E4-WM5-Y714A00
MOUNTING INSTRUCTION

Upper Control Arms, part # 51-304713

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.

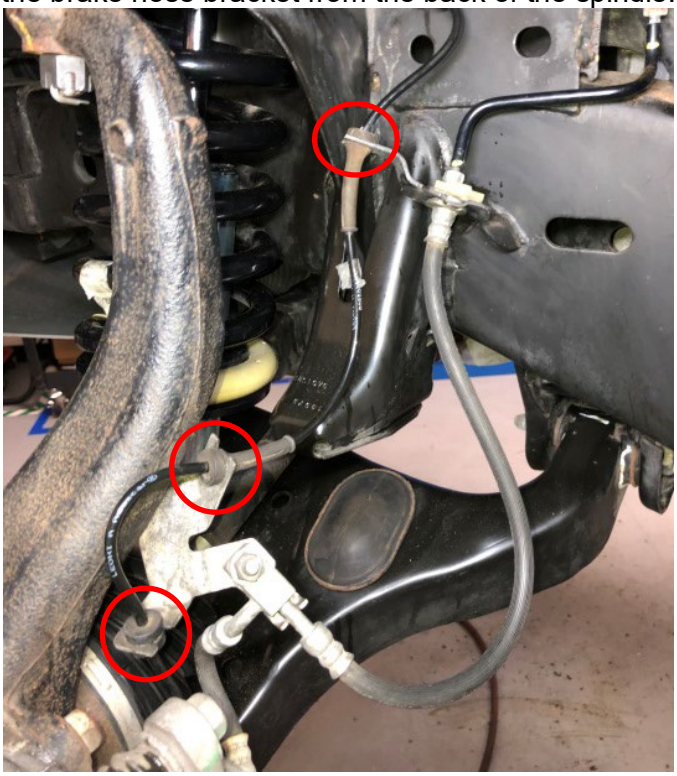
BILSTEIN Upper Control Arms are compatible with direct fit replacement shocks and coilovers only. Not compatible with lift spacers. May not be compatible with some aftermarket spindles. If using aftermarket spindles, installer must check clearance between control arm and spindle throughout full suspension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

Bill of Materials – 51-304713		
Item #	**Description**	**Qty**
1	**B4-BB2-Z062A06; Nissan Titan; '04-'16 & '17+; FL; UCA**	**1**
2	**B4-BB2-Z062A07; Nissan Titan; '04-'16 & '17+; FR; UCA**	**1**
3	**B4-KT1-Z464A00, contents include:**	**1**
	Bushing	8
	Sleeve	4
	Grease Packet	2
4	**B4-KT1-Z465A00, contents include:**	**1**
	Zerk Fitting	4
5	**B4-KT1-Z440A00, contents include:**	**1**
	Castle Nut	2
	Cotter Pin	2

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.

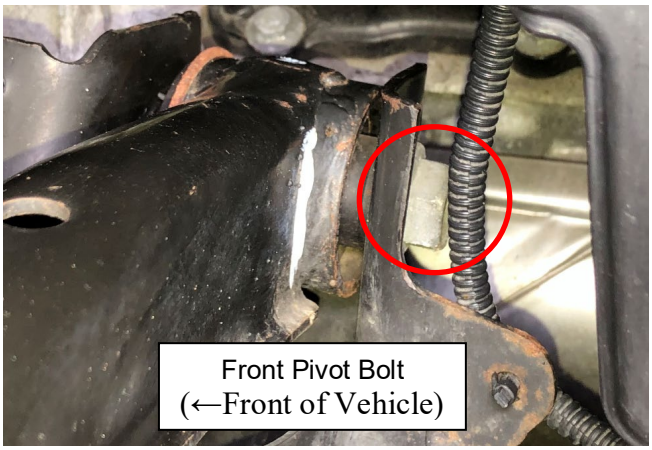
A. Secure vehicle on hoist or stand.
B. Remove the front wheels.
C. Disconnect the ABS line from the brake hose bracket and frame bracket. Then use a 10mm socket to remove the brake hose bracket from the back of the spindle.

