



Upper Control Arms, part # 51-332334

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.

BILSTEIN Upper Control Arms are compatible with direct fit replacement shocks and coilovers only. Not compatible with lift spacers. May not be compatible with some aftermarket spindles. If using aftermarket spindles, installer must check clearance between control arm and spindle throughout full suspension travel. BILSTEIN is not responsible for any damages caused due to insufficient clearance with aftermarket spindles.

E-WM05-0010020AA MOUNTING INSTRUCTION



Bill of Materials – 51-332334		
Item #	Description	Qty
1	B-BB02-0010008; Toyota Tundra '22+; FL; UCA	1
2	B-BB02-0010009; Toyota Tundra '22+; FR; UCA	1
3	B-KT01-0020027, contents include	1
	Washer	4
4	8 Inch Standard Black ZIP TIE	4

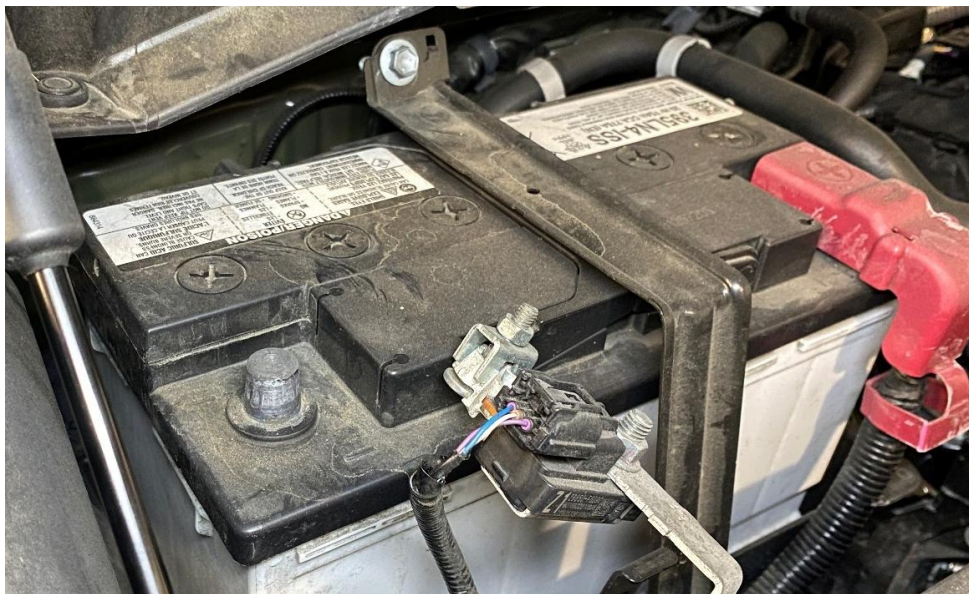
IMPORTANT!!!

This BILSTEIN product is NOT compatible with OE wheel backspacing. Wheels with a maximum of 5.75" backspacing must be used.

Removal of OE Upper Control Arms (always follow service manual specifications)

NOTE: All images are of the left (driver) side of the vehicle unless otherwise stated. Some components depicted herein differ in appearance from the supplied components.

- A. Secure vehicle on hoist.
- B. Remove the front wheels.
- C. Disconnect the negative battery terminal.

