



## RS6417B Rear 2.5" Lift Coil Springs\*

Fits: 2006-1997 Jeep Wrangler TJ/LJ

\*The addition of aftermarket bumpers, sliders, winches, etc. will net differences in lift height

**⚠ WARNING: Carefully read, understand and follow the instructions provided in this manual, and keep it in a safe place for future reference. If you have any doubt whatsoever regarding the installation or maintenance of your Rancho suspension system, please see your retailer for assistance or advice. Failure to follow the warnings and instructions provided herein can result in the failure of the suspension system, or can cause you to lose control of your vehicle, resulting in an accident, severe personal injury or death.**

**These instructions should remain in the vehicle glove box for future reference.**

**Do not install lifted coil springs without appropriate extended length shocks, brake lines, brake line brackets, bump stop extensions, sway bar end links, track bars, and drive shafts.**

**Failure to install these lifted height coil springs along with appropriate components can result in the failure of the suspension system, or can cause you to lose control of your vehicle, resulting in an accident, severe personal injury or death.**

**This suspension system will enhance the off-road performance of your vehicle. It will handle differently; both on and off-road, from a factory equipped passenger car or truck. Failure to drive this vehicle safely may result in serious injury or death to the driver and passengers. ALWAYS WEAR your seat belts, REDUCE your speed, and AVOID sharp turns and other abrupt maneuvers.**

### Required Components and Modifications (MUST BE PURCHASED SEPARATELY)

#### Rear Drive Shaft

To reduce rear driveline vibration on the Rubicon only, replace the rear driveshaft with a double-cardan type and install adjustable cam bolts on the rear suspension upper links. A driveshaft (Part No. 3394-0100) is available from: DriveshaftPro (714) 893-4583. Contact your local 4X4 shop for the adjustable cam bolts and more specific information.

If you install a double-cardan driveshaft, the installation of the skid plate/crossmember spacers and shift relocating bracket are not necessary. The spacers and bracket (if already installed) can be removed to achieve additional ground clearance.

**Recommended Rancho Shock Absorbers:** RS999241, RS7241, RS55241, or RS5241

#### Parts List

P/N	DESCRIPTION	QTY.
RS616B	Front Coil	2
RS88117	Instructions	1

### COIL SPRING REMOVAL

- 1) Park vehicle on a level surface. Set the parking brake and chock front wheels.
- 2) Measure and record the distance from the center of each wheel to the top of the fender opening. See Illustration 1.

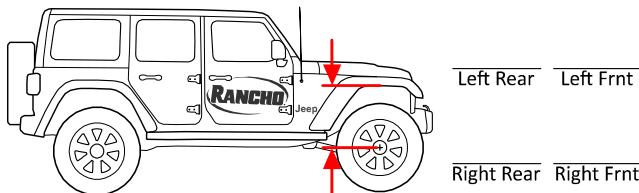


Illustration 1

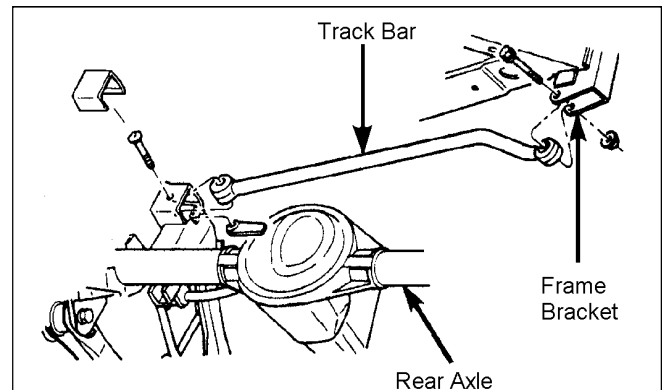


Illustration 2

- 3) Disconnect the rear track bar from the frame bracket. See Illustration 2.
- 4) Disconnect the end links from the sway bar. See Illustration 3.
- 5) Raise the rear of the vehicle and support the frame with jack stands.
- 6) Support the rear axle with a floor jack. Remove the rear shock absorbers.

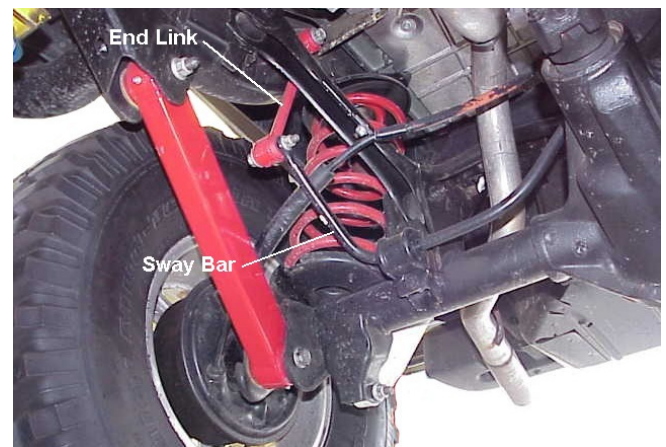


Illustration 3

7) Carefully lower the rear axle until the coil springs are free from the upper mounting seat. Remove the coil springs.

### **COIL SPRING INSTALLATION**

1) Position the new coil springs on the axle pads. Raise the axle until the coil springs seat in the upper mounts.

NOTE: When installing coil springs, make sure that the rubber damper is positioned in the upper mount and the small egg-shaped end of the coil is at the top.

2) Install Rancho rear shock absorbers. Tighten upper mounting bolts to 23 lb-ft.

3) Loosely attach the end links to the sway bar, and attach the track bar to the frame bracket.

4) With the suspension at maximum extension (full droop), inspect and rotate all axles and drive shafts. Check for binding and proper slip yoke insertion. Check for adequate length of any wires, hoses and links. Turn the front wheels completely left then right. Verify adequate tire, wheel, brake hose and ABS wire clearance. Inspect steering and suspension for tightness and proper operation.

5) Lower the vehicle to the ground.

6) Install front wheels and lower vehicle to the ground. Tighten lug nuts to 80--110 lb-ft.

7) Tighten the end link mounting bolts to 40 lb-ft. Tighten the shock absorber lower mounting bolts and the track bar mounting bolt to 74 lb-ft.

### **FINAL CHECKS & ADJUSTMENTS**

1) Turn the front wheels completely left then right. Verify adequate tire, wheel, and brake hose clearance. Inspect steering and suspension for tightness and proper operation.

2) Ensure that the vehicle brake system operates correctly. Verify that each hose and wire allows for full suspension movement.

3) Readjust headlamps. Have vehicle Aligned to manufacturer's specifications.

#### Alignment Specifications

ADJUSTMENT	PREFERRED	RANGE
Caster	7°	±1.0°
Camber (fixed angle)	-0.25°	±0.63°
Toe-In (each wheel)	0.15°	±0.15°
Thrust Angle	0	±0.15°

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#### Torque Specs

Sway Bar End Link	40 lb-ft
Shock Absorber Upper Mount	23 lb-ft
Shock Absorber Lower Mount	74 lb-ft
Track Bar (torque at ride height)	74 lb-ft
Wheels (Lug Nuts)	80-110 lb-ft



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