

1967-69 1st Gen GM F-Body Camaro and LT1 or LT4 Engine 3" 304SS Exhaust w/ X-pipe & Mufflers

For use with Detroit Speed and Engineering (DSE) Chassis and Suspension 705013156HKR (w/o Resonators) & 705013157RHKR (w/ Resonators) 705013161RHKR (Brushed w/o Resonators) 705013162RHKR (Brushed w/ Resonators)

Installation Instructions



Thank you for making HOOKER HEADERS your choice in a high-performance exhaust system. Extensive dyno/track testing has enabled HOOKER to offer the most advanced design in exhaust systems. The installation while not complex, will take a certain amount of time and some fabrication. However, the additional horsepower and improved performance will more than justify your efforts. Proper installation and maintenance will ensure long life and maximum performance from your HOOKER HEADER exhaust system.

BEFORE STARTING:

This exhaust system is specifically designed for vehicles equipped with Detroit Speed and Engineering (DSE) chassis, suspension, and steering components. It will require the use of Hooker Blackheart Long tube or Mid-length headers 70101356-RHKR, 70101359-RHKR, 70201318-RHKR, & 70201319-RHKR. Engine Mount Brackets 71221024HKR and Transmission Crossmember 7122017HKR.

Recommended Mounts:

Engine mounts – Hooker 71221004HKR clamshell with 71221014HKR Black or 71221015HKR Red (Poly bushing). GM P/N 22188497 Mount assembly

Transmission Mount - Anchor P/N 2379

Modifications to the body will be required (See Figures 1 & 2) as this exhaust will not work with stock chassis and suspension components.

For vehicles using stock chassis and suspension components, please see the Hooker website for a complete list of LS Power parts @ www.holley.com

The installation of this exhaust system will require removal of the leading outside corners of the spare tire well. This will be necessary to accommodate tailpipe clearance. These areas will need to be reconstructed after clearance is made.

Modifications to the OEM gas tank or the use of a custom made gas tank may also be necessary. See Figures 1 & 2.

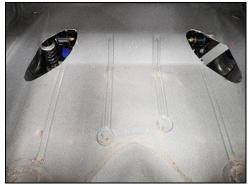


Figure 1



Figure 2

Your vehicle must be raised a minimum of 24 inches. A floor hoist is ideal and recommended. If no hoist is available, we strongly urge the use of axle stands as a safety measure. Please read and understand these instructions and disclaimer in their entirety before attempting installation.

CAUTION! WORK ONLY ON A LEVEL SURFACE. USE JACKS /JACK STANDS OF SUFFICIENT CAPACITY TO LIFT AND SUPPORT YOUR VEHICLE. NEVER WORK UNDER A VEHICLE SUPPORTED BY A FLOOR OR BUMPER JACK.

INCLUDED HARDWARE:

Accessory Pack Contents:								
P/N	Qty.	Description	P/N	Qty.	Description			
199R11387	1	Instruction Sheet	505R62	2	3/8 x 1.75" Bolts			
556R27	2	3" TORCA Couplers	539R26	2	3/8 Nylock Nuts			
556R23	2	3' Band Clamps	546R15	4	3/8 Flat Washers			
41174HKR	4	3" V-Band Clamps	505R63	4	5/16 x 3/4" Bolts			
516R128	2	Hanger Grommets	546R13	4	5/16 Flat Washers			
517R85	2	Tailpipe Hanger Bracket	505R78	4	5/16-18 x 3/4 Flange Bolt			
517R84	2	Tailpipe Hanger	539R24	6	5/16-18 Serrated Nut			
516R77	2	Muffler Hanger Isolator	505R47	2	5/16-18 x 1" Flange Bolt			
517R107	2	Muffler Hanger bracket	599R94	2	Blackheart Decals			
509R286	1	Drill Template						

Check the hardware package. If anything is missing, please contact Technical Service at 1-866-464-6553 or 270-781-9741.

Parts	List:			Tools Needed:		
Qty.	Description	Qty.	Description	3/8" Drive Socket Set	3" long 3/8 Drive Extension	
1	X-Pipe Assembly	1	Left Tailpipe Assembly	9/16 Deep Well Socket	6" long 3/8 Drive Extension*	
1	Left Muffler Assembly	1	Right Tailpipe Assembly	1/2" Deep Well Socket	9/16 Wrench	
1	Right Muffler Assembly			3/8 Drill Motor	15mm Deep Well Socket	
1	Right Muffler Link Pipe			3/8 Drill Bit	1/2" Wrench	
1	Left Muffler Link Pipe			21/64 Drill Bit	Center Punch	

IMPORTANT! Please read and understand instructions before attempting installation.

