

Instruction # 7002

**Cognito Motorsports, Inc., GM 1999-Present 6-Lug 4WD truck
& 2000-Present 6-Lug 2 & 4WD SUV Pitman/Idler Arm
Support Kit**

****PATENT PENDING****

Introduction

- This application is for stock and lifted applications that use the factory steering center link in the factory location. Aftermarket steering stabilizers may interfere with this system.
- Installation requires a qualified mechanic.
- Read instructions carefully and study the pictures (if included) before attempting installation.
- Check the parts and any hardware packages against the parts list to assure that your kit is complete.
- Tools needed: 1 5/16" box end wrench, 24mm open end wrench, qty. 2 of 15/16" box end wrench, 15mm socket, 21mm deep socket, 7/8" socket or box end wrench, 5/16" and 6mm Allen wrench.

Parts List

- Pitman arm bracket
- Idler arm bracket
- (2) Sway bar relocate bracket
- (4) 10mm flat head bolts
- (4) 3/8 socket head cap screws
- (2) 9/16" lock washer
- (2) 3/4-5/8" rod ends
- (4) 5/8" jam nuts
- (2) Fine thread shank nuts (silver)
- (2) Coarse thread shank nuts (gold)



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Installation Instructions

1. If there is an existing skid plate and shroud at the front cross member of the vehicle, underneath the front of the engine, they should be removed with a 15mm socket to access the pitman and idler arms and set aside for re-installation later.
2. Unscrew the factory lock nuts that hold the drag link to the pitman and idler arms, using a 21mm deep socket, and discard them.
3. Unscrew the large nut holding the pitman arm to the steering box using a 1 5/16" boxed end wrench. Remove it and the large lock washer. Figure 4
4. Remove the nut holding the idler arm to the idler arm pivot with a 24mm boxed end wrench. Figure 2
5. Apply a small amount of thread locker on all of the threads on both of the 5/8"x 3/4" rod ends, then thread one 5/8" jam nut all the way on to both of the rod ends. Then insert the rod end through the 5/8" diameter hole on both the pitman and idler arm brackets as shown in Figure 1. Now thread a second jam nut on to both rod ends, but do not tighten at this time.
6. Insert one lock washer over each of the drag link studs, and then install the pitman and idler arm brackets on to the pivot ends where hardware was previously removed in steps 3 and 4, at the same time place the rod end which is connected to the Cognito Motorsports brackets over the drag link studs so that the lock washer is in between the Cognito rod end and the drag link.
7. Re-install the factory lock nut on the pivot stud of the idler arm that was removed in step 4. Re-install the factory lock washer and nut on the pivot shaft of the steering box that was removed in step 3. Do not tighten yet.
8. The gold shank nuts are for factory or coarse thread arms, and the silver shank nuts are for aftermarket or fine thread arms. Apply a small amount of thread locker on the threads of the shank nuts and insert a shank nut on to each of the drag link studs, passing through the rod ends and locking against the lock washer and drag link. Jam each support bracket in between the jam nuts. Tighten shank nuts with 7/8" socket and jam nuts with both 15/16" boxed end wrenches, to 85 ft-lb. Figure 3 & 5
9. Tighten the factory hardware mentioned in Steps 3, 4 and 7 at this time. Hardware in step 4 should be tightened to 85 ft-lb. Hardware in Step 7 may not accommodate clearance to use a torque wrench, but need to be tightened as tight as possible with a boxed end wrench, roughly 85 ft-lb on the idler arm side, and 150 ft-lb on the large pitman arm nut.
10. Re-install any other hardware or skid plate/shroud previously removed and tighten to factory specification.
11. On 1999 to present 6-lug vehicles, the pitman and idler arm brackets will come into contact with the sway bar if it is in the factory location, at full steering swing left and right. The sway bar relocation brackets must be installed if this is the case on your vehicle. Remove the bolts holding the sway bar clamps to the frame, and discard the hardware. You may need to disconnect the sway bar end links from the sway bar in order to move the sway bar out of the way to install the brackets. Bolt the Cognito sway bar relocate brackets to the factory sway bar frame mounts with the countersunk flat head bolts provided as shown in Figure 6, and torque the bolts to 20 ft-lbs at this time. Then, bolt the sway bar clamps to the Cognito sway bar relocate brackets with the provided socket head cap screws, and torque to 20 ft-lbs. The end result should have the sway bar relocated slightly forward and down from the factory location, as shown in Figure 6. Re-connect the sway bar to the end links if previously disconnected.

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12. Check for clearance of steering components through the full steering cycle.



Figure 1: Idler Arm bracket on left, Pitman arm bracket on right



Figure 2: this picture shows an 8-lug truck

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Figure 3: this picture shows an 8-lug truck idler arm



Figure 4: this picture shows an 8-lug truck pitman arm

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Figure 5: this picture shows an 8-lug truck pitman arm



Figure 6: sway bar relocate brackets for 6-lug vehicles.

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Cognito Motorsports, Inc.

Limited Lifetime Warranty

Cognito Motorsports, Inc. 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, Inc. does not warrant the product for finish, alterations, modifications, and/or original installation contrary to Cognito Motorsports, Inc. Cognito Motorsports, Inc. suspension products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities. (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 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, Inc.'s obligation under this warranty is limited to the repair or replacement, at Cognito Motorsports, Inc.'s 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, bump stops, 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, Inc. 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, Inc. does not warrant products not manufactured by Cognito Motorsports, Inc. Cognito Motorsports, Inc. reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of parts when deemed necessary by Cognito without written notice.

Return Policy

No returns will be accepted without prior written approval. All returned product must 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 Safety and Warning

The installation of this kit will modify the suspension of your vehicle and may cause it to handle differently than a factory equipped vehicle. It 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 may 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 effect the reaction, ride, handling, and wear factor of your vehicle's components.