

# E4-WM5-Y579A00

## 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 tension is placed on the suspension system.

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

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## 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 front shock/reservoir assemblies on the vehicle, use the supplied "piggyback" hardware to mount each reservoir to its shock body. The shock reservoirs are mounted using two polyurethane isolator blocks and two steel hose clamps. The hose fittings are designed to swivel and will allow the reservoir and hose to be easily moved.
- C. Position each reservoir as depicted in Figure 1 (Note: Figure 1 shows the driver side, the passenger side is a mirror image).
- D. The isolator blocks should be spaced approximately 6" apart. The hose clamps should be positioned in line with the isolator blocks.
- E. Tighten the hose clamps sufficiently to prevent the reservoir from slipping, but loose enough to allow for small subsequent adjustments of position. The hose clamps will be tightened further once the shock/reservoir assembly is installed on the vehicle and the proper reservoir position has been confirmed.

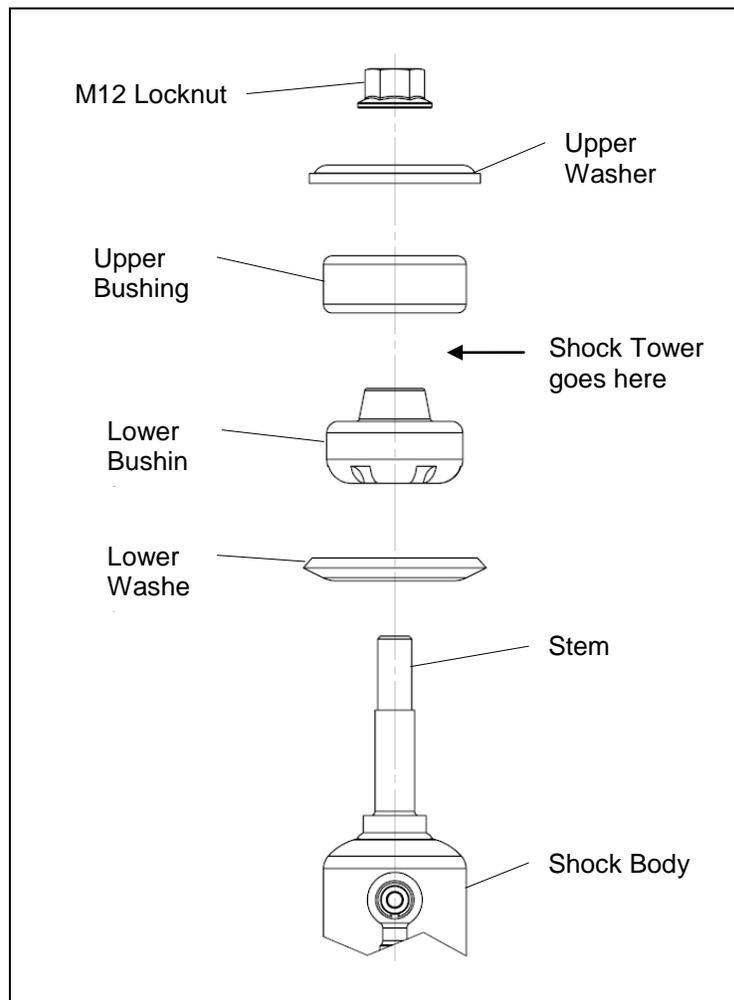


Figure 1. Driver Side

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- F. Install the complete shock/reservoir assemblies on the vehicle using the provided mount bushings and hardware (refer to Figure 2 for assembly order).



**Figure 2. Shock Mount Assembly**

- G. Tighten all fasteners to the vehicle manufacturer's service manual torque specifications.
- H. 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.
- I. If no potential interference is found, tighten the hose clamps until the reservoir cannot be manually moved independent of the shock body.

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### 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 front shock/reservoir assemblies on the vehicle, use the supplied "piggyback" hardware to mount each reservoir to its shock body. The shock reservoirs are mounted using two polyurethane isolator blocks and two steel hose clamps. The hose fittings are designed to swivel and will allow the reservoir and hose to be easily moved.
- C. Position each reservoir as depicted in Figure 3 (Note: Figure 3 shows the driver side, the passenger side is a mirror image with the reservoir placed towards the front end of the vehicle).
- D. The isolator blocks should be spaced approximately 6" apart. The hose clamps should be positioned in line with the isolator blocks.
- E. Tighten the hose clamps sufficiently to prevent the reservoir from slipping, but loose enough to allow for small subsequent adjustments of position. The hose clamps will be tightened further once the shock/reservoir assembly is installed on the vehicle and the proper reservoir position has been confirmed.

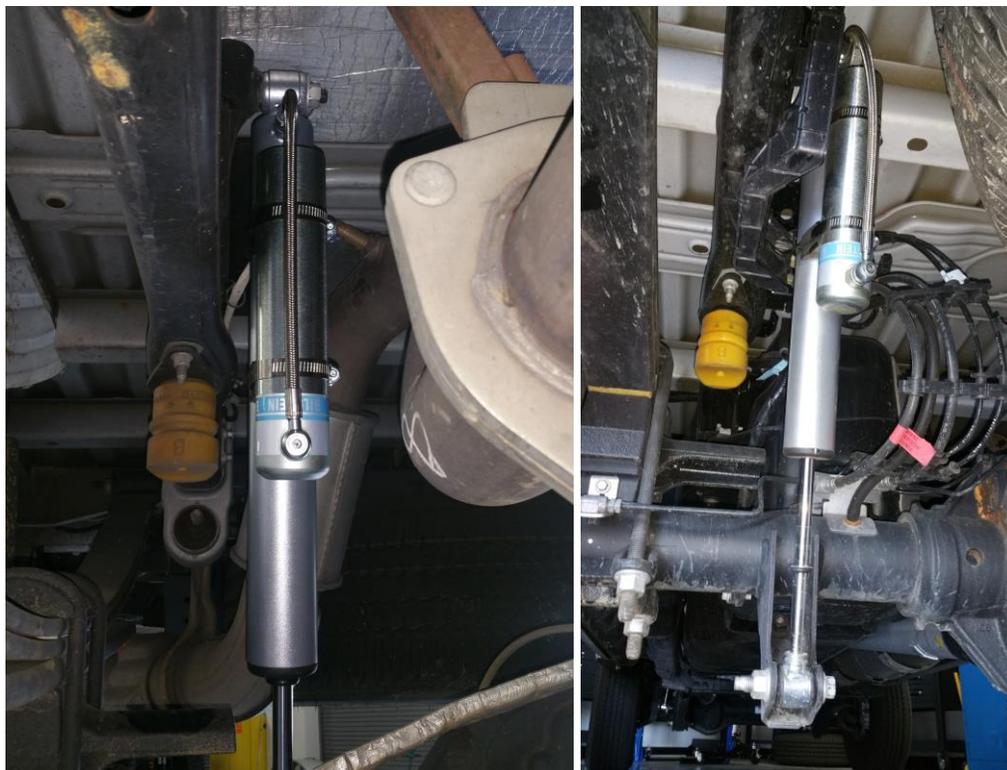


Figure 3. Rear Driver Side

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- F. Install the complete shock/reservoir assemblies on the vehicle. All original fasteners can be reused.
- G. 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.
- H. Tighten all fasteners to the vehicle manufacturer's service manual torque specifications.
- I. Carefully check for any possible interference between the reservoirs 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 vehicles for which this product is intended, however, some aftermarket components 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.
- J. If no potential interference is found, tighten the hose clamps until the reservoirs cannot be manually moved independent of the shock body. This completes the installation.