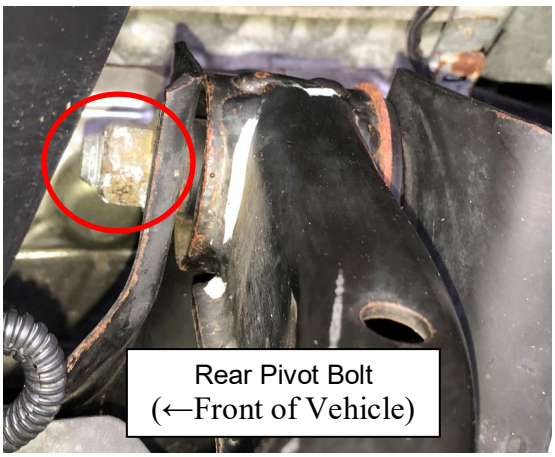


D. Remove cotter pin from upper ball joint. Using a 22mm wrench, loosen upper ball joint nut until flush with the end of the stud. Using a ball joint puller, separate the spindle from the ball joint stem.

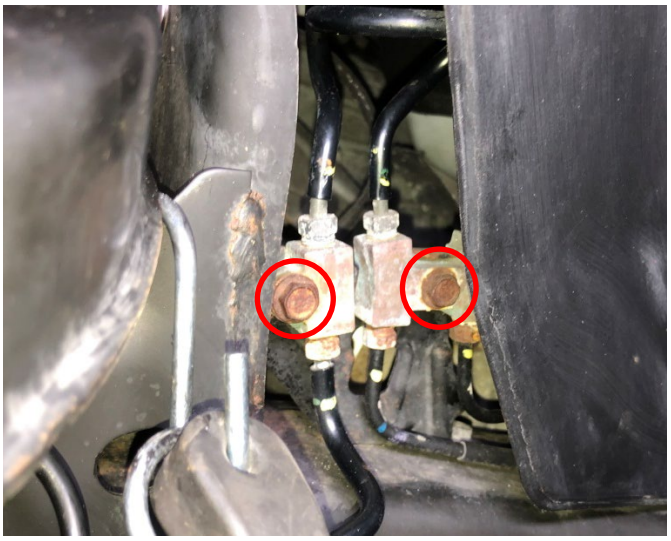
E. Remove the ball joint nut and remove the spindle from the UCA. Secure the spindle using a bungee cord or bailing wire. Be careful to avoid tension on the brake line and ABS line.

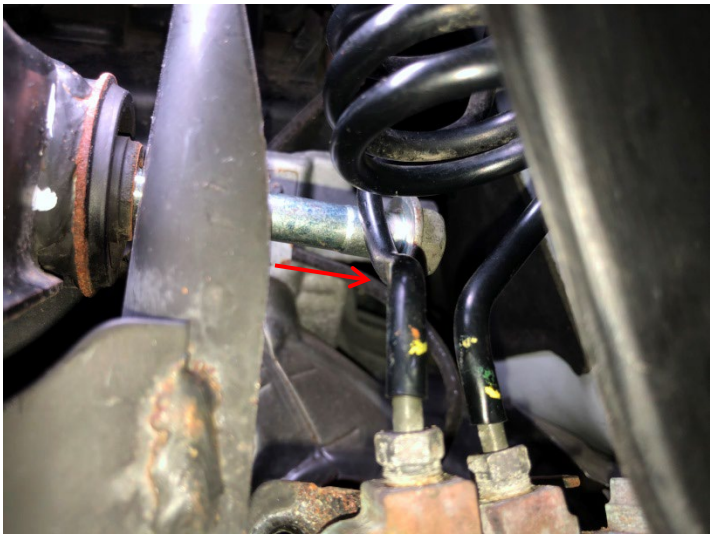
F. Using a 19mm socket and 19mm wrench, remove the nuts from both UCA pivot bolts. Leave the bolts in place at this time. Note that both UCA pivot bolts are facing forward toward the front of the vehicle with the head of the bolts on the rear side of the vehicle.



