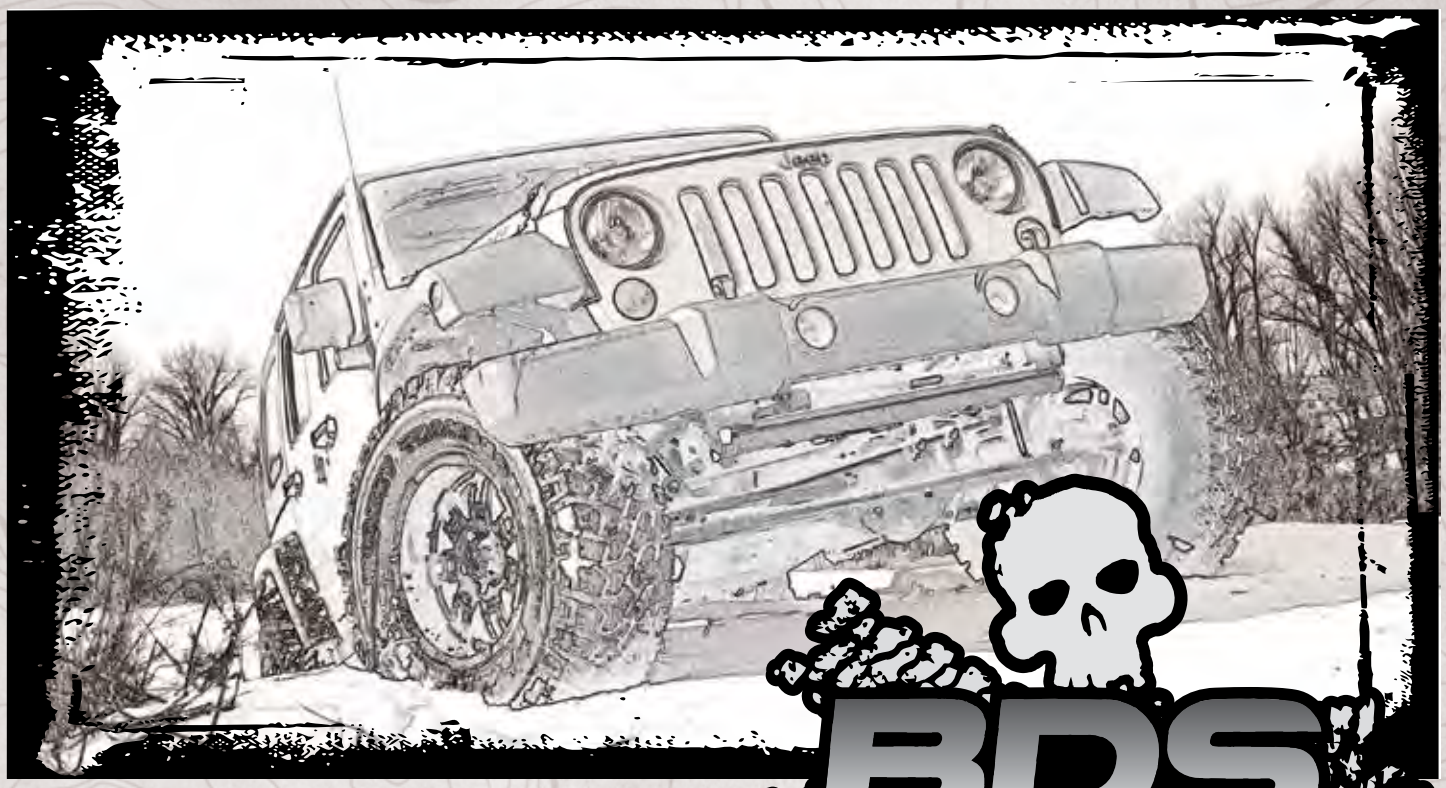
Installation instructions



Part#: 034202

2" Coil Spring Suspension System

Jeep Wrangler JK 4 Door 4WD | 2007-2017

Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.

THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come. Thank you for choosing BDS Suspension!

BEFORE YOU START

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

FOR YOUR SAFETY

Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

BEFORE INSTALLATION

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
- If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
- Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

FACTORY PROTECTION PLUS

TRACTION CONTROL

In an effort to reduce the risk of rollover crashes the National Highway Traffic Safety Administration (NHTSA) established the Federal Motor Vehicle Safety Standard (FMVSS) No. 126 requiring all new passenger vehicles under 10,000 lbs GVWR include an electronic stability control (ESC) system as standard equipment. Effective August 2012 this law requires aftermarket products to be compliant with these same standards.

FMVSS No.126 COMPLIANT

TIRES AND WHEELS

FITMENT GUIDE

33x12.50 on 16x8 with 4.5" Backspacing

See troubleshooting notes

BEFORE YOU DRIVE

Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.

Perform head light check and adjustment.

Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

CONTENTS OF YOUR KIT

034202 Box Kit		
Part #	*Qty*	*Description*
034202	2	Front Coil Springs
034209	2	Rear Coil Springs
01928B	2	Rear Bump Stop Spacer
3296	2	3" dia x 2" tall bump stop spacer
01828	4	Octagon Cams
751	1	Bolt Pack
	4	*5/16"-18 x 1-1/4" bolt*
	8	*5/16" SAE washer*
	4	*5/16"-18 prevailing torque nut*
	2	*3/8"-16 x 3" bolt*
	4	*3/8" USS washer*
	2	*3/8"-16 prevailing torque nut*

034209 Box Kit		
Part #	*Qty*	*Description*
034209	2	Rear Coil Springs

TECH TIPS

TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. BDS 124408 rear track bar or 124308 rear track bar relocation is recommended if using factory wheels.

