

1982-92 GM F-BODY DUAL EXHAUST SYSTEM 70501326-RHKR (304SS) & 70501426-RHKR (409SS) 70501339-RHKR (304SS) & 70501439-RHKR (409SS)

Installation Instructions



Thank you for purchasing/using a Hooker brand product. This exhaust system is part of the complete Hooker LS engine swap solution for GM 3rd-Gen F-body vehicles. These instructions have been written with the assumption that you have already installed Hooker 3rd-gen F-body LS swap headers into the vehicle, with an engine and transmission that were mounted using the Hooker LS swap engine mounting brackets and transmission crossmember also developed for this application.

Automotive work can be dangerous. Work only on a clean, dry and level surface and use lifting/supporting equipment designed specifically for automotive work. If you are unsure of your capability, or that of your equipment, seek professional assistance to install these components.

This exhaust system is designed for off-road/competition use only and carries no CARB E.O. exemption to permit legal installation/use on pollution controlled motor vehicles.

BEFORE BEGINNING...

Check that the hardware package includes the following:

Qty.	Description	Qty.	Description
1	E-brake Cable Adapter Bracket	2	3/8 x 1-1/4" Flanged Head Cap Screws
2	3" Band Clamps	1	1/2 x 1" Flanged Head Cap Screw
6	2.5" Band Clamps	4	1/2 x 1-3/4" Flanged Head Cap Screws
3	2.5" Coupler Clamps	5	1/2" Nylon Lock Nuts
6	1/2" Rubber Isolators	1	Self-Tapping Sheet Metal Screw
2	Rear Muffler Hanger Brackets	1	Heat Shield Spacer
2	Rear Muffler Hanger Backing Bars	3	Panhard Brace Spacers
1	Left Front Muffler Hanger Bracket	3	M10 x 50mm Cap Screws
2	1/4-20 Nut	3	M10 Flat Washers
2	1/4-20 Bolt	1	3/16 x ½ Steel Pop Rivet

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

INSTALLATION:

- 1. Raise and support the vehicle.
- 2. Remove any and all existing exhaust system components from the vehicle, including the stock hangers that are bolted to the vehicle.

- 3. Remove the large heat shield attached to the underside of the floor under the passenger's side seat. There are typically 5 sheet metal screws holding the shield in place.
- 4. Place (x1) supplied 2.5" band clamp over the outlet of the passenger's side header adapter tube (adapter tube with flat bar hanger attached to it) and install the adapter tube/clamp into the short expanded inlet tube of the X-pipe assembly. Place the assembly on the ground, or a bench, then place (x1) supplied 3" band clamp over the expanded inlet of the header adapter tube. See **Figure 1**.
- 5. Place the remaining supplied 3" band clamp over the expanded inlet of the driver's side header adapter tube and install the adapter tube/clamp onto the collector of the driver's side header assembly. See **Figure 2**.



Figure 1

Figure 2

- 6. Install the X-pipe assembly with attached passenger's side header adapter tube onto the right side header collector. Connect the X-pipe assembly and driver's side header adapter tube together with the coupler clamp previously placed on the outlet of the adapter tube. Do not fully tighten clamps at this time.
- 7. Couple the hanger bracket on the right side header inlet tube to the hanger tab on the Hooker transmission crossmember using one supplied rubber isolator. Turn the isolator on its side and engage the hanger tabs on the exhaust/crossmember with the slots in the isolator, not the round holes (**Figure 3**). When completed, install one supplied 1/4-20 bolt and lock nut into the hole in the crossmember tab to secure the isolator.
- 8. Remove the two sheet metal screws attaching the fuel tank heat shield to the panhard brace. Remove the three bolts attaching the panhard brace to the bottom of the driver's side frame rail.
- 9. Pull/pry the end of the panhard brace down from the frame rail and install the supplied (x3) tube spacers (3) and washers in between the panhard brace and the frame rail (the washers will go between the spacers and the brace). Once done, reattach the brace to the frame rail with the supplied (x3) longer cap screws (M10 x 50mm) and tighten them. In some instances, it is necessary to elongate the holes in the braces towards the center of the car slightly to allow installation of the bolts. Use a small round hand file or rotary carbide bit in a die grinder to accomplish this task. See **Figure 4** for installed position reference.







Figure 4

- 10. Bend the tab on the left side of the panhard brace to realign it with the corresponding hole in the fuel tank heat shield. Reinstall the previously removed sheet metal screw in that position. See **Figure 5**.
- 11. Push the right side of the fuel tank heat shield up against the floor at the location of the remaining attachment tab and install the supplied heat shield spacer between the panhard brace and the heat shield. Reuse the stock screw in the lower hole and the install the supplied self-tapping screw in the upper hole as depicted in **Figure 6**.





Figure 5

Figure 6

- 12. Detach the parking brake cable from the body bracket attached to the side of the driveshaft tunnel. Attach the supplied cable adapter bracket to the body bracket using the supplied 1/2 x 1" bolt and one supplied 1/2 nylon lock nut. See **Figure 7**. Next, spot weld the small tang on the adapter bracket to the tunnel sheet metal or drill through the small hole in the tang. Install the supplied 3/16 x 1/2 steel pop rivet into the hole and attach the parking brake cable to the adapter bracket.
- 13. Remove the bolt attaching the parking brake cable routing bracket to the vehicle floor next to the end of the sway on the passenger's side of the vehicle. Flip the bracket upside down and drill a new hole in the vehicle floor for the tang in the bracket that will allow the bracket to be re-attached to the vehicle in this new modified position. See **Figure 8**.