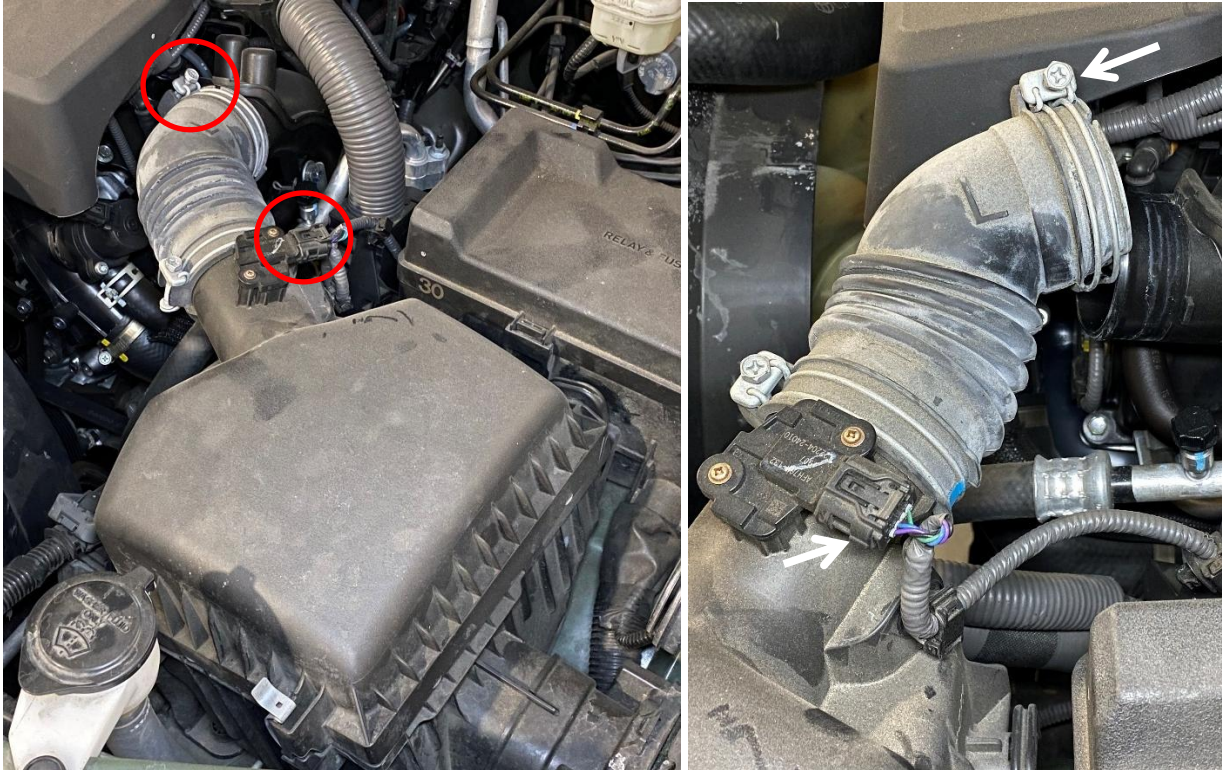


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- D. Remove the air box by loosening the intake boot clamp at the throttle body and disconnecting the MAF sensor, see below.



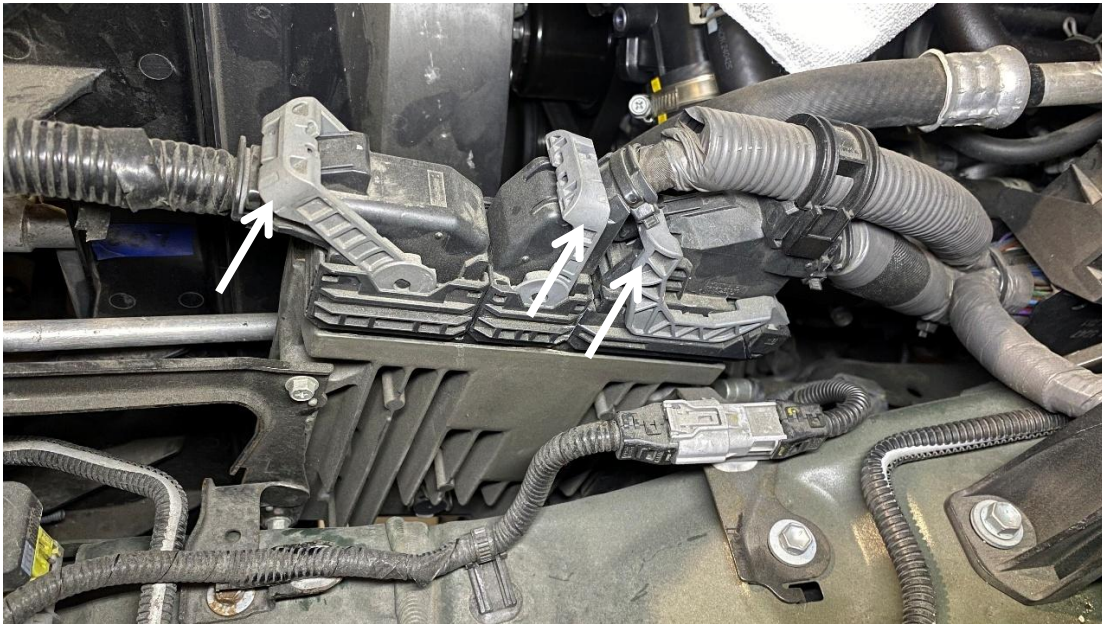
- E. Pull upward on the air box lower assembly. It is held in by rubber grommets and will pop up by prying upward.
F. Set the air box aside and out of the way. Place a rag in the intake boot to prevent any debris from entering the intake.



