

# 1979-1993 FORD MUSTANG COYOTE ENGINE SWAP HEADERS 70103317-RHKR (1-3/4") Installation Instructions



Thank you for using Hooker Blackheart products as part of your engine swap project. These headers are part of the complete Hooker Blackheart Coyote engine swap system for 1979-1993 Ford Mustang vehicles. These instructions have been written with the assumption that you have already installed a Coyote engine into your car using an **AJE/MU40-UM**, or **Team Z/TZM-KM-SWAP** K-member and Hooker Blackheart engine brackets made specifically for each, or a **Maximum Motorsports MMKM-2.1** K-member with **Prothane™ 6-504** polyurethane motor mounts. These headers are not compatible with the **Maximum Motorsports MMKM-1** K-member, or known to be compatible with any other aftermarket K-members than those listed above.

Automotive work can be dangerous. Work only on a clean, dry and level surface and use lifting/supporting equipment specifically designed for automotive work. If you are unsure of your capability, or that of your equipment, seek professional assistance to install these components.

These headers are designed for off-road/competition use only and carry no CARB E.O. exemption to permit legal installation/use on pollution controlled motor vehicles.

**NOTES:** These headers are designed and validated to be compatible with T45, T56 Magnum (Ford spec), TKO 500/600 (Ford spec), 4R70W, 6R80, MT82 and Powerglide transmissions. Compatibility with any other transmission in unknown.

When these headers are installed with the AJE, Team Z, or Maximum Motorsports K-members listed above, the stock 2011-17 Mustang Coyote oil pan, or Moroso™ 20571 Coyote oil pan may be used. Aftermarket K-members may affect the specific installation steps required to install these headers. In such cases, use these instructions as a go-by and adjust as needed for your specific situation.

These headers are compatible with the stock vehicle clutch cable system when used with manual transmission bellhousings configured with the SN95-up factory type 7 o'clock clutch fork position.

### **BEFORE BEGINNING:**

Check that the hardware package includes the following:

Qty.	Description
16	M8 x 1.25 Header Bolts
16	M8 x 1.5 Header Bolts

If you are missing any hardware, please contact Technical Support at 1-866-464-6553 or 270-781-9741.

#### **INSTALLATION:**

- 1. Disconnect the negative battery cable from the battery.
- 2. Raise the vehicle to comfortable height for working beneath it.
- 3. Remove the starter from the engine.
- 4. Remove the bolts/nuts connecting the steering shaft rag joint to the flange on the steering rack and separate shaft from the rack.

- 5. Remove the bolt/nut connecting the steering shaft to the steering column protruding through the firewall and then remove the steering shaft from the car.
- 6. Remove the stock exhaust manifold studs from the engine.
- 7. Install the headers into the vehicle in the following manner for the specific K-member you are using:

Maximum Motorsports MMKM-2.1 K-member - Install the headers into the car after installation of the engine onto the K-member has been carried out (prior to, or following the installation of the transmission). Remove the nut from the passenger's side motor mount stud and jack the engine up off the passenger's side K-member mount stand by approximately 3/4" to allow placement of the passenger's side header alongside the engine. Lower the engine and reattach the motor mount to the K-member prior to attaching the header assembly to the engine. Now, install the driver's side header onto the left side of the engine from the bottom of the car also.

**NOTE:** The Maximum Motorsports MMK-2.1 K-member provides the unique ability to adjust its position on the car during installation to align it with the rear suspension. This movement of the K-member also pulls the engine left/right in the car along, which may cause the right side header to experience contact with the frame rail above the K-member if the alignment process draws the K-member exceedingly to the right. If you experience this in your installation, you may need to limit the movement of the K-member in that direction to prevent interference.

**AJE/MU40-UM**, **or Team Z/TZM-KM-SWAP K-members** - install the headers into the car after installation of the engine onto the K-member has been carried out (prior to, or following the installation of the transmission). Install both headers from the bottom of the car.

**For all K-members** - Tighten the bolts to approximately 18 ft. /lbs. **NOTE:** The top rear bolt on the passenger's side header flange can most easily be installed/tightened from the top side area of the engine behind the shock tower.

8. Re-install the starter, steering shaft, and negative battery cable.

## **COMPATIBILITY INFORMATION:**

These headers are designed to provide best clearances with a Motorcraft/Ford **SA-991/BR3Z-11002-B 9** (2011-13 Mustang) starter. Motorcraft/Ford **SA-1062/FR3Z-11002-C** (2014-15 Mustang), **SA-1067/GR3Z-11002-A** (2016-17 Mustang), or Ford Performance **M-11000-C50** Coyote starters may also be used, but slight filing/grinding may be needed to the end of the nose cone casting behind the solenoid to clear the header tube adjacent to it. No aftermarket starters are known to be compatible with these headers.

These headers are comprehensively designed for installation with Hooker Blackheart LS engine swap brackets, transmission crossmembers and 2.5" and 3" dual exhaust systems co-developed for this vehicle application.

An O2 bung is included on each header collector for providing O2 sensor compatibility/operation.

#### LIMITATION OF LIABILITY - DISCLAIMER:

The regulation of emissions production, noise levels, and safety standards is undertaken by the federal government, each of the fifty state legislatures, and by many local municipalities, towns, and counties.

HOOKER™ makes no warranties of merchantability, of fitness for particular purpose, or that its products are approved for general use, or that its products comply with laws, regulations, or ordinances in the state where they may be sold to the ultimate purchaser, the consumer.

Unless expressly stated to the contrary in the catalog, instruction sheet; or price list, the entire risk as to the conformity of any company product in any such state and as to repair should the product prove to be defective or non-conforming, is on the retail purchaser, the buyer, the ultimate consumer, of such product and it is not upon the seller, distributor, or manufacturer.

In this connection, the retail purchaser, the buyer, the ultimate consumer assumes the burden of the entire cost of any and all necessary service, alterations, or repair. THE FOREGOING STATEMENT LIMITS THE LIABILITY OF THE MANUFACTURER.

California vehicle code, sections 27156 and 38391, prohibits the advertising, offering for sale, or installation of any device, which modifies a vehicle's emission control system, unless exempted, unless otherwise noted. HOOKER™ Headers that have not received an Executive Order (E.O.) exemption from these code sections are not legal for sale or use in California on vehicles originally equipped with catalytic converters, except for racing vehicles, which may never be driven upon a highway. Check with your local authorities to determine if these headers are legal for use in your particular area.

**Technical Service: 1-866-464-6553** 

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