

# E4-WM5-Y746A00

## MOUNTING INSTRUCTION



### **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.**

# E4-WM5-Y746A00

## MOUNTING INSTRUCTION



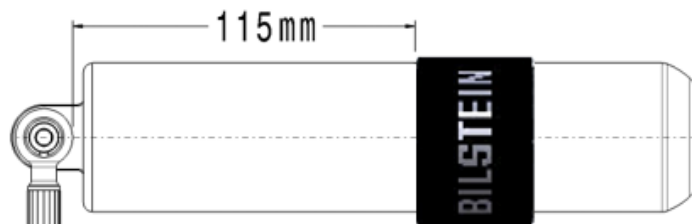
BILSTEIN B8 5160 Reservoir Shock Absorbers are designed to fit your vehicle's original shock mounts with no modifications. With the exception of the remote reservoir/bracket placement the B8 5160 shocks are installed in the same manner as a standard replacement shock.

### Rear Shock Installation Procedure:

1. Remove the existing rear shocks from the vehicle following all procedures in the vehicle manufacturer's service manual.
2. Install the lower end of the Bilstein shock absorber with the OE bolt, nut and washer that was removed in Step 1. Temporarily hand tighten.
3. Install the new supplied lower washer, lower bushing, and support washer onto the shock stem. Refer to Figure 3 for the correct orientation of the washers.
4. Pull down on the shock body and insert the stem into the shock tower.
5. Rotate the shock body so the hose bung is facing outward and indexed perpendicular to the vehicle frame.
6. Install the new supplied upper bushing, upper washer, and locknut onto the shock stem. Refer to Figure 3 for the correct orientation of the washers.

**Torque the locknut to 20 N·m (15ft·lbf).** Hold the shock tube to prevent the stem from rotating while torquing the locknut.

7. Slide the reservoir bracket onto the reservoir as shown below.
  - a) Position the reservoir in the reservoir bracket so there is 115mm between the bracket and the hose bung.



- b) Rotate the reservoir body so the hose bung is centered with the BILSTEIN lettering on the reservoir bracket. This will ensure the hose bung is facing outward, indexed perpendicular to the vehicle frame, once installed on the vehicle. Refer to Figures 1 and 2.
  - a) Place one drop of non-permanent thread locker onto the reservoir bracket pinch bolt (see Figure 4a) and install the pinch bolt.
8. Mount the reservoir to the frame. Refer to Figures 4a and 4b.
    - a) Place one drop of non-permanent thread locker into each of the threaded holes in the reservoir bracket.
    - b) Locate the boss of the reservoir bracket into the frame datum hole to the right of the shock absorber.
    - c) Lower the spare tire 15 inches for better access to fasteners on driver's side.
    - d) Install mount plate, split washers and bolts as shown in Figures 4a and 4b.

**Torque the reservoir bracket mount plate bolts to 27 N·m (20ft·lbf)**

9. Fully tighten the lower shock absorber bolt that was hand tightened in step 2.

**Torque to 98 N·m (72ft·lbf)**

# E4-WM5-Y746A00 MOUNTING INSTRUCTION



10. If a chassis hoist has been used, be sure to lower the vehicle such that its full weight is on the suspension prior to fully tightening the fasteners (with the exception of the reservoir bracket hardware)
11. Carefully check for any possible dynamic interference between the reservoirs, hoses and any other components on the vehicle, then make any necessary adjustments to the reservoir positions. The reservoir mounting locations depicted herein are appropriate for this application; however, some aftermarket components such as tires and/or lift kit combinations may create interference problems. It is the responsibility of the installer to determine if the reservoir is mounted appropriately and if there is any potential for interference.