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G. Unlock the three ECU plugs by opening the latches on top of the ECU, then unplug the harness.



H. Remove the three bolts retaining the ECU to the chassis and remove the ECU from the vehicle.



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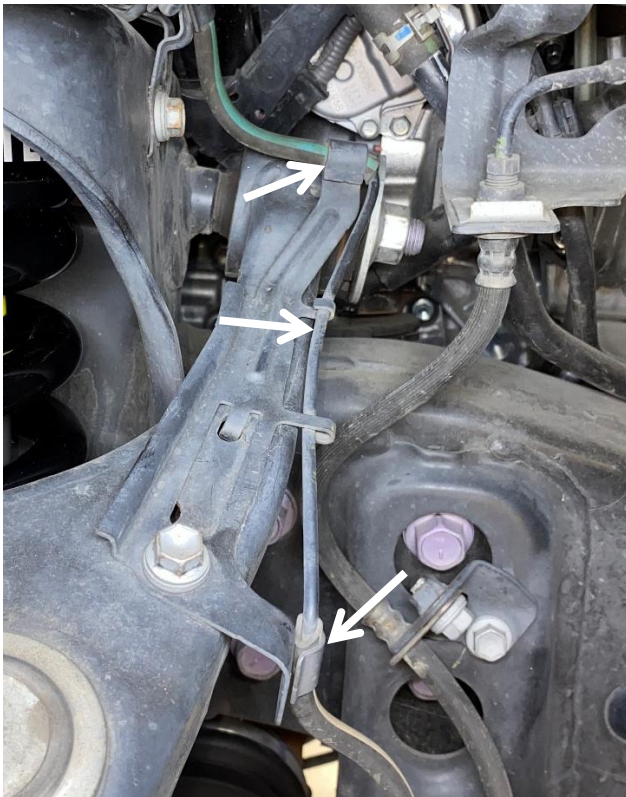
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- I. Using a clip tool, remove the clips that secure the inner fender aprons to the inner fender. Then remove the fender aprons to access the UCA pivot bolt.



- J. Remove the ABS line from the ABS line bracket on the OE upper control arm.

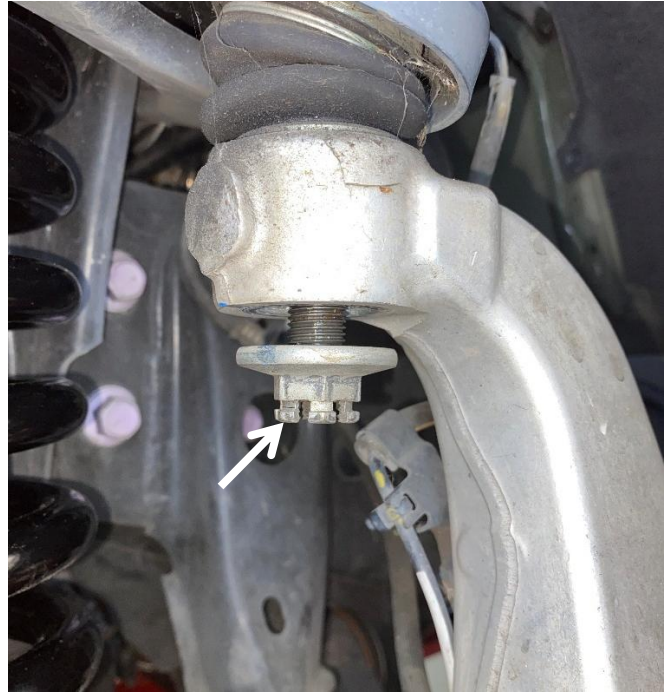


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- K. Remove the cotter pin from upper ball joint castle nut. Using a 19mm wrench, loosen the upper ball joint castle nut until flush with the end of the stud.



- L. Using a ball joint puller, separate the spindle from the ball joint stem. Be careful to avoid tension on the brake line and ABS line.

