

NAG1 5 Speed Automatic GEN3 Hemi Swap Transmission Adapter 1973-1976 A-Body Mopar with Stock (Non-Hemi) V8 K-Member P/N: BHS574



Installation Instructions

Thank you for choosing to use HOOKER[™] engine swap transmission adapter as part of your GEN3 HEMI Swap project. This adapter is 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 Mounting Brackets **P/N**; **BHS571**, 2-bolt Chevy transmission mount **P/N 71223029HKR**, transmission crossmember **P/N**: **BHS572**, and **BHS578** transmission tunnel hoop - (cutting of the torsion bar crossmember required).

Visit <u>www.holley.com</u> for a complete selection of transmission crossmember, headers, exhaust, and more GEN3 HEMI support products to complete your A-Body Hemi Swap.

COMPATIBILITY INFORMATION:

73-76 A-Body Mopar cars using GEN3 HEMI engines, installing the following transmission and using the listed supporting parts:

NAG1 (5 SPEED AUTOMATIC): Crossmember P/N: BHS572, Transmission mount P/N: 71223029HKR, Engine mounts P/N: BHS571, and Transmission tunnel hoop P/N: BHS578

Install Notes:

- Some transmission tunnel massaging will be required for upper case clearance and around shift linkage.
- Trimming of the pinch weld at the transmission tunnel/firewall intersection will be required.
- Minor trimming of unused-nonstructural casting flash and tabs will be required to the transmission case.
- Output flange adapter (Sonnax PN:T35-GMFD-01) and custom telescopic drive shaft are required.
- Floor shifter required **B&M PN: 81188** or 10-14 Charger /Challenger Shifter MOPAR PN: 4578584AD (Shifter only)
- Requires torsion bar crossmember center hoop be removed for drive shaft coupler clearance. Hooker Blackheart bolt-in transmission tunnel hoop PN: BHS578 recommended to replace lost structural integrity.

PARTS LIST:

Qty.	Description
1	Transmission Adapter Plate

Accessory Pack Contents

2		M8 x 1.25 x 25mm Flange Bolt
2		7/16-14 x 1" Flange Bolt
2		7/16-14 Flange Nut
2	599R94	Decal – Blackheart 2" x 4"
1	199R12172	Instruction Sheet

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

TOOLS NEEDED:

	3/8" Drive Standard Socket Set
	3/8" Drive Metric Socket Set
	11/16 Wrench
5/8 Wrench	
	4.5" Grinder with Cut Off Wheel / Flap Disk
	22oz (or larger) Ball Peen Hammer

INSTALLATION:

These instructions assume the engine is installed and supported to prevent damage to the engine mounts.

NOTE: It will require several installations of the transmission to identify and clearance the areas necessary for adequate space around the transmission case with the transmission installed and resting on the crossmember and transmission mount.

1. Trim approximately ¼" from the bottom edge of the firewall pinch weld as shown in **Figure 1**. Take care to not trim into the spot welds. If additional clearance is required for the bell housing, it will require rolling the pinch weld.

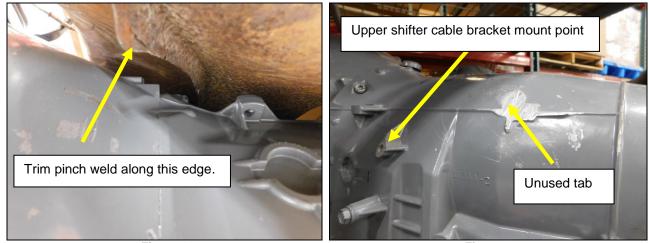


Figure 1

Figure 2

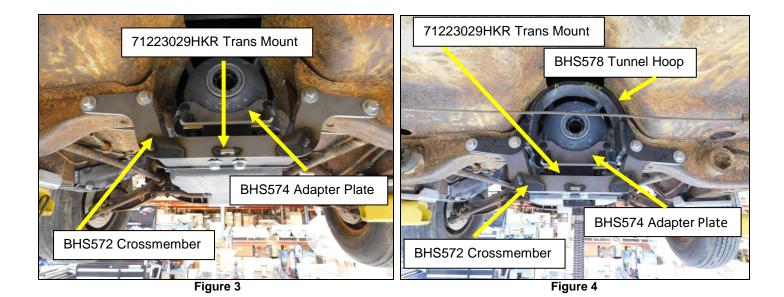
- Trim off the upper transmission shift cable mount and unused tabs from the transmission case as shown in Figure 2. Installation of the B&M PN: 81188 shifter cable bracket will use the two lower mounting points. OE shifter PN: 4578584AD will require a custom bracket for the cable mount.
- 3. In most cases, the NAG1 transmission case will not touch the transmission tunnel, but may need some massaging in the center part of the case to provide a minimum of 1/8" free space around the entire case to allow for chassis and drive train movement. Cutting of the transmission tunnel is generally not required.

IMPORTANT: Removing the center hoop section from the torsion bar crossmember will be required for drive shaft coupler clearance. If you are using the Hooker Blackheart transmission tunnel hoop **PN: BHS578** to replace this section and restore the structural integrity of the crossmember, follow the instructions provided with **PN: BHS578**. This process should be performed with the transmission out of the car.

- 4. Install the Hooker Blackheart transmission adapter plate on to the transmission tail shaft using the (x4) supplied M8 x 25mm bolts. Tighten the bolts. **NOTE: Torque M8 bolts to approximately 30 ft. lbs. Do Not over tighten.**
- 5. Install the **P/N: 71223029HKR** transmission mount to the transmission adaptor plate with the (x2) 7/16 x 1" bolts and nuts supplied in the adapter plate kit.

NOTE: The transmission mount will be installed between the adapter plate and the BHS572 transmission crossmember. Fig.1

- 6. Install the **BHS572** crossmember and **BHS578** transmission tunnel hoop if being used (SOLD SEPARATELY) and align the studs of the transmission mount while raising the transmission crossmember into position. Align the bolt holes and install the provided 3/8 bolts with washers. Install the provided flange nuts and tighten. Align the transmission to center. Install the nuts onto the transmission mounts and tighten.
- 7. **Figure 3** is shown with NAG1 transmission and torsion bar crossmember center hoop removed. **Figure 4** is shown with **BHS578** tunnel hoop installed. It is not necessary to cut the transmission tunnel sheet metal.



Any questions? Please contact Technical Service: 1-866-464-6553 or 270-781-9741. For online help, please refer to: www.holley.com. © 2021 Hooker Headers, Inc. All rights reserved. Tous Droits Réservés.

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