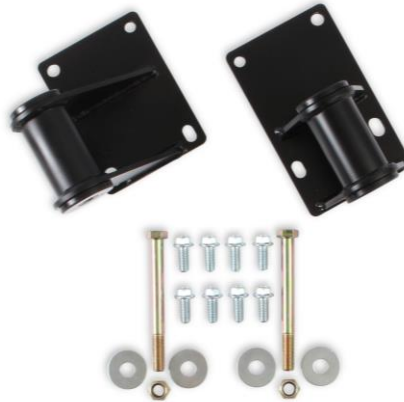




**GEN3 Hemi Swap Engine Mounts  
1997-2004 Dodge Dakota  
5.7, 6.1, 6.2, & 6.4L Engines  
PN: BHS541**



**Installation Instructions**

Thank you for choosing to use HOOKER™ engine swap mounting brackets as part of your GEN3 HEMI Swap project. These mounting brackets are part of the most comprehensively engineered system of mounting components, headers and exhaust systems available for this application. Please read these instructions thoroughly before attempting installation.

**IMPORTANT:** Low mount A/C Compressors will require modifications to frame stands for engines with “NON” VVT front covers.

OEM passenger’s side low mount alternators will not clear frame – see compatibility information below.

**PRE-INSTALLATION CONSIDERATIONS:**

- Right hand starter installations will require notching the K member for NAG1, 8HP70, 8HP90, and TR6060 installations. The use of a 6.2L starter is recommended to minimize the amount of material removed from the front K member. The 6.2L starter is required when using the BHS543 filler plate. Performing this modification is recommended during the mock up stage of the build.
- Clearance will need to be performed on the Left (driver’s side) engine mount frame stand to accommodate low mount A/C compressors when using engines with “NON” VVT front covers.
- Use of a rear sump oil pan and pick up tube required (example: Milodon PN: 30995 pan / 18454 pickup (5.7-6.1-6.4 engines). **OEM truck oil pan will not work.**
- 6.2L Hellcat engine installations will require supercharger water manifold or firewall modification and custom oil pan.
- Only Blackheart Headers **PN: BH2374** have been tested for correct fitment with BHS541 engine mounts

**COMPATIBILITY INFORMATION:**

**PN: BHS541** Engine Mounts are designed to work with the following supporting Hooker Blackheart swap parts

- PN: BHS542 Transmission Crossmember – Correct transmission adapter plate is required and sold separately.
- PN: BH2374 Long Tube Headers – **Racing applications only – non registered vehicles intended for track use only**
- PN: 97-369 Holley Alternator Relocation kit is recommended (PN: 97-368 Bracket only)

Parts List	
Qty.	Description
1	Left Engine Mount Assy.
1	Right Engine Mount Assy.

Accessory Pack Contents		
Qty.	P/N	Description
8		M10 x 1.50 x 25mm Flange Bolts
2	599R94	Decal – Blackheart 2" x 4"
2		1/2" - 20 x 5" Bolts
2		1/2" - 20 Nuts
4		1/2" Washers
1	199R12057	Instruction Sheet

Tools Needed
3/8" Metric Socket Set
6" Extension
3/4" Wrench
3/4" Socket
Blue Loctite®

## INSTALLATION:

### Installation of Blackheart BHS541 GEN 3 HEMI Swap Engine Mounts

#### Driver's Side Mounting Plate

- With the engine out of the vehicle, install the driver's side (Left) engine mount assembly to the engine block using (x4) M10 x 25mm flange bolts provided. Install the engine mount assembly with the engine mount bushing toward the front of the engine using the OEM engine mount locations. **Note:** Always use all 4 mounting bolts (**Figures 1 & 2**).

Driver's Side (Left) Mounting Plate

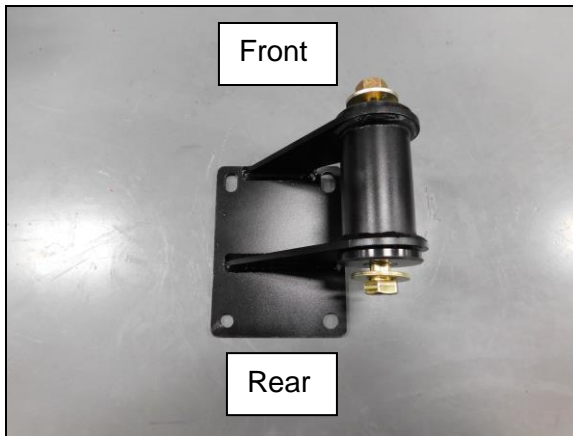


Figure 1

Driver's Side (Left) Mounting Plate Installed



Figure 2

#### Passenger's Side Mounting Plate

- Install the passenger's side (Right) mounting plate to the engine block using (x4) M10 x 25mm flange bolts provided. Install the mounting bracket with the engine mount bushing toward the front of the engine using the OEM engine mount locations (**Figures 3 & 4**).

Passenger's Side Mounting Plate

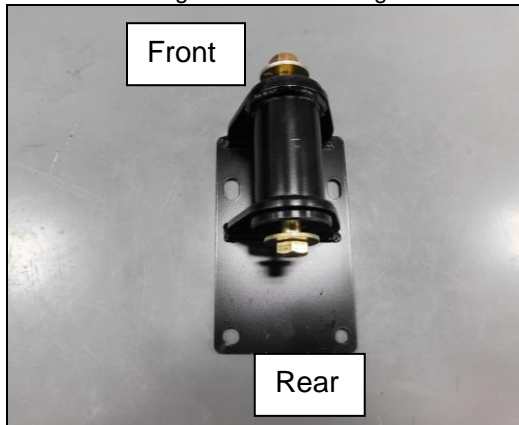


Figure 3

Passenger's Side Mounting Plate Installed

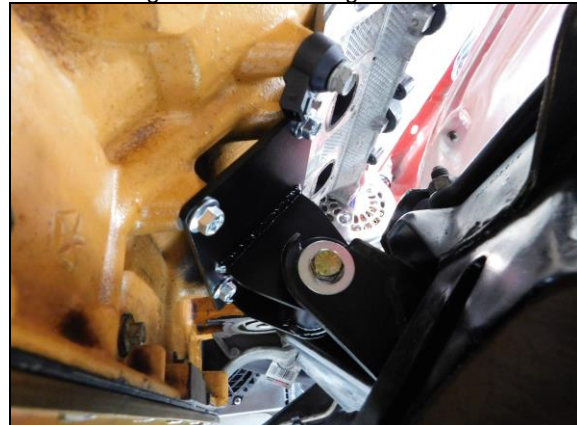


Figure 4

- Install the 1/2" engine mount bolts into the engine mount assemblies, as shown in **Figures 1 & 3**. Be sure to leave a space between the washer and the polyurethane bushing. This space will be required for the frame stand to pass between the washer and the bushing when the engine is being installed
- Install the engine into the vehicle slowly, until the engine mounts are resting on the frame stands and the engine mount bolts can be tightened. Be sure to block or support the engine to prevent damage to the engine mounts while the transmission is being installed.
- Double check and make sure the washers are outside the frame stands and not crossed between the inside and outside of the frame stand and the engine mount bolt is resting completely against the bottom of the slot in the frame stand.
- Loosen the engine mount bolts after the transmission is installed to allow the engine to settle into the frame stands before final tightening of the engine mount bolts.

**Special Note:** If you are installing Hooker Blackheart long tube headers PN: BH2374, loosely install the headers and gaskets before the transmission is installed to simplify the header installation. Follow instructions provided with the BH2374 header kit.