

## Differential Mount Bracket Kit

**INSTALL INSTRUCTIONS:**

Differential Mount Bracket Kit  
SKU: 110-90190

**PARTS LIST FOR SKU: 110-90190**

QUANTITY	PART #	DESCRIPTION
1	8142	Differential Mount Conversion Bracket
1	HP9080	Mount Hardware

**PARTS LIST FOR SKU: HP9080**

QTY	PART #	DESCRIPTION
1	HP9080-1	SUB HARDWARE
1	5003	Crush Sleeve
2	POLY-BUSHING-2130G	Bushing

**PARTS LIST FOR SKU: HP9080-1**

QTY	PART #	DESCRIPTION
3	HARDWARE-33082	3/8 Flat Washer
3	HARDWARE-33086	1/2 Flat Washer
1	HARDWARE-33626	1/2 L/Washer
1	HARDWARE-37268	1/2-13 Lock Nut
2	HARDWARE-33088	9/16 Flat Washer
1	HARDWARE-37270	9/16 Lock Nut
1	HARDWARE-15209	1/2-13X1.5 Bolt
1	HARDWARE-15269	9/16-12X4 Bolt
3	HARDWARE-0153992	M10X1.50X60 Bolt


**WARNING**

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.

Modification of vehicle suspension can interfere with ride-height sensors, active suspension, lane departure features, semi-autonomous, and autonomous driving features. It is the responsibility of the mechanic to determine feature compatibility prior to installation. Recalibration of sensors may be required in the event of any modification.



## INTRODUCTION

Thank you for purchasing our Cognito Motorsports Front Differential Mount Conversion Bracket Kit.

This bracket adds the upper driver side mount back to the front differential.

The bracket is formed and fabricated with a semi-gloss powder coat finish. Includes polyurethane bushings and all mounting hardware needed.

## REQUIREMENTS

- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual.
- Always wear safety glasses when using power tools.
- When a lift is required to perform the installation of these products and always ensure the vehicle is properly supported before attempting installation or serious injury may occur.

## TECH NOTES

- Read instructions carefully and study the pictures (if included) before attempting installation.
- If this product was purchased as part of a bundle/package. Familiarize yourself with each set of instructions included with the bundle/package before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.

## INSTALLATION

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.
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**.



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

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  $\frac{1}{2}$ " 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
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  $\frac{1}{2}$ " 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  $\frac{1}{2}$ " 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.



## WARRANTY / RETURN POLICY / SAFETY

### **Cognito Limited Lifetime Warranty**

Cognito Motorsports, Inc. hereinafter “Cognito,” warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on “competition” vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito’s obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are “consumables” and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warranted separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

### **Return Policy**

Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

### **Product Safety Advisory**

The installation of Cognito steering and suspension components will modify your vehicle’s original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle’s frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle’s susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle’s ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle’s suspension components and tires.