



GEN3 Hemi Engine Swap Brackets 1972-1993 DODGE W100/W150 BHS5118



Installation Instructions

Thank you for choosing to use HOOKER™ Engine Mounting Brackets as part of your GEN3 HEMI Swap project. These engine 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: NP435 and NP445 manual transmissions may require the input shaft pilot be shortened approximately 5/8" to prevent bottoming out in the shallow counter bore of the GEN3 Hemi crank shaft flange. Always check the input shaft to crankshaft bottoming clearance before cutting the shaft.

Visit www.holley.com for a complete selection of transmission crossmember, headers, exhaust, and more GEN3 HEMI support products to complete your GEN 3 HEMI Swap or transmission Swap.

COMPATIBILITY INFORMATION:

BHS5118 engine mounting brackets have been specifically designed for 72-93 W100 / W150 4WD Pickup trucks originally produced with V8 and slant 6 engines with either NP435, NP445 or torque flight automatic transmissions. BHS5118 Engine mounting plates have been designed maintain original engine setback and operating angles for direct bolt up installation and no need to move drive line components. Holley has also designed the BHS5118 engine mounting brackets with a 1" forward engine position to accommodate popular transmission / transfer case swaps and custom installs that require additional fire wall clearance.

*** BHS5118 Engine mounting brackets will not work with V6 front crossmembers.**

*Manual Transmissions require a pilot bushing be installed Mopar **PN: 53009180AB**

*Automatic Transmissions require the pilot bushing be removed if present.

Supported Engines - 2003-2022 5.7L, 6.1L, 6.2L, & 6.4L Gen 3 Hemi Engines

- Engines with short runner intake valves (SRV) will require minor fire wall clearance
- 6.2L Supercharged engines will require minor firewall clearance for supercharger water manifold.
- EARLS low profile intercooler water manifold recommended **PN: HEMI0005ERL**
- Car engines with rear exit heater pipes will need modification
- OEM V8 Radiator will require upper radiator hose fabrication

Supporting parts

- Alternator and Pigtail – Holley 150 amp Truck accessory drive alternator **PN:197-305**, Pigtail **PN:197-400**
- Power Steering Pump – Holley Truck Accessory Drive power steering pump kit **PN:97-384**
- 45 or 90 Degree Oil Filter Adapter – 45 degree Holley/ Mopar **PN: 53021610AF** - 90 degree Mopar **PN: 04893315AC**
- 3" Stainless Steel Exhaust – **PN: BH23140 (rear exit w / tip) - PN: BHS23141 (side exit after rear tires)**
- A727 Automatic Flex Plate – **Hays PN: 40-518**
- Manual 130 Tooth Billet Flywheel – **Hays PN: 11-500**
- Lower Radiator Hose – **Gates 22698** (cut to length)
- Heater Hoses – **Gates 28471** (x2) Truck engine w/ front passenger heater pipes.

PARTS LIST:

Qty.	Description
1	Driver's Engine Mount Bracket
1	Passenger's Engine Mount Bracket
1	Driver's Frame Plate
1	Passenger's Frame Plate
1	Driver's Frame Plate Support
1	Passenger's Frame Plate Support

Accessory Pack Contents:			Tools Needed:
2	24095LKW	Lakewood Engine Mounts	3/8 Drive Standard Socket Set
4		1/2-13 x 1-1/4" Flange Head Bolt	3/8 Drive Metric Socket Set
8		1/2-13 Flanged Nut	3/4 Wrench
2		7/16-14 x 1-1/4 Flange Bolt	5/8 Wrench
2		7/16 Flange Nut	11/16 Wrench
8		M10 x 25mm Flange Bolts	15mm Wrench
1	599R94	Hooker Blackheart Decal	6" and 12" 3/8 Drive Extension
1	199R12320	Instruction Sheet	7/16 Drill Bit
			Drill motor

Check the hardware package. If anything is missing, please contact Technical Service at 1-866-464-6553 or 270-781-9741.

