



Ball-Joint Performance Upper Arm Instructions

Tacoma Pre/4wd 05-13 | FJ Cruiser 2wd/4wd 07-13 | 4Runner 2wd/4wd 03-13

PARTS SUPPLIED

QTY	Description	
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 SS allen bolts	
4	10-32 SS flat washers	
2	10-32 SS nyloc nuts	
2	Rubber insulated clamps	
4	Grease packets	
4	Camburg 8.5" 3C stickers	

Thanks for purchasing a set of 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 to be used with stock unmodified spindles or Camburg performance lift spindles in conjunction with an approved 2"-3" lift bolt-in coilover. They are not to be used with other suspension kits or spacer type kits. 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.

Tools & Supplies Required

Eye protection | Jack | Jack Stands | Needle nose pliers | Dead blow hammer | 19mm socket & wrench | 22mm socket | 5/32" allen wrench | 3/8" wrench | 1/4" wrench | Torque wrench | Air saw | Brake cleaner | Ball-joint removal/install tool set | Snap ring pliers | Replacement cotter pin

1.0 Setup

Park the vehicle on level ground and set the parking brake and chock the rear wheels. Jack up the front end until the tires are off the ground. Place jack stands under the frame rails and set down. Jack up the driver side lower arm to only raise the tire off the ground, remove the wheel and keep jack under lower a-arm to support the suspension.

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 dead blow 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. You may need to remove a small portion of the inner fender sheet metal to remove the long OEM bolt, a small air saw works best. Remove the upper arm.



3.0 Pre-installation

The Camburg B/J upper arms are designed to use factory Toyota OEM ball-joints. Your current ball-joints will be reused as long as they are in good condition. Worn or damaged parts need to be replaced. While some aftermarket versions are available, they are a much lower quality part and their manufacturing tolerances many times are oversized and will not press correctly into the Camburg arms and will damage the arm and ball-joint. Slightly machining the aftermarket oversized ball-joints to correct sizing can correct the fitment problem.

Using the proper ball-joint removal/install tool remove the ball-joint from the stock arm and install into the Camburg arm making sure it's fully seated and clipped in. Refer to a Toyota service manual for step by step ball-joint removal/install instructions.

Using a 1/4" wrench, install the self tapping 90 degree zerk fittings into the Camburg arms so the grease port is facing outward. Now press the polyurethane bushings into the arms. Using the supplied grease, apply grease onto the OD of the inner pivot sleeves and press into the bushings. Wipe excess grease onto outer bushing face and apply additional grease if needed. Refer to diagram 3.1.

4.0 Installation

Install the driver side Camburg upper arm to the frame using the original M14 bolt with four of the supplied zinc-plated washers on either side of the polyurethane bushings. 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 washer and nyloc nut with red loctite. Using a 19mm wrench and 22mm socket torque to 85 ft/lbs. Refer to diagram 4.1

[SEE OTHER SIDE]

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4.0 Installation Cont....

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. Install a 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. Make sure to route the wire so that it has proper clearances.

If you have our optional ball-joint cover kit, now would be the time to install them.

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 castor is built into the Camburg arms to correct alignment issues that are inherent with lifting the vehicle. Have your alignment shop increase castor from the OEM suggested specs, then set camber and toe to factory specifications. Having an increase in castor helps with straight line stability and cornering precision.

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. We supply and sell a hi-temp, waterproof PTFE grease. Not using the correct grease can cause the bushings to squeak abnormally. The best method to grease the bushings is to remove the arms from the vehicle, disassemble, clean and lubricate. When using a grease gun, 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. Some grease guns operate at 1300 psi. and can damage the bushings applying too much pressure.

Notes

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

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

Maximum wheel backspacing = 4.75"

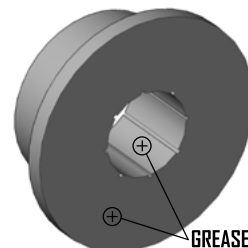


DIAGRAM 3.1

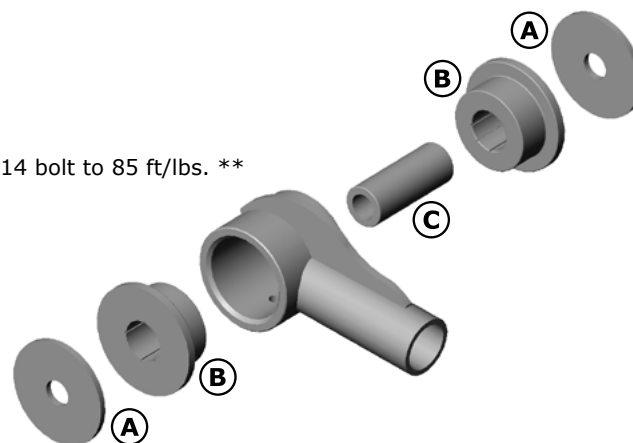


DIAGRAM 4.1

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