Cognito Motorsports, Inc. Upper Control Arm Kit for 2011-Present GM 8-Lug

#UCAK100051

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. Some cutting is required.
- If using this control arm kit as/with a leveling kit, rim width should be kept at 9" or less with 5"-5.75" backspacing. Tire width should be kept at 11.5" or less, and diameter kept to 33" or less, to avoid rubbing while turning. With wider than stock wheels and tires, trimming will still be required to the back bottom of the fender well area and the plastic valance under the front bumper. Dually's may need a spacer in between the rear tires.

Parts List

- (1) #8337 Driver upper control arm
- (1) #8338 Passenger upper control arm
- (2) #6292 Heavy duty ball joint
- (1) #9114 Hardware package

Installation Instructions

1. Rack the vehicle and hoist it off the ground, or if no hoist is available then jack front of truck off of ground and support properly with jack stands. NEVER WORK ON AN UNSUPORTED VEHICLE. 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. See figure 1

2. 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.

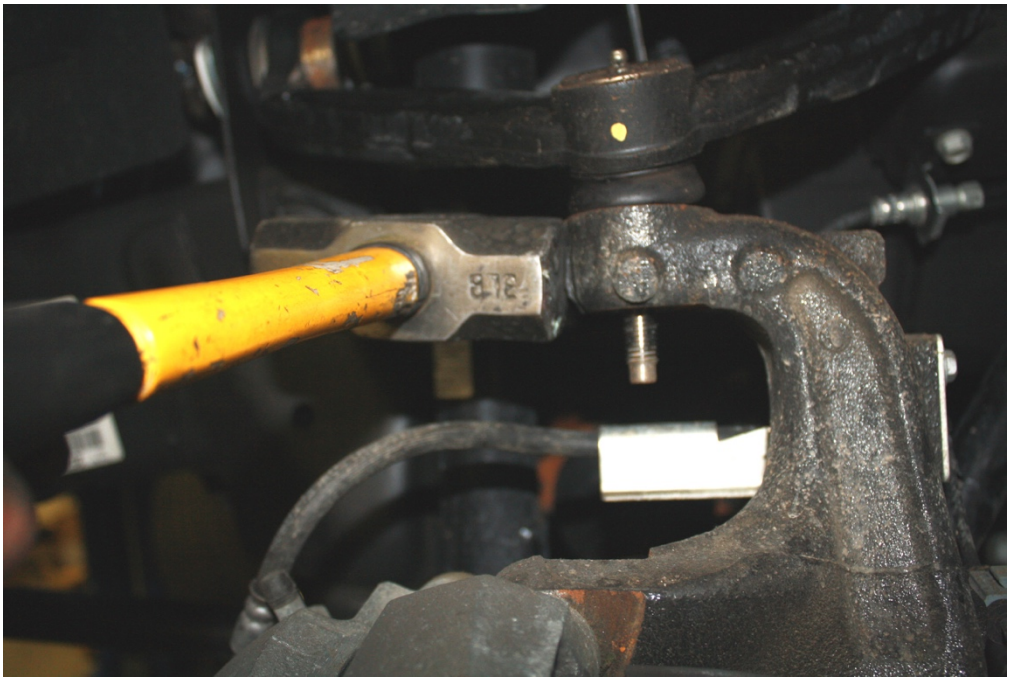

Figure 1: breaking ball joint loose from spindle

3. Mount the supplied ball joints with the 5/16" bolts, flat washers, and locknuts provided in Hardware Package 9114 to the bottom of the ball joint pocket of the Cognito upper control arms as shown in Figure 2. Use anti-seize lubricant on the threads. Tighten all hardware in this step to 22 ft-lbs. of torque. See figure 2

Figure 2: ball joint installation

4. From the hardware package, insert the polyurethane bushings, crush sleeves, and grease fittings into the ends of the Upper control arms. Use WD-40 to aid installation of bushings and use grease to aid installation of sleeves. Push the

bushings into the arms first, then the sleeve through the bushings. Do not over tighten the grease fitting, tighten until it is snug. See figure 3.

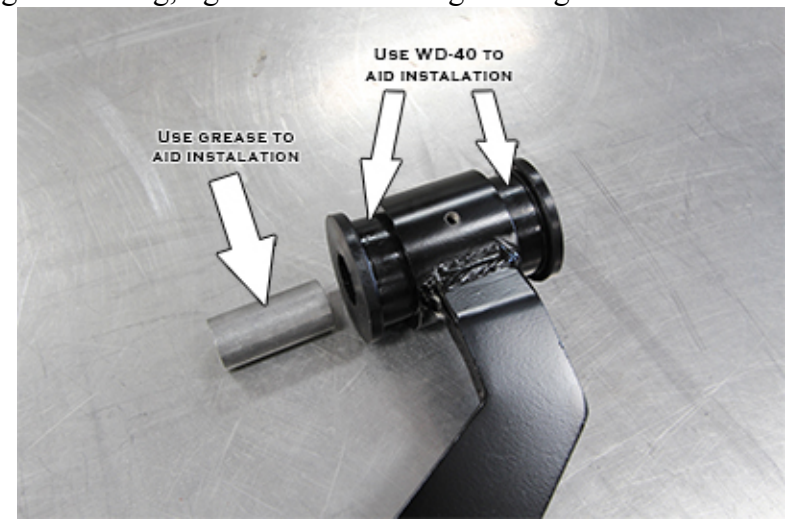

Figure 3: bushing and crush sleeve installation

5. THE CONTROL ARMS ARE NOT THE SAME, be sure to mount 8337 to the driver side, and 8338 on the passenger side. The ball joint is moved toward the rear of the truck from center of the arm. Mount the Cognito upper control arms to the frame with the factory nuts, bolts, and eccentric washers as previously removed. Set the bolts in the middle of the adjustment swing to be close enough to drive to an alignment shop. Torque alignment nuts to 90 ft-lbs.

