



### **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.

#### ***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.**



BILSTEIN 8100 Series Reservoir Shock Absorbers are designed to fit your vehicle's original shock mounts with no modifications. With the exception of reservoir placement, the 8100 Series shocks are installed in the same manner as a standard replacement shock.

**Shock Installation Procedure:**

- A. Remove the existing rear shocks from the vehicle following all procedures in the vehicle manufacturer's service manual. Please note that removing inner fender wells will simplify installation.
- B. Using the supplied stem mounting hardware, install the lower washer, sleeve, and bushing on the shock stem. Refer to Figure 1 for the proper order of installation and orientation of the stem hardware.
- C. Then install the Bilstein Shock Absorber in the original location with the reservoir positioned behind the working tube towards the rear of the vehicle [see Figure 3].
- D. Attach the lower mount. Make sure the hex head of the bolt is facing the outside of the vehicle [see Figure 3].
- E. Install the upper bushing, washer, and nut. Refer to Figure 1 for the proper order of installation and orientation of the stem hardware. Be sure to lower the vehicle such that its full weight is on the suspension prior to fully tightening the fasteners.
- F. Tighten the lower mount fasteners to the vehicle manufacturer's service manual torque specification.
- G. Tighten the locknut on the stem and torque to 45 Nm (34 ft lb). Use a 6mm allen key to prevent the piston rod from rotating while torquing the locknut.
- H. Take the secondary Schrader cap assembly provided and screw it into the top reservoir cap for both sides as shown in Figure 2. Torque it to 13 lb•ft (17.5 N•m).
- 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 C and verify the reservoirs are in the correct positions. The reservoir positions depicted herein are appropriate for most Ram trucks 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. Tighten all remaining fasteners to the vehicle manufacturer's service manual torque specifications.
- K. If no potential interference is found the installation is complete.

