



# Installation Instructions

## *SS175 – Idler Arm Support Assembly*

### **Replacement for OEM Idler Arm Support**

#### **For GM Light Duty K Pickup Trucks Year 1999 & Up**

**Caution:** Proper service and repair procedures are essential for safe and reliable installation of chassis parts. They require experience and tools that may be specially designed for the purpose. These parts **must** be installed by a qualified mechanic; otherwise an unsafe vehicle and/or personal injury may occur.

◆ **To ensure maximum performance from a SuperSteer® Idler Arm Support Assembly, the front-end alignment must be re-checked after installation.**

**Note:** Play in other areas of the suspension may adversely affect alignment specifications and performance of SuperSteer® Idler Support Assembly. It is necessary to raise the vehicle for installation of the SuperSteer® Idler Arm Support Assembly; however, a hoist or pit is recommended.

The SS175 Idler Arm Support is not warranted for off-road use or on modified suspensions

### **Instructions**

1. Remove the front shield – set it aside with the hardware.
2. Disengage the idler arm by loosening the large nut at the bottom end of the OEM unit using a large mouth tie-rod separator.
3. Remove the nut, lock washer and idler arm – discard the nut and lock washer. Set the idler arm aside.
4. Remove the mounting bolts (quantity of 2), washers and locknuts and the OEM unit – discard the hardware – salvage the OEM unit.
5. Install the SuperSteer® Idler Arm Support Assembly in the reverse manner above, using **NEW** 9/16–12, grade 8 bolts, flat washers and locknuts. (Flat washers must be under the bolt head and between the nut and the frame-bracket.) **Torque to 100 ft. lbs.**
6. Reassemble the idler arm to the SuperSteer® Idler Arm Support Assembly, using the new lock washer and nut supplied.  
**Torque to 100-125 ft. lbs.**
7. Check the alignment per the vehicle's manual.

## **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.

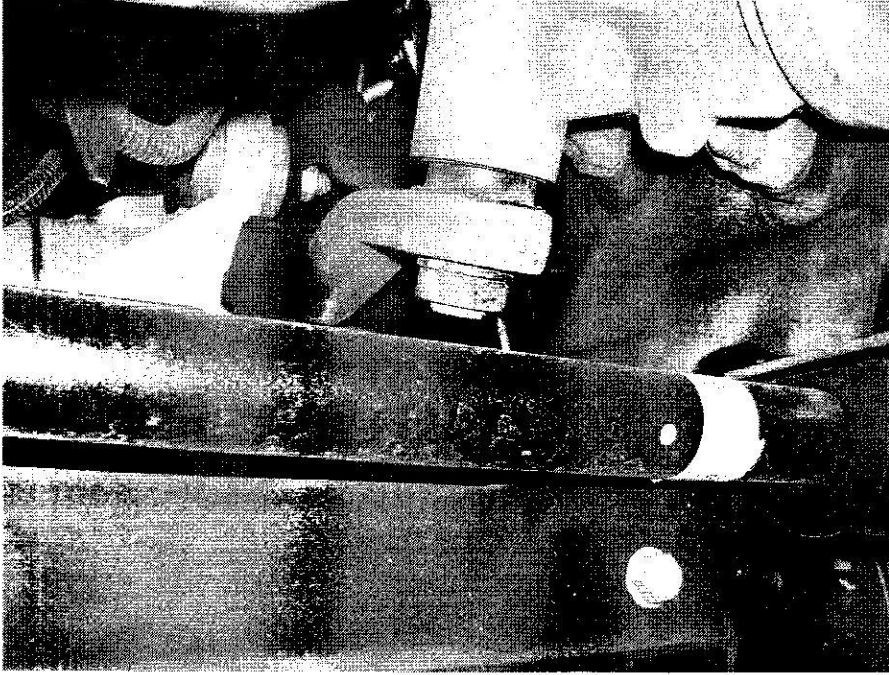
This warranty excludes the following items: bushings, bump stops, tie-rod ends, limiting straps, and heim joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days of purchase for defects in workmanship. Cognito Motorsports, Inc. suspension components 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**