INSTALLATION:

1. Install the driver's side engine mount bracket using the supplied M10 x 25mm bolts. The driver's side bracket is the **shorter** of the two engine brackets. Install the bracket with the slots toward the front of the engine using all (x4) supplied bolts.
2. Install the passenger's side engine mount bracket using the supplied M10 x 25mm bolts. The passenger's side bracket is the **longer** of the two engine brackets. Install the bracket with the slots toward the front of the engine using all (x4) supplied bolts.
3. Pair the frame plates and the lower support plates as shown in **Figure 1**.

Note: The bolt holes and slots should be offset to the top of the brackets as they are shown here.

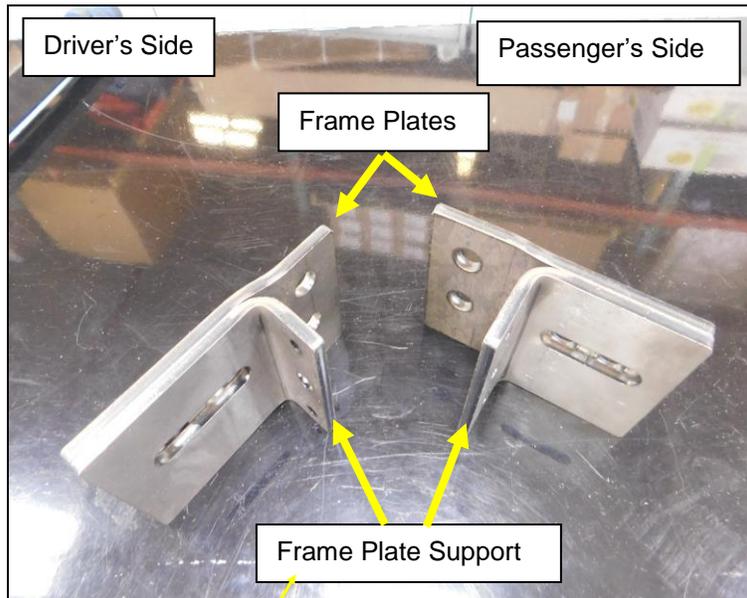


Figure 1

4. Install the driver's and passenger's frame plates on to the upper engine mount slot closest to the rear edge of the crossmember. Install (x2) 1/2 x 1-1/4" bolts through the frame plate and upper slot. Install the flanged nuts hand tight (**Figures 2 & 3**).

NOTE: The frame plate support will be installed after the engine and mounts are installed.