- 1. Place vehicle on flat solid surface set parking brake and block front wheels.
- 2. **Disconnect the negative terminal of the battery.** Lift the vehicle a minimum of 24 inches and support with jack stands.
- 3. Remove existing exhaust system if applicable.

INSTALLATION OF BLACKHEART EXHAUST SYSTEM:

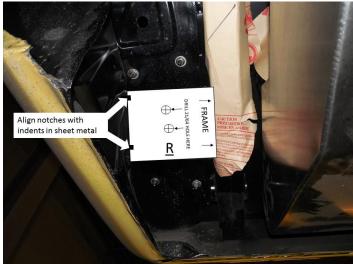
These instructions are meant as a guide for the installation of this exhaust system, due to the inherent nature of extensively modified vehicles some of the information in these instructions may not be accurate for your particular combination of parts.

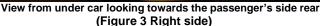
- Install a 3" TORCA coupler on to each header collector with the bolts to the inside and the nut facing down.
- 2. Place the X-pipe at the header collector and slide the couplers on to the X-pipe keeping a 50/50 split on the header collector and the X-Pipe. Support the X-pipe and tighten the coupler bolts just enough to hold the parts in place, but still allow for adjustment.
- 3. Install a 3" Band clamp on to each outlet of the X-pipe with the bolt to the inside and the nut facing down
- 4. Install the left and right muffler assembly on to the X-pipe. Slide the clamp onto the muffler inlet pipe. Adjust the muffler's level and tighten the clamp to support the muffler, but still allow for adjustment.
- 5. Install the left and right muffler link pipes on to the mufflers with the supplied V-band clamp. Install the link pipe with the long leg of the link pipe towards the muffler and the hanger rod facing in to the center of the car **Figure 7**. Install the V-Band clamp with the bolt facing in towards the center of the vehicle and clocked at 3 & 9 o'clock. Tighten the V-band clamp to allow the link pipes to be adjusted.
- 6. Install the muffler hanger isolator grommets onto the hanger rod of the muffler link pipes. Install the isolator hanger bracket on to the isolator and install the supplied ½" bolt with the Nylock nut. Tighten the nut to allow the bracket to move freely on the isolator. (Figure 6). NOTE: Do not drill the bolt hole to the vehicle at this time.

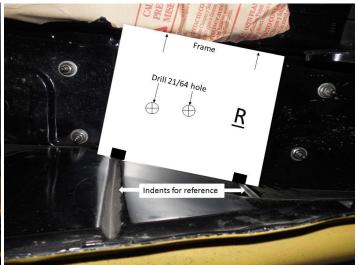
- 7. Using the supplied tailpipe bracket drill template (P/N 509R286), mark the location of the 2 holes to be drilled in the **Right and Left** side trunk floor just behind the wheel well area **(Figures 3 & 4).** Use the drill template with the **R** showing for the **Right** side and flip the drill template over and use the template for the left side. **NOTE**: Be sure the **R** is NOT showing for the Left side.
- 8. Align the drill template with the strengthening indents in the inner quarter wall sheet metal shown in **Figures 3 & 4** and mark location to be drilled (do not drill hole at this time).

NOTE: It may be necessary to trim the template slightly to fit between the frame and the inner quarter wall. This can be done on the frame edge of the template without effecting the accuracy of the template.

NOTE: If the indents are not present in the inner quarter wall for reference, assemble the tailpipe hanger brackets to the tailpipe hanger (**Figure 5**) and install them onto the tailpipe with the supplied 5/16 x 3/4 flange bolts. Install the tailpipes and tailpipe hangers and mark the holes using the tailpipe hanger bracket as a guide. Be sure to check all alignment and component clearance before the holes are drilled.







View from under car looking up at right inner quarter wall (Figure 4 Right Side)



Figure 5

- 9. Assemble the tailpipe hanger brackets to the tailpipe hanger (Figure 5).
- 10. Install the tailpipe hanger assembly on to the tailpipe with the supplied 5/16 x 3/4" flanged bolts.
- 11. Install the left and right tailpipes on to the muffler link pipes with the supplied V-band clamps. Tighten the V-band to hold the tailpipes in place, but still allow for adjustment.
- 12. Align the mufflers, link pipes, and tailpipes. Check for clearance and make adjustments as necessary.
- Check the tailpipe hangers for proper alignment with the marks made previously using the drill template. Make adjustment if necessary.

