



**1994-1998 Ford Mustang Engine Swap Transmission Crossmember
71222012HKR
Installation Instructions**



Thank you for choosing to use this Hooker Blackheart transmission crossmember as part of your engine swap project. This crossmember is part of the most comprehensively engineered system of mounting components, headers and exhaust systems available for this vehicle application. Hooker Blackheart engine swap systems are designed to decrease your total swap installation effort and cost while increasing the engineered quality of your vehicle and compatibility of these components with other popular aftermarket components. Please read these instructions in their entirety before attempting installation.

PRE-INSTALLATION CONSIDERATIONS:

This crossmember is designed as part of a fully-engineered engine swap mounting system for 1994-1998 Ford Mustang vehicles. It has been CAD designed to provide an optimized balance of weight, stiffness, and strength. The dual-arch exhaust passages are provided for installation of available Hooker Blackheart 2.5" and 3" exhaust systems for this application, or any custom system of your choice.

Installation of this crossmember with any of the applicable transmissions also requires the use of a specific spacer block or adapter kit as follows:

LS swaps-

- **4L60-4L70** or **TKO** transmissions - **71223012HKR**
- **TH350** or **Powerglide** transmissions - **71222014HKR**

Coyote swaps-

- **Powerglide** transmission (w/ JW performance bellhousing) - **BHS508**
- **TKO** and **TR-3550** transmissions - **71223012HKR**

This crossmember is designed to be installed with a Prothane™ **7-1604** poly mount, or an Anchor™ **2268** rubber transmission mount for all transmission applications listed for this crossmember. TKO and TR-3550 transmission extension housings that are drilled/tapped only with the Ford mount pattern will need to be drilled/tapped with the narrower pattern required to attach the above mentioned GM style mounts.

Due to the unique design geometry of this transmission crossmember, attempts to install it with headers and/or engine mounting plates/brackets other than those developed by HOOKER™ for this vehicle application will be unsuccessful. When used with the Hooker Blackheart LS and Coyote engine mounting brackets also designed for this vehicle application, this CAD designed transmission crossmember will provide desirable component clearances and U-joint operation angles.

A suitable lifting jack will be required to install this crossmember with the appropriate transmissions for which it is intended. An automotive lift or a jack and jack stands will be required to safely raise and support the vehicle.

CAUTION! WORK ONLY ON A LEVEL SURFACE. USE JACKS /JACK STANDS OF SUFFICIENT CAPACITY TO LIFT AND SUPPORT YOUR VEHICLE. NEVER WORK UNDER A VEHICLE SUPPORTED BY A FLOOR OR BUMPER JACK.

INSTALLATION:

1. Check that the hardware package includes the following:

Qty.	Description
1	Crossmember Assembly
1	Transmission Spacer (3/16" thick)

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

NOTE: These instructions have been written with the assumption that you have already installed an LS or Coyote engine into your vehicle using a Hooker Blackheart engine mounting bracket kit, or mounting method prescribed by HOOKER™, for the specific engine K-member you are using.

NOTE: Some hammer clearancing to the trans tunnel should be expected in the following areas:

- **TH350, Powerglide and 4L60-4L70**- around the servo bore/cover on the right side of the case
- **TKO 500/600** - around the shifter housing and the front and middle top covers of the transmission.

1. Raise the vehicle to a comfortable working height and support it by proper means.
2. If in place, remove the factory transmission crossmember from the vehicle.
3. Attach the transmission to the engine and then raise the tailshaft of the transmission as high as possible with a floor jack or screw jack.
4. Attach your chosen transmission mount to the rear of the transmission (bolts for this purpose are user supplied).
5. Install the Hooker Blackheart crossmember into the car in the stock location. Re-use the stock OE bolts/nuts for this purpose. Be sure to orient the crossmember so that the slight tilt of the crossbeam is angled up towards the front of the vehicle and not up towards the rear of the vehicle.
6. Attach the transmission mount to the crossmember in the following fashion:

Powerglide or TH350 transmissions - Attach the available **71222014HKR** (for LS swap), or **BHS508** (for Coyote swap) cantilever bracket onto crossmember per its instructions, then lower the transmission tail down onto the end of the cantilever bracket and attach the two together using the fasteners supplied with the transmission mount. Before fastening the crossmember/cantilever bracket/mount together using the 7/16" bolts supplied with the transmission mount, place the supplied 3/16" thick spacer between the spacer block and the crossmember.

4L60-4L70 or TKO 500/600 transmissions - Place the available **71223012HKR** spacer block onto the beam of the crossmember (over the forward set of holes for TKO transmissions or the rear set of holes for 4L60-4L70 transmissions) then lower the transmission tail down onto the spacer block. Before fastening the crossmember/spacer block/mount together using the 7/16" bolts supplied with the spacer block, place the supplied 3/16" thick spacer between the spacer block and the crossmember.

Any questions? Please contact Technical Service: 1-866-464-6553 or 270-781-9741. For online help, please refer to: www.holley.com.

COMPATIBILITY INFORMATION:

This transmission crossmember was specifically designed for bolt-in compatibility with the Hooker Blackheart LS and Coyote swap engine mounting bracket kits, cast iron LS exhaust manifolds, LS and Coyote headers and exhaust systems also developed for this application. Various other Holley® and OE LS components have been designed and/or validated for use with this system of components, as follows:

The engine/transmission positioning provided by the Hooker Blackheart LS swap system for this application has been validated to be compatible with the Holley® **302-1** (will not fit 1994-1995 cars with stock or Maximum Motorsports MMKM-1 K-members), **302-2** or **302-3** oil pans in LS swap applications; compatibility with other aftermarket/OE engine oil pans is unknown. The engine/transmission positioning provided by the Hooker Blackheart Coyote swap system for this application has been validated to be compatible with the Moroso 20571 (with all K-members) and stock Mustang Coyote (with all K-members except UPR Performance) oil pans.

More LS and Coyote swap/engine performance components, such as EFI fuel control systems, fuel filters, fuel pumps, plumbing hose/fittings and valve covers can be found at www.holley.com.

LIMITATION OF LIABILITY – DISCLAIMER:

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.

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