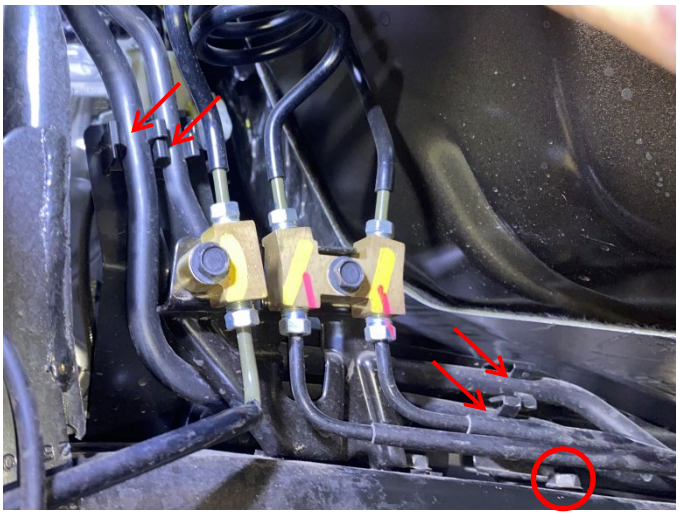


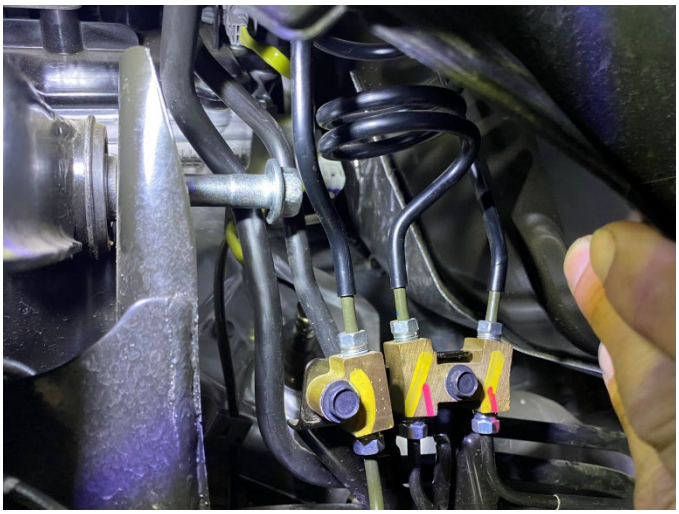
G. For **2004-2016 Titan**, on left (driver) side only: Locate the two brake line blocks rearward of the UCA. Use a 10mm socket to remove the two bolts securing the brake line blocks to the frame. This will allow for removal of the rear UCA pivot bolt by carefully moving the brake lines until they clear the bolt.





H. For **2017+ Titan**, on left (driver) side only: Locate the two hoses mounted to a bracket rearward of the UCA. Use a 10mm socket to remove the two bolts securing the bracket to the frame (the first bolt is circled below, the second is on the inside of the frame rail) and remove the bracket from the hoses at four clip points (arrows below). This will allow for removal of the rear UCA pivot bolt by carefully moving the hoses until they clear the bolt.





I. Carefully remove the remaining UCA bolts. The UCA can now be removed. Save the UCA bolts and nuts as they will be reused later.

Preparation of Bilstein Upper Control Arms

J. Thoroughly clean and dry the UCA and provided bushings.
K. Following the Bushing Assembly Instructions provided in the kit, use a shop press or vice to dry press the bushings into the UCAs.

L. Apply the supplied grease to the bushing inside diameter.

M. Press the steel sleeves into the bushings and apply more grease to outside faces of all bushings and sleeves.

N. Install the 4 provided 90° zerk fittings into the threaded holes on the top of each bushing eye-ring ensuring they face outboard for easy access during service.
DO NOT OVER TORQUE ZERK FITTINGS. OVER TORQUING CAN RESULT IN DAMAGE TO FITTINGS.