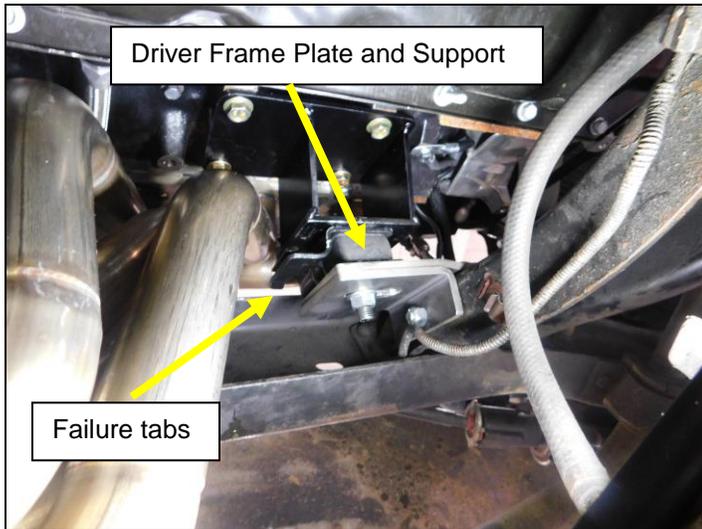


Figure 2

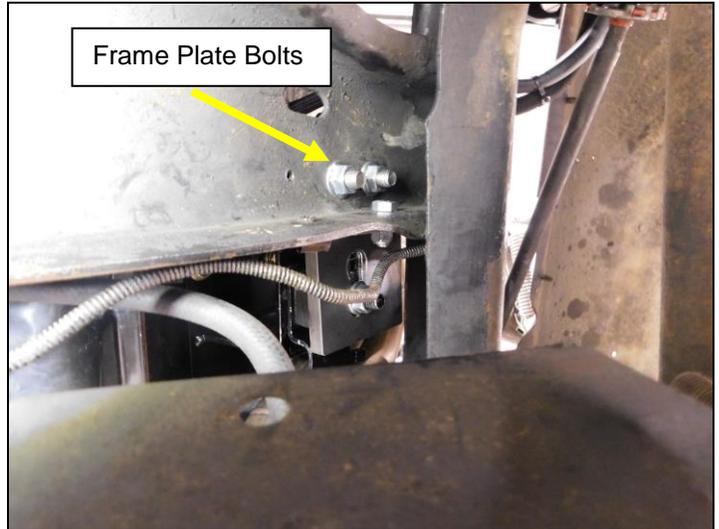


Figure 3

5. Install the supplied LAKEWOOD engine mounts on to the engine mount brackets previously installed.

NOTE: Make sure the alignment bump on the engine mount is fully inside the slot on the bracket and the failure tabs are facing the front of the engine for the **passenger's** side (**Figure 4**). Install and tighten the 1/2" flange nut. The failure tabs will face the rear of the engine on the **driver's** side (**Figure 2**).

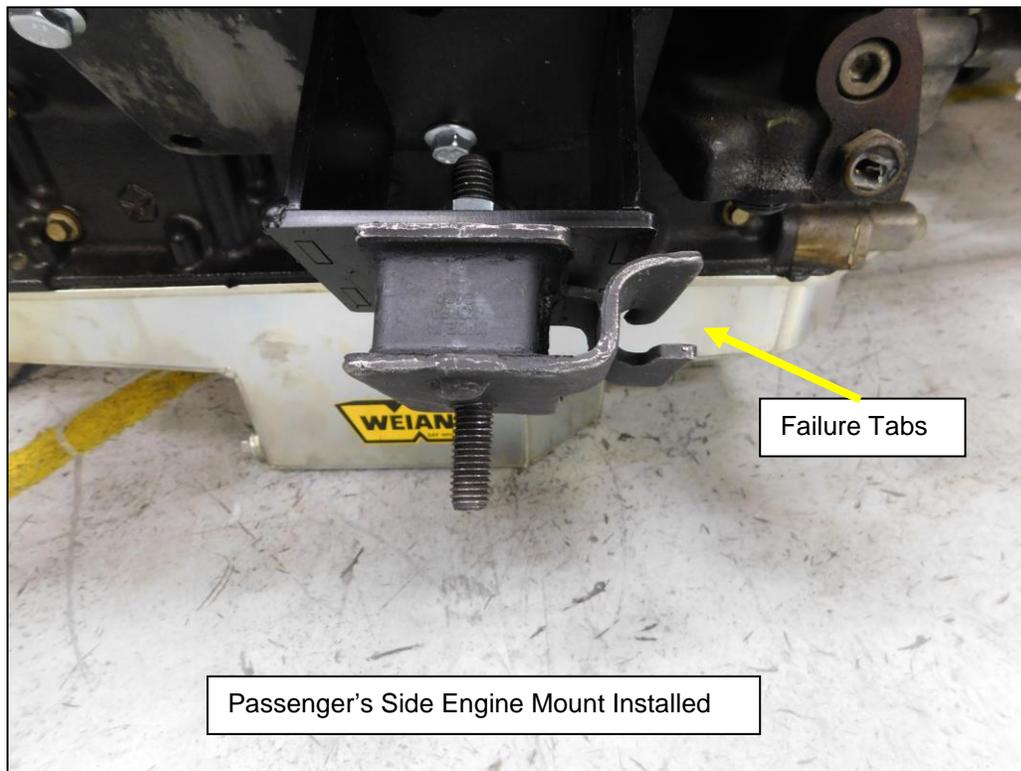


Figure 4

6. Install the engine into the vehicle and align the studs on the engine mount through the rearward mounting slot on the frame plate for OEM engine placement.

