



# **Cognito Motorsports, Inc. CMS Alloy Series OEM Style Tie Rod Steering Kit for GM 2001-2010 8-lug vehicles**

## **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.

## **Parts List**

- (2) 5437 Outer tie rod end with grease fitting
- (2) 5521 Inner ball and socket joint with jam nut

## **Installation Instructions**

1. Remove the nut holding the outer factory tie rod to the spindle with a 19mm wrench. Using a hammer, tap on the spindle boss to dislodge the tie rod from the spindle.
2. Unscrew the factory inner tie rod end assembly from the drag link at the inner joint, which is also the end of the drag link. Clean the grease and old thread locker out of these holes completely. Use contact cleaner and air dry.
3. Use thread locker on the threads of the new Cognito inner joint and thread it into the end of the center link. Use a 2" wrench or adjustable wrench to tighten the new tie rod on to the center link. Since there will be no easy way to torque this, tighten very tight with your wrench.
4. Thread the outer tie rod end onto the inner end. Make sure tapered hole in spindle is clean and insert the outer tie rod into the tapered spindle hole. Install new nut and torque to 80 ft-lb. Tighten jam nut against outer tie rod end to lock in the length of the tie rod assembly.
5. Grease both the inner and outer joints. Re-grease at every oil change/lube.
6. at wheel full droop, make sure the sway bar does not hit the Heavy Duty tie rods since they are larger in diameter, all the way thru the turning cycle. Longer sway bar end links may be needed.
7. The toe settings of the vehicle will have to be adjusted to factory specs with a professional alignment.

## **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.

### **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.