Installation of Bilstein Upper Control Arms

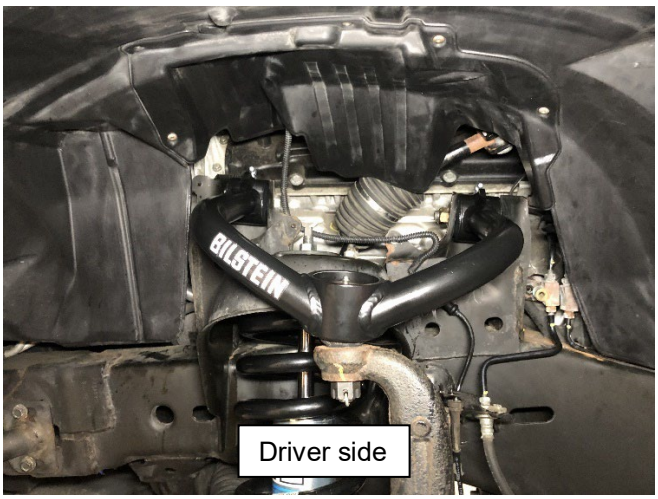
O. Using the OE UCA pivot bolts & nuts that were removed in steps F-I, install the UCA onto the vehicle. Ensure the bolts are installed in the same direction as removed, facing forward towards the front of the vehicle. Before fastening flange nut to UCA bolt, use a grease gun to apply Prothane Super Grease to the zerk fitting until grease squeezes out from behind the seams. Repeat for all four UCA bushings. (Make sure to do this step before fastening flange nuts to UCA bolts. Failure to grease bushing while UCA bolt is loose will cause damage to the bushing.) Wipe off the excess grease. Tighten the nut by hand. Do not torque down at this point. For the left (driver) side rear pivot bolt, the brake lines will need to be carefully moved out of the way for installation as noted in step G.

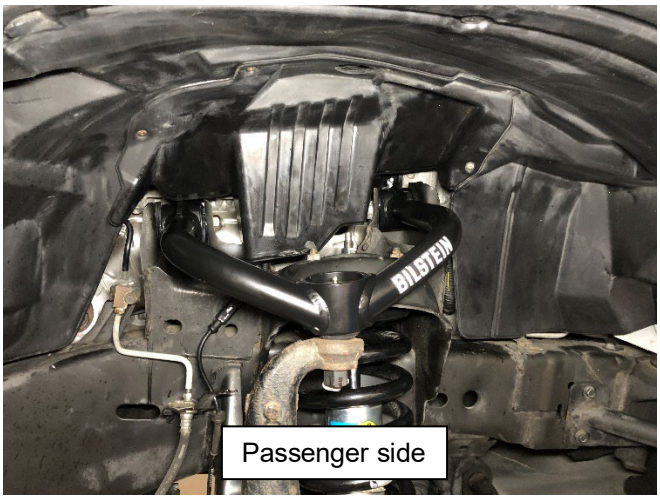
P. Install UCA ball joint on the spindle and secure using castle nut provided. Using 21mm socket, torque castle nut to 78.5 Nm (58 ft.-lbs.). Continue to tighten the castle nut to the next available slot (no more than 60°). Never back off the slotted nut to achieve alignment with the hole in the stud. Install the cotter pin.

Q. Using a grease gun, apply Prothane Super Grease to the zerk fittings of the ball joints (do not over grease the joint or the ball joint boot will be damaged). Fill with grease until the boot starts to expand and the bottom of the boot sleeve seats against the spindle, and then add a little more. Do not fill to the point where the boot starts to look like a balloon.

R. Install wheels, lower to ride height, and torque to factory specification.

S. Using a 19mm socket and 19mm wrench, torque UCA pivot bolts and nuts to 167 Nm (125 ft.-lbs.). (Torquing the UCA bolts while at **droop**, and **not** at **ride height**, may cause early wear to the bushings.)





T. Check alignment and perform alignment if needed.

Maintenance

U. A break in period of 50 miles is required for bushings and ball joints to settle, which may result in some creaking noises through this period. After a 50-mile break in period, re-torque all bolts to their required torque.

V. To increase the life span of the bushings and ball joint, make sure to grease them through their grease zerk fittings over time (remember to loosen UCA bolts before greasing and do not over grease the ball joint, which could damage the ball joint boot);
   - Repeat steps A and B.
   - Make sure to clean the zerk fittings of any dirt and debris using compressed air or soap and water.
   - Loosen the UCA bolts and use a grease gun to apply Prothane Super Grease until significant resistance is felt or grease is squeezing out of the seams of the bushings (step O).
   - Repeat step Q.
   - Make sure to wipe off any excess grease on UCA bushings and ball joint to prevent dirt build up.
   - Repeat steps R, S, and T.

W. Make sure to inspect the bushings and ball joint periodically for any unusual wear or damage. If parts have excessive wear or damage, make sure to replace parts with a BILSTEIN replacement bushing kit.