- 14. Mark the location of the hole to be drilled for the muffler isolator bracket at this time. Verify the alignment of components before the hole is drilled
- 15. Remove the tailpipe from the muffler link pipe, leave the link pipes connected to the mufflers.
- 16. Clear the area inside the car where the holes for the tailpipe and muffler isolator bracket will be drilled to prevent damage from the drill bit when the holes are drilled from the bottom.
- 17. Using a 21/64 (5/16 if no 21/64 is available) drill bit, carefully drill the holes for the hanger brackets at the reference marks.
- 18. Remove the 3/8 x 1 3/4 bolt from the tailpipe hanger bracket assembly (**Figure 5**) and remove the tailpipe hanger bracket from the grommet.
- 19. Install the supplied 5/16 x 3/4 bolt and flat washer into each of the 4 holes drilled for the tailpipe hanger brackets from the inside of the trunk. Install the Left and Right tailpipe hanger bracket on to the bolts. Install the supplied washer and flange nut on to the bolt. Tighten the bolts to allow for adjustment.
- 20. Install the 5/16 x1" bolt through the muffler hanger isolator bracket and into the vehicle, install the bracket with the supplied flange nut (**Figure 6**).



Figure 6

- 21. Install the left and right tailpipes on to the muffler link pipes. Install the V-band clamp and tighten to allow for adjustment.
- 22. Align the tailpipe hanger grommet into the tailpipe hanger bracket on the car for the left and right tailpipe. Install the 3/8 x1 3/4 bolt and washer through the bracket and grommet. Install the locking nut and flat washer hand tight.
- 23. Adjust the tailpipe hanger brackets, Tighten the 5/16 bolts on the tailpipe hanger bracket to the vehicle and the 5/16 flange bolts at the tailpipe when best clearance is set.
- 24. Tighten the V-band clamps on the mufflers and the muffler link pipes.
- 25. Tighten the 3/8 bolt at the hanger bracket only enough to fully engage the locking nut and prevent the nut from coming loose. The bolt should turn freely in the grommet with light pressure with a wrench applied.
- 26. Recheck all alignment and clearances around the entire exhaust system.

IMPORTANT! Tighten the 3/8 bolt at the hanger bracket only enough to slightly compress the grommet. Do not over tighten and crush the grommet.

27. Recheck all piping for proper alignment and clearance.

NOTE: The tailpipe length is left slightly longer than necessary so the finished length of the tailpipes can be trimmed to satisfy your personal taste. The tailpipes should be marked and trimmed only after the final adjustments are made to prevent any errors.

- 28. Tighten and recheck all connections and hardware to be sure all work is complete.
- 29. Remove the jack stands and lower the car.
- 30. Start vehicle and check for leaks. After 150 miles, recheck all connections and clamps.

NOTE: It is normal for your new Blackheart exhaust system to emit smoke for the first few minutes of operation.

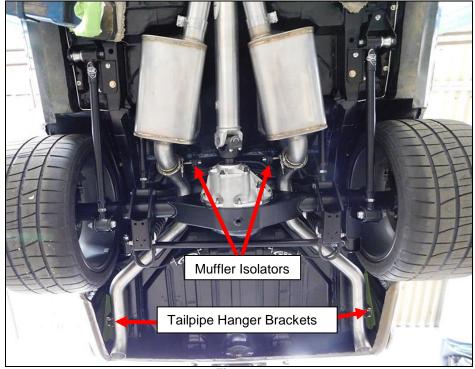


Figure 7

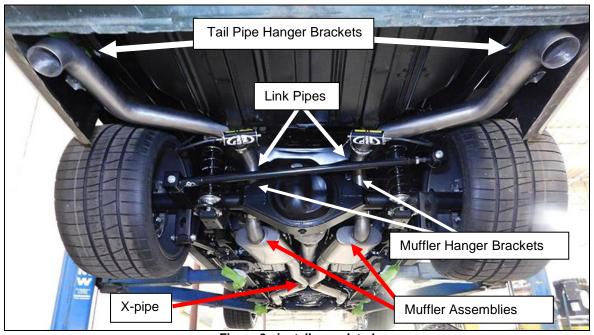


Figure 8 - install completed

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 Support: 1-866-464-6553

© 2017 Hooker Headers, Inc. All rights reserved.

199R11387 Date: 8-16-17