6. Mount the ball joint to the spindle with supplied hardware. Use the 9/16" flat washers supplied if the castle nut needs to be spaced in order for the cotter pin to engage, and tighten to no more than 50 ft-lbs. of torque, making sure the cotter pin hole will line up with the castle nut notch. You may have to chase the small end of the tapered hole in the spindle with a 9/16" drill bit because the factory ball joint is a metric thread and the aftermarket ball joint is an American thread. Insert the cotter pin and bend ends around the nut to secure.

7. Grease the ball joint until the dust boot starts to swell. Grease the a-arm pivot bushings also. If you do not grease these items, premature wear will result on these items!

8. The upper control arm is not designed to be the droop travel limiter due to wear and tear of the upper ball joint. Therefore the correct length shock must be used, the shock is the droop limiter and shocks designated by Cognito must be used. If this control arm kit is being used with any other parts then specified, warranty will be void on this arm kit, and damage may occur to arms, ball joints, tie rods, cv axles and possibly more.

9. Setting the ride height, Record measurement (A) in chart below. Subtract 2" from (A) to determine maximum ride height (B). This will insure the proper amount of available down travel. **NOTE:** Maximum ride height is not required if you reach

desired ride height below measurement (B). It is a good idea to record your final ride height after adjustments (C). See figure 4.

Figure 4: Distance between top of tire and fender lip.

	Record Measurement
Full Drop Out (A)	
Subtract 2”	**-2”**
Max Ride Height (B)	
Finished Ride Height (C)	

10. Have the vehicle’s front end professionally aligned to the vehicle, or lift kit (if it is lifted) manufacturer specification.

11. Adjust headlights per owner’s manual.

Cognito Motorsports

Limited Lifetime Warranty

Cognito Motorsports warrants, to the original retail purchaser, that its suspension products are free from defects in workmanship and material for as long as the purchaser owns the vehicle on which the product was originally installed. Cognito Motorsports does not warrant the product for finish, alterations, modifications, and/or original installation contrary to specifications of Cognito Motorsports. Cognito Motorsports suspension products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities involving abnormal abuse other than the vehicle was originally designed to handle or endure. (A "RACE" is defined as any contest between two or more vehicles, and/or contest of one or more vehicle against the clock, whether or not such contest is for a prize.)

This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warrant are sales outside of the United States of America. Alterations to the finish of the parts including but not limited to painting, powder coating, plating, and/or welding will void all warranties. Cognito Motorsports obligation under this warranty is limited to the repair or replacement, at Cognito Motorsports option of the defective product. Any and all costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty.

This warranty excludes the following items: bushings, bumpstops, tie-rod ends, limiting straps, and hiem joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days of purchase for defects in workmanship. Cognito Motorsports suspension components must be installed as a complete system. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty. This warranty shall not apply to any product that had been subject to accident, negligence, alteration, abuse, or misuse. Cognito Motorsports does not warrant products not manufactured by Cognito Motorsports. Cognito Motorsports reserves the right to supercede, discontinue, or change the design, finish, part number and/or application of parts when deemed necessary by Cognito Motorsports without written notice.

Return Policy

Cognito Motorsports has a no refund return policy. Under special circumstances, returns might be accepted with prior written approval. All returned product will be shipped freight prepaid. Product returned is subject to a 25% restocking fee. No returns will be accepted after 30 days upon receipt of product.

Product Consumer Safety and Warning

The installation of this kit will modify the suspension of your vehicle and may cause it to handle significantly different than a factory equipped vehicle. Installing larger tires with modified suspension and increased ground clearance will significantly alter the handling characteristics of the vehicle, and may result in increased braking distances as well as changes in vehicle maneuverability and handling compared to the factory equipped vehicle. As with any vehicle, extreme caution and care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts and drive safely, recognizing the reduced speeds and specialized driving techniques is required.

This suspension system will not strengthen nor reinforce the stock frame of the vehicle, nor will it increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for tightness of fit or any damage. Installation of these parts will modify the height of the vehicle and will raise the center of gravity. Altered height modifications and off-road operation may increase your vehicle's susceptibility to roll over conditions and may cause serious injury or death. Many states regulate the height modification to each vehicle. Check the laws in your state for exact specifications. Height modifications may effect the reaction, ride, handling, and wear factor of your vehicle's components.

Failure to drive this vehicle safely may result in injury or death! Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications and combinations of modifications are not recommended, unsafe, and may not be permitted in your state. Consult your vehicle owner's manual, the instructions accompanying this product, and your state laws before undertaking these modifications. The owner of the modified vehicle and the qualified mechanic required to install this product are responsible for the legality and safety of the vehicle being modified.