

PARTS SUPPLIED

QTY	Description	
4	FK 7/8 x 3/4 RHT Heim Joints	
4	7/8-14 RHT Jam Nuts	
4	3/8-24 x 1.25" SHCS (zinc)	
8	3/8 AN960 Washers	
4	3/8-24 MS21042 Nuts	
4	Heim Spacer 1.045" OAL	A
2	Heim Spacer 1.235" OAL	B
2	Heim Spacer 1.745" OAL	C
2	9/16" tapered uniball spindle adaptors	E
2	9/16" upper uniball spacers	D
2	9/16-18 x 4.0" 12pt bolts	
2	9/16 SAE flat washers	
2	9/16-18 stover nuts	
2	Uniball Cover Caps	
12	6-32 x 3/8" BH torx screws (zinc)	
2	Uniball Cap O-rings	
2	Rubber stainless insulated clamps	
4	10-32 stainless washers	
2	10-32 x 3/8" BHCS (zinc)	
2	M14 x 1.50 nyloc nuts	
2	M14 flat washers	
4	Camburg 8.5" Stickers	



Thanks for purchasing a set of our Camburg KINETIK series billet 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 | 7/16" socket | 9/16" 12pt socket | 7/8" socket | T15 torx driver | 5/32" allen wrench | 5/16" allen driver | Torque wrench | Brake cleaner | Anti-seize | Grease | Red loctite | Blue painters tape

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. Always use caution when working under the vehicle and make sure it's supported correctly.

2.0 Removal

Disconnect the ABS wire and bracket from the upper arm. 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 difficult since it's a press fit, a mini sledge hammer, ball-joint separator tool or heating up the spindle to get it to expand will help if need be. Once the ball joint releases from the spindle, then remove the castle nut. Disconnect the arm from the spindle. 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, especially on the 2016-2019 models. You may need to bend or trim the sheet metal lip for more clearance. Worst case, you'll need to cut the bolt in half and replace with new OEM bolts. Upon installation we change the orientation of the bolt so it's no longer a problem removing/installing in the future. Remove the upper arm.

3.0 Pre-installation

We recommend putting blue painters tape on the billet arms for protection during installation. Thread the 7/8" jam nuts onto the heims then apply anti-seize compound on the exposed threads. Thread the heims into the upper arm so the heim is vertical and the jam nut makes contact with the arm and you have 3 threads exposed past the nut (Refer to Fig.1). Install the 3/8" allen heim pinch bolts into the arm. With a drop of red Loctite on the nut tighten and torque to 20-22 ft/lbs. Use a 1-1/4" open-end wrench to fully tighten the jam nut using another wrench to hold the heim vertical (perpendicular to the arm) so it doesn't rotate.

Now you'll install the heim spacers in the standard or high caster settings (See Diagram 3.1). On vehicles that have been lifted 1-3" you'll go with the standard setting, for taller lifts or high performance/racing use you'll go with the high setting as you gain 2 more degrees of positive caster. If tire clearance is a concern, use the standard setting. Make sure to setup both arms the same so the spacers are mirrored.

4.0 Installation

Install the driver side Camburg upper arm to the frame using the existing OEM M14 bolt or new replacement. 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.

Inspect and clean the tapered hole in the spindle/knuckle. Insert the tapered lower uniball spacer into the uniball. Then install the upper spacer into the top of the uniball making sure both spacers are fully seated. If not damage will occur in the following steps. Install the 9/16" 12pt bolt through the spacers and uniball and attach the upper arm to the spindle by swinging it down to the spindle with some finesse. You may need to jack up the lower arm and move the uniball joint. The tapered spacer should sit almost flush with the top of the spindle before tightening. Make sure the lower spacer did not pull out slightly from the uniball or damage will occur as the spacer can get caught on the bearing race and/or snap ring. Install the 9/16" washer and stover lock nut with a small amount of red Loctite onto clean threads. Using a 9/16" 12pt socket and 7/8" socket, torque to 120-125 ft/lbs. Don't not over-tighten or use an impact gun.

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.

4.0 Installation Continued

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 wrench and a drop of blue loctite. Get this hand tight only and do not over-tighten. Make sure to route the wire so that it has proper clearances and slack.

Lastly install the driver side uniball cover by first installing the supplied o-ring. Then the supplied 6-32 hardware using a T15 torx driver with grease on the threads. Get this hand tight only and do not over-tighten.

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. Depending on your heim joint spacer setup and your ride height, caster will be in the 3-7 degree range. You can also adjust the heim joints to correct camber as well if needed.

6.0 Maintenance & Care

Use mild soap and water to clean the anodized aluminum surfaces, using chemicals can stain/dis-color the finish. Uniballs and heims are precision parts with tight tolerances which can lead to occasional noise when they become dirty. Occasionally wipe off the heims and underside of the uniball with a clean rag to remove road grime and dirt. Cleaning and lubricating them with WD-40 or a PTFE dry film lube like "Tri-Flow" can minimize any noise from stiction. Do not use harsh chemicals or grease/oil that attracts dirt to clean & lubricate the uniball as it will damage and wear the PTFE liner that is bonded internally. You will also need to occasionally remove the uniball cover to clean the top-side of the uniball. Neglecting care and upkeep will wear parts out faster.

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 | 285/70/17

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

Maximum wheel backspacing = 4.75"

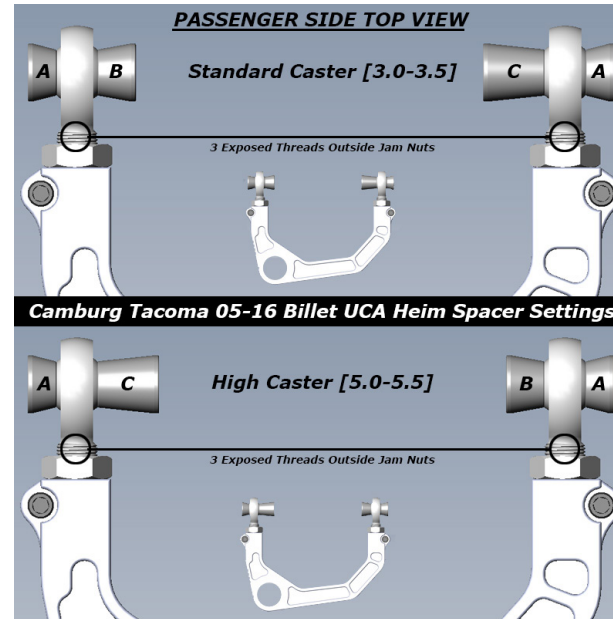


Diagram 3.1



TORQUE TO 120-125 FT/LBS. W/ RED LOCTITE

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