EFREURE

1.25 Uniball Performance Upper Arm Instructions

Landcruiser 200 Series 2wd/4wd 08-20

PARTS SUPPLIED

| QTY | Description | | |
|-----|--|---|--|
| 8 | Polyurethane pivot bushings | В | |
| 8 | Large flat washers (plated) | А | |
| 4 | 7/8" od x 0.635" id x 2.335" sleeves | С | |
| 4 | 90 deg. zerk grease fittings (self tapping) | | |
| 2 | 1.25 x 9/16" tapered uniball spindle adaptors | E | |
| 2 | 1.25 x 9/16" upper uniball spacers | D | |
| 2 | M16 x 1.50 nyloc nuts | | |
| 2 | 9/16-18 x 4.0" 12pt bolts | | |
| 2 | 9/16 SAE flat washers | | |
| 2 | 9/16-18 stover lock nuts | | |
| 2 | 10-32 x 3/4" steel allen bolts | | |
| 4 | 10-32 stainless flat washers | | |
| 2 | 10-32 steel nyloc nuts | | |
| 2 | Rubber insulated clamps | | |
| 4 | Grease packets | | |
| 4 | Camburg 8.5" Stickers | | |

Thanks for purchasing a set of Camburg uniball performance upper a-arms for your vehicle. Please follow all instructions. If you are not installing these yourself with aid of a friend 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 1"-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 | 10mm socket | 19mm socket 22mm socket & wrench | 24mm socket | 1/4" wrench 3/8" wrench | 9/16" 12pt socket | 7/8" socket | 5/32" allen wrench Torque wrench | Brake cleaner

<u>1.0 Setup</u>

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. Use a 10mm socket to temporarily disconnect the battery cable wiring harness clamp from the inner fender and push aside (driver side only). Using a 22mm socket & wrench, loosen and remove the OEM upper a-arm bolt. Remove the upper arm.

3.0 Pre-installation

Using a 1/4" wrench install the self tapping zerk fittings into the Camburg arms. 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 M16 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, the uniball snap-ring below 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 22mm wrench and 24mm socket, torque to 120 ft/ lbs. Refer to diagram 4.1

Prior to installing the tapered uniball adaptor spacer into the spindle, make sure the spindle taper is clean and free of debris. Install the spacer on top of the spindle with the taper fitting down into the spindle. Swing down the upper arm so the spindle adaptor inserts into the uniball. Insert the upper uniball spacer into the top of the uniball and bolt together with the supplied 9/16" bolt, washer and locking nut. Using a 9/16" 12pt socket and 7/8" socket, torque to 120-125 ft/ lbs. Make sure the spacers are fully seated in the uniball prior to tightening. Refer to diagram 4.2

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 is has proper clearances.

Slightly bend back & inward the sheet metal tab on the inner fender behind the upper arm for added clearance for the arm and speed sensor wire. Refer to diagram 4.3

Repeat steps 1 through 4 to install passenger side arm

[SEE OTHER SIDE]

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<u>5.0 Alignment</u>

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 caster from the OEM suggested specs, then set camber and toe. Having an increase in caster helps with straight line stability and cornering precision.

6.0 Maintenance & Care

Uniballs are a precision part with tight tolerances which can lead to occasional noise. Cleaning and lubricating them with WD-40 or a PTFE dry film can minimize that issue. Do not use harsh chemicals or grease that attracts dirt to clean & lubricate the uniball as it will damage the PTFE liner that is bonded internally. Over time the pivot bushings will also need to be cleaned and lubricated. Use grease that's designed specifically for polyurethane. 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.

<u>Notes</u>

Recommended tire size: 33-34" Recommended wheel size: 18" Maximum wheel backspacing = 6.00"



