



2009-2013 C6 CORVETTE
304SS, 1 7/8" Long Tube Headers + Off-Road X-Pipe
(Designed to work with OEM Muffler)
11149FLT
Installation Instructions



Thank you for making FLOWTECH EXHAUST your choice in a high-performance exhaust system. Extensive dyno/track testing has enabled FLOWTECH to offer the most advanced design in exhaust systems. The installation, while not complex, will take a certain amount of time. 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 FLOWTECH exhaust system.

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.

INCLUDED HARDWARE:

Accessory Pack Contents:		Parts List:		Tools Needed:
Qty.	Description	Qty.	Description	
4	Band Clamps	1	X-pipe assembly	Spray Lube (WD 40®)
1	Instruction Sheet	1	Left Header Assembly	3/8 Socket Wrench
12	8mm x 1.25 x 25mm header bolts	1	Right Header Assembly	12" 3/8 Drive Extension
2	2.5" Band Clamp	1	Hardware Pack	13mm & 15mm Deep Socket
				3/8 Universal

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:

NOTE: Your Flowtech Long Tube headers + Off-Road X-Pipe system is designed to work with the factory mufflers.

IMPORTANT: Inspect your accessory pack BEFORE YOU START!

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.

WARNING! Never support a vehicle with a floor or bumper jack.

REMOVAL OF OEM EXHAUST:

1. Loosen the clamps at the end of the H-Pipe where it connects to the muffler inlet pipes.
2. Remove the (x4) nuts at the H-Pipe where it connects to the catalytic converter down pipes. Remove the (x2) nuts at the center spring hangers. Slide the flanges off of the studs and remove the H-Pipe from the muffler inlet pipes.
3. **Follow installation instructions for Hooker Blackheart Headers P/N 70101317-RHCR (for header installation).**

REMOVAL OF OEM EXHAUST MANIFOLDS & CATALYTIC CONVERTERS:

1. Remove the decorative engine cover.
2. Unplug the left and right pre-catalyst O2 sensors.
3. Remove the spark plug wires and spark plugs (x8).
4. Remove the bolt securing the dipstick tube to the cylinder head (15mm socket). Remove the dipstick.

NOTE: Take a good mental picture of how the tube is routed, it will make re-installation a lot easier.

5. Loosen the 15mm nuts securing the flanges that connect the exhaust system to the catalytic converters and slide the flanges off the studs.
6. Remove 15mm nuts securing the catalytic converters to the exhaust manifolds. Use a 12" long extension and universal from under the car with good quality deep well socket.
7. Unplug the post-catalyst O2 sensors. Disconnecting the plug from the retainer on the firewall will allow the catalyst to drop an additional 3-4 inches for better access to the post catalyst O2 sensor connector latch. Take care not to damage the locks on the connectors. Remove the catalytic converters.
8. Remove the 6 bolts (13mm socket) that attach **EACH** exhaust manifold to the cylinder head. Carefully remove the manifold out from the bottom. Be careful not to damage the coolant temperature sensor on the driver's side.
9. Remove the left and right O2 sensors from the exhaust manifolds

INSTALLATION OF 11149FLT LONG TUBE 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.**

NOTE: The factory exhaust manifold gasket will be re-used, inspect the gasket for damage and replace, if necessary.

2. Install the O2 sensor into the left and right header collector and connect the provided 18" O2 sensor extension harnesses to the O2 sensor.

NOTE: Automatic transmission installations – Follow steps 1-18.
Manual transmission installations – Skip steps 3-9.

NOTE: Moving the transmission cooler lines is necessary for **automatic** transmission installations only. 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. Trim the plastic cover using a utility knife to allow the cooler lines to hug the bell housing and oil pan (**Figure 1**).
6. **CAREFULLY** bend the lines so that they rest up against the bellhousing (**Figure 3**).
7. Install the insulated clamp around the cooler lines and attach the clamp to the oil pan bolt (**Figure 2**).
8. Adjust the lines after the clamp is installed for clearance at the starter and the bellhousing (**Figure 2 & 3**).
9. Reconnect the oil level sensor.

