

2006 - 2013 Corvette Z06 7.0L V8 304SS, 2" Primary Tri-Y Headers 70101323-RHKR 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. This installation, while not complex will take a certain amount of time, mechanical ability, and a good selection of QUALITY hand tools. 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. Please let a professional perform this installation if you are not entirely confident in your ability or possess the correct tools for the job at hand.

BEFORE STARTING:

Your vehicle must be raised a minimum of 18 inches. A floor hoist is ideal. 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.

ACCESSORY PACK, TOOLS NEEDED, & PARTS LIST:

Accessory Pack Contents:			Tools Needed:	
P/N	Qty.	Description	Extended 3/8 Drive Flex Ratchet	13mm Deep Socket
271R1134	2	O2 Sensor Extension Harness	18" Extension or equivalent	O2 Sensor Socket or Wrench
505R21	12	8mm x 1.25 x 25mm Header Bolts	3/8 Drive Universal	Long Flat Blade Screwdriver
557R7	2	Insulated Clamp	3/8 Drive Metric Socket Set	13mm Ratcheting Wrench
505R73	1	1/4-20 Flange Bolt	15mm Deep Socket	Spray Lube (WD-40®)
539R21	1	1/4-20 Flange Nut	15mm Medium Deep Socket	Utility Knife
508R28	2	MLS Header Gasket	15mm Combination Wrench	5/8" Spark Plug Socket
599R94	2	Blackheart Decal – 2" x 4"	Parts List:	
199R10981	1	Instruction Sheet	1 – Left Header Assembly	1 – Right Header Assembly

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

IMPORTANT! Please read and understand instructions before attempting installation.

PRE-INSTALLATION:

1. Place vehicle on flat solid surface set parking brake and block front wheels.

- 2. Disconnect the negative terminal of the battery.
- 3. Lift the vehicle and support with jack stands.
- 4. Soak studs on catalytic converters with penetrating oil or WD-40®.

NOTE: Hooker Blackheart Long Tube headers WILL NOT connect to the factory X-pipe. The following components are available to connect your Hooker Blackheart Headers to the factory mufflers.

- 2006-13 Z06 P/N 70801307-RHKR X-pipe with CATS to OEM mufflers.
- 2006-13 Z06 P/N 70801308-RHKR X-pipe with no CATS to OEM mufflers.

Please visit the Holley website @ www.holley.com for a full line of Hooker Blackheart Exhaust products available for the C6 and Z06 Corvette.

REMOVAL OF OEM EXHAUST MANIFOLDS & CATALYTIC CONVERTERS:

- DRAIN THE ENGINE OIL FOLLOW MANUFACTURER'S RECOMMENDED PROCEDURE FOR CHANGING THE ENGINE OIL IN A DRY SUMP OILING SYSTEM. Replace the O-rings and or drain plugs if necessary.
- Remove the oil lines from the bottom right side of the oil pan. Be careful not to damage the lines or O-rings. Replace the O-rings if
 necessary. Wrap a rag around the ends of the lines to prevent debris from entering the oil lines and tie the lines out of the way.
 Place a piece of clean rag into the oil pan where the lines were removed to prevent debris from entering the oil pan.
- 3. Remove the decorative engine cover
- 4. Remove the (x8) spark plug wires and (x8) spark plugs.
- 5. Loosen the 15mm nuts securing the flanges that connect the X-pipe to the catalytic converter down pipes.
- 6. Loosen the 15mm nuts on the clamps at the back of the X-pipe where the muffler pipes connect to the X-pipe. Spray the connection with WD-40®.
- 7. Remove the 13mm nuts on the spring hangers on the X-pipe, slide the flanges off the catalyst down pipes, and remove the X-pipe from the mufflers.
- 8. Remove the battery cable (make sure battery is disconnected) and starter solenoid wire from the starter and remove the starter.
- 9. Remove (x3) of the (x4) 15mm nuts securing the catalytic converters to the exhaust manifolds that are accessible by using a 12" long extension and universal from under the car with a good quality medium deep well socket. These nuts are typically very difficult to loosen and will require a quality 15mm medium deep socket. Using an inexpensive socket here will almost certainly result in broken tools and rounded off hardware making the removal of the catalytic converters much more difficult. The 4th 15mm nut is accessible from outside the frame rail over the control arm using a long reach Flex ratchet with a 15mm medium deep socket. A standard socket is too shallow and a deep socket is too tall.

NOTE: The catalyst down pipes will not come off the manifolds at this point. See steps below.

 Allow the catalyst to drop down and remove the Pre and Post catalyst O2 sensor plugs from there holders and unplug the O2 sensors.

NOTE: It may be necessary to unbolt the driver's side connector bracket from the transmission to reach the rear O2 connector.

- 11. Remove the shoulder bolt from the steering column coupler at the steering rack. Take the driver's side seat belt and loop it through the steering wheel and latch it. This will prevent the steering wheel from being turned and damaging the clock spring when the column is disconnected. Slide the column back and disconnect from the steering rack. DO NOT REMOVE THE COLUMN FROM THE CAR. This will provide better clearance for the headers to be installed.
- 12. Remove the (x6) 13mm bolts securing the manifold to the cylinder head. Raise the manifold slightly to allow the catalyst down pipe to be removed from the manifold studs. Remove the catalyst from the car. Remove the exhaust manifold from the car.
- 13. Remove the left and right O2 sensors from the catalyst. Keep the pre and post catalyst O2 sensors separated.

