

# 1973-1976 A-Body Mopar GEN3 HEMI Swap P/N: BH23104 1 3/4" 304SS Shorty Headers 5.7 - 6.1 - 6.2 - 6.4L



Installation Instructions

Thank you for choosing to use HOOKER™ engine swap Headers as part of your GEN3 HEMI Swap project. These headers 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:**

- Power Steering Hardline kit 198-231 Recommended for Borgeson Power steering applications
- Requires U joint style coupler to the steering box (see compatibility information)
- Will not fit Factory Power Steering
- Requires Hydraulic clutch
- · Requires cable shifter conversion

Visit <u>www.holley.com</u> for a complete selection of Transmission Crossmember, Headers, Exhaust, and more GEN3 HEMI support products to complete your Hemi Swap.

## **COMPATIBILITY INFORMATION:**

These headers were specifically designed to be installed with **Hooker Blackheart** HEMI swap engine and transmission mounting components and exhaust systems for this same application. Attempts to install these headers with any other type or combination of engine and transmission mounting components may cause them to not provide their intended ground or vehicle component clearances, or compatibility with the related HOOKER™ exhaust systems.

#### Supporting Hooker Blackheart parts required for use with BH23104 headers:

Engine Mounting Brackets – **BHS571**Transmission Crossmember – **BHS572** – 727 and TKX (GM Style), NAG1
Transmission Adapter Plate – **BHS573** – 727 and TKX, **BHS574** – NAG1
Transmission Mount – **71223029HKR** (or any standard 2-bolt Chevy Mount of the same design)
Power Steering Hard Line Kit – **198-231** 

#### Recommended part:s

Universal joint type steering coupler – Borgeson P/N: 01364 manual steering box – Borgeson P/N: 036425 power steering box – Lokar or equivalent universal flexible dipstick – ED-5015-24

IMPORTANT: Manual steering column will require outer sleeve modifications for GEN 3 Hemi valve cover and header clearance.

#### Transmissions and Starters BH23104 headers are designed to work with:

727 – Small truck starter
TREMEC TKX (GM style) – Small truck starter
NAG1 – Left or Right Side Starter – See notes 2 & 3.
8HP70 – Left or Right Side Starter – See notes 1 & 2.
TR6060 – Right Side Starter – See note 1.
T56 MAG – Left or Right Side Starter – See notes 1 & 2.

- Small body Hell Cat starter is recommended and provides additional clearance
- Right hand starter applications require modification to the pitman arm
- 2010 Chrysler 300 AWD starter, 52108422AA bell housing, and 53013573AB dust shield for left hand starter

#### BH23104 Headers will fit the following engines: (\* see notes)

5.7L 2003 - 2008 5.7L 2009 - 2020 6.1L 2005 - 2010 6.2L 2015 - 2020 6.4L 2011 - 2020

## **PARTS LIST:**

Qty.	Description
1	Left Header
1	Right header

## **ACCESSORY PACK CONTENTS:**

20	505R21	M8 x 25mm Header Bolts
2	599R94	Decal – Blackheart 2" x 4"
1	199R12216	Instruction Sheet

<sup>\*</sup> REQUIRES THE USE OF OEM EXHAUST MANIFOLD GASKETS.

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" Metric Socket Set	
24" Extension	
Universal or 13mm Swivel Socket / 11mm Swivel Socket	
7/8 Wrench	
13mm Wrench	

#### **INSTALLATION:**

**INSTALLATION NOTE:** Install power steering hard lines 198-231 (if applicable) and driver's side header before the engine is installed to simplify installation. Follow install steps.

Installing the driver's side header after the engine is installed will require the steering box be unbolted and the engine to be raised off the engine mount.

**BEFORE YOU START:** The steering column must be removed from the vehicle and will be reinstalled after the engine is installed with headers in place.

- 1. Install the BHS571 engine mounts before the header is installed.
- Install the OEM manifold gasket on to the left and right side cylinder head with the bottom row of bolts supplied with the headers. Only install the bolts a few threads. Be sure the composite material is facing out to the header flange (Figure 1).

<sup>\* 2003-2008</sup> Square exhaust port requires OEM Gasket P/N: 53013943AA and P/N: 53013944AA

<sup>\* 2009 &</sup>amp; up D-Port exhaust requires OEM Gasket P/N: 05038098AA and P/N: 05038099AA

- 3. Install the driver's side (left) header on to the bottom row of bolts and tighten the flanged header bolts until the header flange is touching the gasket, but is still loose on the bolts. Install the upper row of flanged header bolts (**Figure 2**).
- 4. Tighten all the bolts evenly from the center out to approximately 30 ft./lbs.
- 5. Partially install the engine into the vehicle leaving room to install the 198-231 hard lines (if applicable).
- 6. Install the 198-231 power steering hard lines on to the Borgeson power steering box (if applicable) using the instructions provided with them.

**NOTE:** Installing the engine with the power steering hard lines mounted to the steering box requires some twisting and tilting of the engine as it passes the hard lines and the header collector clears the firewall.

- 7. Install the engine and transmission.
- 8. Install the right side header into the car and onto the lower row of bolts previously installed. Install the upper row of flanged header bolts.
- 9. Tighten all the bolts evenly from the center out to approximately 30 ft./lbs.
- 10. Reinstall the steering column and connect to the steering box using one of the below U-joint couplers as required for your application.

\*Universal joint type steering coupler – **Borgeson PN: 013464** for OEM Manual steering box – **Borgeson PN: 036425** for Borgeson power steering box



Figure 1



Figure 2

- 11. Install the knock sensors if they are being used.
- 12. Install the O2 sensors if they are being used.
- 13. Retorque all header bolts after installation.