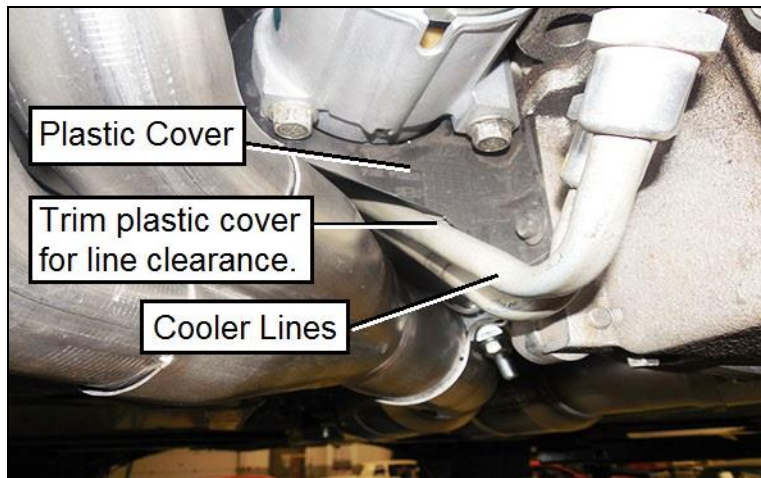


Figure 1

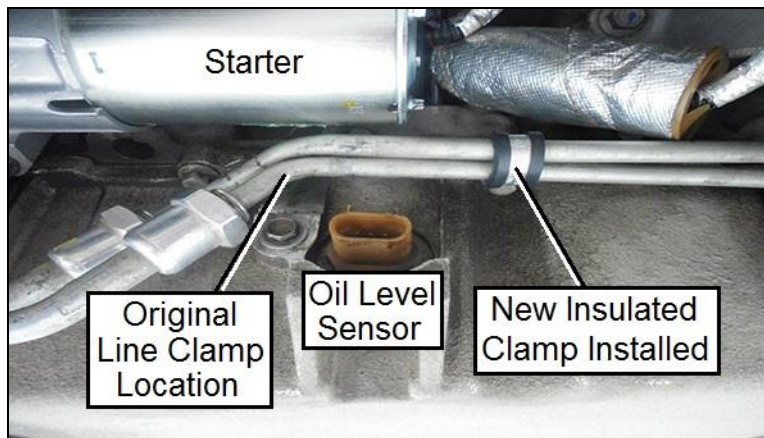


Figure 2

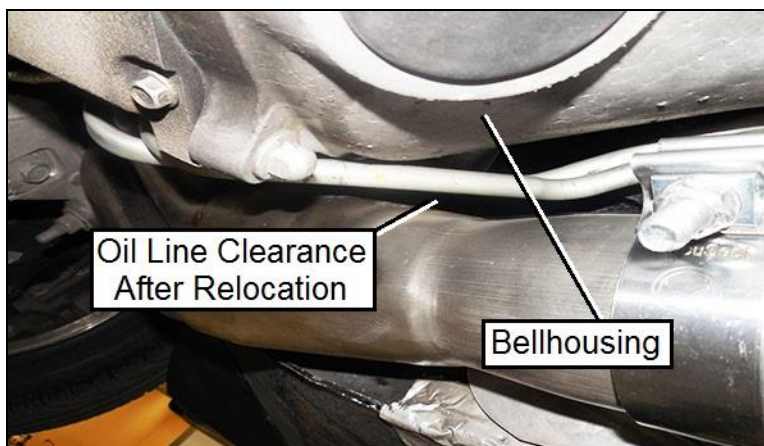


Figure 3

10. Install the **right** (passenger's side) header into position. Route the O2 sensor extension harness away from the header tubes and up the back of the engine to the fuel rail. Position the gasket with the correct bolt orientation and install the 6 header bolts provided. Check the clearance at the collector and cooler lines and make adjustments if needed (automatic only). Torque the header bolts to 20-25 ft/lbs. and recheck after the first 150 miles.
11. Install the **left** (driver's side) header past the steering column and into position. Route the O2 sensor wire away from the header tubes and up the back of the engine to the fuel rail. Position the gasket with the correct bolt orientation and install the 6 header bolts provided. 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.
12. Route the O2 sensor harnesses along the fuel rail, plug in the connectors, and install the locks. Make sure the harnesses are clear of any exhaust pipe and secure.
13. Install the dipstick tube after checking the condition of the O-ring (replace, if necessary).

Install the spark plugs and spark plug wires.

14. Recheck your work. Verify all connections and hardware are properly installed and tight.
15. Connect the battery, start the engine, and check for leaks. Recheck your work before lowering the car.
16. Install the decorative engine covers.
17. After 150 miles recheck all connections, clamps, and hardware.

FLOWTECH EXHAUST headers are intended for **Racing Use Only** 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 FLOWTECH EXHAUST Headers.

INSTALLATION OF YOUR FLOWTECH OFF-ROAD X-PIPE:

1. Install the 76mm band clamp on to the link pipes with the bolt on the inside and the nut down.
2. Install the left and right link pipes on to the header collectors and tighten the clamps to allow for adjustment.
3. Install the (x2) band clamps on to the catalyst outlets, bolts to the outside and nuts down.
4. Slide the X-pipe on to the catalyst outlet pipes (spring hanger bracket facing up). Install the spring hanger and nuts.
5. Tighten the clamps on the X-pipe where it connects to the catalyst to allow for adjustment.
6. Position the 2.5" band clamp at the X-pipe outlet, bolt to the inside and nut facing down.
7. Connect the over-axle pipes to the OEM muffler to the X-pipe and tighten the clamps to allow for adjustment. The mufflers and the over-axle pipes will need to be as far rearward as possible to allow the X-pipe to connect to the over-axle pipes.
8. Check all the hardware and the connection points for proper installation and clearance.
9. Adjust all components for proper alignment. Tighten all clamps and hardware starting at the front and working towards the tailpipes.
10. Remove the jack stands and lower the car. Connect the battery and remove the wheel blocks.
11. Start the vehicle and check for leaks and loose hardware.
12. Check all hardware again after the first 150 miles of driving.

NOTE: Your FLOWTECH exhaust has no provisions for the rear (post catalyst) O2 sensors and will result in a check engine light. The use of a tuner is recommended to correct this condition and take full advantage of the performance potential of this exhaust.

NOTE: It is normal for your new FLOWTECH EXHAUST headers 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. FLOWTECH EXHAUST™ 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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