INSTALLATION INSTRUCTIONS

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Measure from the center of the wheel up to the bottom edge of the wheel opening

   LF_____ RF_____ LR_____ RR_____
3. Disconnect the front track bar from the axle. Retain mounting bolt. (Fig 1)

SPECIAL TOOLS

3/8" Drill for bump stop extension

Rotary grinder or chisel for cam slot removal

FIGURE 1 - LEFT HAND DRIVE SHOWN

4. Raise the front of the vehicle and support the frame with jack stands behind the front lower control arm pockets.
5. Remove the wheels.
6. Support the front axle with a hydraulic jack. Remove the front shocks from the vehicle. Retain lower mounting hardware.
7. Disconnect the OE front sway bar links from the sway bar and the axle. Save lower hardware.
8. Lower the front axle and remove the coil springs from the vehicle.
9. Make a mark in the center of the lower coil spring mount pad. Drill a 3/8" hole at the mark. This hole will be used to attach the provided bump stop extension to the axle. (Fig 2)

FIGURE 2

10. Place a provided bump stop extension inside one of the new front coil springs and install the spring in the vehicle. Make sure the spring is seated properly in the axle mount.
11. Attach the bump stop extension to the axle through the hole that was drilled earlier using a 3/8" x 3" bolt, nut and 3/8" USS washers (BP 751). Torque bolt to 30 ft-lbs. Repeat the spring/bumper stop installation of the other side of the vehicle.
12. Install the new shocks with the OE lower hardware and new upper bushings/hardware. Torque the lower bolt to 60 ft-lbs and the upper nut until the bushings begin to swell.
13. Locate the new front sway bar links. Lightly grease and install the provided hourglass bushings (SB34BK and sleeves (46) into each end of the links.
14. Attach the new links to the outer mounting surfaces of the front sway bar using a 1/2" x 3" bolt, nut and 1/2" washers. Install the links so that they offset toward the outside of the vehicle when installed. Run the bolt from the outside in. Leave hardware loose.
15. Attach the lower end of the new sway bar links to the inside mounting surface of the OE axle tab. Fasten the links with the OE sway bar link mounting hardware. Torque the upper and lower sway bar link hardware to 60 ft-lbs.
16. With the front axle still support with a jack, remove the passenger's side lower control arm bolt at the axle. The OE lower control arm mounts are perforated from the factory so that they can be changed to slots for alignment cams. The perforated sections must be removed to accepted the new cam bolts supplied in this kit. Special tools are made to perform this operation but are not necessary. The perforated sections can be removed with a rotary grinding tool, chisel or a combination of both. Only the rear portion of the cam slot must be removed if using a rotary grinding tool or chisel. It is acceptable to remove the entire slot if the proper removal tool is used. (Fig 3)

FIGURE 3

17. When the perforated sections are removed from the lower control arm mount, reinstall the control arm to the axle with octagon cams on factory bolt. Rotate the cams so that the bolt is as far towards the 'rear' of the slot as possible. Just snug the cam hardware so that the cam washers are retained within the stops. Final cam bolt torque will be completed with the weight of the vehicle on the suspension. (Fig 4)

FIGURE 4

18. Repeat cam bolt installation on the driver's side.

19. Install the wheels and torque lug nuts to manufacturer's specifications.
20. Lower the vehicle to the ground and bounce the front to settle the suspension. Center the cams and torque the front cam bolts to 95 ft-lbs.
21. Reattach the front track bar to the axle with the OE hardware. Have an assistant turn the steering wheel to aid in aligning the track bar bolt. Torque the track bar bolt to 125 ft-lbs.

REAR INSTALLATION

22. Block the front wheels for safety.
23. Disconnect the rear track bar from the axle. Retain hardware.
24. Raise the rear of the vehicle and support the frame with jack stands in front of the lower control arm mounts.
25. Remove the wheels.
26. Remove the shocks. Retain the upper and lower mounting hardware.
27. Disconnect the sway bar links from the axle. Retain hardware.
28. Lower the axle and remove the rear springs.

Tip *Do not overextend the brakelines or ABS wires. It may be necessary to remove these from their retaining clips temporarily.*

29. Install the new rear springs in the vehicle, making sure the OE upper rubber isolator is in place. Raise the axle to slightly compress the spring.
30. Re-attach the sway bar links at the axle with the factory hardware. Torque hardware to 60 ft-lbs.
31. Install the new shocks with the OE hardware. Tighten upper mounting hardware to 30 ft-lbs, and lower hardware to 55 ft-lbs.
32. Install the provided bump stop spacers on the axle using the existing holes in the axle bump stop pad. Fasten the bump stop spacer to the axle with 5/16" x 1-1/4" bolts, nuts and 5/16" SAE washers (BP 751). Torque bolts to 20 ft-lbs. (Fig 5)

FIGURE 5

33. Reinstall wheels and torque to factory specifications. Lower vehicle to ground.
34. Reconnect the track bar to the axle with the OE hardware. Torque hardware to 100 ft-lbs.
35. Double check all hardware for proper torque.
36. Have a front end alignment performed to correct caster angle.
37. Check all fasteners after 500 miles and at regularly scheduled maintenance intervals.