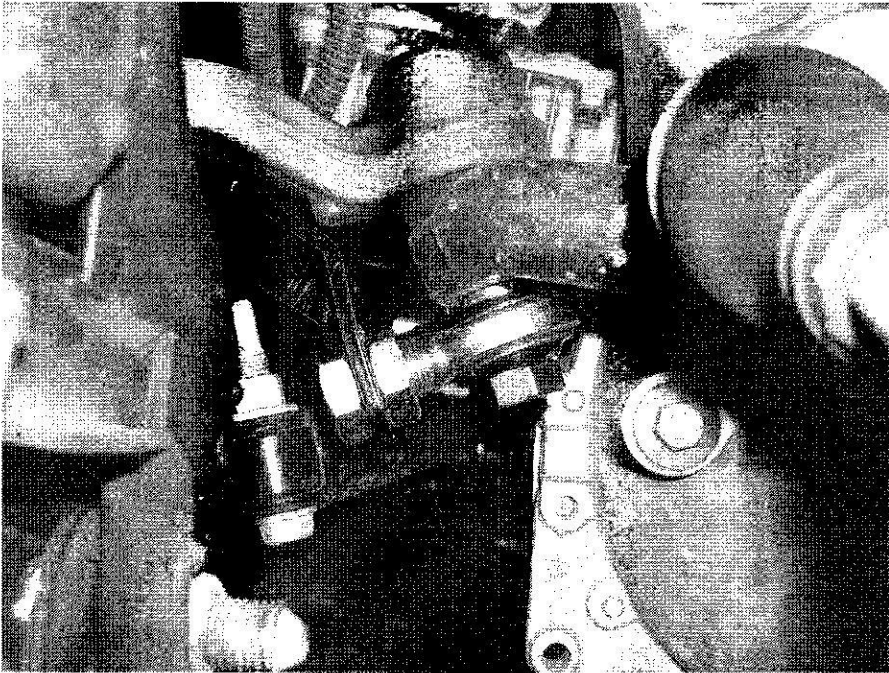
No returns will be accepted without prior written approval. All returned product must be shipped freight prepaid. Product returned is subject to a 25% restocking fee. No returns will be accepted after 30 days upon receipt of product.

### **Product Safety and Warning**

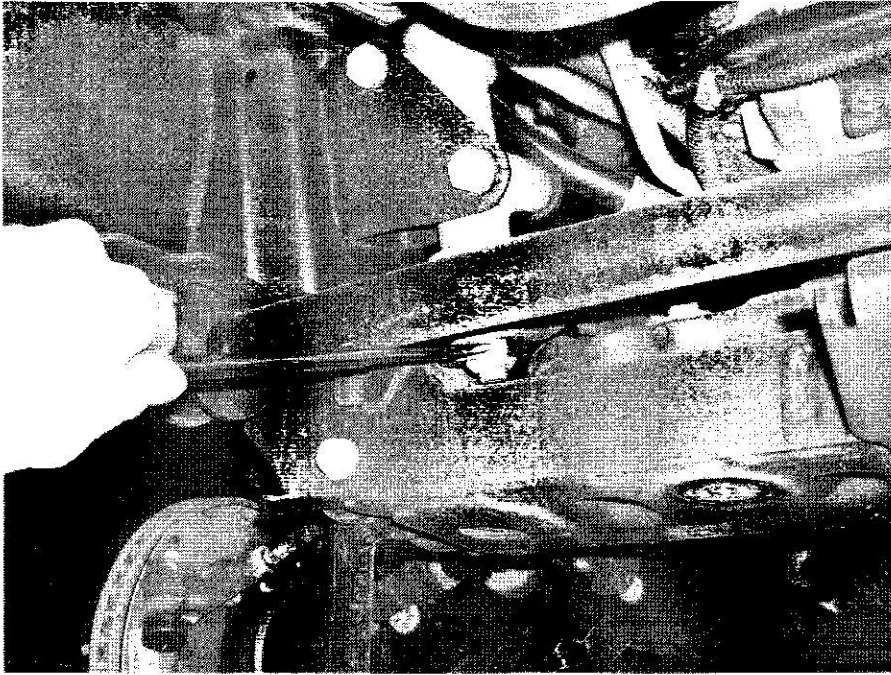
The installation of this kit will modify the suspension of your vehicle and may cause it to handle differently than a factory equipped vehicle. It will not strengthen nor reinforce the stock frame of the vehicle, nor will it increase rollover protection. It is necessary to periodically inspect all suspension 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.



