

# Installation Instructions P/N 42501HKR (2.5") & 42502HKR (3") 1970-81 GM F-body Exhaust Systems



Thank you for choosing to install a HOOKER™ exhaust system on your 2<sup>nd</sup>-gen GM F-body vehicle. These systems have been specifically developed for direct fitment with HOOKER™ LS swap components for this application. However, they will provide equally beneficial fitment, function, and service life with other non-Hooker LS swap headers or non-LS engine equipped F-bodies through the modification of the system inlet tubes, or construction of new ones, by a competent fabricator. Installation of these systems are 50-state legal on 1970-74 OE non-catalyst applications and can only be legally installed on 1975-81 model year vehicles operated solely for closed course competition purposes, which will never be driven on public streets or highways.

## PRE-INSTALLATION CONSIDERATIONS:

Check that the hardware package includes the parts listed below. If any listed hardware is missing, please contact Technical Service at: 1-866-464-6553 or 270-781-9741.

42501HKR		42502HKR	
Qty.	Description	Qty.	Description
2	Over-Axle Tube Hanger Brackets with Barbed Rods	2	Over-Axle Tube Hanger Brackets with Barbed Rods
2	U-Channel Tailpipe Hanger Brackets	2	U-Channel Tailpipe Hanger Brackets
2	Rectangular Back-Up Washers	2	Rectangular Back-Up Washers
2	½-13 X 2" Bolts*	2	½-13 X 2" Bolts**
2	½" Nylon Lock Nuts*	2	½" Nylon Lock Nuts
6	3/16" X 3/8" Pop Rivets*	6	3/16" X 3/8" Pop Rivets*
4	Rubber Isolators	4	Rubber Isolators
10	2.5" Band Clamps*	10	3" Band Clamps*

\*not shown in photo above

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 PLACING YOURSELF UNDER THE VEHICLE.

Your vehicle was designed to accommodate the routing of 2" exhaust tubing from the factory and therefore may require re-configuring the routing of your brake and/or fuel lines to achieve safe operating clearances between the components of this HOOKER™ 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 the loss of vehicle control.

## **INSTALLATION:**

NOTE: The following steps assume that you are installing this system using HOOKER™ LS swap mounting components and long-tube headers, mid-length headers, or cast iron manifolds 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 HOOKER™ 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 hangers added to the vehicle floor in front of the rear axle, the stock hangers above a transverse muffler and the tailpipe hangers attached to the outside faces of the rear frame. Spray all hanger fasteners with penetrating oil prior to removal and allow ample soak time before attempting to do so.
- 2. Place a supplied band clamp over each inlet of the crossover assembly and insert the supplied inlet tubes (tubes with a single bend in them) into the crossover assembly. The driver/left side pipe will be marked as such.
- 3. Now, position another clamp over the open end of each inlet tube and install the entire assembly onto the outlets of the previously installed HOOKER™ LS swap long-tube headers, or the outlets of the HOOKER™ cast iron LS exhaust manifold or LS swap midlength header down-pipe adapters previously installed.
- 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 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. Feed the supplied over-axle tubes over the axle and place a supplied clamp over the inlet of each before engaging them over 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.
- 7. Install a rubber isolator into each U-channel hanger bracket and position the supplied rectangular offset-hole washers on top of the rubber isolators. Next, install the supplied ½" bolts through the washers, isolators and brackets and install the lock nuts on the back sides of the brackets. Install the assembled brackets over the ends of the hanger rods welded to the tailpipes. When properly installed, the ends of the brackets with the rubber isolators will be positioned towards the front of the vehicle. Lightly oiling the rubber isolators will greatly ease their installation.
- 8. Place the two remaining clamps over the inlets of the tailpipes and install both with their attached hanger brackets onto the outlets of the over-axle tubes. Now attach the hanger brackets to the outside of the frame rails using the stock holes and fasteners. To ensure correct adjustment later, do not tighten the clamps more than what is required to hold basic component positions at this time.
- 9. Using the remaining two rubber isolators, connect the left and right muffler hanger assemblies to the barbed hangers on the overaxle tubes. When properly installed, the barbed ends of the hangers will point in towards the center of the car and be passing through the rubber isolators in the opposite direction of the hanger rods welded to the tailpipes. Lightly oiling the rubber isolators will greatly ease their installation over the barbed hanger rod ends.
- 10. Provide a means of support under both mufflers to keep their weight from working against your efforts to align the system components. Now align the over-axle tubes and tailpipes to achieve best fitment and clearance of the system with the vehicle.

## **IMPORTANT NOTE:** There is an intentional 10-15 degree rotation of the mufflers designed into the system to maximize ground clearance once installed. In order to achieve the proper alignment of all system components, you must duplicate this rotation/tilt in your installation by rotating each muffler to be slightly higher on the driveshaft side than on the side facing the rear wheel.

11. Attach the muffler hangers to the underside of the floor in front of the axle using one of the following three methods:

- 1) Drill holes in floor and attach brackets with the supplied 3/16" steel pop rivets.
- 2) Enlarge holes in brackets to ¼", drill holes in floor and attach with user supplied ¼" -20 hardware (remove rear seat).
- 3) Plug weld holes in bracket to attach to floor (nice OE appearance, rear seat removal recommended for fire safety).

12. Once the preferred method of attachment has been decided, position the brackets against the crease in the floor sheet metal just above the seat belt attachment well, as shown in the photo below, and provide as close-to-vertical alignment of the rubber isolators as possible before marking the floor for the position of the holes to be drilled.



Hanger position against the floor - left side shown

- 13. Next, drill the holes and attach the hangers with rivets or fasteners, or attach the hangers to the floor by plug welding them through the holes in the brackets.
- 14. Align all system components for best fit and fully tighten all band clamps.

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 exhaust system was designed for direct installation with various HOOKER™ LS swaps headers and engine and transmission mounting components listed for this vehicle application. If needed, additional compatible LS engine swap components, such as EFI fuel control systems, fuel filters, fuel pumps, plumbing hose/fittings, valve covers and accessory drive brackets can be found at www.holley.com.

These systems are fully compatible with Ridetech® four-link rear suspension systems for 2<sup>nd</sup>-gen GM F-bodies (both coil and air spring versions) and either stock or narrowed fuel tanks.

As shipped, the bend geometry of this system's inlet tubes (forward of the crossover) is only directly compatible with Hooker LS swap headers and transmission crossmembers for this application. As such, interference with original GM, or aftermarket transmission crossmembers and/or poor line-up issues with other headers should be expected. Such issues can be remedied through modification of the supplied Hooker inlet tubes, or the fabrication of new inlet tubes, to provide compatibility with the component geometry of your vehicle.

As there are differences in the brake line flex hose attachment points on the rear differential/axle (diff cover on early cars and left axle tube on later cars) and in the fuel tank/line plumbing between early and late 2<sup>nd</sup>-gen vehicles, steps need to be taken during installation to tie-up or re-route lines as needed. This is to prevent contact of any brake or fuel system component with the exhaust system overaxle tubes and/or tailpipes during vehicle operation. It is especially critical in the case of the larger diameter tubing used in the 3" version of the HOOKER<sup>TM</sup> exhaust system.

### **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.

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.

## 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.

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