

Cognito Motorsports Inc. Traction Bar Kit

Introduction

- Installation requires a qualified mechanic, and qualified welder.
- 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.
- Foot-pound readings are listed on the Torque Specification Chart at the end of the instructions.

<u>Parts List</u>

- (2) Traction bar tube
- (2) Front frame mount bracket
- (2) Rear end housing bolt on bracket
- Hardware package 9146

Installation Instructions

- 1. Support the rear axle appropriately, working on the driver side first, with the passenger side still together. Remove the driver side u-bolt nuts. Then bolt on one of the Cognito traction bar axle brackets, it will get sandwiched in between the factory u-bolt axle plate and the washers and u-bolt nuts as seen in Figures 1 and 2. Torque the u-bolt nuts according to the chart below. Then repeat for passenger side.
- 2. From the hardware package, insert the polyurethane bushings into the front end of the traction bar tubes. Apply small amount of grease on the inside of the poly bushings, then push the crush sleeves into the poly bushings, this will be a tight fit and required tapping with a rubber or plastic mallet.
- 3. Thread the jam nuts onto the rod ends. Apply some anti-seize lubricant to the threads of the rod ends and thread them into the rear ends of the traction bar tubes leaving about 3/8" of thread showing so that there is room for adjusting later on.

- 4. Mount the front frame brackets to the front ends of the traction bar tubes with the 1/2" hardware included. Mount the spacer sleeves in between the rod end and the rear end housing bolt on brackets with the 1/2" hardware included, see Figures 1 and 2.
- 5. With the truck on the ground and at ride height, position the front frame bracket to the underside of the frame. Verify the position is satisfactory, and clean the undercoating from the frame using solvent or brake cleaner on a rag. Repeat for both sides of the vehicle. See Figure 3.
- 6. VERY IMPORTANT! Get a friend to help by having them hold a piece of sheet plastic or sheet metal to shield the fuel tank and any other items that might get weld spatter on them, to protect them from spatter, including the shock shafts. Weld the frame brackets to the underside of the frame as shown in Figure 3. Start by tack welding them into place, and then disconnect the traction bar from the bracket so it is out of the way to complete the welding procedure. Weld across the front and rear of the brackets. Paint all exposed metal surfaces after welds have cooled.
- 7. Bolt traction bars back into place. Tighten hardware to specs below.
- 8. At ride height, the length of the traction bar must be correct so that it is not binding with the leaf springs. To check this, make sure the truck is at normal ride height. Unbolt either end of the traction bar, both sides. The mounting holes of the bar should line up with the brackets. If not, adjust length and re-fasten.

Torque Specification Chart

1/2" Bolts	70 FtLbs
3/4" Jam Nut	Really Tight with end wrench
5/8" u-bolts	100 ft-lbs
3/4" u-bolts	120 ft-lbs

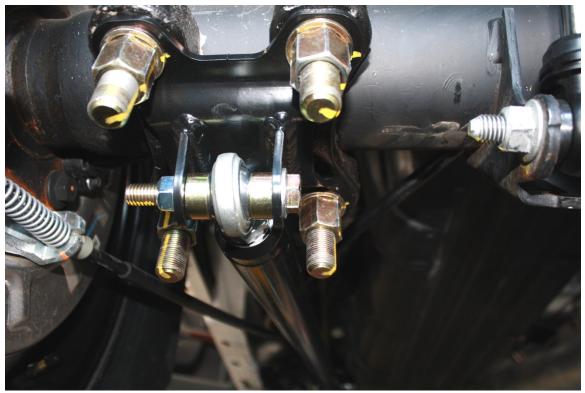


Figure 1

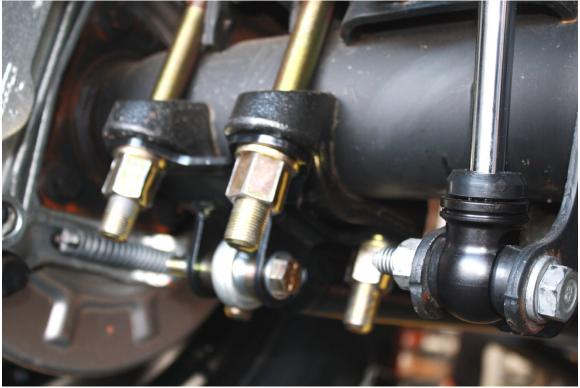


Figure 2



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 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 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.