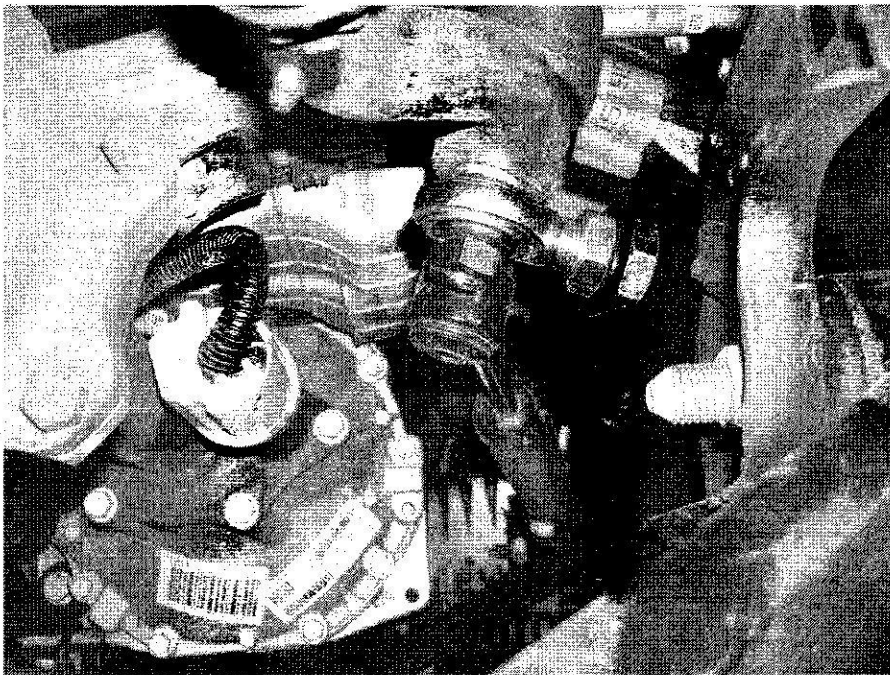
**Figure 5: pitman arm**



**Figure 6: pitman arm bracket installed**



**Figure 3: idler arm**

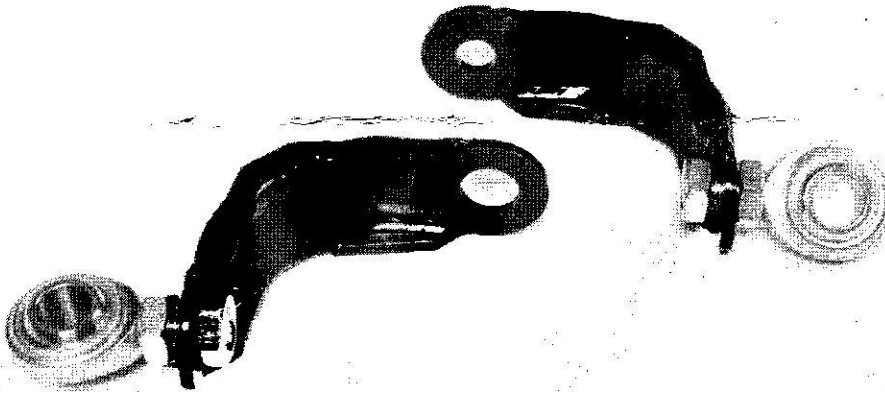


**Figure 4: idler arm bracket installed**

### **Instruction Set # 7047**

in between the jam nuts. Tighten shank nuts with 7/8" socket and jam nuts with both 15/16" boxed end wrenches, to 60 ft-lb. Figure 4 & 6

9. Tighten the factory hardware mentioned in Steps 3, 4 and 7 at this time. The hardware may not accommodate clearance to use a torque wrench, but need to be tightened as tight as possible with the box end of an end wrench, roughly 70 ft-lb on the idler arm side, and 120 ft-lb on the large pitman arm nut.
  
