

Transmission Polyurethane Mount - GM 71223029HKR & 71223030HKR Installation Instructions



Thank you for choosing to use the Hooker BlackHeart[™] transmission mount as part of your performance vehicle project. Please read thoroughly and understand these instructions before attempting installation.

PRE-INSTALLATION CONSIDERATIONS:

These polyurethane transmission mounts may be used as a direct replacement for stock GM rubber mounts that measure 1.75" in height. Replacement of mounts with a greater height than 1.75" can be accommodated with the use of shim washers between the crossmember and the mount.

The polyurethane construction is capable of high horsepower applications while preserving vibration dampening and the safety interlock design of the inner components ensures that even if the polyurethane fails the mount will not separate. These polyurethane mounts are capable of fitting either a one or two stud type of crossmember interface.

BEFORE BEGINNING:

Check that the package contains the following hardware:

71223029HKR		
Qty.	Description	
1	Black Polyurethane Transmission Mount	
2	7/16"-14 x 1.5" Studs	
2	7/16"-14 Hex Nuts	
2	Flat Washers	
2	Lock Washers	

71223030HKR		
Qty.	Description	
1	Red Polyurethane Transmission Mount	
2	7/16"-14 x 1.5" Studs	
2	7/16"-14 Hex Nuts	
2	Flat Washers	
2	Lock Washers	

INSTALLATION:

- 1. Determine if your application requires a one or two stud crossmember interface. Install the supplied stud(s) (7/16"-14 x 1.5") into the appropriate threaded holes in the polyurethane mount with a 7/32" hex key. If no hex key is available, the studs can also be installed into the mount by "double nutting" the end of the stud with the supplied hex nuts. Install the stud(s) until firmly seated in place.
- Install the mount onto the crossmember with hardware provided (shown in Figure 1). Do not tighten the hex nuts at this time.
- 3. Install the factory transmission bolts (user supplied). Do not tighten the bolts at this time.
- 4. Confirm alignment of the polyurethane mount with the transmission and crossmember. Tighten and torque the transmission bolts to factory torque specifications. Also tighten and torque the crossmember hex nut(s) to 49 ft./lbs.

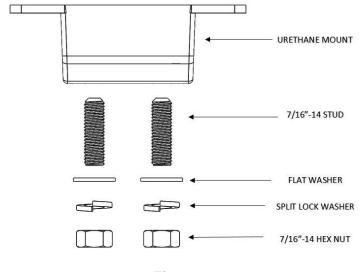


Figure 1

LIMITATION OF LIABLILITY - DISCLAIMER:

HOOKER™ BLACKHEART 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.



BH13192 3" 304SS BIG BLOCK CHEVY 1967-69 GM F-BODY (excluding convertibles) EXHAUST SYSTEM Installation Instructions

*Compatible with BLACKHEART full length headers BH13181 & BH13182 *MUST USE CORRECT BIG BLOCK ENGINE STANDS & MOUNTS



Thank you for choosing to install a BLACKHEART exhaust system on your 1967-69 GM F-body vehicle. Although this system was developed for direct fitment with BLACKHEART headers for this application, they will provide equally beneficial fitment, function and service life with other non-BLACKHEART headers or non-BIG BLOCK engine equipped F-bodies through modification of the system inlet tubes, or construction of new ones, by a competent fabricator. Installation of these systems are 50-state legal.

PRE-INSTALLATION CONSIDERATIONS:

Check that the hardware package includes the following:

BH13192		
Qty.	Description	
2*	Over-Axle Tube Hanger Brackets with Barbed Rods	
2*	1/4-20 x 2.5" Bolts	
2*	1/4-20 Nylock Nuts	
4	1/2-13 x 1.75 Grade 8 Bolts	
4	1/2-13 Nylock Nuts	
2	U-channel Tailpipe Hanger Brackets	
2	Rectangular Back-up Washers	
4	Rubber Isolators	
8	3" Band Clamps	
2	3" Couplers	

*Items not shown in photo above

NOTE: These systems are not compatible with 1968-74 GM X-body vehicles.

IMPORTANT! Position and support your vehicle on a suitable surface. USE CAUTION AND WORK ONLY ON A LEVEL SURFACE USING JACKS AND JACKSTANDS OF SUFFICIENT CAPACITY TO LIFT AND SUPPORT YOUR VEHICLE. NEVER WORK UNDER A VEHICLE SUPPORTED BY A FLOOR OR BUMPER JACK. Use of a two-post under arm lift or four-post drive-on lift will considerably reduce the time and effort required to complete the installation. MAKE SURE LIFT LOCKS ARE ENGAGED BEFORE WORKING UNDER THE VEHICLE.

NOTE: Your vehicle was designed to accommodate the routing of 2" exhaust tubing from the factory and therefore may require reconfiguring the routing of your brake and/or fuel lines to achieve safe operating clearances between the components of this BLACKHEART exhaust system and those of your vehicle (this is extremely critical on 3" systems). Failure to provide sufficient clearance as mentioned here may result in an unexpected fire or loss of vehicle control.

