



P/N 12628HKR

1967-69 GM F-Body/3rd Gen X-Body LS Swap TH350*/7004R* Transmission Mount Adapter Kit

*Requires the use of a Hooker 12625HKR 4L60-4L75 transmission crossmember

P/N 12650HKR

1967-69 GM F-Body/3rd Gen X-Body/2nd-gen F-body LS Swap TH400*/2004R* Trans. Mount Adapter Kit

*Requires the use of a Hooker 12626HKR 1st-gen F-body/3rd-gen X-body T56 transmission crossmember, or a 12616HKR 2nd-gen F-body T56 transmission crossmember

Installation Instructions 199R10685

Thank you for choosing to use this Hooker™ transmission mount adapter kit as part of your engine/transmission swap project. This kit is part of the most comprehensively engineered system of mounting components, headers and exhaust systems available for this application. The entire Hooker™ swap system is 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.

IMPORTANT DESIGN AND PRE-INSTALLATION INFORMATION:

These components have been designed as part of a fully-engineered LS swap mounting system for GM 1st and 2nd-gen F-body and 3rd-gen X-body vehicles. They have been CAD designed and FEA validated to provide the required structural strength for this application.

Installation of these components requires the use of an aftermarket Prothane™ 7-1604 polyurethane mount or one of equivalent installed height.

Use of the 12628HKR adapter kit with a 12625HKR 4L60-4L75 crossmember to install a TH350 or 700R4 transmission into an LS swapped 1st-gen F-body/3rd-gen F-body (using Hooker 12618HKR LS swap engine brackets only) requires modifications (cutting and welding) be performed on the 12625HKR crossmember to complete the installation. The increased exhaust passage and ground clearance gained by using the 12625HKR crossmember as part of your LS swap project will more than justify the extra effort required for this operation.

Use of the 12650HKR adapter kit with a 12626HKR T56 crossmember to install a 2004R transmission into an LS swapped 1st-gen F-body/3rd-gen X-body (using Hooker 12618HKR LS swap engine brackets only) requires slight modification/welding to be done to the 12626HKR crossmember to fit around the case and pan of a 2004R transmission; the steel gusset bracket included within the 12650HKR kit is intended for this purpose and its use is outlined in these instructions. The increased exhaust passage and ground clearance gained by using the 12626HKR crossmember as part of your LS swap project will more than justify the extra effort required for this operation.

Use of the 12650HKR adapter kit with a 12616HKR T56 crossmember to install a 2004R or TH400 transmission into an LS swapped 2nd-gen F-body (using Hooker 12512HKR or 12613HKR LS engine swap brackets only) will not require any modification to be done to the 12616HKR crossmember or the use of the steel gusset bracket included in the 12650HKR adapter kit.

These instructions are intended to supplement the basic installation steps outlined in the 12626HKR and 12616HKR instruction sheets. The drawings below can be seen in color by going to www.holley.com and searching for either 12628HKR or 12650HKR.

INSTALLATION OF 12628HKR

1. Check that the hardware package includes the following:
 - 1 – Adapter Bracket Assembly
 - 2 – 7/16" Bolts
 - 2 – 7/16" NutsIf any are missing, please contact Technical Service at 1-866-464-6553 or 270-781-9741.
2. Cut a notch as wide as the 12628HKR bracket into the front of the 12625HKR crossmember; place the notch in the center of the crossmember and cut it back 1-1/8" from the face of the crossbeam front flange (**Figure 1**).
3. Attach the bracket to the crossmember placing the supplied bolts and nuts in the holes that pass through both the bracket and crossmember (**Figure 2**).
4. If you are using this kit to install a 700R4 transmission, trim the front of the bracket off so that it is even with the front edge of the bracket gusset plate (**Figure 2**) and slightly notch the top edges of the upright crossmember gussets to clear the isolator mount base plate (**Figure 3**). If you are using this kit to install a TH350, leave the bracket length as-is as you will be attaching the transmission mount to the forward set of holes in the bracket.
5. Once notching/clearancing is complete, clean parts and weld them together using either a MIG or TIG welder (**Figure 2**) and spot-paint as desired to match.
6. Install the crossmember per the instructions contained in its packaging.

