



**GEN3 Hemi Swap  
Torsion Bar Crossmember Center Support  
1973-1976 A-Body Mopar  
BHS588  
GM TKX 5 SPEED**



**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 BHS571**, Transmission Crossmember **BHS572**, and Transmission adapter plate **BHS573**. See compatibility below for part numbers and installation notes.

- **Cutting the upper torsion bar crossmember is required.**
- **Cutting of the transmission tunnel is required for TKX transmission installation.**
- **Welding of the transmission tunnel patch is required** - Hurst PN: 69520001 transmission tunnel patch is recommended

**COMPATIBILITY INFORMATION:**

The **BHS588** crossmember support was designed specifically to restore structural integrity to the torsion bar crossmember when the center hoop is removed for the TKX 5 speed transmission installations.

\* **BHS588** will not work with T56 (Magnum) or TR6060 installations. These transmissions require extensive transmission tunnel modifications and structural crossmember support

**Supporting Hooker Blackheart parts required for use with BHS588 Torsion Bar Support:**

**BHS571:** Engine Mounts  
**BHS572:** Transmission Crossmember  
**BHS573:** GM TKX Transmission Adapter Plate  
**71223029HKR:** Transmission Mount  
**69520001:** Hurst Transmission Tunnel Patch is recommended

**PARTS LIST:**

Qty.	Description
1	Torsion Bar Crossmember Support

## ACCESSORY PACK CONTENTS:

4		3/8-16 x 4.0" Bolt
4		3/8 Flat Washer
4		3/8-16 Flange Nut
2	599R94	Decal – Blackheart 2" x 4"
1	199R12231	Instruction Sheet

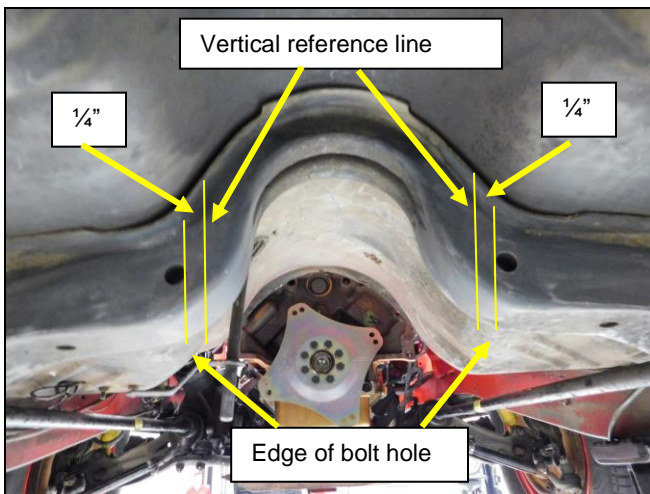
## TOOLS NEEDED:

3/8" Socket Set	Reciprocating Saw	Curved Body Hammer (Optional)
9/16 Wrench	Cutoff Wheel	Drill
11/16 Wrench	Right Angle Grinder	Drill Bit Set
5/8 Wrench	Large Ballpeen Hammer	Wire Brush
15mm Socket		

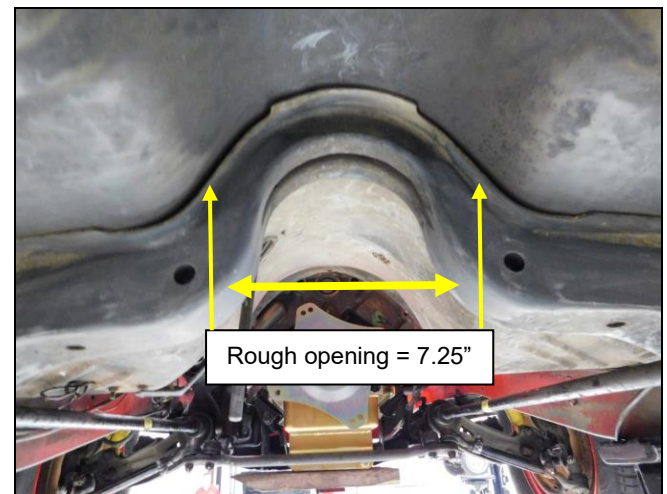
## INSTALLATION:

These instructions are written with the assumption that the center console, shifter, and shift linkage have been removed if your car is equipped with a floor shifter and center console.

1. Measure from the edge of the bolt hole to the vertical reference line and mark at  $\frac{1}{4}$ " (**Figure 1**).
2. Draw a vertical reference line from top to bottom on the upper torsion bar crossmember (**Figure 1**). This will be the rough opening after the section of crossmember is removed. The opening will be trimmed to actual size after the initial cut is made to avoid cutting into the support bushings inside the Crossmember Support (**Figure 2**).

