

# Cognito Motorsports

## Torsion Bar Adjuster Key Installation

### Introduction

- Installation requires a qualified mechanic.
- Read instructions carefully and study the pictures (if included) before attempting installation.
- Secure and properly block vehicle prior to beginning installation.
- Always wear safety glasses when using power tools.

### Parts List

\_\_ (2) torsion bar adjuster key

1. **On level ground, measure the height of the front fender well from the ground, write it down and use for later reference. Always work on a properly supported vehicle.** Lift the front of the vehicle off of the ground by the frame so the front tires and suspension droop down.
2. Remove torsion bar adjusting screw. Using a torsion bar tool, load torsion bar and remove adjuster nut, then unload torsion bar and remove tool. Slide torsion bar forward into lower control arm. If bar seems lodged, use a punch and hammer to loosen through the hole in the back of the torsion bar crossmember. This will allow the adjuster to fall out. Repeat this to the other side.
3. Reinstall the new adjuster key in the reverse order.
4. Tighten the adjuster bolt while the truck is still off the ground.
5. Do not tighten the adjuster bolt to raise the height of the vehicle while the vehicle is on the ground and the front suspension is holding its own weight. This will cause the adjuster bolt excess stress and will most likely strip the threads.
6. Set the vehicle on the ground and back out the adjuster bolt to lower the vehicle to the desired ride height. You must drive the vehicle forward and backward a couple of times to allow the suspension to settle into place. Level the truck side to side by measuring from the top of the tire up to the lip of the fender well.
7. Do not set the ride height too high for the given application, adverse effects will occur. Do not exceed a height increase of 2" over the initial ride height measured in step 1
8. Raising the height of the vehicle will cause premature wear of the pitman and idler arms, therefore it is recommended to also install the Cognito Motorsports Pitman and Idler Arm Support System.
9. Using the factory upper control arms, you can also expect marginal alignment settings and accelerated wear of the upper ball joints because of the increased ball joint angle after raising the height of the front of the truck. For this reason it is also recommended to use the Cognito Upper control arm kit and either longer after market shocks, or the Cognito shock extension brackets.
10. Front end alignment to factory settings and headlight adjustment are required at this time.

## **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.