NOTE: The vehicle-side over-axle tube hangers of this exhaust system are designed for attachment to the stock floor panel. These hanger brackets will more than likely require modifications to successfully install this exhaust system on vehicles that have had floor panel repairs/replacement done with aftermarket floor panels.

INSTALLATION:

NOTE: The following steps assume that you are installing this system using BLACKHEART long-tube headers already in place on the vehicle. If you are performing an installation of this system without utilizing these products, install all system components from the "X" crossover rearward. Then, align them for parallel alignment with the bottom of the rocker panels and sufficient clearances around all suspension, fuel, and brake components. Do all this before modifying the included BLACKHEART inlet tubes, or fabricating new inlet tubes to be compatible with the geometry of your headers and transmission crossmember.

- 1. Remove all existing exhaust system components from the vehicle, including any stock or previously added hangers along the entire length of the exhaust system. Spray all hanger fasteners with penetrating oil prior to removal and allow ample soak time before attempting to remove any fasteners.
- 2. Place a supplied band clamp over each inlet of the crossover assembly and insert the supplied inlet tubes into the crossover assembly. The end closest to the bend goes into the X-Pipe inlets.
- 3. Now, position the supplied couplers over the open end of each inlet tube and install the entire assembly onto the collectors of a previously installed set of BLACKHEART full-length headers.
- 4. According to your preference, the emergency brake cable may be routed either below or above the crossover assembly during installation. When correctly installed, the bends in the crossover assembly outlet legs will gradually angle up towards the floor of the vehicle, not down towards the ground. To ensure correct adjustment later, do not tighten the clamps more than what is required to hold basic component positions at this time.
- 5. Place a supplied clamp over the offset inlet of each muffler and install them onto the outlets of the crossover assembly. To ensure proper final adjustment, tighten the clamps only enough to maintain the general position of the mufflers at this time.
- 6. Using the included 1/2"-13 grade 8 bolts and/or nylock nuts, attach the included over-axle hanger brackets, barbed hanger rods pointing outward, to each rear seat belt bolt gusset bracket welded to the underside of the floor just in front of the rear axle. The bend in the base plate will wrap over the outer edge of each gusset to prevent rotation of the brackets once installed.
- 7. If your car is a competition vehicle that is no longer equipped with rear seat belts, you can attach the hanger brackets by installing only the supplied bolts from the underside of the car inward. If your rear seat belts are still installed, you will need to remove the rear seat and replace the factory seat belt bolts with the longer ones provided, to allow their protruding threads under the floor to be used with the supplied nuts to attach the hanger brackets to the gusset plates.
- 8. Feed the supplied over-axle tubes over the axle and place a supplied clamp over the inlet of each before engaging them into the muffler outlets. To ensure correct adjustment later, do not tighten the clamps more than what is required to hold basic component positions at this time.
- 9. Use a supplied rubber isolator to connect the barbed hanger rods of each hanger attached to the seat belt gusset brackets and the corresponding barbed hanger rods welded to the over-axle tubes.
- 10. Install a rear hanger bracket onto the rear un-barbed hanger of each over-axle tube. The large end of the bracket with the rubber isolator will be closest to the front of the vehicle when properly installed.
- 11. Now, attach the hanger brackets to the outside of the rear frame rails in the same holes that were used to attach the previously removed stock hangers. Re-use the stock sheet metal screws for this purpose or source new ones if they are no longer present.
- 12. If the driver's side rail of your vehicle does not have factory punched holes in it for the hanger, remove the left rear tire and drill two 1/4" holes completely through both walls of the frame member to allow attachment of the hanger with the included 1/4- 20 x 2-1/4" bolts and nuts.

- 13. Place the two remaining clamps over the inlets of the tips and install both onto the outlets of the over-axle tubes. To enable correct final adjustment, do not tighten the clamps more than what is required to hold basic component positions at this time.
- 14. Provide a means of support under both mufflers to keep their weight from working against your efforts to align the system components.
- 15. Align all system components for best fit and tighten all clamps fully. You will achieve best results by working from the front of the vehicle to the rear while repeatedly checking the alignment of the components against multiple reference points, i.e. the bottom edge of the rocker panels, the transmission crossmember exhaust passage humps and the rear end housing.

COMPATIBILITY INFORMATION:

This exhaust system was designed for direct installation with various BLACKHEART big block headers for this vehicle application.

As shipped, the bend geometry of this system's inlet tubes (forward of the crossover) is directly compatible with stock transmission crossmembers for this application. As such, interference with other brands of headers should be expected. Such issues may be remedied through modification of the supplied BLACKHEART inlet tubes, or the fabrication of new inlet pipes, to provide compatibility with the components installed on your vehicle.

NOTE: These systems are not installable on any convertible model 1967-69 F-body vehicle.

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.

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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.

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.