1984-1995 Ford Mustang OE 4 cyl. / 8 cyl. Or Maximum Motorsports MMKM-1 K-member LS Engine Swap Mounting Brackets
71221013HKR

Installation Instructions

Thank you for choosing to use these HOOKER™ engine swap mounting plates as part of your LS swap project. These mounting plates are part of the most comprehensively engineered system of mounting components, headers and exhaust systems available for this LS swap application. Please read these instructions thoroughly before attempting installation.

PRE-INSTALLATION CONSIDERATIONS:

These engine mounting brackets have been designed for use with the stock 1984-95 OE 4 cyl. / 8 cyl. or Maximum Motorsports MMKM-1 K-members only. Installation of the engine using these brackets requires use of the Holley® **302-3** oil pan.

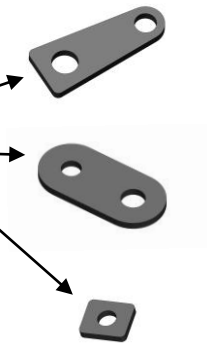
Installation of these engine mounting plates requires the use of Energy Suspension brand aftermarket polyurethane engine mounts, or stock rubber mounts for **1998-2002 GM F-body LS1 engines**.

The long horizontally installed through bolts that couple the engine mounts to the Hooker engine brackets are to be user supplied.

BEFORE BEGINNING…

Check that the hardware package includes the following**:**

Qty.	Description	Qty.	Description
2	M14-1.5mm Nuts	1	Backing Plate, Left/Driver's Side
3	7/16-14 Carriage Bolts	1	Backing Plate, Right/Pass. Side
1	7/16-14 x 1" Cap Screw	1	Backing Plate, Right/Pass. Side
3	7/16-14 Flanged Head Nuts		



INSTALLATION ON OE K-MEMBER

1. Disconnect the battery.
2. Discharge any residual pressure in the stock fuel system.
3. Remove the stock driveshaft, transmission and engine from the vehicle.
4. Attach a set of 1998-2002 F-body engine mounts (rubber or aftermarket polyurethane) to the engine with 8 user-supplied M10 x 1.5 x 25mm bolts. The formed step at one end of the housings goes towards the bottom of the engine for correct orientation
5. Feed the threaded stud attached to the left side engine bracket into the receiving slot in the left engine mount stand on the K-member, while placing the included left side backing plate over the stud from the bottom side of the mount stand. Hold the backing plate against the mount stand and install one supplied M14 nut onto the threaded stud. Leave the nut loose enough to allow the backing plate to move freely between the nut and engine mount stand.
6. Install one supplied 7/16 carriage bolt into the rectangular hole directly below the threaded stud and ensure it passes through the backing plate on the underside of the mount stand. Install one supplied 7/16 nut onto the carriage bolt but do not fully tighten it at this time.

7. Install the included 7/16 cap screw into the hole located at the rear bottom rear edge of the left side engine bracket and install one supplied 7/16 nut onto the bolt from the underside of the engine mount stand. Do not tighten any bolts at this time.

8. Feed the threaded stud attached to the right side mount into the receiving slot in the right side engine mount stand, while placing the included right side backing plate over the stud from the bottom side of the engine mount stand. Hold the backing plate against the mount stand and install the remaining supplied M14 nut onto the threaded stud. Leave the nut loose enough to allow the backing plate to move freely between the nut and engine mount stand.

9. Working from the bottom side of the engine mount stand, insert the supplied rectangular bushing washer into the large rectangular hole in the right engine mount pad and swing the backing plate into position under the bushing to hold it in place. Now install the remaining 7/16 carriage bolt into the center-most rectangular slot in the engine bracket. Once the bolt passes through the engine bracket, rectangular bushing washer and right side backing plate, install one supplied 7/16" nut onto the end of the stud. Do not tighten any bolts at this time.

10. Lower the engine onto the brackets and couple the engine mounts to the brackets with long M12 metric tie-bolts and nuts (user supplied); move the still-loose engine brackets along the K-member to assist in lining up the holes in the brackets with the holes in the mounts.

