

latest revision: 01.13.23

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!!!

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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.



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BILSTEIN B8 5160 Shock Absorbers are designed to fit your vehicle's original shock mounts with no modifications. The B8 5160 shocks are installed in the same manner as a standard replacement shock.

Shock Installation Procedure:

- A. Remove the existing shocks from the vehicle following all procedures in the vehicle manufacturer's service manual.
- **B.** The left and right rear shocks are different and need to be installed as follows:

25-311402 or 25-291810 – REAR LEFT 25-311419 or 25-285529 – REAR RIGHT

For steps C to I, refer to Figure 1 for the proper installation order and orientation of the stem mounting hardware

- C. Attach the lower mount.
- **D.** Using the supplied stem mounting hardware install the sleeve, washer (17.8mm/0.70" hole, concave side up), bushing, and alignment washer (concave side down) onto the shock stem.
- **E.** Then install the Bilstein Shock Absorber in the original location so the **BILSTEIN lettering on the bracket is facing outwards**. Make sure the "lip" on the alignment washer seats into the hole in the frame.

Note: On both sides of the vehicle the reservoir will be positioned forwards of the main shock tube [see Figures 2 and 3].

- **F.** Install the supplied washer (24.3mm/0.96" hole, concave side up), bushing, washer (17.8mm/0.70" hole, concave side down), and lock nut onto the shock stem. Be sure to lower the vehicle such that its full weight is on the suspension prior to fully tightening the fasteners.
- **G.** Tighten the lower mount fasteners to the vehicle manufacturer's service manual torque specification.
- **H.** Tighten the lock nut on the stem until it bottoms out and torque to 72 N·m (53 lb·ft). Use an 8mm wrench to keep the piston rod from rotating while torqueing the lock nut.

**** DO NOT USE AN IMPACT WRENCH TO TIGHTEN THE LOCK NUT! ****

- I. Carefully check for any possible interference between the reservoirs and any other components on the vehicle. If any interference is found, go back to Step E and verify the reservoirs are in the correct positions. The reservoir positions depicted herein are appropriate for most vehicles for which these shocks are intended, however, some wheel/tire and/or lift kit combinations may create interference problems. It is the responsibility of the installer to determine if the reservoirs are positioned appropriately and if there is any potential for interference.
- J. If no potential interference is found the installation is complete.



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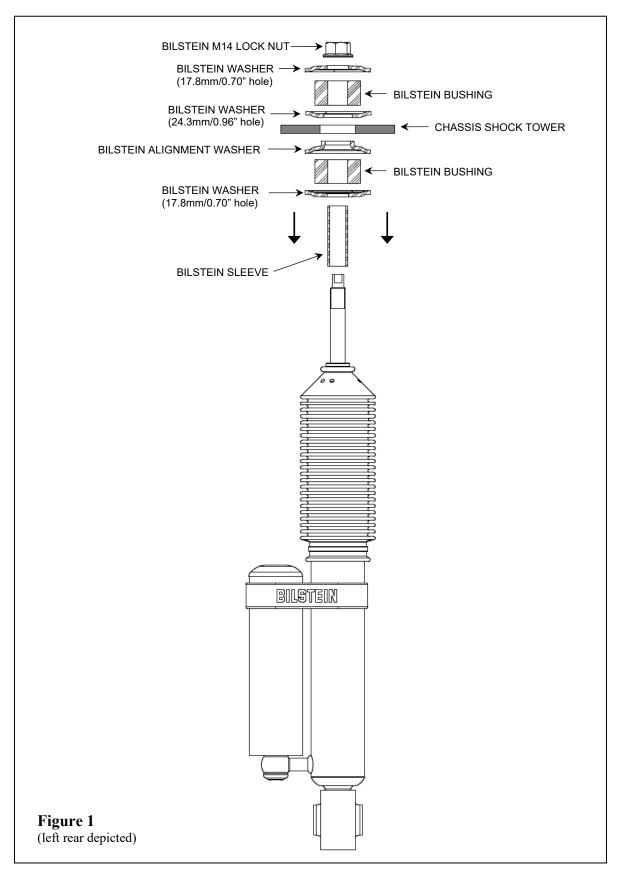








Figure 2 – RIGHT REAR

Figure 3 – LEFT REAR

Note: The shocks depicted herein differ slightly in appearance from the supplied components.