

IMPORTANT! READ THIS FIRST!

Installation of shock absorbers or other suspension components requires special tools and expert knowledge. Accordingly, installation of all BILSTEIN products must be performed by a professional automotive suspension technician.

When replacing other brands, BILSTEIN shock absorbers or other suspension components should always be installed as a set. All BILSTEIN products must only be used for the specific, intended application as indicated in the application guide. Any use of any BILSTEIN product other than for its intended use may result in serious bodily injury or death.

Always use a chassis hoist for the installation of BILSTEIN products and make certain that the raised vehicle is securely attached to the hoist and/or supported to prevent the vehicle from slipping, falling, or moving during the installation process.

If you install any BILSTEIN product without the necessary special tools, expertise, and chassis hoist, you may subject yourself to the risk of serious bodily injury or death.

BILSTEIN shock absorbers are gas-filled and are highly pressurized.

- Never place any BILSTEIN shock absorbers in a vise or use a clamp on any BILSTEIN shock absorber.
- Never apply heat near any BILSTEIN shock absorber.
- Never attempt to open or repair any BILSTEIN product, in order to prevent serious bodily injury or death.

Any attempt to misuse, misapply, modify, or tamper with any BILSTEIN suspension product voids any warranty and **may result in serious bodily injury or death.**

While installing any BILSTEIN product:

- Do not use impact tools for loosening or tightening fasteners, because this may destroy the screw threads.
- Self-locking fasteners must only be used **once**!
- Reuse original equipment components only if they are in good condition, otherwise replace them with new components.
- Never remove the slight film of oil on the shock absorber piston rod and seal.
- All mounting fasteners for shock absorbers and other suspension components must be securely tightened before tension is placed on the suspension system, unless otherwise specified in the manufacturer's service manual or in this instruction.

After installing any BILSTEIN product:

- The suspension caster and camber must be checked and/or adjusted to comply with the vehicle manufacturer's specifications.
- The (load dependent) brake compensator and the anti-lock brake system must be checked and/or reset to comply with the vehicle manufacturer's specifications.
- The headlight aim must be checked and adjusted. Or, if applicable, adaptive headlights must be checked and recalibrated to comply with the vehicle manufacturer's specifications.
- If applicable, any/all Advanced Driver Assistance Systems (ADAS) must be checked and recalibrated to comply with the vehicle manufacturer's specifications.

CAUTION for COILOVER TYPE SUSPENSIONS!!!

If disassembling a coilover type suspension, refer to the vehicle manufacturer's service manual for proper procedures. The coil spring is preloaded and must be compressed with a spring compressor to release load before the upper mount is disassembled. Failure to follow the vehicle manufacturer's procedures may cause serious injury or death, and may damage the vehicle.

IMPORTANT!!!

This BILSTEIN product may or may not be compatible with non-BILSTEIN aftermarket products and/or vehicle modifications. It is the responsibility of the professional automotive suspension technician performing the installation to identify any non-OEM components and/or modifications on the vehicle that may interact with the suspension system. These must be evaluated for any potential physical static or dynamic interference with and/or effect on the function of this BILSTEIN product.

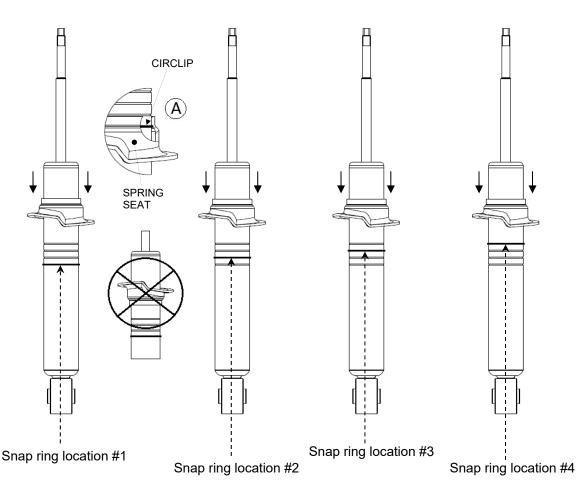


NOTE: For optimum ride performance it is recommended that 2" lift rear coil springs be installed (220 lb/in rate) in conjunction with the B8 5100 front (24-248730) and rear (24-249966) shock absorbers

IMPORTANT:

PLACE CIRCLIP IN APPROPRIATE GROOVE TO ADJUST RIDE HEIGHT (FRONT SHOCKS ONLY).

