



Cognito Motorsports, Inc., Uni-Ball Upper Control Arm Kit for 2001-2010 GM 8-Lug UCAK100044 & UCAK100050

Introduction

- Installation requires a qualified mechanic.
- Read instructions carefully and study the pictures (if included) before attempting installation.
- Check the parts and hardware packages against the parts list to assure that your kit is complete.
- Always wear safety glasses when using power tools.
- Limiting strap kit is necessary to prevent upper uni-ball joint damage, the strap will take the droop strain instead of the strain being transferred to the uni-ball joint.

Parts List UCAK100044

- (1) #8154 Driver upper control arm
- (1) #8155 Passenger upper control arm
- (2) 1" Uni-ball
- (2) 2.125" retaining ring
- (1) #9090 Hardware package

Parts List UCAK100050

- (1) #8222 Driver upper control arm
- (1) #8223 Passenger upper control arm
- (2) 1" Uni-ball
- (2) 2.125" retaining ring
- (1) #9090 Hardware package



Installation Instructions

1. The Cognito Motorsports Uni Ball Upper control arm kit is a direct replacement of the factory upper control arms on 2001-2010 GM 8-lug vehicles.
2. Remove the factory upper control arms by supporting the lower control arms with a floor jack or some kind of stand used in a safe fashion. Loosen the ball joint nut of the upper control arm enough until you can spin the nut with your fingers, but do not remove totally, and use a pickle fork to separate the ball joint from the spindle, or tap on the side of the spindle next to the ball joint stud. When the tapered seat of the ball joint breaks loose, you may then remove the ball joint nut, and separate the factory upper control arms from the spindles.
3. Remove the factory bolts and eccentric washers that connect the control arm to the frame, but retain them for future use. Place them aside in order so they can be re-installed in the same place they came off. The plastic inserts will need to be removed and discarded from the eccentric washers.
4. Mount the bump stops to the bump stop tabs of the Cognito upper control arms. Use a 3/8" flat washer, then lock washer, then nut to secure the bump stop to the control arm. Tighten to 15 ft-lbs of torque.
5. If the Uni-ball and retaining ring is not pre-installed in the control arm follow steps 6, and 7. If they are preinstalled skip to step 8.

6. Install the 1” Uni-Ball into the upper control arms with a hydraulic press. First, bevel the leading edge of the Uni-ball so it will not gouge the walls of the cup when pressing in. The fit will be very tight and a press fit, so use a very small amount of grease inside the cup to help get it into the control arm, and make sure the Uni-ball is going straight into the housing, and not crooked. If it starts out crooked, it will not straighten out, you will have to remove it and start over.
7. Install the retaining ring with snap ring pliers, ensuring that it spreads out into the groove properly in the Uni-ball housing.
8. From the hardware package, insert the polyurethane bushings, crush sleeves, and grease fittings into the pivot ends of the Upper control arms. Use WD-40 to aid installation of bushings and use grease to aid installation of sleeves. See figure 1 below.



Figure 1: bushing and crush sleeve installation

9. The spindle studs and misalignment spacers are stainless steel, use anti-seize lubricant on all surfaces that mate with another part, to prevent galling. Insert the tapered stud through the Uni-ball from the bottom. Push one of the high misalignment spacers onto the straight end of the tapered stud from the top, and into the Uni-ball. This will be a very snug fit and may be a slight press fit, tap with rubber mallet. USE ANTI-SEIZE thread lubricant on the threads and insert a flat washer and locknut.
10. Mount the Cognito upper control arms to the frame with the factory nuts, bolts, and eccentric washers as previously removed. The bump stop tabs on the Cognito arms go toward the rear of the vehicle. Figure 2 shows the passenger side control arm installed on the truck, although the picture shows a ball joint style control arm. Set the alignment bolts about in the middle of the slot of the eccentric washers and torque alignment nuts to 90 ft-lbs.

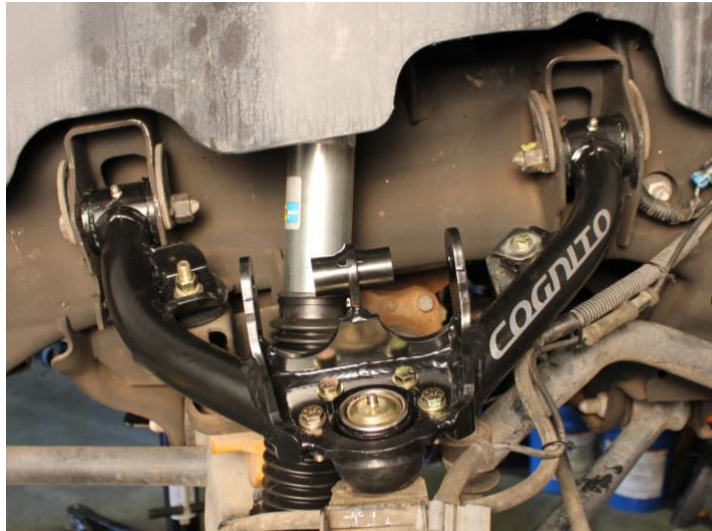


Figure 2 Passenger side Cognito control arm installed

11. Grease the a-arm pivot bushings. If you do not grease these items, premature wear will result on these items!
12. Make sure the spindle taper hole is clean, then USE a very small amount of ANTI-SEIZE thread lubricant to lightly coat the stud and bolt the control arm to the spindle using the 9/16" hardware provided, and torque to 70 ft/lbs. Torque the nut at the top of the spindle stud to 90 ft/lbs. If the stud will not fit into the spindle taper hole, use a 9/16" drill bit to chase the spindle hole, it will only cut a small amount of the small end of the hole.
13. If there were factory lines mounted to the factory upper control arms such as ABS or brake lines, they must be restrained as to avoid binding and contact with any moving parts of the vehicle. Use the 1/4" hardware provided to fasten the factory brake line bracket to the Cognito upper control arm. If necessary, slide the brake line through the factory bracket to obtain a suitable mounting situation.
14. Remove the abs line clip from the top of the frame shock pocket and use the cable ties to restrain the abs line to the brake line as shown in Figure 1. Double check the clearance of both the brake lines and the abs lines after the install while the truck is on the ground through the complete steering cycle. Be sure there is no rubbing or loose cables anywhere.
15. Have the vehicle's front end professionally aligned to the vehicle, or suspension system (if it is altered) manufacturer specification. There is extra caster built in to these control arms, so the caster will be around 1 to 2 degrees higher to provide better stability driving down the road.

Alignment Specifications

Caster, +4.0 to +6.0 degrees with .8 degree caster split optimal for average road crown.

Camber, 0.0 to + .2 degrees, with both sides equal. Toe, 1/16" to 1/8" toe in, or stock toe setting.

WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

Cognito Motorsports, Inc. hereinafter “Cognito,” warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on “competition” vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito’s obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are “consumables” and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warranted separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

Return Policy

Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

Product Safety Advisory

The installation of Cognito steering and suspension components will modify your vehicle’s original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle’s frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle’s susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle’s ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle’s suspension components and tires.