued to spec. with weight on the suspension.
41. Torque front upper control arm nuts to 60 foot pounds.
42. Torque front and rear lower control arm nuts to 120 foot pounds.
43. Torque any remaining loose bolts to spec.
44. Install front and rear tires.
45. Lower vehicle from jack stands.
46. Torque lug nuts to spec. (usually 85-115 foot pounds, verify using factory service manual)
47. 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 or re-routing.
48. Re-center steering wheel by adjusting the drag link (longer) until the steering wheel is centered.

* A professional front end alignment is required after installation.

We recommend the following alignment settings:

Caster: +3.5 to +6.0

Toe-in: +.20 degrees (+1/16" to +1/8" measured at the tire)

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