Use appropriate tools to move the circlip. Ensure that the circlip is fully seated in the groove after moving it (you should be able to rotate it manually in the groove). Install the spring seat in the direction shown only. The circlip must fit completely in the groove inside spring seat (A). Improper installation will cause permanent damage to the shock!



	Typical Front Lift Height**	
snap ring location	4x4	4x2
#1	stock	Do not use
#2	0.8"	0.8"
#3	1.6"	1.6"
#4	2.3"	2.3"



**Lift heights indicated are typical. Actual lift height is influenced by which factory suspension the vehicle is equipped with and its condition; optional equipment and accessories on your vehicle, and other vehicle modifications such as replacement coil springs, wheel and tire combinations, etc.

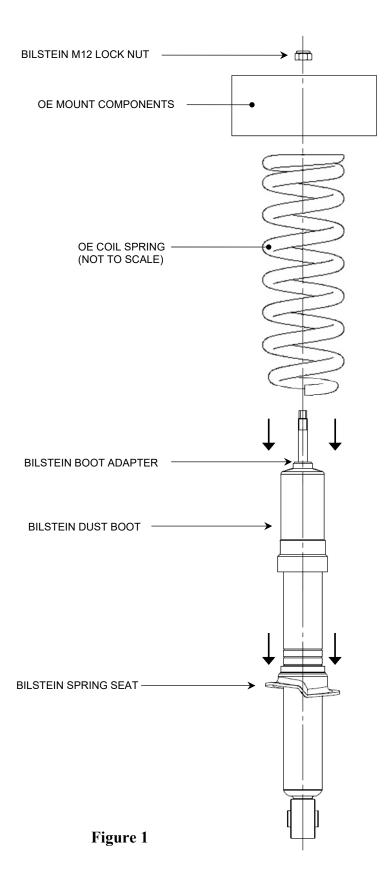
Modifying/lifting the suspension to your vehicle may raise its center of gravity and may make it more susceptible to loss of control and/or rollover, which may result in death or serious injury. We strongly recommend that you offset the loss of rollover resistance as much as possible by increasing tire track width, and that you equip the vehicle with a functional roll bar and cage system.

Wear seat belts and shoulder harnesses at all times, and avoid situations where a side rollover may occur.

Front Shock Installation Procedure:

- 1. Install the spring seat onto the shock body as shown. Ensure that the groove inside the spring seat fits over the circlip on the shock body (see page 2 detail (A)). The dust boot and boot adapter will need to be removed to slide the spring seat on.
- Re-install the dust boot and boot adapter onto the stem of the rod as shown. The boot adapter is clipped into the top of the dust boot. Install OE coil spring and re-install all original mount parts in reverse order of removal in accordance with the vehicle manufacturer's Service Manual. Please refer to Figure 1 for the proper order of installation of the module components.
- 3. Install new lock nut and tighten until it bottoms out. Torque lock nut to vehicle manufacturer's service manual torque specification.







Rear Shock Installation Procedure:

- A. Remove the existing shocks from the vehicle following all procedures in the vehicle manufacturer's service manual.
- **B.** Using the supplied stem mounting hardware, install the lower washer, lower bushing, and middle washer onto the shock stem. Using the supplied eye-ring bushings for the lower mount, install the Bilstein Shock Absorber in the original location and attach the lower mount. Please refer to Figure 2 for the proper order of installation of the stem hardware and correct orientation of the eye-ring bushings.
- **C.** Install the upper bushing, upper washer, and lock nut. Be sure to lower the vehicle such that its full weight is on the suspension prior to fully tightening the fasteners.
- **D.** Tighten the lower mount fasteners to the vehicle manufacturer's service manual torque specification. Tighten the lock nut on the stem until it bottoms out and torque to vehicle manufacturer's service manual torque specification.

