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CAMBURG

Ball-Joint Performance Upper Arm Instructions

Toyota Tacoma Pre/4wd 2005-2020

PARTS SUPPLIED

QTY	Description	ID
8	Polyurethane pivot bushings	B
8	Large flat washers (plated)	A
4	7/8" od x 9/16" id x 2.335" sleeves	C
4	90 deg. zerk grease fittings (self tapping)	
2	M14 x 1.50 nyloc nuts	
2	M14 flat washers	
2	10-32 x 3/4" steel SHCS allen bolts	
4	10-32 stainless flat washers	
2	10-32 steel nyloc nuts	
2	Rubber stainless insulated clamps	
1	Ball-Joint cover kit	
1	Ball-Joint hardware kit (zerks, castlenuts and cotter pins)	
4	Bushing grease packets	
4	Camburg 8.5" stickers	

Thanks for purchasing a set of our Camburg ball-joint performance upper a-arms for your vehicle. Please follow all instructions. If you are not installing these yourself have a qualified shop do so. These arms are designed for 1-3" of lift from coilovers and to be used with stock OEM spindles or Camburg performance spindles. These are NOT designed to be used with cheap spacer type lifts. Make sure to check the parts list to make sure you have every component prior to starting. Camburg Engineering has made every attempt to insure you receive the highest quality components in the most complete manner. This is a guide to help you through the process with recommended torque specs. It's your responsibility to ensure parts are being installed correctly using the correct tools and procedures.

Tools & Supplies Required

Eye protection | Jack | Jack Stands | Needle nose pliers
2-3 lb. mini sledge hammer | 19mm socket & wrench
22mm socket | 5/32" allen wrench | 3/8" wrench
1/4" wrench | 8mm socket | Torque wrench | Air saw
Brake cleaner | Grease Gun for ball-joint | Red loctite

1.0 Setup

Park the vehicle on level ground and set the parking brake and chock both rear wheels. Jack up the front end from the chassis until the front tires are off the ground. Place jack stands under the front frame rails and set down. Make sure the vehicle is supported correctly and the front tires are still off the ground. Place the jack under the driver side lower arm and raise the tire 1/2", then remove the wheel while keeping jack under lower a-arm to support the suspension. Read these instructions start to finish before moving forward and review diagrams.

2.0 Removal

Using needle nose pliers, remove the cotter pin from the upper ball-joint at the spindle. Using a 19mm socket, loosen the castle nut but do not fully remove. With a mini sledge hammer, strike the top of the spindle numerous times to release the ball-joint tapered stud. This can be a little difficult since it's a press fit, heating up the spindle to get it to expand will help. Once the ball joint releases from the spindle, then remove the castle nut. Using a 19mm socket & wrench, loosen and remove the OEM upper a-arm bolt. Due to the length of the bolt it can be difficult to remove. You may need to bend or trim the inner sheet metal for clearance. On newer 2016-2020 models we recommend cutting the bolt in half and replacing with new OEM bolts available through us or any Toyota dealership. Upon installation we change the orientation of the bolt so it's no longer a problem removing/installing in the future. Make sure to position & support the spindle so that it doesn't pull on the brake line and on 4wd models that it doesn't pull out the inner CV or strain the CV boots and axles. Remove the upper arm.

3.0 Pre-installation

The Camburg B/J upper arms come with the ball-joints pre-installed. You will need to grease them once installed on the truck, **not doing so will damage them.** You will need to install the straight zerk fittings into the top of the ball-joint using an 8mm socket. Do not over tighten.

Using a 1/4" wrench install the self-tapping 90-degree zerk fittings into the Camburg arms. Do not bottom out the fittings into the arms. The zerk fitting is two parts that thread together, you may need to remove the nipple when installing. Position them pointing outward for grease gun access. Now press the polyurethane bushings into the arms. Using the supplied bushing grease, apply grease onto the OD of the inner pivot sleeves and press into the bushings. Wipe excess grease onto outer bushing faces and apply additional grease if needed. See diagram on other side for reference.

4.0 Installation

Install the driver side Camburg upper arm to the frame using the OEM M14 bolt with four of the supplied zinc-plated washers on either side of the polyurethane bushings. Install the bolt opposite from the factory orientation so the bolt head will be at the back of the arm and the nut at the front of the arm. To insure you're installing the correct arm, the zerk fittings will be pointed downward, pivot gussets are on top and the longer a-arm tube towards the front of the vehicle. With the bolt pushed all the way through clean the threads using brake cleaner and install the supplied M14 washer and M14 nyloc nut with red loctite. Using a 19mm wrench and 22mm socket torque to 85 ft/lbs. See diagram on other side for reference.