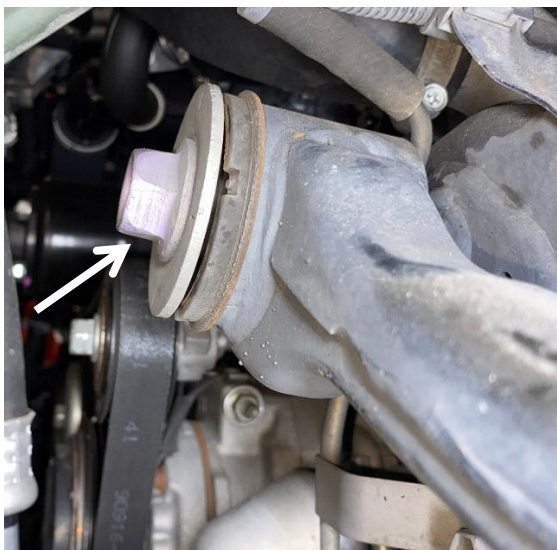


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- M. Using two 22mm wrenches, remove the nut and washer securing the UCA bolt. Keep the OEM pivot bolt and nut as these will be re-used, the OEM washers can be discarded.



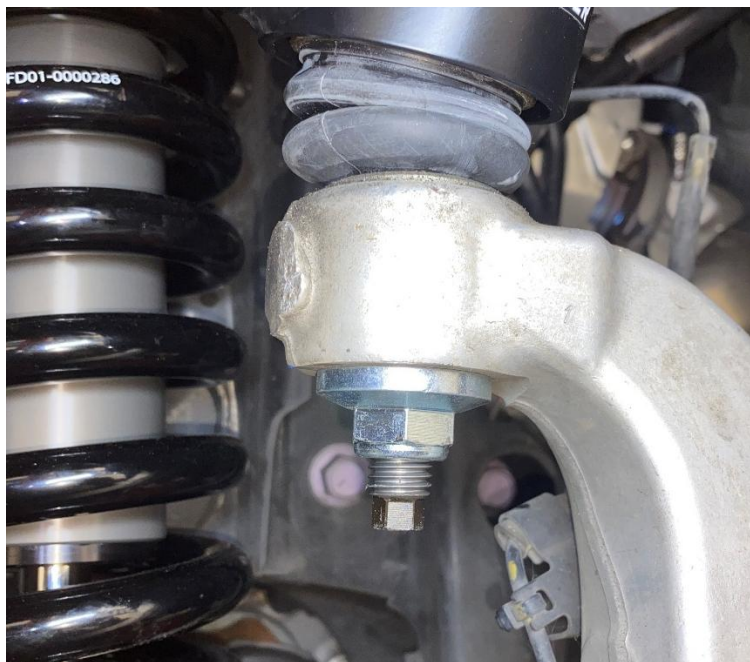


Installation of Bilstein Upper Control Arms

- N. Place the supplied washers (BOM item #3) on the outside face of the bushings as shown and install the UCA onto the vehicle in the reverse order of removal using the OEM pivot bolt and nut. Apply high strength thread locker, then using a 22mm socket and 22mm wrench, torque the UCA bolt and flanged nut to 235 Nm (173 ft.-lbs.).



- O. Install the UCA ball joint on the spindle and secure it using the provided flange nut. Torque the flange nut to 115 Nm (85 ft.-lbs.).



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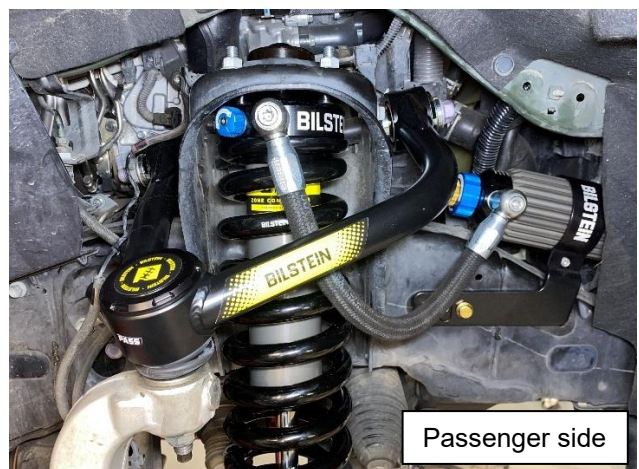
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- P. Secure the ABS line to the Bilstein UCA mounting tabs using the provided zip ties (BOM item #4).



- Q. Re-install the inner fender aprons to the inner fender by pressing the clips back into place (removed in step I). Note, if running Bilstein 8112s, the frontward inner fender apron can remain off.



- R. Reinstall the ECU and the air box, then reconnect the negative battery terminal.
S. Install the wheels and lower the vehicle to ride height – then torque the lugs to the factory specification.
T. Check alignment and calibrate as needed.