INSTALL NOTES:

- For manual transmissions, it may be necessary to install the engine with the engine mounts removed to make engaging the input shaft into the clutch less challenging. Install the engine mounts after the engine and transmission are bolted together in the same way described in step 5.
- It will be necessary to dimple the fire wall if the engine has an SRV valve on the back of the intake manifold.
- Support the engine to prevent the full weight of the engine and transmission from sitting on the frame plate until the frame plate support is installed

FRAME PLATE SUPPORTS:

1. Install the frame plate supports on to the engine mount stud with the 90° flange facing down. Install the supplied ½" flange nut on to the engine mount stud. Tighten the nut to pull the plates together, but still have movement.
2. **Make final adjustment to the engine position side to side and rotationally at this time.**
3. Tighten the (x2) ½" frame plate bolts.
4. Take the engine weight off the rubber mounts by lifting the engine slightly. DO NOT PULL on the rubber mount, just take the static weight off the rubber isolator.
5. Drill the 7/16" hole in the crossmember using the hole in the center of the frame plate support 90° flange as a guide. Install the 7/16 x 1" bolt. Install the flange nut and tighten (**Figures 5 & 6**).

NOTE: make sure the frame plate support 90° flange is against the crossmember when the bolt is tightened.

6. Tighten all engine mount hardware.
7. Slowly lower the engine on to the engine mounts.

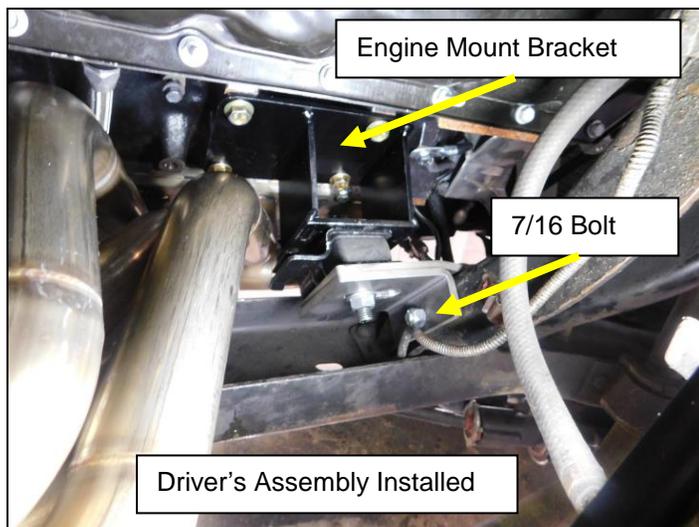


Figure 5

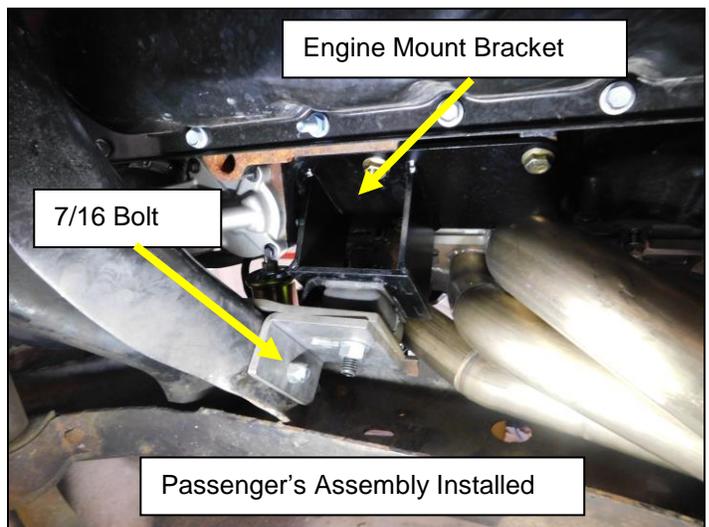


Figure 6

Any questions? Please contact Technical Service: 1-866-464-6553 or 270-781-9741. For online help, please refer to: www.holley.com.

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