11. Using a pry bar between the steering rack and the flanges of the oil pan, level the engine on the K-member and tighten all fasteners in the engine bracket assemblies. The bottom of the oil pan or the oil pan-to-engine separation line are both good visual references to use to level the engine.

12. Install transmission of your choice with the appropriate Hooker crossmember following the basic guidelines given for each further in this document.

13. Your LS swap engine and transmission are now mounted and ready to be outfitted with headers and an exhaust system. Hooker 1979-93 Mustang, or 1994-2004 LS swap headers and exhaust systems are specifically designed for use with these engine mounting brackets.

INSTALLATION MAXIMUM MOTORSPORTS MMKM-1 K-MEMBER

NOTE: Installation intended to be done using the forward position engine mount stud slots in the K-member only. The Hooker Fox Body LS swap long-tube headers are not compatible with the rear set-back mount stud slots. Obtaining the maximum possible steering rack installed height will require trimming the Hooker engine bracket M14 studs shorter than shipped.

1. Disconnect the battery.

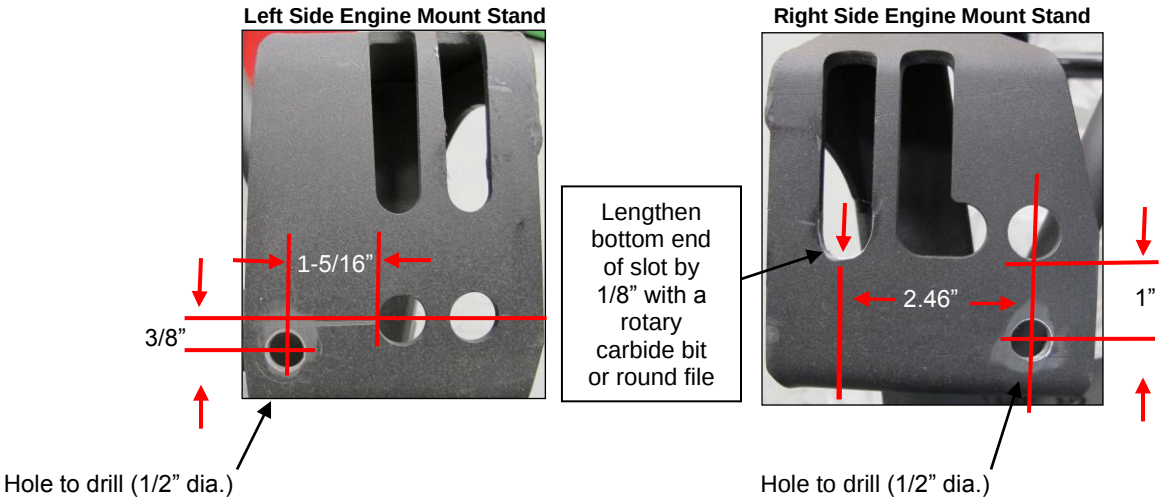
2. Discharge any residual pressure in the stock fuel system.

3. Remove the stock driveshaft, transmission, and engine from the vehicle.

4. Using the supplied M10 bolts, attach 1998-2002 F-body engine mounts (user-supplied) to the engine. The formed step at one end of the housings goes towards the bottom of the engine for correct orientation.

5. Install the Maximum Motorsports K-member into the vehicle as per the manufacturer's instructions.

6. Mark-off and drill one 1/2" diameter hole in the each engine mounting stand on the K-member, as specified in the photos below.



7. Feed the threaded stud attached to the left side engine bracket into the forward-most receiving slot in the left engine mount stand on the K-member, while placing the included left side backing plate over the stud from the bottom side of the mount stand. Hold the backing plate against the mount stand and install one supplied M14 nut onto the threaded stud. Leave the nut loose enough to allow the backing plate to move freely between the nut and engine mount stand.

8. Install one supplied 7/16 carriage bolt into the rectangular hole directly below the threaded stud and ensure it passes through the backing plate on the underside of the mount stand. Install one supplied 7/16 nut onto the carriage bolt, but do not fully tighten it at this time.