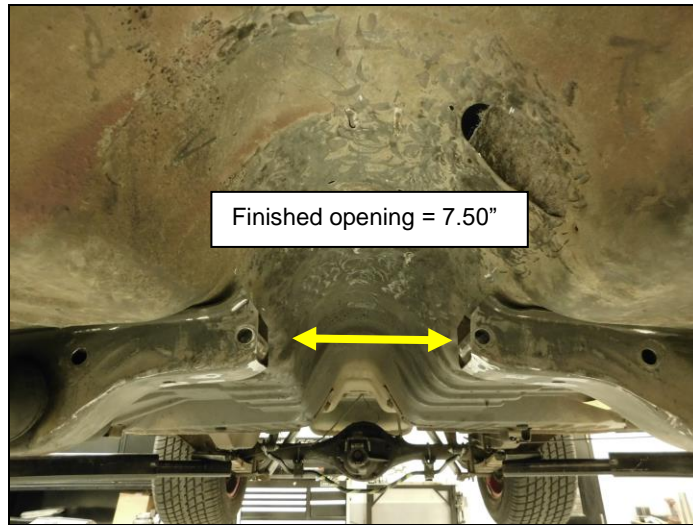


**Figure 1**



**Figure 2**

3. Cut along the vertical reference line using a right angle grinder and cutoff wheel. Take your time and make a clean vertical cut making sure to stay on the inside of the vertical reference line. Resist the need to take more material than necessary, more material will be removed with the grinder and flap wheel after the initial center section of the torsion bar crossmember is removed (**Figure 3**).
4. Remove the center hoop section of the upper crossmember – it may be necessary to drill some spot welds from the upper flanges where the factory has welded the floor pan to the crossmember hoop. Wire brushing the paint from the flanges will make it easier to see the location of the spot welds.
5. Using the grinder with the flap wheel, carefully trim the opening back to the support bushings. The finished opening will be 7.5" wide to allow the BHS588 support to be installed after the sheet metal and final trimming work are completed (**Figure 3**).



**Figure 3**

\* The transmission tunnel will have to be cut to allow the TKX 5 speed transmission to fit inside the vehicle before the crossmember and torsion bar support can be installed (**Figure 4**) shows approximately how much material will need to be removed for a rough opening on an Automatic Transmission Tunnel. Vehicles equipped with a manual transmission tunnel will require slightly less trimming



**Figure 4**

6. With the transmission installed in the car and supported, raise the BH588 support on to the torsion bar crossmember and install one 3/8 x 4" bolt on each side to hold it in place (**Figure 5**).
7. Install the BH573 transmission adapter plate on to the transmission using the (supplied with the adapter plate) M10 x 25mm bolts (**Figure 6**).

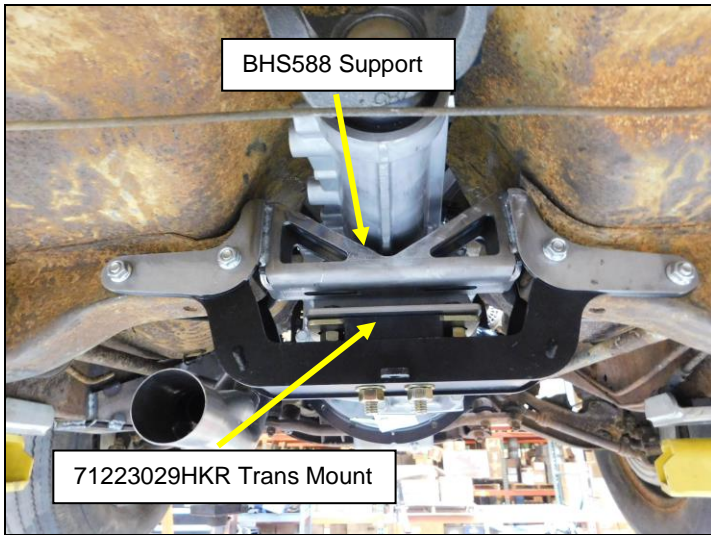


Figure 5

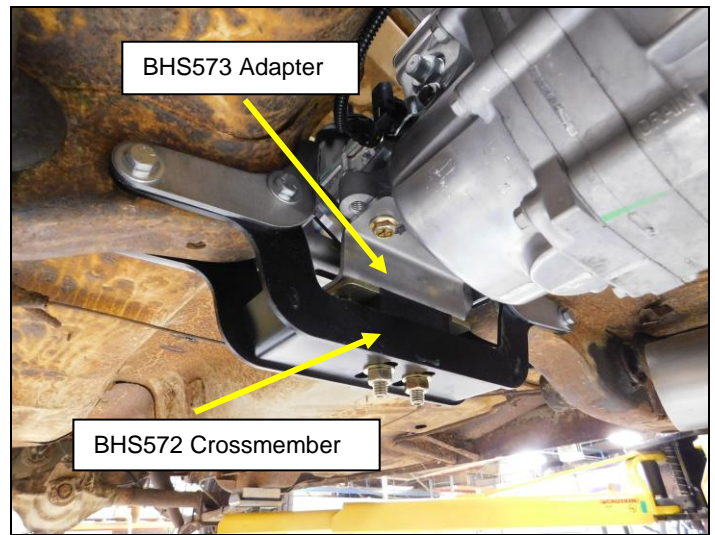


Figure 6

8. Loosely install the **71223029HKR** transmission mount on to the adapter plate using the 7/16-14 bolts and nuts provided with that kit. These will be tightened after the **BHS572** crossmember is installed (**Figure 6**).
9. Raise the **BHS572** crossmember into position **inside** the BHS588 support. Install the 3/8 x 4" bolts and flat washer through both the **BHS572** and **BHS588**, install the lock nuts, and tighten (**Figure 6**).
10. Align the transmission to center install the studs and nuts through the bottom of the crossmember into the transmission mount and tighten the 7/16 bolts on the adaptor plate and 7/16 nuts on the trans mount studs.

**NOTE:** Hurst PN: 69520001 transmission tunnel patch is recommended to reconstruct the transmission tunnel.