

# Cognito Motorsports, Inc. Shock Extender Kit for 2011-present GM 8-Lug trucks

## Introduction

- some applications require the use of 2 spacers sandwiched together, please follow instructions carefully to ensure the proper setup for your vehicle. this instruction set is for use with either the **SEK-2011-8-1** or the **SEK-2011-8-2**
- if this kit is being installed on a lifted vehicle with a Cognito Motorsports suspension lift system, refer to the instructions for that lift system to install this extender kit. if installing this kit on any other lift system, Cognito is not responsible for improper setup or adverse effects.
- 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.

## Parts List

### **SEK-2011-8-1**

- (2) 1581 shock extender bracket
- Instruction set 7057

### **SEK-2011-8-2**

- (4) 1581 shock extender bracket
- (4) 1/2 x 2.1/2" hex bolt
- (4) 1/2" lock nut
- (8) 1/2" flat washer
- Instruction set 7057

## Installation Instructions

- first determine the setup that the truck will get. there are 4 leveling kit combinations so gather that info then refer to the appropriate section here for the combination. if this kit is being installed on a lifted vehicle with a Cognito Motorsports suspension lift system, refer to the instructions for that lift system to install this extender kit. if installing this kit on any other lift system, Cognito is not responsible for improper setup or adverse effects. **IF THE COMBINATION IS EVER CHANGED YOU MUST REFER TO THIS INSTRUCTION SET TO DETERMINE THE NEW COMBINATION AND FOLLOW THOSE INSTRUCTIONS. FAILURE TO DO SAY CAN CAUSE DAMAGE TO THE VEHICLE THAT CAN RESULT IN COMPONENT FAILURE AND A CRASH.**

## Instruction Set # 7057

### **Combination 1: stock front shocks and stock upper control arm, install SEK-2011-8-1**

- 1.1. open the hood since access to the top shock mount is easier from the engine compartment. remove the 2 nuts from the top mount of each factory shock.
- 1.2. push the shock body down to compress the shock and then insert one of the 1579 spacers over the studs. repeat for other shock.
- 1.3. reinsert the studs thru the holes in the frame and re-fasten the nuts to 40 ft/lbs. repeat for other shock.
- 1.4. this combination will allow cranking stock torsion keys or using aftermarket torsion keys to gain an additional 2" maximum of height safely from FACTORY height. Do not set height more than 2" over factory height with this combination.
- 1.5. raising the height of the truck affects the alignment, so a front end alignment is required. Also the headlights need to be adjusted, refer to your owner's manual for headlight adjustment screw, normally the screw needs to be turned 2 revolutions to lower the headlight for every 1" the front is raised without raising the rear.

### **Combination 2: Cognito specific front shocks by Bilstein or Fox and stock upper control arm, DO NOT install a spacer**

- 2.1 the Cognito shocks are longer than factory, so do not use a spacer with this combination.
- 2.2 this combination will allow cranking stock torsion keys or using aftermarket torsion keys to gain an additional 2" maximum of height safely from FACTORY height. Do not set height more than 2" over factory height with this combination.
- 2.3 raising the height of the truck affects the alignment, so a front end alignment is required. Also the headlights need to be adjusted, refer to your owner's manual for headlight adjustment screw, normally the screw needs to be turned 2 revolutions to lower the headlight for every 1" the front is raised without raising the rear.

## Instruction Set # 7057

### **Combination 3: stock front shocks and Cognito upper control arms, install SEK-2011-8-2**

- 3.1. the Cognito upper control arms provide more down travel than factory, therefore 2 spacers can be used with the FACTORY SHOCK.
- 3.2. refer to the Cognito upper control arm kit for instructions to install the arm kit.
- 3.3. open the hood since access to the top shock mount is easier from the engine compartment. remove the 2 nuts from the top mount of each factory shock. remove the nut and bolt holding the bottom shock mount to the lower control arm.
- 3.4. remove the shocks from the truck, the studs in the upper bar pin need to be removed since they are too short. use a deep socket to cup the flat end of the stud, then use a hammer to tap the stud out of the bar pin.
- 3.5. re-attach the shock to the lower control arm with the factory hardware, torque to 50 ft/lbs.
- 3.6. push the shock body down to compress the shock and then insert 2 of the 1579 spacers over the bar pin. guide the shock up into the top mounting pocket on the frame. use the repeat for other shock. use the 1/2" hardware provided to bolt the top shock mount together with the spacers sandwiched between the bar pin and the frame. Tighten to 50 ft/lb.
- 3.7. this combination will allow cranking stock torsion keys or using aftermarket torsion keys to gain an additional 3" maximum of height safely from FACTORY height. Do not set height more than 3" over factory height with this combination.
- 3.8. raising the height of the truck affects the alignment, so a front end alignment is required. Also the headlights need to be adjusted, refer to your owner's manual for headlight adjustment screw, normally the screw needs to be turned 2 revolutions to lower the headlight for every 1" the front is raised without raising the rear.

### **Combination 4: Cognito specific front shocks by Bilstein or Fox and Cognito upper control arms, install SEK-2011-8-1**

- 4.1. the Cognito shocks are longer than factory, so use only one spacer with this combination.
- 4.2. refer to the Cognito upper control arm kit for instructions to install the arm kit.
- 4.3. install the Cognito shock with only one spacer sandwiched between it and the frame. tighten hardware to 50 ft/lbs of torque.
- 4.4. this combination will allow cranking stock torsion keys or using aftermarket torsion keys to gain an additional 3" maximum of height safely from FACTORY height. Do not set height more than 3" over factory height with this combination.
- 4.5. raising the height of the truck affects the alignment, so a front end alignment is required. Also the headlights need to be adjusted, refer to your owner's manual for headlight adjustment screw, normally the screw needs to be turned 2 revolutions to lower the headlight for every 1" the front is raised without raising the rear.

## Instruction Set # 7057

### 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 is for a one-time replacement of each Cognito Motorsports product and does not cover any part that Cognito Motorsports has previously replaced under this warranty. 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 heim 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 supersede, discontinue, or change the design, finish, part number and/or application of parts when deemed necessary by Cognito Motorsports without written notice, and in the sole and absolute discretion of Cognito Motorsports.

#### Warranty Claims

All warranty claims must be submitted through the original company of purchase. All claims must be shipped back to the original company of purchase with an approved RMA number listed as a reference on the shipping label and clearly printed on two opposing sides of the package(s); product in question must be inspected by Cognito Motorsports before replacement parts are shipped out.

#### 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 affect 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.