

Cognito Motorsports, Inc. Idler Pivot Assembly & Weld in Gusset

CAUTION: Installation <u>must</u> be performed by a <u>qualified</u> mechanic. Installation by an un-qualified mechanic may result in an unsafe vehicle/ and or personal injury.

Upon completion of the installation, the front end alignment must be checked in order to obtain optimal results.*

Note: It is necessary to raise the vehicle to perform installation of these products. A hoist or installation bay is recommended. Always ensure the truck is properly supported before attempting installation as serious injury could occur.

Parts List

- Weld in gusset, shape depends on 6 or 8 lug chassis.
- Idler Arm Pivot Assembly
- (2) 9/16"-12x3.5" hex bolt
- (2) 9/16"-12 lock nut
- (4) 9/16" flat washer

INSTRUCTIONS:

- 1. If you are installing this on a Hummer H2, Please see page 3. If installing on a 1500HD, 2500HD, 3500HD Please continue with steps 2-11.
- 2. Remove the front shield set it aside with the hardware
- 3. Disengage the idler arm by loosening the large nut at the bottom end of the OEM unit.
- **4.** Remove the nut, lock washer and idler arm discard the nut and lock washer. Set the idler arm to the side.
- **5.** Remove the mounting bolts (quantity of 2), washers and locknuts and the OEM unit discard the hardware salvage the OEM unit.
- 6. Install the weld in gusset as shown in the picture (figure 1.1) A qualified welder will be needed at this point. **Do not quench welds**
- 7. Clean and paint all raw metal surfaces after cooled
- **8.** Install the new **Idler Pivot Assembly** (noted in figure 1.1) 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.) <u>Torque to 100ft. lbs.</u>
- **9.** Reassemble the idler arm to the **Idler pivot assembly**, using the new lock washer and nut supplied.
- **10.** Check any hoses or lines for interference with the larger pivot assembly and gusset. Tie back any lines or hoses as needed to avoid rubbing wear issues.
- 11. Check the alignment per the vehicle's manual.



FIGURE 1.1

Hummer H2 Installation Guide

- 1. Remove the front shield. Set aside with the hardware.
- 2. Remove the nut at the bottom of the OEM unit which holds the idler arm in place. Disengage the idler arm from the OEM Support Assembly using a large mouth tie-rod separator.
- 3. Discard the nut and set the idler arm aside.
- 4. Remove the mounting bolts (quantity of 2), washers & lock nuts and the OEM unit discard the hardware and the OEM unit. (Hummer H2 specific)(See Figure A for existing H2 brace)
- 5. Cut the top plate of the brace so it is flush with side braces. Cut the bottom plate 1/2" and bend it down. (See Figure B for cut brace)
- 6. Weld the gusset (SS125) in the center of the brace, forward to frame. (See Figure C) Gussets optional on pickups.
- 7. Install the SuperSteer Idler Arm Support Assembly (SS175) 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.*
- 8. Reassemble the idler arm to the SS175, using the new lock washer and nut supplied. *Torque to 100-125 ft. lbs.* Check the alignment per vehicle's manual.



FIGURE A – Existing Brace FIGURE B – Cut Brace



FIGURE C - Gusset welded in center of brace; SS175 installed.

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 reinstallation, 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.