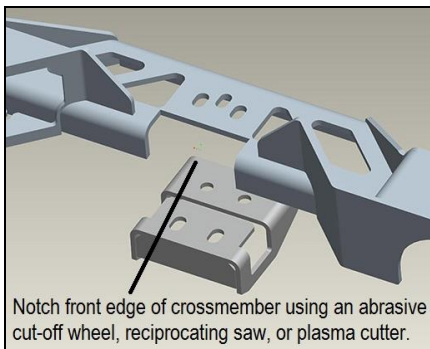


Figure 1

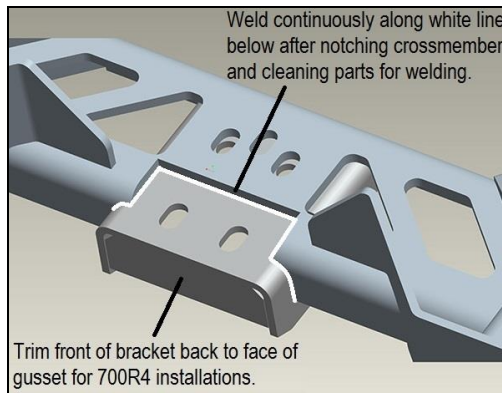


Figure 2

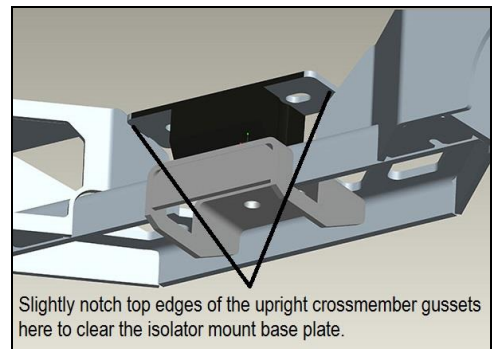


Figure 3

INSTALLATION OF 12650HKR

1. Check that the hardware package includes the following:
 - 1 – Aluminum Spacer Block
 - 1 – Steel Gusset Bracket
 - 2 – 7/16" Bolts
 - 2 – 7/16" Washers
 If any are missing, please contact Technical Service at 1-866-464-6553 or 270-781-9741.
2. If you are using this adapter kit to install a 2004R into a 1st-gen F-body or 3rd-gen X-body using the Hooker 12626HKR T56 crossmember, modify/cut the inside left upright wall of the crossmember to match what is shown in **Figures 4 and 5** below. Once modifications are complete, clean parts and weld them together using either a MIG or TIG welder, as indicated in **Figure 6** below and spot-paint as desired to match. Install the crossmember per the instructions contained in its packaging while installing the spacer block included in this kit between the crossmember and transmission isolator; use the included long fasteners to attach the transmission mount to the crossmember.

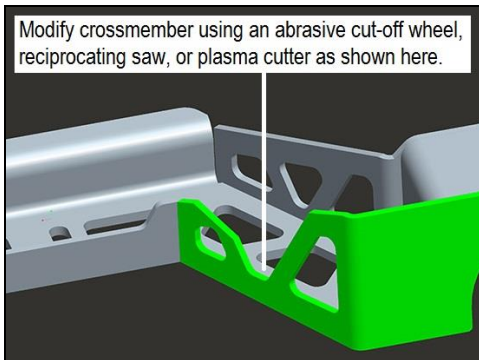


Figure 4

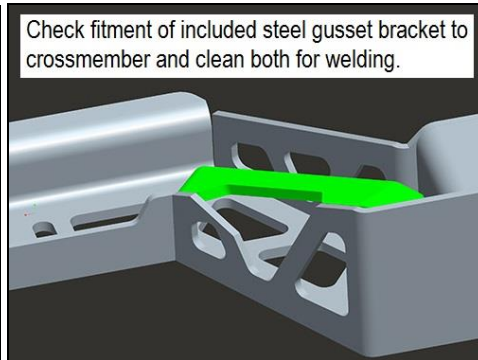


Figure 5

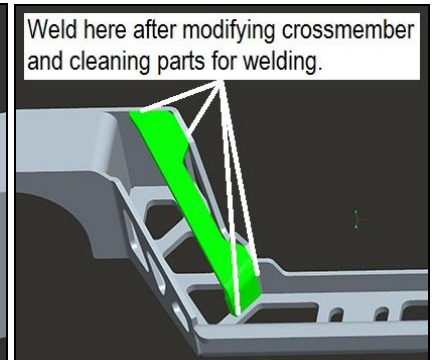


Figure 6

3. If you using this adapter kit and the Hooker 12626HKR T56 crossmember to install a TH400 into a 1st-gen F-body or 3rd-gen X-body, or are using this adapter kit and the Hooker 12616HKR T56 crossmember to install a 2004R or TH400 transmission into a 2nd-gen F-body, do not modify the crossmember in any way. Install the crossmember per the instructions contained in its packaging while installing the spacer block included in this kit between the crossmember and transmission isolator; use the included long fasteners to attach the transmission mount to 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.

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Date: 4-8-14