

Cognito Motorsports, Inc. GM Heavy Duty Tie Rod Steering Kit, 99-06 6-lug SUV & 4WD truck, & 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.
- Foot-pound readings are listed on the Torque Specification Chart at the end of the instructions.

Parts List

- (2) Adjuster tubes
- (2) Steering adapters
- (2) Spindle studs
- Hardware package #9116

Installation Instructions

1. Unscrew the factory tie rod end assembly and the grease fitting from the drag link at the inner joint, which is also the end of the drag link. Remove the grease fittings, and clean the grease and old thread locker out of these holes completely. Use contact cleaner and air dry.
2. From the hardware package, insert the 18mm metric bolt through one lock washer, then through the steering adapter bracket. Thread the bolt into the end of the drag link where

Instruction Set # 7056

the factory hardware was removed. Bolt the steering adapter to the drag link with the tab of the adapter on the bottom of the drag link. Be sure that the steering adapter bolt hole runs horizontal, and use a ¼" fine thread bolt and lock washer from the hardware package and bolt the tab to the drag link using the old grease fitting hole. You may have to use some of the ¼" flat washers provided as shims in between the tab and the drag link if there is a gap. Tighten the 18mm bolt to 90 ft-lb, and the ¼" bolt to 10 ft-lb. See Figure 1

3. Thread the appropriate left and right-hand jam nuts on to the appropriate left and right hand rod ends. Use an anti-seize lubricant on the threads and thread the rod ends in to the appropriate ends of the Cognito steering adjusters.
4. Use the 3 1/2" long bolts with the head of the bolt toward the front of the truck, washers and nuts to mount the end of the Cognito steering adjuster assembly that has the left handed rod end in the Cognito steering adapter. The rod end must have a spacer from the hardware package on each side of it inside the Cognito adapter. See Figure 1
5. The spindle studs are stainless steel, therefore plenty of anti-seize lubricant is required. apply anti-seize lubricant to the surface of the stainless stud where the rod end will fasten, and the 3/8" internal threads of the stud. insert the stud into the rod end, then apply anti seize to the spherical washer mating surface and insert into the rod end and screw in the 12-point bolt with the 3/8" lock washer under the head.
6. Lubricate with anti-seize the tapered surface of the stud that seats inside the tapered hole of the spindle, and the external threads. Then mount the Cognito spindle stud to the spindle appropriately with a 9/16" flat washer and lock nut from the hardware package for an 8-lug vehicle, or the ½" flat washer and lock nut from the hardware package for a 6-lug vehicle. You may have to chase the small end of the spindles tapered hole with a 9/16" drill bit for an 8-lug vehicle, and ½" drill bit for a 6-lug vehicle. The reason is the factory studs are metric, and the Cognito studs are slightly larger standard thread size. hold the 12 point bolt with a 3/8" 12-point box end wrench or socket, and torque the lock nut appropriately. Also torque the 12 point bolt to 30 ft. lbs.

Instruction Set # 7056

7. Tighten all other fasteners at this time.
8. The toe settings of the vehicle will have to be adjusted to factory specs with a professional alignment. Jam the $\frac{3}{4}$ " thin nuts to the Cognito steering adjuster to lock it in place.

Torque Specification Chart

1/2" fasteners	60Ft.-Lbs
9/16" fasteners	70Ft.-Lbs
5/8" fasteners	80 Ft.-Lbs

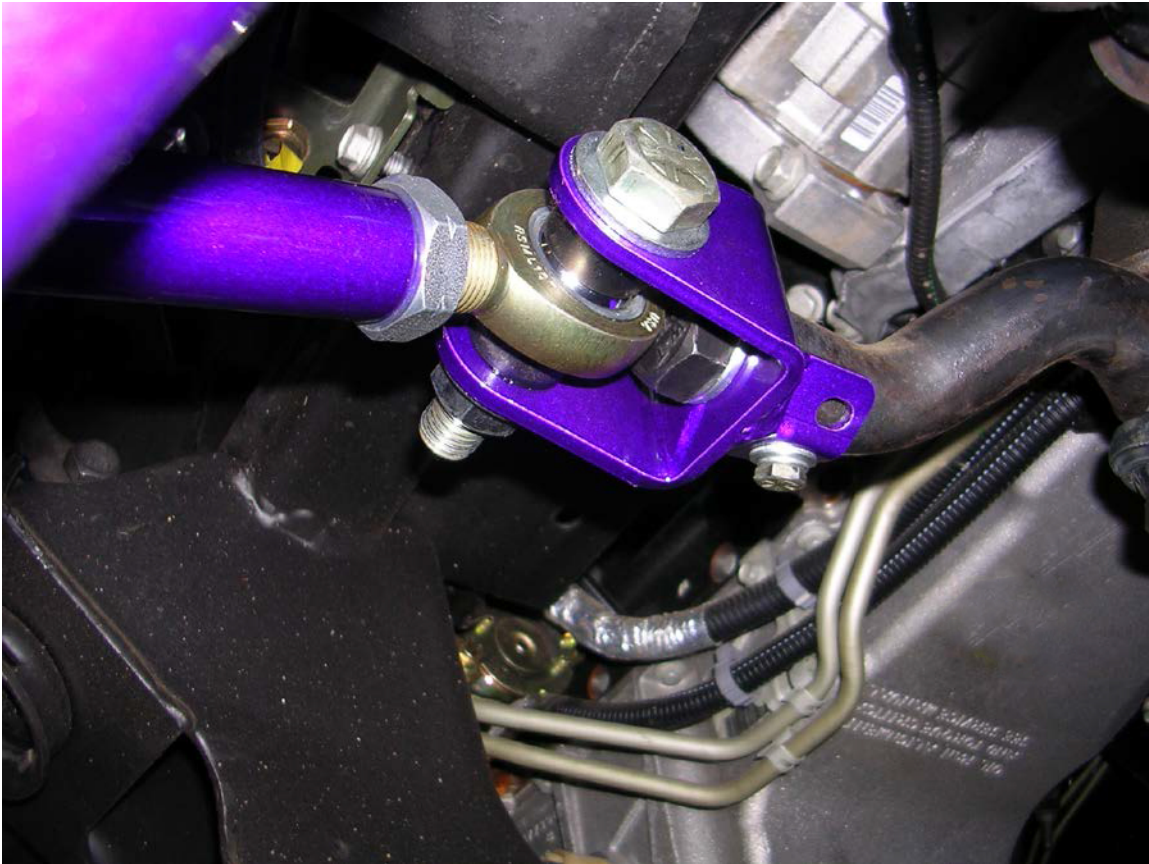


Figure 1: Steering Adapter Assembly