



SCAVENGER SERIES ELITE HEADERS

409S[®] Stainless Steel

Header Installation Instructions:

Part Number: 814117

2010-2014 Chevrolet Camaro 6.2L

03/20/15



WARNING: The product accompanying this document is legal only for off-highway use (except in California or states that have adopted California emission standards), racing use or for use on pre-emission-controlled motor vehicles/motor vehicle engines (pre-1966 domestic vehicles certified to California standards, pre-1968 domestic vehicles certified to federal standards and all pre-1968 foreign vehicles), per the manufacturer's application guide.

Note: Installation of this product requires adequate work space, general mechanic's tools, general mechanical "know how" and a reasonable level of experience. Please carefully read these instructions before attempting to install these headers. If in doubt, consult a professional mechanic. (Better to do it now than to get stuck halfway through the installation.)

These headers are not intended to fit with the factory catalytic converters and will require fabrication to adapt them to the rear portion of the exhaust system. Mid pipes #81067 are available separately to help facilitate this. Please keep in mind that even if catalytic converters are adapted into the system, it will still result in a non-emissions compliant installation that is not legal for highway use.

Check to make sure that you have received the proper parts for your installation. The header number will be stamped on the engine flange. If you are unsure you have received the proper parts call before you start work.

Be sure to work safe! Whenever you work under the vehicle be sure that it is located on level, solid ground and is supported by adequate safety stands. **Remember: hot asphalt will not support most jack stands!**

Attention Customers breaking in new engines: Due to the extreme heat generated during the break-in process, the appearance of the ceramic coating may be altered in certain areas. The protection characteristics and thermal barrier properties of the coating is never compromised. It is recommended that a cast iron manifold or old set of headers be used for this process.

The purchaser is responsible for following all installation instructions and safety guidelines supplied with your new Flowmaster Performance Exhaust Product. Flowmaster Performance Exhaust assumes no responsibility for damages resulting from improper operation, misuse, abuse, or lack of reasonable care, or any problems resulting from incompatibility with other manufacturer's products.

- 1) Place the vehicle in a location where the floor is solid and flat, with adequate lighting. Do not attempt to work on a hot engine. **Disconnect the battery cables from the battery.** Raise the front of the vehicle to obtain adequate access to the bottom exhaust manifold flanges. Use large base jack stands to support the vehicle. Do not rely on the jack! Block the tires to prevent the vehicle from rolling off of the jack stands.
- 2) Spray WD-40 or some type of penetrating lubricant on all accessible exhaust manifold fasteners and fittings before attempting to remove them. Temporarily unplug O2 sensors from harness.

- 3) From under the vehicle, remove the nuts attaching the manifolds to the exhaust pipe.
- 4) Remove the bolt attaching the steering shaft to the steering rack. Slip shaft off of rack. Be sure to mark the steering shaft position, so that it can be indexed in the correct position when reinstalled.
- 5) From above, remove oil fill cap. Remove engine cover by tugging upwards gently on the lower corners. Remove the bolt that attaches the oil dipstick to the head. Remove the dipstick.
- 6) Carefully remove the spark plug wires. Twist the boots prior to tugging on them. Do not pull directly on the wire. Remove the spark plugs.
- 7) Unbolt catalytic converter assemblies from the exhaust pipes. Unplug and remove the oxygen sensors.
- 8) Remove the bolts attaching the manifolds to the head. After removing the manifolds, clean the gasket surface of the head, being careful not to gouge the aluminum head surface.
- 9) Install the Headers using gaskets and supplied hardware. We have found that when installed correctly, the raised bead around each port increases the pressure exerted on the gasket directly adjacent to the port and effectively prevents leaking gaskets. It is normal for the flange to be raised off the cylinder head the thickness of the sealing bead. It is important when installing the header to install all bolts loosely, and then tighten evenly to ensure the flat installation of the flange. The torque sequence on the header should be first fit snug, starting from the inside of the flange working out, alternating from top to bottom so that the bolt connects the flange to the manifold to the point where they barely touch. Second, using the same inside-out pattern, tighten each bolt to 13-15 ft. /lbs. This method will help prevent leakage and will give the user the best possible performance out of their new set of headers.
- 10) Connect the headers to the rear portion of the exhaust system by fabricating the necessary pipes and pieces. Using the two included O2 extensions, reconnect the forward O2 sensors to the ports located in the collectors.
- 11) Re-install the spark plugs and plug wires. Re-install the dipstick.
- 12) Re-check everything and re-connect the battery cables to the battery. Check to ensure that there is adequate clearance around all fuel lines, brake lines, battery cables, wiring harnesses and other heat sensitive items.
- 13) Start the engine and check for leaks. Test drive the vehicle. Let the engine cool and re-torque the header bolts to 13-15 ft. /lbs. Periodically check and retighten the header bolts.

Packing List

<u>Qty</u>	<u>Description</u>
(1)	Drivers Side Header Assembly
(1)	Passenger Side Header Assembly
(2)	Head Flange Gaskets
(2)	O2 Harness Extensions
(12)	8mm-1.25 x 25mm Header Fasteners W/Lock Washers
(2)	Collector Adapters
(2)	Collector Flanges
(4)	Collector Bolts w/nuts and lock washers (PK357)
(1)	Flowmaster Decal