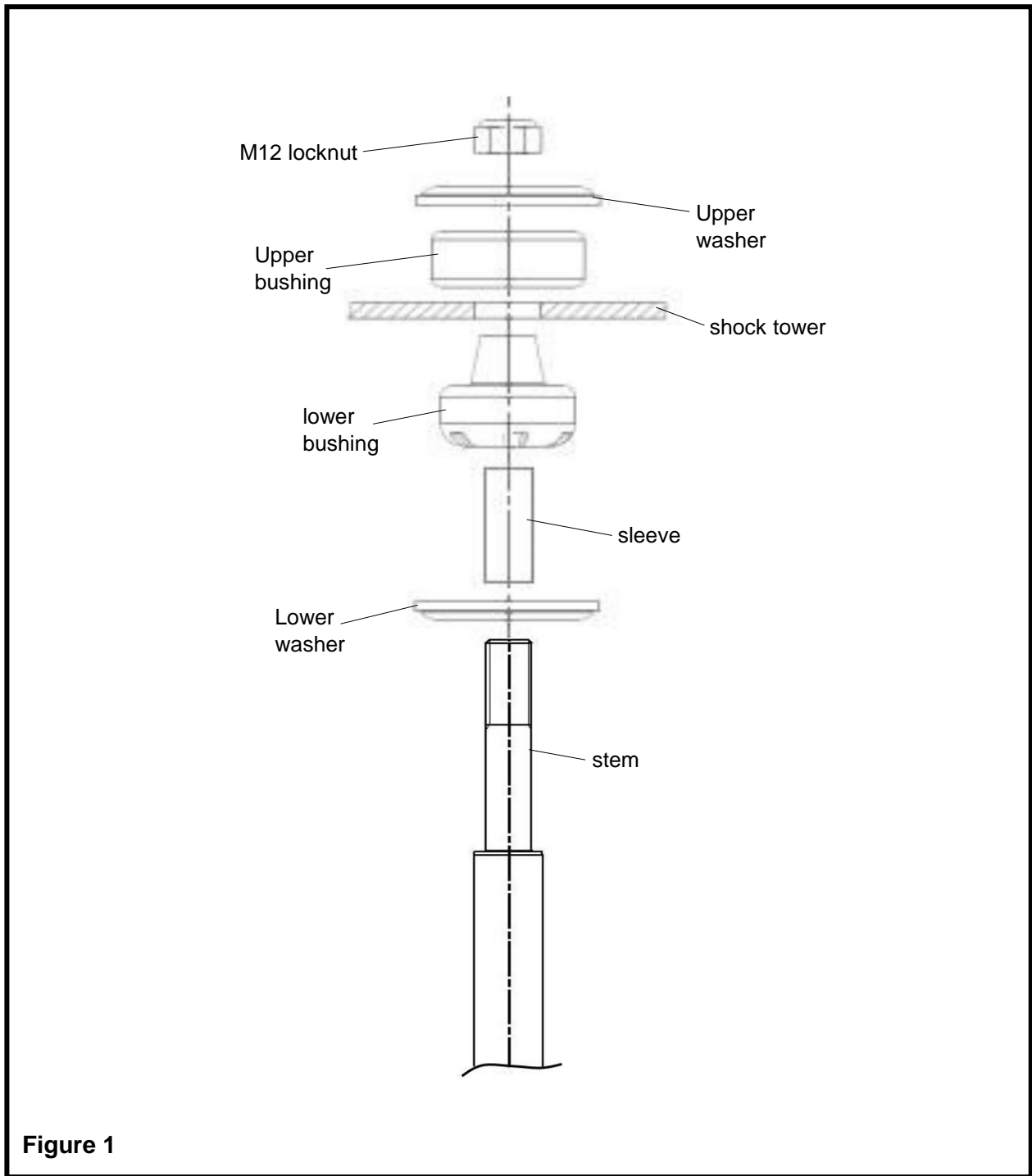
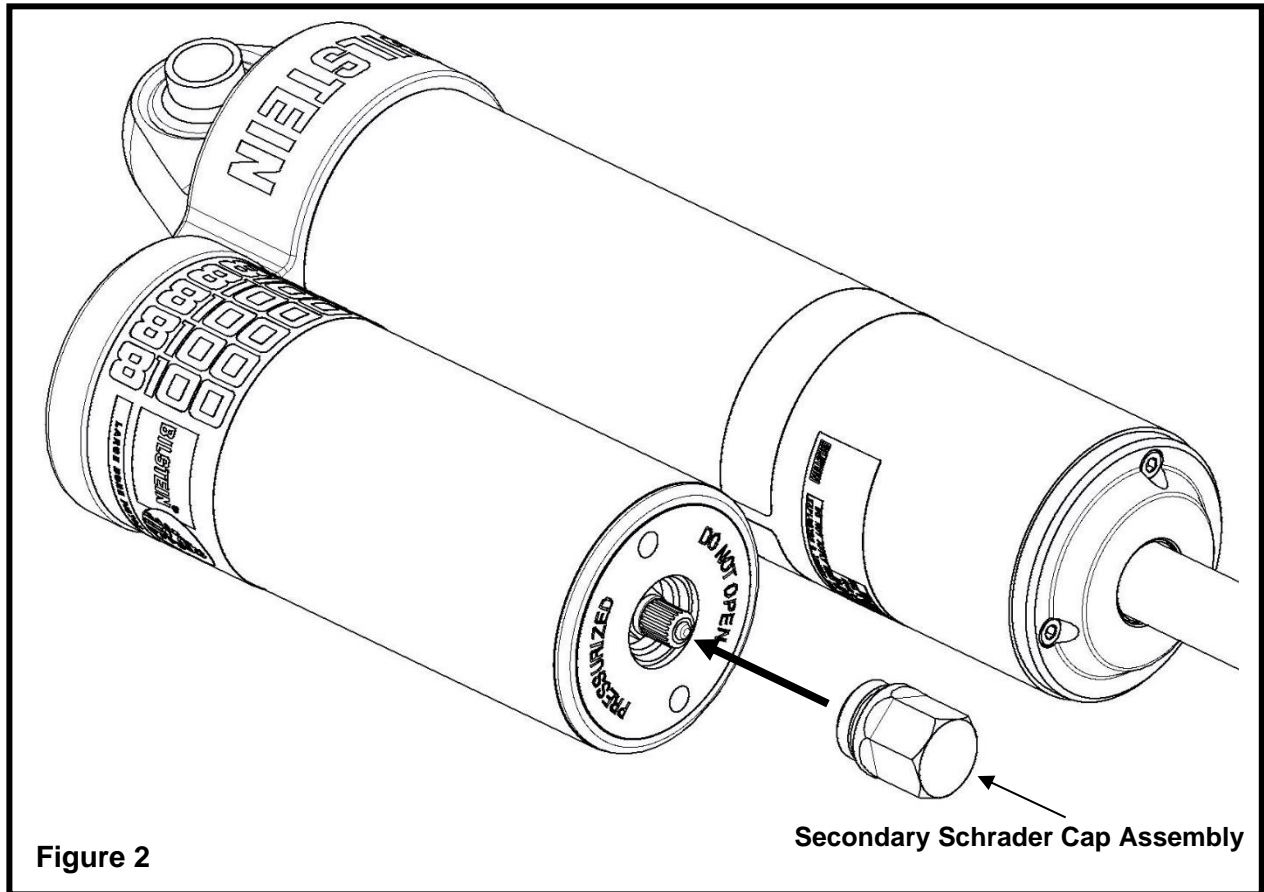


Figure 1





**Figure 3**

**Passenger side  
(looking towards the rear)**

**Driver side  
(looking towards the rear)**