

# E4-WM5-Y596A00

## 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.

### **CAUTION!!!**

**Before disassembling the front 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.**

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## ORIGINAL EQUIPMENT REMOVAL / BTS INSTALLATION



**Note:** *Installation of this kit and alignment of the vehicle should be performed by a qualified technician. Use of proper tools and observance of all safety precautions is required.*

1. Immediately inspect all parts and instructions prior to installation of this kit!

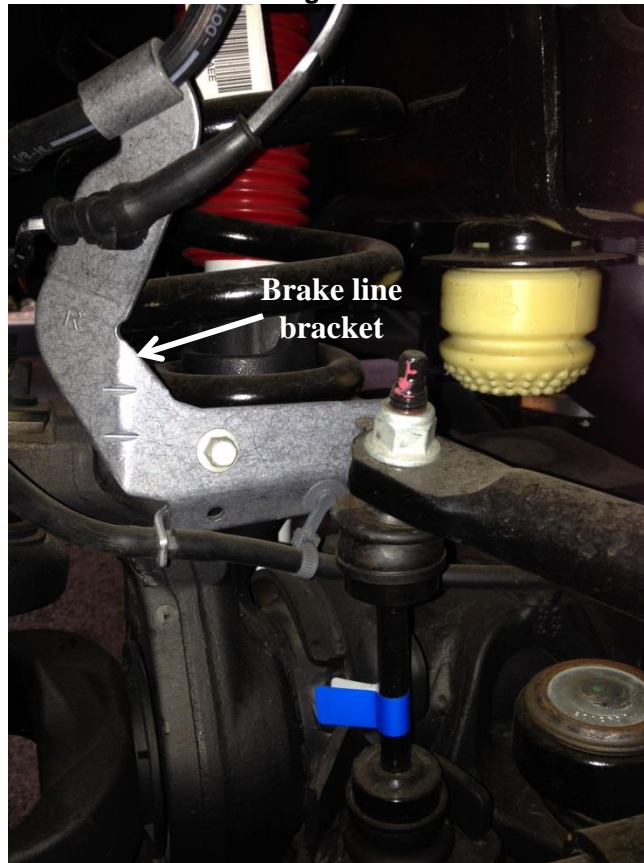


### CAUTION!

**READ THIS BEFORE REMOVING THE COIL SPRING:** There will be a high pre-load force on the coil spring during installation.

2. Support vehicle on a chassis hoist or make sure the vehicle is on level ground and apply the emergency brake. Block the wheels for extra safety. **Do not lift the front wheels off the ground.** Raise vehicle at the frame allowing the wheels to stay in contact with the ground.
3. Remove the brake line bracket from the axle housing near the lower spring perch. **See figure 1**, this will allow the brake line to extend without failure.

Figure 1



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4. Remove sway bar links at upper attachment points. **See figure 2**, pull links out of mount holes and secure sway bar to frame. *Failure to do this will result in possible damage to sway bar attachment points.*

Figure 2



5. Remove O.E. upper shock mount.
6. Raise vehicle until O.E. springs become loose in the seats and remove. **Take caution not to over extend brake lines!!!!**
7. Remove lower shock mount bolt and remove the shock absorber.
8. Install Bilstein spring. Make sure factory **upper isolator is reinstalled** on Bilstein unit and the lower spring coil end is mated to the factory spring stop.
9. Install Bilstein shock at lower attachment point; hand tighten only. Install lower portion of the upper mounting hardware on to the mounting stem.
10. Lower vehicle **slowly** checking for proper spring alignment periodically. Guide the shock absorber mounting stem into the frame mounting hole.
11. Install the remaining upper shock mounting hardware. Confirm the stem bushings are centered in the hole before tightening the lock nut.
12. Reinstall brake line brackets and sway bar links. Torque to manufacturer's specifications.
13. Lower the vehicle to static ride height and torque lower shock mount bolt to manufacturer's specifications.
14. Inspect all points of attachment and the brake/ABS lines for clearance. Adjust if necessary.
15. Align the vehicle to factory specifications before driving any substantial distance. Inspect and re-torque all hardware after the first 50 miles of driving and periodically thereafter.