

E4-WM5-Y642A00 MOUNTING INSTRUCTION



IMPORTANT! READ THIS FIRST!

Installation of shock absorbers requires special tools and expert knowledge. Accordingly, installation of all BILSTEIN products must be performed by a qualified suspension specialist.

When replacing other brands, BILSTEIN shock absorbers 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 choose to install any BILSTEIN product without the necessary special tools, expertise or chassis hoist, you may subject yourself to the risk of serious bodily injury or death. If you elect not to use a chassis hoist, at least make sure the vehicle is on level ground, that all tires on the ground during installation are blocked to prevent movement, that at least two tires are on the ground at all times, and that adequately secured safety stands (jack stands) are used to support the chassis. **NEVER** get under the vehicle until you have checked to make sure all of these steps are performed.

BILSTEIN suspension products are gas-filled and are highly pressurized.

- Never place any BILSTEIN product in a vise or use a clamp on any BILSTEIN product.
- Never apply heat near any BILSTEIN product.
- 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 piston rod and seal.
- All mounting fasteners for shocks and struts must be securely tightened before the vehicle is operated.

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.

Be sure to properly dispose of all old parts.

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

E4-WM5-Y642A00 MOUNTING INSTRUCTION



Front Shock Installation Procedure:

- A. Remove existing front shocks from the vehicle following all procedures in the vehicle manufacturer's service manual.
- B. Before installing the shock/reservoir assemblies on the vehicle, use the supplied billet aluminum "piggyback" reservoir bracket to mount each reservoir to its shock body. Position reservoir for driver side as depicted in Figures 1 and 2. The passenger side is a mirror image. Ensure the hose is not rubbing against the shock tube in the static position. The hose fittings are designed to swivel and will allow the reservoir and hose to be easily moved.

Note: Before mounting the reservoir with the reservoir bracket, apply non-permanent thread locker on the 2 socket head cap screws.

- C. The reservoir and reservoir bracket should be placed approximately in the location pictured below.
- D. Tighten the socket head cap screws into the reservoir bracket sufficiently to prevent the reservoir from slipping, but loose enough to allow for small subsequent adjustments of position. The socket head cap screws will be tightened further once the shock/reservoir assembly is installed on the vehicle and the proper reservoir position has been confirmed.



Figure 1. Driver Side



Figure 2. Driver Side

E4-WM5-Y642A00 MOUNTING INSTRUCTION



- E. Install the complete shock/reservoir assemblies on the vehicle using the provided mount bushings and hardware (refer to Figure 3 for assembly order).

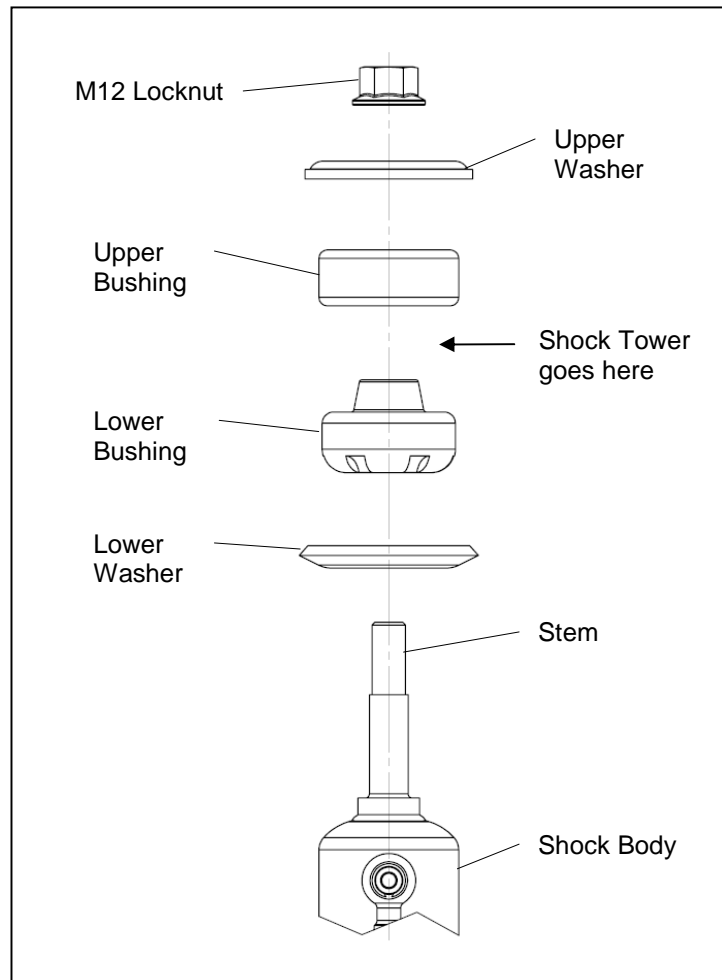


Figure 3. Shock Mount Assembly

- F. Tighten all fasteners to the vehicle manufacturer's service manual torque specifications.
- G. Carefully check for any possible 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 most Super-Duty trucks for which this kit is 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 mounted appropriately and if there is any potential for interference.
- H. If no potential interference is found, tighten the reservoir bracket's socket head cap screws to approximately 6 ± 1 ft-lb (8 ± 1 Nm).

E4-WM5-Y642A00 MOUNTING INSTRUCTION



Rear Shock Installation Procedure:

- A. Remove the existing rear shocks from the vehicle following all procedures in the vehicle manufacturer's service manual.
- B. Before installing the shock/reservoir assemblies on the vehicle, use the supplied billet aluminum "piggyback" reservoir bracket to mount each reservoir to its shock body. Position reservoir for driver and passenger side as depicted in Figures 4 and 5. Ensure the hose is not rubbing against the shock tube in the static position. The hose fittings are designed to swivel and will allow the reservoir and hose to be easily moved.

Note: Before mounting the reservoir with the reservoir bracket, apply non-permanent thread locker on the 2 socket head cap screws.

- C. The reservoir and reservoir bracket should be placed approximately in the location pictured below.
- D. Tighten the socket head cap screws into the reservoir bracket sufficiently to prevent the reservoir from slipping, but loose enough to allow for small subsequent adjustments of position. The socket head cap screws will be tightened further once the shock/reservoir assembly is installed on the vehicle and the proper reservoir position has been confirmed.



**Figure 4. Rear Driver Side
(View from rear)**



**Figure 5. Rear Passenger Side
(View from front)**

E4-WM5-Y642A00 MOUNTING INSTRUCTION



- E. Install the complete shock/reservoir assemblies on the vehicle. All original fasteners can be reused.
- F. 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.
- G. Tighten all fasteners to the vehicle manufacturer's service manual torque specifications.
- I. Carefully check for any possible 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 most Super-Duty trucks for which this kit is 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 mounted appropriately and if there is any potential for interference.
- J. If no potential interference is found, tighten the reservoir bracket's socket head cap screws to approximately 6 ± 1 ft-lb (8 ± 1 Nm).
- K. Installation is complete.