10. Re-install any other hardware for skid plate/shroud previously removed and tighten to factory specification.



## Instruction Set # 7047

### 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 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 5
4. Remove the nut holding the idler arm to the idler arm pivot with a 24mm boxed end wrench. Figure 3
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 2. 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

Instruction Set # 7047

## Cognito Motorsports, Inc., GM 2000-2006 6-Lug Truck and SUV Pitman/Idler Arm Support Kit

**\*\*UTILITY PATENT US7,475,891 B2\*\***

### Introduction

- This application is for stock and lifted applications that use the factory steering center link in the factory location. Aftermarket steering stabilizers that do not mount in a factory location may interfere with this system.
- Installation requires a qualified mechanic.
- Read instructions carefully and study the pictures 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 end wrench, qty. 2 of 15/16" box end wrench. 15mm socket, 7/8" socket or box end wrench.

### Parts List

- 8197 Pitman arm bracket
- 8209 Idler arm bracket
- (2) 9/16" lock washer
- (2) 3/4"-5 8" rod ends
- (4) 5/8" jam nuts
- (2) Fine thread shank nuts (normally silver)
- (2) Coarse thread shank nuts (normally gold)
- Thread locker

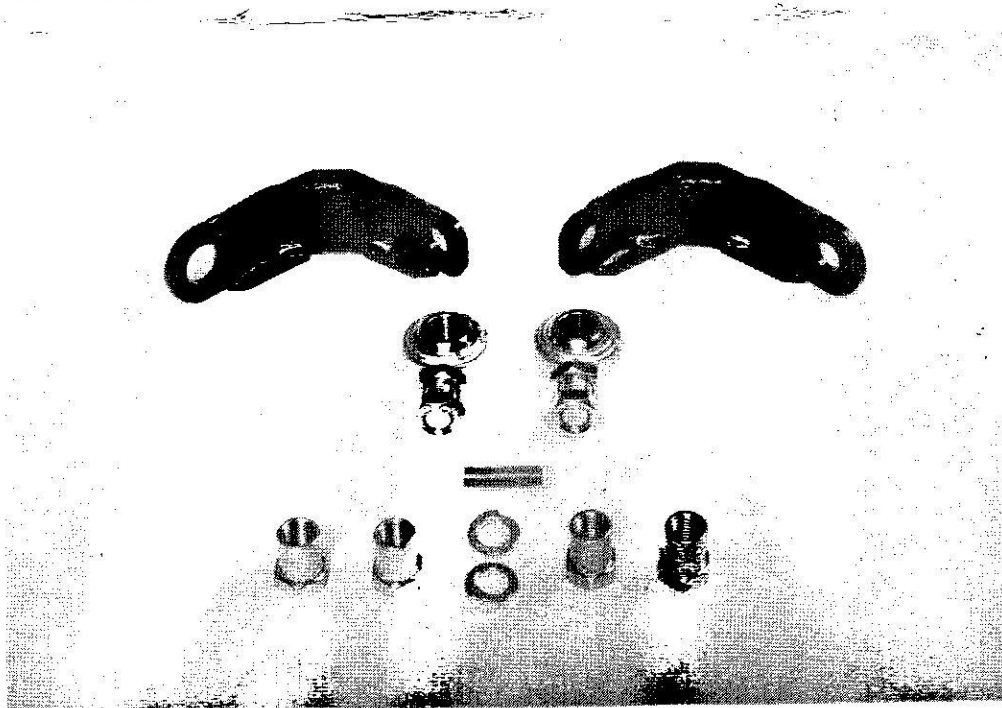


Figure 1: Layout of parts