



1993-2002 GM F-Body LS Swap Engine Mounting Brackets 3.4/3.8L V6 and LT1/LT4 V8 Equipped Vehicles Installation Instructions



71221001HKR (V6)



71221002HKR (LT1/LT4-V8)



Thank you for choosing to use HOOKER™ engine swap mounting brackets as part of your LS 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.

PRE-INSTALLATION CONSIDERATIONS:

Installation of these brackets requires the use of new stock OE 4th-gen F-body LS engine mounts (ex: GM 22179268 or Anchor 3064) or aftermarket polyurethane inserts (Prothane 7-512 or Energy Suspension 3-1151); use of old engine mounts is not recommended.

In addition, a pair of metric motor mount through-bolts and a pair of locking flange nuts will need to be sourced for connecting the Hooker engine brackets to the motor mounts. Specification requirements are 10.9 M12 x 1.75 x 140mm (Fastenal part no. 0122037 or equivalent) for the bolts and M12 x 1.75 class 8 (Fastenal part no. 11508236 or equivalent) for the nuts.

Installation of these brackets requires removal of the entire engine/cradle/front suspension/transmission assembly from the vehicle and its subsequent replacement. This operation is inherently dangerous and should be only performed by properly skilled individuals using the proper tools and dedicated automotive lifting equipment.

COMPATIBILITY INFORMATION:

When used with the related Hooker™ **71222001HKR** or **71222002HKR** transmission crossmembers, these engine swap mounting brackets will replicate the factory engine/transmission location and inclination angle used in 1998-2002 LS applications.

These engine swap mounting bracket kits have been developed for compatibility with the Holley® **302-2** or stock 4th-gen F-body LS oil pans. The stock 4th-gen F-body accessory drive system is intended to be used in this swap application.

Hooker 4th-gen F-body LS exhaust components are compatible with these engine brackets under the following guidelines:

- Installation of Hooker headers requires the installation of an LS application steering rack and intermediate shaft as well as a front end alignment following the completion of the swap.
- Installation of the Hooker 4th-gen dual exhaust system on 1993-97 cars requires installation of a Hooker **71223002HKR** notch panel on the driver side floor brace to clear the left inlet tube of the exhaust system.

INSTALLATION:

1. Raise, support and lock the vehicle in position.
2. Remove the engine/cradle/suspension/transmission assembly from the vehicle; use the appropriate factory service manual for the specific vehicle you are working on for step-by-step instructions on how to carry out this task and pay close attention to all listed safety precautions.
3. If installing an LS application steering rack on the cradle to provide exhaust header clearance, do so now; use the appropriate factory service manual for the specific vehicle you are working on for step-by-step instructions on how to carry out this task and pay close attention to all listed safety precautions.
4. Remove the engine and transmission from the cradle and set them aside.

5. Remove the existing engine mounting brackets from the cradle and clean the bracket mounting surfaces on the cradle.
6. Using the stock bolts, install the Hooker engine brackets onto the cradle, as shown in **Figures 1 and 2** for V6 applications and **Figure 3** for LT1/LT4-V8 applications. The additional base plate holes (**marked B**) can be scribed, drilled and fitted with fasteners, if desired, for higher HP applications. Leaving these holes undrilled will have no effect on the strength/integrity of a typical swap installation.
7. Install new OE rubber or aftermarket polyurethane mounts on the LS engine to be installed and install the engine/transmission assembly onto the Hooker engine brackets; fasten the engine brackets to the mounts using the user-sourced metric cap screws and flanged locking nuts.
8. Reinstall the engine/cradle/suspension/transmission assembly into the vehicle in the reverse order of steps that was used for removal. Attach the rear of the transmission to the vehicle by installing a Hooker™ 71222001HKR or 71222002HKR transmission crossmember, or a stock model-year appropriate 4th-gen T56 or 4L60 transmission crossmember.
9. The LS engine/transmission drivetrain is now mounted and ready for attachment of the exhaust system components.

Hole Use Legend	
A	Install bolt in matching factory hole.
A1	Install bolt in 3.4L applications – disregard in 3.8L applications.
A2	Install bolt in 3.8L applications – disregard in 3.4L applications
B	Mark, drill, and install bolt/nut in hole, if desired.

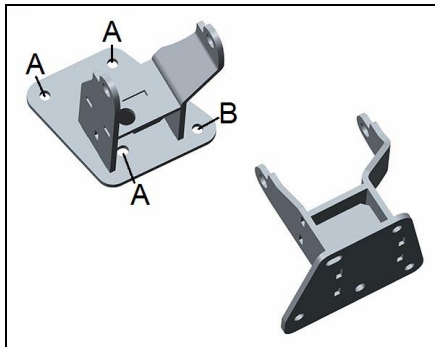


Figure 1 – V6 Driver's Side

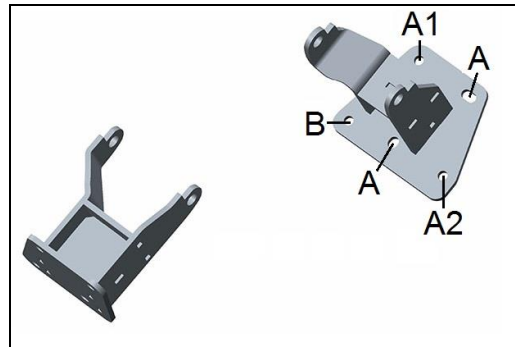


Figure 2 – V6 Passenger's Side

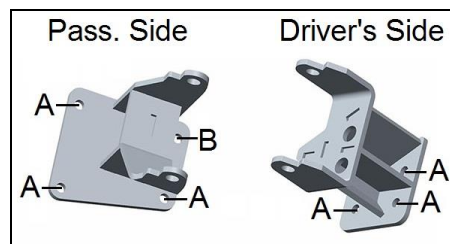


Figure 3 – LT1/LT4-V8

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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.