



1967-69 1<sup>st</sup> Gen GM F-Body Camaro

3" 304SS Exhaust w/ X-pipe and Mufflers

For use with Detroit Speed and Engineering (DSE) Chassis and Suspension

705013109RHKR (w/o Resonators) & P/N 705013124RHKR (w/ Resonators)

705013130RHKR (Brushed w/o Resonators & 705013131RHKR (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 headers P/N 70101329-RHKR, 70101337-RHKR, 70101344-RHKR, & 70101345-RHKR. Modifications to the body will be required and this exhaust will not work with stock chassis and suspension components.

**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.**

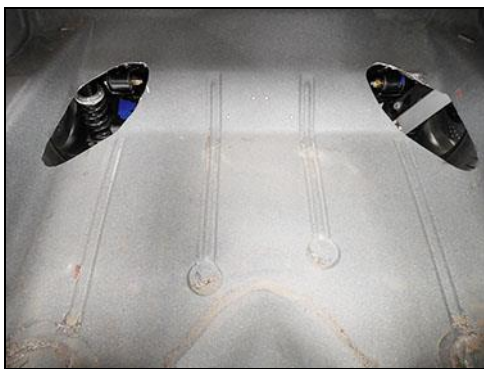


Figure 1



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
199R11091	1	Instruction Sheet	505R62	4	3/8 x 1.75" Bolts
556R27	4	3" TORCA Couplers	539R26	4	3/8 Nylock Nuts
41174HKR	4	3" V-Band Clamps	546R15	8	3/8 Flat Washers
516R128	4	Hanger Grommets	505R63	4	5/16 x 3/4" Bolts
517R85	2	Tailpipe Hanger Bracket	546R13	4	5/16 Flat Washers
517R84	2	Tailpipe Hanger	505R78	4	5/16-18 x 3/4 Flange Bolt
509R286	1	Drill Template	539R24	4	5/16-18 Serrated Nut
			599R94	2	Blackheart Decals

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

### **IMPORTANT! Please read and understand instructions before attempting installation.**

- Place vehicle on flat solid surface set parking brake and block front wheels.
- Disconnect the negative terminal of the battery.** Lift the vehicle a minimum of 24 inches and support with jack stands.

**NOTE:** HOOKER Blackheart P/N 705013109RHKR, 705013124RHKR, 705013130RHKR, & 705013131RHKR exhausts are designed to be installed with either HOOKER Blackheart Headers P/N 70101329-RHKR or 70101337-RHKR and will require fabrication to be installed with headers other than the ones specified.

- Remove existing exhaust system if applicable.

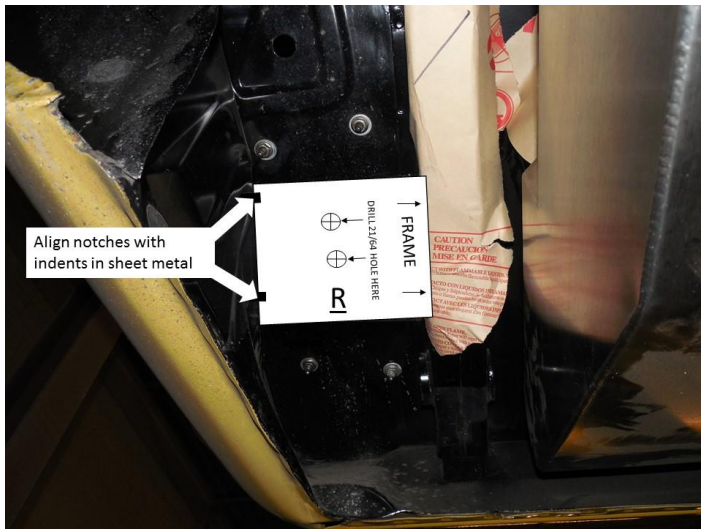
## INSTALLATION OF BLACKHEART EXHAUST SYSTEM:

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.
- 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.
- Install a 3" TORCA Coupler on to each outlet of the X-pipe with the bolt to the inside and the nut facing down
- Install the left and right muffler assembly at the X-pipe with the hanger bracket facing to the inside. Slide the coupler onto the muffler inlet pipe keeping a 50/50 split on the X-pipe and the muffler inlet pipe. Tighten the coupler to support the muffler, but still allow for adjustment.
- Install the muffler hanger isolator grommets into the hanger bracket and snap the two halves together. Align the muffler hanger bracket with the floor pan and tighten the band clamp to keep the muffler from moving while the tailpipes are installed, but still be adjusted if necessary (**Figure 6**). **NOTE:** Do not drill the bolt hole.
- Install the left and right muffler link pipes on to the mufflers with the supplied V-band clamp. The longer of the 2 link pipes to the left muffler and the shorter of the 2 link pipes to the right muffler. Tighten the V-band clamp to allow the link pipes to be adjusted.
- 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**). 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). Holding the tailpipe in place will provide a reference for the general location of the tailpipe hanger.
- Use the drill template with the **R** showing for the right side and flip the drill template over and use the template with the **L** showing for the left side.

