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#### 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. Or, if applicable, adaptive headlights must be checked and recalibrated to comply with the vehicle manufacturer's specifications.
- If applicable, any/all Advanced Driver Assistance Systems (ADAS) must be checked and recalibrated to comply with the vehicle manufacturer's specifications.

### **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.



## SPRING LEVELING KIT (FRONT) 2013+ RAM 3500 4x4 / 2014+ RAM 2500 4x4

### Installation Instructions: Warning! Coil springs under high pre-load force!!!

- 1. Prior to installation, read instructions thoroughly and inspect the items within the kit.
- 2. Take vehicle ride height measurements on a level surface prior to disassembly.
- 3. Support vehicle on a chassis hoist or make sure the vehicle is on a safe/solid working surface with the emergency brake engaged. Block the rear wheels for added safety. **Do not lift the front wheels off the ground.**
- 4. Disconnect the front track bar at the frame, driver's side, carefully allowing it to rest on the tie rod assembly below. See Figures 1 and 2 below.



Figure 1

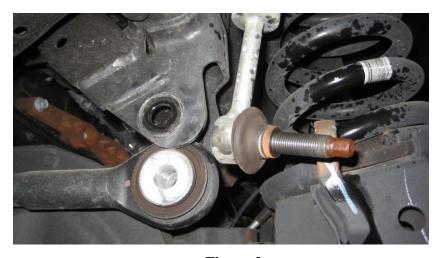


Figure 2



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The following steps should be performed on both sides of the vehicle:

- 5. Disconnect the lower sway bar end link and move sway bar off the mount. See Figure 2 on page 2.
- 6. Disconnect and remove the upper shock mount.
- 7. Slowly and carefully raise the vehicle, by the frame, just enough to allow springs to be removed. Remove spring and upper rubber spring isolator. See Figure 3 below.



Figure 3. Passenger side

- 8. If new shocks are being installed at this time, remove lower shock mount bolt and remove the shock absorber. If shocks are not being replaced at this time, loosen the lower shock mount bolt slightly but don't remove the shock from the vehicle.
- 9. Install the BILSTEIN provided upper spring isolator in same position the OE upper rubber isolator was removed from. Insert the threaded stem into the hole in the frame and thread on the BILSTEIN provided 5/16"-18 locknut. Temporarily hand tighten.
- 10. Carefully raise the vehicle enough to install the BILSTEIN provided coil springs, using caution to prevent damage to any of the ABS/brake lines. Install BILSTEIN provided coil springs so the BILSTEIN lettering is upright and legible. The coil springs have different upper and lower end gaps and need to be installed in this orientation only! Verify the coil spring is clocked properly in the indexed upper isolator. The spring should be centered on the lower spring seat on the axle. See Figures 4-7 on pages 4-5.





Figure 4. Passenger side (pictured with Bilstein 5100 shocks)



Figure 5. Passenger side (pictured with Bilstein **5100** shocks)

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Figure 6. Driver side (pictured with Bilstein 5100 shocks)



Figure 7. Driver side (pictured with Bilstein 5100 shocks)

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- 11. If new shocks are being installed at this time:
  - -Install shock at lower attachment point; hand tighten only.
  - -Install lower portion of the upper mounting hardware on to the mounting stem.
- 12. Slowly lower the vehicle onto the coil spring/isolator, checking for proper spring alignment periodically. Guide the shock absorber mounting stem into the frame mounting hole.
- 13. With the weight of the vehicle completely on the coil spring/isolator, tighten the locknut fastening the isolator to the frame. Torque to 25Nm (18 ft-lbs).
- 14. Install the remaining upper shock mounting hardware. Confirm the stem bushings are centered in the hole before tightening the lock nut.
- 15. If new shocks are being installed at this time, refer to additional installation instructions for the BILSTEIN shock provided in the shock box.
- 16. Reconnect sway bar end links and torque to service manual specifications.
- 17. Reconnect track bar hardware at the frame and torque to service manual specifications.
- 18. Torque lower shock mount bolt to manufacturer's specifications.
- 19. Align the vehicle to factory specifications and have any adjustments performed by a certified technician. This completes the installation.