9. Install one supplied 7/16 carriage bolt through the rectangular slot located near the rear ear of the engine bracket and corresponding 1/2" diameter drilled hole in the K-member engine mount stand. Install one supplied 7/16 nut onto the bolt from the underside of the engine mount stand. Do not tighten any bolts at this time.

10. Feed the threaded stud attached to the right side mount into the receiving slot in the right side engine mount stand, while placing the included right side backing plate over the stud from the bottom side of the engine mount stand. Hold the backing plate against the mount stand and install the remaining supplied M14 nut onto the threaded stud. Leave the nut loose enough to allow the backing plate to move freely between the nut and engine mount stand.

11. Install the remaining supplied 7/16 carriage bolt into the rectangular slot furthest away from the threaded stud, and through the drilled 1/2" diameter hole in the K-member. Install the remaining 7/16 nut onto the bolt. Do not fully tighten any bolts at this time.

12. Lower the engine onto the brackets and couple the engine mounts to the brackets with long M12 metric tie-bolts and nuts (user supplied); move the still-loose engine brackets along the K-member to assist in lining up the holes in the brackets with the holes in the mounts.

13. Using a pry bar between the steering rack and the flanges of the oil pan, level the engine on the K-member and tighten all fasteners in the engine bracket assemblies. The bottom of the oil pan or the oil pan-to-engine separation line are both good visual references to use to level the engine.

14. Install transmission of your choice with the appropriate Hooker crossmember following the basic guidelines given for each on the following page.

15. Your LS swap engine and transmission are now mounted and ready to be outfitted with headers and an exhaust system. Hooker 1979-93 Mustang, or 1994-2004 LS swap headers and exhaust systems are specifically designed for use with these engine mounting brackets.

COMPATIBILITY INFORMATION

These mounting brackets and the related Hooker long-tube headers for this application are designed for complete compatibility with the stock suspension and steering systems (i.e. K-member, steering rack, steering shaft and steering rag-joint coupler), as well as the stock vacuum brake booster.

When used with the related Hooker™ transmission crossmembers for this application, these engine mounting brackets install an LS engine at the stock installed 5.0L crankshaft centerline position (height, inclination angle and offset), which ensures fitment of the Hooker headers and exhaust systems co-developed for this application, and the ability to achieve optimized U-joint working angles.

If extra clearance is desired for specific under-hood components, or top-side clearance challenged transmissions such as the Tremec TKO units, use of up to 1/2" thick K-member spacers may be used without suffering the loss of considerable amounts of header collector ground clearance (when using Hooker Blackheart long-tube headers for this application).

Accessory Drives –

Holley Corvette-style system - compatible with battery relocation to trunk (use Holley low-mount or high-mount compressor bracket). Installation at Corvette offset will require modification/relocation of electrical power distribution box. Clears stock hood.

Holley F-body-style system - compatible; use of the Holley low-mount SD7 compressor/bracket *may* require front anti-sway bar to be spaced down with SN95 Mustang sway bar brackets (or use Holley high-mount SD7 compressor bracket). Clears stock hood.

OE Corvette - compatible, **excluding** A/C compressor (use Holley low mount or high-mount A/C bracket/compressor); requires battery relocation to trunk and modification/relocation of electrical power distribution box. Clears stock hood.

OE F-body - compatible, **excluding** A/C compressor (use Holley low-mount or high-mount A/C bracket/compressor). Clears stock hood.

OE GTO - compatible, **excluding** A/C compressor (use Holley low-mount or high-mount A/C bracket/compressor). Clears stock hood.

OE Vortec truck - compatible, **excluding** A/C compressor (use Holley low-mount or high-mount A/C bracket/compressor). Large truck alternator clearance under stock hood with OE or Maximum Motorsports K-members will require use of 1/2" K-member shims.

Headers, Manifolds and Exhaust Systems –

Hooker Blackheart 1979-1993 Mustang LS swap long-tube headers, 1994-2004 LS swap long-tube headers (use with these brackets on 1994 or 1995 model year cars only), 8501HKR exhaust manifolds, 8510HKR turbo manifolds and related crossover and turbine inlet tubes, full-length exhaust systems (2.5" and 3") and muffler/turn-down exhaust systems (3" only).