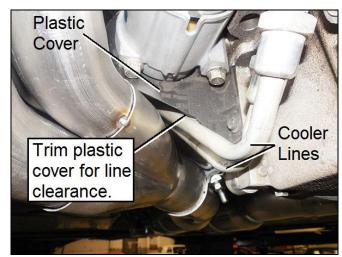
INSTALLATION OF 70101323-RHKR TRI-Y HEADERS:

1. Clean the exhaust port sealing surface to remove any dirt or gasket material that may affect the sealing performance of the gasket and cause leaks. Repair any damaged threads or broken bolts.

2. Install the pre catalyst O2 sensors into the left and right header collector and connect the provided 6" O2 sensor extension harnesses to the O2 sensors.

NOTE: Moving the cooler lines is necessary for this installation. This is a relatively simple procedure of bending the lines for better collector clearance, moving the line clamp on the oil pan, and trimming the plastic cover at the bell housing around the starter. Please read all the steps listed for this modification before proceeding with the installation.

- 3. Remove the line clamp at the oil pan below the starter and next to the oil level sensor (Figure 2).
- 4. Unplug the oil level sensor (Figure 2).
- 5. Remove the plastic cover and trim using a utility knife to allow the cooler lines to hug the bellhousing and oil pan (Figure 1).
- 6. Reinstall the plastic cover.
- 7. CAREFULLY bend the lines so that they rest up against the bellhousing (Figure 3).
- 8. Install the insulated clamp around the cooler lines and attach the clamp to the oil pan bolt (Figure 2).
- 9. Adjust the lines after the clamp is installed for clearance at the starter and the bellhousing (Figures 2 & 3).
- 10. Reconnect the oil level sensor.



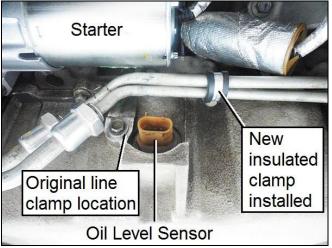


Figure 1

Figure 2

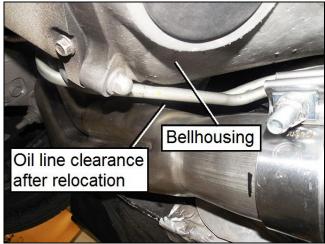


Figure 3

- 11. Remove 15 mm bolt above the starter connecting the ground harness to the block.
- 12. Follow the battery cable and the ground harness up to where they enter the split loom and are clipped to the frame rail. Release the split loom from the clamp and remove the plastic clamp from the frame rail.

- 13. Install the supplied 1/4-20 bolt into the hole in the frame rail and install the insulated clamp around the split loom with the short flat side of the clamp facing the bolt (**Figure 4**).
- 14. Install the clamp over the bolt and install the supplied 1/4" nut. When installed, the harness should be routed on top of the frame rail away from the header tube (**Figure 5**).





Figure 4

Figure 5

- 15. Install the right (passenger's side) 70101323-RHKR header into position. The rear of the header flange will need to clear the harnesses at the back of the engine. Push the header as far forward as possible and work the header flange past the harnesses being careful not to damage the harnesses. Route the O2 sensor extension harness away from the header tubes and plug in the O2 sensor before the header is bolted to the engine.
- 16. Position the supplied header gasket with the correct bolt orientation and loosely install 2 of the provided header bolts. Do not reuse the factory manifold gasket.
- 17. Install the starter, connect the battery cable, and connect the starter solenoid wires.
- 18. Install the ground cable to the block at the starter. Be sure to reconnect all the ground wires that came off the bolt.
- 19. Install the remaining header bolts. Torque the header bolts to 20-25 ft./lbs. and recheck after the first 150 miles.
- 20. Check clearance at the cooler lines and make adjustments as necessary.
- 21. Install the left (driver's side) 70101323-RHKR header past the steering column and into position. Be careful not to damage the wiring harnesses or brake lines at the rear of the engine as the header flange passes by them. Route the O2 sensor wire away from the header tubes and connect the O2 sensor.
- 22. Position the supplied header gasket with the correct bolt orientation and install the (x6) header bolts provided. **Do not re-use the factory manifold gasket**. Check the clearance at the collector and trim the plastic cover on the bellhousing if necessary. Torque the header bolts to 20-25 ft./lbs. and recheck after the first 150 miles. Be sure to reconnect the O2 sensor connector clip if it was removed during disassembly.
- 23. Install the steering column onto the steering rack. Be sure the wheel is in the same position as when you removed the column.
- 24. Install the shoulder bolt into the coupler at the steering rack. Be sure the coupler is fully seated on to the steering rack. Tighten the shoulder bolt to the recommended specification.
- 25. Install the spark plugs and spark plug wires
- 26. Inspect the O-rings on the dry sump oil lines and replace if necessary. Reconnect the oil lines to the oil pan and torque fasteners to the recommended specifications.
- 27. Inspect the oil pan drain plugs and O-rings and replace if needed. Reinstall the drain plugs and torque to recommended specification.
- 28. Refill the engine with the recommended oil, follow the manufacturer's recommended procedures for changing, refilling and checking the oil level in a dry sump oiling system. **IMPORTANT! Failure to follow the proper procedures may result in improper oil level and engine damage.**

- 29. Recheck you work. Verify all connections and hardware are properly installed and tight.
- 30. Connect the battery, start the engine, and check for leaks. Recheck your work before lowering the car.
- 31. Install the decorative engine covers.
- 32. After 150 miles recheck all connections, clamps, and hardware.

Hooker Blackheart Headers are intended for <u>Racing Use Only</u> and will cause the check engine light to illuminate. The use of a tuner is recommended to prevent this condition and to realize the full performance potential of your Hooker Blackheart Headers.

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

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

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