



## **Cognito Motorsports, Inc. Front Differential Mount Conversion Bracket Kit for '01-'09 GM 8-Lug**

### **Introduction**

- This bracket kit is developed to act in place of the top driver side mount on the aluminum front differential that may have been cut off by the previous installation of certain suspension lift kits where that cut is required.
- 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.
- Always wear safety glasses when using power tools.

### **Parts List**

- 8142 Differential Mount Conversion Bracket
- HP9080: 2 poly bushings, 1 crush sleeve, 1/2" bolt and hardware, 9/16" bolt and hardware, 3 metric 10mm bolts, and 3 10mm flat washers.

### **Installation Instructions**

1. Prepare the front differential on a workbench or other steady work surface. Plug the breather hole and any other openings to the gear area to avoid contamination, and then remove any extra casting left over from the original mount being cut off by sanding or grinding to provide clearance for the Cognito Motorsports Differential Mount Conversion Bracket. See Figure 1.



**Figure 1: Clean up excess material left from previous mount**

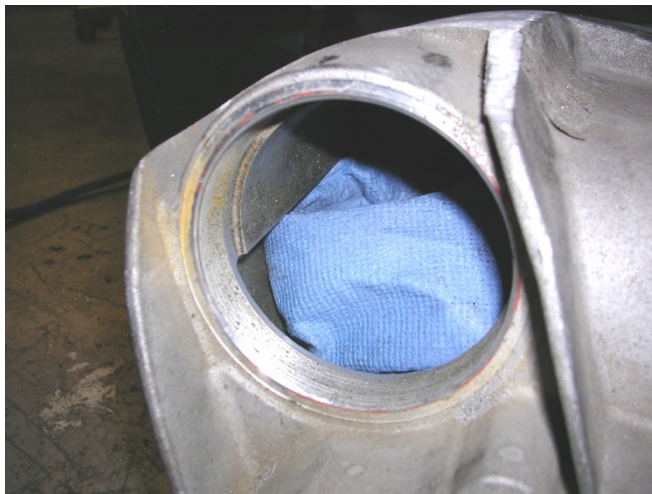
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2. After the clearance is obtained, clean the differential and work area from abrasive and aluminum dust created in step 1. Then remove the 3 case bolts shown in Figure 1.
3. Use the longer 10mm bolts and flat washers provided with a small amount of thread locker to bolt the Cognito Motorsports Differential Mount Conversion Bracket to the front differential as shown on Figure 2. Torque these bolts to 30 ft-lb of torque.



**Figure 2: Installing the Cognito Bracket**

4. Remove the plastic breather assembly as shown on Figure 3. Block off areas where metal shavings can enter the differential case with rags or towels. Apply a few layers of duct tape where the hole will be drilled will poke through the inside of the case. This will help trap the metal shavings for a clean removal.



**Figure 3: Vent cap removed, protect internals very carefully.**

5. Using the differential bracket as a drill guide, drill a 1/2" hole through the wall of the differential case, being careful not to poke through the duct tape on the inside. Then carefully remove the duct tape along with the contained metal shavings. Be sure the area

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is free from shavings, using a vacuum if necessary, and then remove the rags also trapping any shavings.

6. Insert some clean rags or towels to block off the gear area to prevent entrance incase any hardware in this step is mishandled. If there is a gap between the Cognito bracket and the differential case, use the extra ½” flat washer provided as a shim to take up the extra space. If the gap is small enough so the shim will not easily fit, do not insert the shim as the bracket will mate up to the case fine when fastening. Using the ½” hardware provided, bolt the Cognito Motorsports Differential Mount Conversion Bracket to the differential case through the hole previously drilled. Use 1 flat washer on the bolt and insert into the bracket and through the case from the outside going in. Apply some RTV silicone sealant to bolt protruding on the inside of the differential case. Then on the inside, insert a flat washer, and then a lock washer, and finally the locknut. Torque this hardware to 70 ft-lb of torque. Wipe off any excess silicone sealant.
7. Reinstall the plastic breather assembly; be sure not to over tighten.
8. Lubricate the polyurethane bushings with WD-40 and insert them as well as the crush sleeve into the Cognito Motorsports Differential Mount Conversion Bracket.

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### **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 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 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.