PARTS LIST FOR SKU: 199-91161

QTY	PART #	DESCRIPTION
4	5490	Crush Sleeve 1.0" OD X 2.54" L
8	POLY-BUSHING-2862.01	Black Polyurethane Bushing

PARTS LIST FOR SKU: 199-91162

QTY	PART #	DESCRIPTION
4	5024	Crush Sleeve 1.0" OD X 2.13" L
8	POLY-BUSHING-2757	Black Polyurethane Bushing

WARNING

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.

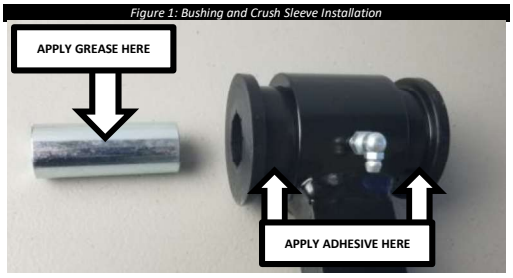
REQUIREMENTS

- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual.
- Always wear safety glasses when using power tools.
- When a lift is required to perform the installation of these products and always ensure the vehicle is properly supported before attempting installation or serious injury may occur.
- Read instructions carefully before attempting installation.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.

INSTALLATION

1. Rack the vehicle and lift it off the ground, or if no hoist is available then jack front of truck off the ground and support properly with jack stands. Remove the front tires and set them as side.
   - ***NEVER WORK ON AN UNSUPPORTED VEHICLE.***
2. Support the lower control arms with a floor jack or stand prior to removing the upper control arms (UCAs).
3. Loosen the ball joint nut of the upper control arm enough until the nut can be spun by hand, but do not remove totally. 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 remove the ball joint nut, and separate the upper control arm from the spindle.
4. Remove the factory bolts and eccentric washers that connect the control arm to the frame and retain them for future use. Place them aside and note the order in which the components were removed, that way they may be re-installed in the same manner they came off.
5. Remove the control arm from the vehicle.
6. Press out the crush sleeves.
7. Using a hammer and punch, knock out the poly bushings.
   - **NOTE:**
     Restrain the arm on the same side the bushings are being removed from. If the arm is restrained on the opposite side, there is a chance the arms can bend from the force required to remove the bushings.
8. Clean the inner diameter of the pivot tubes, remove any remaining adhesive and grease.
9. Locate the new bushing and crush sleeves and insert the polyurethane bushings and crush sleeves into the pivot tubes.
   - **NOTE:**
     It is recommended to use black weather-stripping adhesive on the bushings outer barrel to ensure a secure installation. ***DO NOT*** use grease on the outside of the bushings.
     Grease can be used to aid the installation of the crush sleeves.

Figure 1: Bushing and Crush Sleeve Installation



INSTALLATION – CONT.

10. Reinstall the control arms into the vehicle.
- **NOTE:**
  Reference the install instructions that originally came with the control arms for how to install them back onto the vehicle.

11. Grease the a-arm pivot bushing. If these items are not greased, premature wear will result on these items! Its highly recommend to grease the pivot bushings every 3-5K miles.

(If equipped with Zerk fitting(s)) Grease the ball joint until the dust boot starts to swell. If these items are not greased, premature wear will result on these items! It is highly recommended to grease the ball joints every 3-5K miles.(
- **NOTE:**
  Warranty on Cognito products will be void if damage occurs due to negligence in servicing the ball joints and pivot bushings every 3-5K miles with fresh grease.

12. Ensure that all bolts are properly torqued. Ensure there are no rubbing or loose cables anywhere after the installation. Use cable ties to restrain any cables from interfering with any other part. Check that all lines are free of stress or interference while the vehicle is in full droop, full bump, and throughout the complete steering cycle.

13. Install front wheels and tires and torque lug nuts to factory manufacturer's specifications.

14. Have the vehicle professionally aligned.
- **NOTE:**
  Reference the installation instructions that originally came with the Cognito UCA Kit for alignment recommendations.

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 warrantied 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.