



## 1968-72 Nova/GM X-BODY EXHAUST SYSTEMS 70501320-RHKR (2.5") & 70501321-RHKR (3") Installation Instructions



Thank you for choosing to install a HOOKER™ exhaust system on your 1968-72 GM X-body vehicle. Although these systems have been specifically developed for direct fitment with HOOKER™ LS swap components for these applications, they will provide equally beneficial fitment, function and service life with other non-Hooker LS swap headers or non-LS engine equipped X-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:

70501320-RHKR		70501321-RHKR	
Qty.	Description	Qty.	Description
2*	Over-Axle Tube Hanger Brackets with Barbed Rods	2*	Over-Axle Tube Hanger Brackets with Barbed Rods
4*	Sheet Metal Screws	4*	Sheet Metal Screws
2*	5/16-18 x 2.25" Bolts	2*	5/16-18 X 2.25" Bolts
2*	5/16-18 Nylock Nuts	2*	5/16-18 Nylock Nuts
2*	5/16 Flat Washers	2*	5/16 Flat Washers
4	1/2-13 x 1.75 Grade 8 Bolts	4	1/2-13 X 1.75 Grade 8 Bolts
4	1/2-13 Nylock Nuts	4	1/2-13 Nylock Nuts
1	Left Tailpipe Hanger Bracket	1	Left Tailpipe Hanger Bracket
1	Right Tailpipe Hanger Bracket	1	Right Tailpipe Hanger Bracket
2*	Isolator Back-Up Washers	2*	Isolator Back-Up Washers
4	Rubber Isolators	4	Rubber Isolators
8	2.5" Band Clamps (70501320-RHKR only)	8	3" Band Clamps (70501321-RHKR only)
2	2.5" Couplers (70501320-RHKR only)	2	3" Couplers (70501321-RHKR only)

\*Items not shown in photo above

If any listed hardware is missing, please contact Technical Service at: 1-866-464-6553 or 270-781-9741.

**IMPORTANT!** Position and support your vehicle on a suitable surface. **USE CAUTION AND WORK ONLY ON A LEVEL SURFACE USING JACKS AND JACK STANDS 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 2.25" and 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 loss of vehicle control.

**NOTE:** The Hooker 70501320-RHKR 2.5" exhaust system is compatible with driveshafts up to 4" in diameter as received. The Hooker 70501321-RHKR 3" exhaust system is compatible with driveshafts up to 3.5" in diameter as received and can be made to be compatible with a 4" diameter driveshaft on most cars by modifying or dimpling the passenger side outlet leg of the X-pipe assembly.

**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 HOOKER™ LS swap mounting components and long-tube headers or mid-length 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 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 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. Retain these fasteners for later use.
2. Remove the rear wheels/tires from the vehicle.
3. Place a supplied band clamp over each inlet of the crossover assembly and insert the supplied inlet tube (tubes with a single bend in them) into the crossover assembly. The longest legs of the inlets go into the X-stamping.
4. 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 HOOKER™ LS swap full-length headers, or the outlets of HOOKER™ adapter tubes already installed onto the collectors of a set of HOOKER™ mid-length headers.
5. Position the emergency brake cable for routing above the crossover assembly during installation of the X-pipe. 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.
6. 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. See **Figure 1**.
7. Using the included ½"-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. See **Figure 1**.
8. 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, so as to allow their protruding threads under the floor to be used with the supplied nuts to attach the hanger brackets to the gusset plates. See **Figure 1**.
9. 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.
10. 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.
11. Install a supplied rubber hanger into the U-saddle of each rear tailpipe bracket and secure them in place using the included 1/2" bolts, back-up washers (to be installed against the rubber isolators) and lock nuts. Now install the rear hanger brackets onto the rear un-barbed hanger of each over-axle tube assembly. When properly indexed, the narrow ends of each hanger will be facing towards the front of the car and the U-saddles will be facing towards the outside of the car. See **Figure 2**.
12. Attach the hanger brackets to the frame using the fasteners (removed earlier) from the stock hangers. Use the front and middle position bolt holes in the brackets for this purpose. If your vehicle was originally equipped with a 6 cylinder engine, the holes in the driver's side frame rail will not have threaded inserts in them. In this case, drill through the inner wall of the frame and the forward

and middle mounting holes in the left side hanger bracket with a 5/16" drill bit and attach the driver's side hanger with the supplied 5/16" bolts, nuts and flat washers.

13. Reinstall the rear wheels/tires.

14. 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.

15. Provide a means of support under both mufflers to keep their weight from working against your efforts to align the system components.

16. 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.

17. Once you've achieved the desired alignment of all system components, use a cordless screw gun or similar tool to install the supplied self-drilling sheet metal screws into the rear-most holes in the tailpipe frame brackets to securely fasten them in their final position on the frame rails.

Any questions? Please contact Technical Service: 1-866-464-6553 or 270-781-9741. For online help, please refer to: [www.holley.com](http://www.holley.com).



Figure 1



Figure 2

## **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](http://www.holley.com).

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 factory GM, or aftermarket transmission crossmembers and/or poor line-up characteristics with other brands of headers should be expected. Such issues can be remedied through modification of the supplied HOOKER™ inlet tubes, or the fabrication of new inlet pipes, to provide compatibility with the components installed on your vehicle.

### **Rear sway bar compatibility:**

Hellwig sway bar kit – compatible

Addco sway bar kit – compatible

Factory RPO option F40/F41 sway bar – unknown, but likely to require modifications to the over-axle pipes for fitment

Hotchkis – unknown, but likely to require modifications to the over-axle pipes for fitment

## **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.

**Technical Service: 1-866-464-6553**

**Phone: 1-270-781-9741**

**For online help, please refer to the Tech Service section of our website: [www.holley.com](http://www.holley.com)**

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