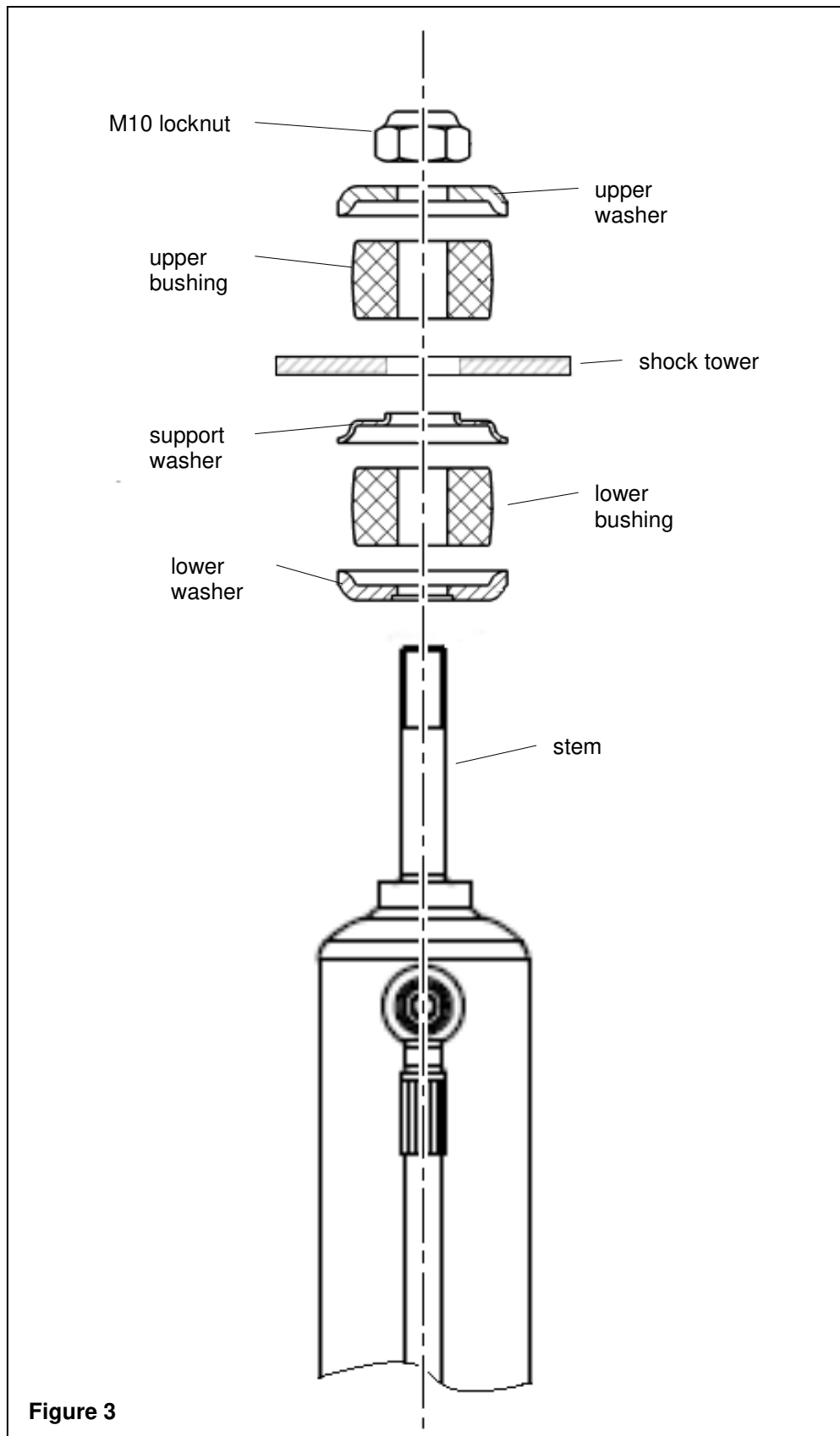


**Figure 1. rear driver's side**



**Figure 2. rear passenger's side**

# E4-WM5-Y746A00 MOUNTING INSTRUCTION



# E4-WM5-Y746A00 MOUNTING INSTRUCTION