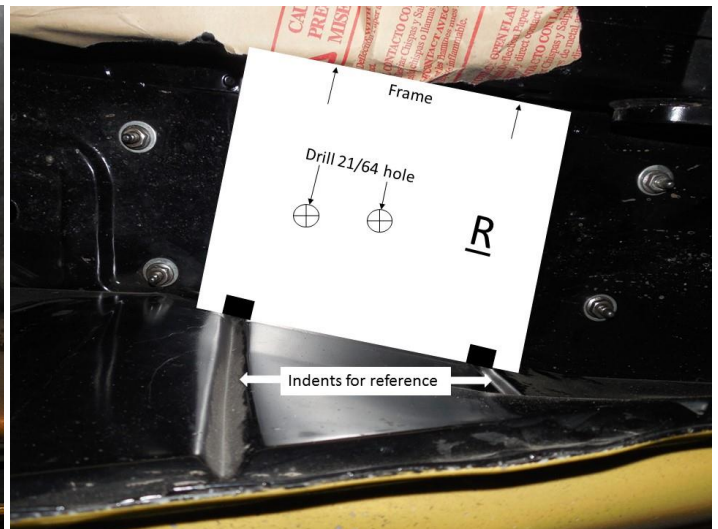
**NOTE:** It may be necessary to trim the template slightly to fit between the frame and the inner quarter wall. This can be done on the frame edge of the template without effecting the accuracy of the template.

**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.



(Figure 3 Right side)

View from under car looking towards the passenger's side rear



(Figure 4 Right Side)

View from under car looking up at Right inner quarter wall



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.
13. Check the tailpipe hangers for proper alignment with the marks made previously using the drill template. Make adjustment if necessary.
14. Remove the tailpipe from the muffler link pipe.
15. Clear the area inside the car where the holes for the tailpipe bracket will be drilled to prevent damage from the drill bit when the holes are drilled from the bottom.

16. Using a 21/64 (5/16 if no 21/64 is available) drill bit, carefully drill the holes for the tailpipe hanger brackets at the reference marks made with the drill template.
17. 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.
18. 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 locking nut on to the bolt. Tighten the bolts to allow for adjustment.
19. Install the left and right tailpipes on to the muffler link pipes. Install the V-band clamp and tighten to allow for adjustment. Align the tailpipe hanger grommet into the tailpipe hanger bracket on the car for the left and right tailpipe. Install the 3/8 x 1 3/4 bolt and washer through the bracket and grommet. Install the locking nut and flat washer hand tight.
20. Adjust the tailpipe hanger brackets and the tailpipe hanger at the tailpipe for best clearance.
21. Tighten the V-band clamps on the mufflers and the muffler link pipes.
22. Tighten the 5/16 bolts on the tailpipe hanger bracket and on the tailpipe hanger where it bolts to the tailpipe.
23. 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.
24. Recheck all alignment and clearances around the entire exhaust system.
25. Clear the area inside the car where the holes will be drilled for the muffler hangers to prevent damage from the drill bit when it comes through the floor.
26. Using the grommet on the muffler hanger bracket as a drill guide, carefully drill a 3/8" hole in the floor (**Figure 7**).
27. Install a flat washer on to the supplied 3/8"x1-3/4" bolt. Install the bolt and washer from inside the car through the hole drilled for each muffler hanger and through the grommet in the muffler hanger bracket. Install the second 3/8 flat washer and Nylock nut on the bolt and tighten the nut while a second person holds the bolt from the inside (**Figure 6**). Repeat this process for both sides.

**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.



**Figure 6**



**Figure 7**

28. Recheck all piping for proper alignment and clearance.
  29. Check that the muffler hanger brackets are properly aligned and the hanger grommet are flush with the floor pan. Recheck the alignment of the entire exhaust.
- 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.**
30. Tighten and recheck all connections and hardware to be sure all work is complete.
  31. Remove the jack stands and lower the car.
  32. 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 8 - install completed**