Prior to installing the ball-joint stud into the spindle, make sure the spindle taper is clean and free of debris. Swing down the upper arm so the ball-joint inserts into the spindle. Using a 19mm socket torque to 80 ft/lbs. Do not over-tighten or use an impact gun. Install the new cotter pin through the castle nut.

Using the supplied 10-32 hardware and rubber clamps, attach the speed sensor wire to the backside of the upper arm using a 5/32" allen and 3/8" wrench and hand tighten. Make sure to route the wire so that it has proper clearances.

The last step will be installing the ball-joint cover kit, **make sure to grease the ball-joint prior.** Follow the instructions supplied with the cover kit.

Due to the extreme and punishing nature of offroad use, Camburg Engineering products have no implied or expressed warranty. Camburg Engineering products and components are designed and manufactured for offroad use only. Installing most suspension products will raise the center of gravity of the vehicle and can increase the susceptibility to a rollover and alter the handling characteristics. Camburg Engineering products may void the vehicles warranty, check with your local dealer. The loss of use of the product, loss of time, inconvenience, removal, shipping costs, commercial loss or consequential damages are not covered. Camburg Engineering reserves the right to change the design, material or specifications of any product without assuming any obligation to modify any product previously manufactured and without prior notice. Every effort has been made to avoid printing errors and specifications. By installing and/or using these products you are accepting these stated conditions and accept all liability and responsibility.



Repeat steps 1 through 4 to install passenger side arm

5.0 Alignment

You will need to have your vehicle aligned by a qualified shop. Additional caster is built into the Camburg arms to correct alignment issues that are inherent with lifting the vehicle. Have your alignment shop increase/maxout positive caster, then set camber and toe to factory OEM specifications. Having an increase in caster helps with straight line stability and cornering precision for performance driving on and off-road.

6.0 Maintenance & Care

Over time the pivot bushings will also need to be cleaned and lubricated. Use grease that's designed specifically for polyurethane bushings. Not using the correct grease can cause the bushings to squeak abnormally and wear faster. The best method to grease the bushings is to remove the arms from the vehicle, disassemble, clean and lubricate. When using a grease gun on the vehicle, loosen the upper arm bolts so you're able to pull the washers slightly away from the outer bushings to relieve pressure prior to greasing. Most grease guns operate at 1500+ psi. and can damage the bushings applying too much pressure, so operate the grease gun slowly. Neglecting care and upkeep will wear parts out faster. We recommend greasing the bushings every 6k miles or 1-2 times per year.

We recommend greasing the ball-joint every 10k miles or sooner if used in dirt/snow/mud a lot to flush contaminants out.

Inspect and re-torque all hardware and components after 500 miles and whenever using the truck off-road.

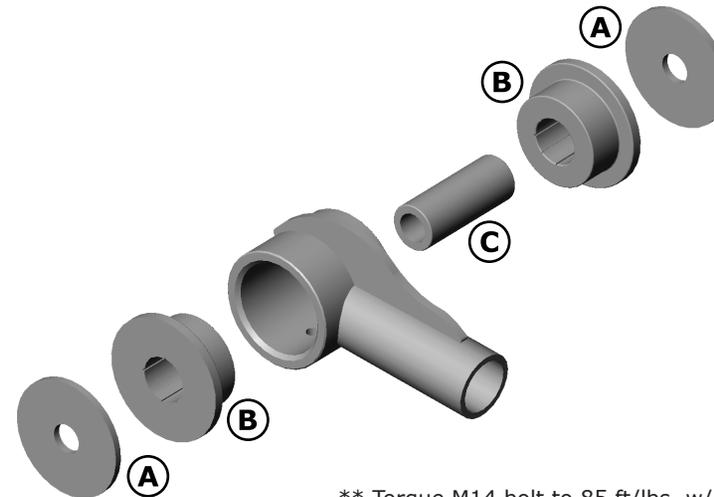
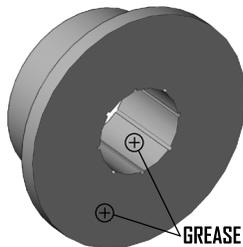
Notes

Recommended tire size: 285/75/16 or 285/70/17

Recommended wheel size: 16-17" x 8-9"

Maximum wheel backspacing = 4.75" (with larger tires than stock)

Stock wheels and tires will fit "as is"



** Torque M14 bolt to 85 ft/lbs. w/ red loctite **

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