Figure 7



Figure 8

- 14. Place the two remaining supplied double-ended 2.5" coupler clamps over the outlets of the X-pipe assembly. Orient them in such a way that the nuts on the clamps will be positioned on top of the tubes in the straight-up 12 O'clock position and be facing away from each other (pointed towards the sides of the car) when installed. Tighten the clamp nuts just enough to hold the basic position of the attached components at this time. See **Figure 9**.
- 15. Remove/cut the safety wire from the tie tabs attaching the over-axle tubes together and separate the over-axle tubes.
- 16. Working from the front side of the axle, feed the right side over-axle tube over the axle and through the space between the upper heat shield and the panhard brace. See **Figure 10**.





Figure 9

Figure 10

17. Feed the left over-axle tube over the axle in the same manner as the right side over-axle tube. Bring the tab located near the tube outlet to rest against the backside of the corresponding tab attached to the right side over-axle tube. See **Figures 11 and 12**.



Figure 11



Figure 12

- 18. Attach the two tabs together with the remaining (x1) supplied 1/4-20 bolt and (x1) lock nut.
- 19. Raise the front ends of the over-axle tubes up and connect them to the X-pipe outlet legs with the coupler clamps already in position on the X-pipe outlet legs. Tighten the clamps just enough to hold the basic position of the attached components at this time.
- 20. Attach the (x4) supplied rubber isolators to the supplied rear muffler hanger brackets with the supplied (x4) 1/2 x 1-3/4 screws and nylon lock nuts. Tighten the nuts enough to remove all slack/clearance between the brackets and the isolators, but not enough to begin to crush the rubber isolators. See **Figure 13**.
- 21. Use the supplied (x2) 3/8 x 1-1/4" bolts and rectangular threaded backing bars to attach the muffler hanger bracket assemblies to the left and right frame rails just under the rear bumper. The threaded back-up bars need to be inserted into the interior of the frame rails through the square holes in the sides of the frame. Hold in place with your finger to allow the installation of the bolt that attaches each bracket to the bottom of the frame rails. See **Figure 14**.



Figure 13



Figure 14

- 22. Install the stock right side exhaust hanger that was removed from just behind the axle onto the doubled hanger rods attached to the inlet pipe of the right (passenger's) side muffler. See **Figure 15**.
- 23. Place a supplied 2.5" band clamp over the expanded inlet tube of the right side (passenger's) muffler assembly. Insert the rear hanger rods into the rubber isolators on the right rear hanger bracket just attached under the rear bumper. Lift the muffler up and connect it to the outlet of the right side over axle tube. Do not tighten band clamp at this time.
- 24. Reattach the factory hanger bracket onto the muffler inlet pipe to the frame rail with the factory bolts.
- 25. Attach the supplied left front muffler hanger bracket to the bottom of the left side frame rail, as shown in **Figure 16**. Use the removed factory fasteners for this purpose.





Figure 15

Figure 16

- 26. Place a supplied 2.5" band clamp over the expanded inlet tube of the left side (driver's) muffler assembly and insert the left muffler intermediate tube into the inlet of the muffler.
- 27. Insert the rear hanger rods on the left (driver's side) muffler into the rubber isolators on the left rear hanger bracket under the bumper. Lift the muffler up and connect its inlet tube to the outlet of the left side over axle tube using (x1) supplied 2.5" band clamp. Do not fully tighten the band clamp at this time.
- 28. Couple the hanger rod attached to the rear of the left side muffler to the supplied hanger bracket attached to the left frame rail with the remaining supplied rubber isolator.
- 29. Place the remaining (x2) supplied 2.5" band clamps over the tip inlets and install the tip assemblies onto the muffler outlets. The tips should be installed so that the compound angle cut on their ends follow the angled contour of the bumper.
- 30. The right (passenger's) side sensor will require the use of a harness extension to permit connection to the harness.
- 31. Adjust all system components and tighten the clamps. A few tips to remember to accomplish optimized fitment/clearances are as follows:
 - Begin by tightening all clamps just enough to remove all "slop" from the system, but still allow the rotation of each tube to be
 adjusted without major force being required.
 - The X-pipe assembly should lie flat in the tunnel when the installation is complete.
 - Ensure the header collector adapter tubes are rotated over far enough for the O2 sensors to clear the floor.
 - Pay special attention to the clearances obtained where the over-axle tubes route over the axle and past the panhard brace as the fitment/clearance constraints are greatest in this area.
 - The amount of tip assembly protrusion beyond the rear bumper can be adjusted to suit your individual taste...tucking them in tight, or pulling them out to be more noticeable is completely up to each user.
 - Perfect rotational alignment of the tip assemblies with each other can most easily be accomplished by laying a long piece of
 metal tubing or flat bar across the bottoms of the tips before tightening the clamps.

COMPATIBILITY INFORMATION:

This exhaust system is geometrically/functionally compatible with GM TH350, TH400, 700R4, 2004R, 4L60-4L70 and 4L80E/4L85E automatic or Tremec OE LS 4th-gen F-body T56 and aftermarket T56 Magnum manual transmissions.

This exhaust system is designed for direct bolt-in compatibility with the Hooker 1-3/4" (P/N 70101316-RHKR) and 1-7/8" (P/N 70101315-RHKR) LS swap headers developed for this application. Connection to other brand/type headers will require custom fabrication work.

LIMITATION OF LIABILITY - DISCLAIMER:

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For online help, please refer to the Tech Service section of our website: www.holley.com

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