



**GEN3 Hemi Swap Transmission Crossmember
1997-2004 Dodge Dakota 2WD
727, 46RE, 545RFE, NAG1, 8HP70, & TR6060
PN: BHS542**



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: Requires Hooker Blackheart Engine Mounts **P/N BHS541**, 2 bolt Chevy Transmission mount **P/N 71223029HKR** and a transmission adapter plate specific to the transmission being installed, See compatibility below for part numbers and installation notes.

COMPATIBILITY INFORMATION:

This Crossmember was designed specifically to place the engine and transmission in the vehicle to accommodate the widest range of Engine, Transmission and Accessory Drive combinations possible. Using hooker Blackheart engine mounts and transmission adapter plate will be required with this Crossmember. The transmissions listed may require minor to moderate massaging or modification to the transmission Tunnel accommodate the larger cases or manual configurations. See below.

Supporting Hooker Blackheart adapters required for use with BHS542 transmission crossmember:

- A727:** Adapter Plate **P/N: BHS530**, Transmission mount **P/N: 71223029HKR**, & Engine mounts **P/N: BHS541**
- **Install Notes:** Shifter cable, kick down cable, speedometer cable and custom drive shaft will be required.
- 45RFE / 46RFE / 545RFE:** Adapter Plate **P/N: BHS529**, Transmission mount **P/N: 71223029HKR**, & Engine mounts **P/N: BHS541**
- **Install Notes:** Shifter cable, kick down cable, and speedometer cable fabrication may be required if transmission is not original to the vehicle. Some transmission tunnel massaging may be necessary for 545RFE. Custom driveshaft is required.
- NAG1:** Adapter Plate **P/N: BHS527**, Transmission mount **P/N: 71223029HKR**, & Engine mounts **P/N: BHS541**
- **Install Notes:** Some transmission tunnel massaging may be required (shift linkage). Minor case trimming will be required. Custom driveshaft and flange are required. Custom shifter and cable are required.
- 8HP70:** Adapter Plate **P/N: BHS526**, Transmission mount **P/N: 71223029HKR**, Engine mounts **P/N: BHS541**
- **Install Notes:** Transmission tunnel massaging may be required. Minor case trimming will be required. Custom driveshaft and flange are required. Custom shifter and cable are required.
- TR6060:** Adapter Plate **P/N: BHS528**, Transmission mount **P/N: 71223029HKR**, Engine mounts **P/N: BHS541**
- **Install Notes:** Extensive transmission tunnel modifications and fabrication required.

Parts List	
Qty.	Description
1	Transmission Crossmember
1	Left Mounting Plate
1	Right Mounting Plate

Accessory Pack Contents		
Qty.	P/N	Description
4		3/8-16 x 1" Bolt
4		3/8-16 Flange Nut
2	599R94	Decal – Blackheart 2" x 4"
1	199R12058	Instruction Sheet

Tools Needed
3/8" Socket Set to 3/4"
3/4" Wrench
11/16 Wrench
5/8 Box Wrench
1/2" Box Wrench

INSTALLATION:

These instructions assume the engine and transmission are installed.

1. Install the Hooker Blackheart transmission adapter plate applicable to your transmission (see instructions provided with the adapter plate.)
2. Install the transmission mount **71223029hkr** to the transmission adapter plate with the hardware supplied in the adapter plate kit.

NOTE: The Transmission Mount will be installed between the Adapter Plate and the **BHS542** Transmission Crossmember. **Fig.1**

3. Install the **BHS542** crossmember frame plates using the original bolts removed from the OEM transmission crossmember. The Driver's (left) and Passenger's (right) side frame plates are marked for easy identification with a "P" or "D". The bolt holes in each frame plate are keyed to install with the marking on the top towards the cab to prevent the plates from being installed in the incorrect position (**Figure 1**).

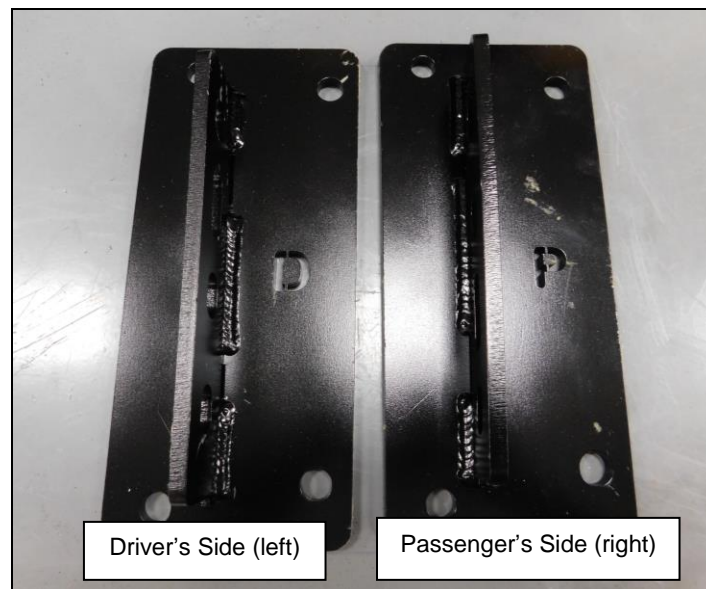


Figure 1

4. Install the **BHS542** transmission crossmember into position on top of the frame plate mounting flanges. Adjust the bolt hole to the corresponding transmission adapter being used and install the 3/8-16 x 1" bolts and flange nuts.
5. Align the transmission adapter to the slotted holes in the crossmember and install the 7/16 bolts or studs into the mount.
6. Adjust the transmission and adapter plates and tighten all hardware.

Shown with 46RFE Transmission Installed

