



**SCAVENGER**  
**SERIES ELITE HEADERS**

**409S Stainless Steel**

## Header Installation Instructions:

**Part Number: 814122**

**2010-2011 Chevrolet Camaro**

3.6L · V6 Engine

ARB E.O. No. D-698

07/17/14



The product accompanying this document has been granted a California Air Resources Board (CARB) exemption, an "E.O." number, or is a direct or consolidated replacement part. It is 50-state legal, per the manufacturer's application guide.

**Note:** Installation of this product requires an adequate work space, general mechanic's tools, general mechanical "know how" and a reasonable level of experience. Most auto enthusiasts with these resources will have little difficulty installing these headers. However, you should 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.) This part is certified for use on Pollution Controlled Vehicles.

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!**

Many factors affect the installation of headers, some of which are; broken or aftermarket motor mounts, accidents that impact the configuration of the frame, and/or the installation of different engines or aftermarket cylinder heads.

**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.

Flowmaster uses sealing beads on its headers. 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 from one flange to another will vary, but generally every bolt on a 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 until finished. This method will help prevent leakage and will give the user the best possible performance out of their new set of headers.

- 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. Heat causes metal to expand and makes removal of fasteners difficult at best. **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.
- 3) Disconnect the negative battery cable. Remove the plastic engine cover.

#### **FROM ABOVE:**

- 4) Remove the three 10mm bolts attaching the heat shield to the exhaust manifold. Remove the heat shields.
- 5) Remove the 15mm nuts attaching the catalytic converter assembly to the manifolds. Note: Leave one nut on each side very loose to prevent the converter assembly from falling while working underneath.
- 6) Find the O2 sensor leads at the rear of the cylinder heads. Remove the locking clip and disconnect the O2 sensors.
- 7) Remove the dipstick tube on the drivers' side of the vehicle.

#### **FROM BELOW:**

- 8) Loosen the 15mm nuts on the band clamps connecting the exhaust pipes to the converter assemblies.
- 9) Release the clip and slide the band clamps to separate the pipes.
- 10) Unplug the rear O2 sensor leads and remove the converter assemblies.

#### **ABOVE AND BELOW:**

- 11) Remove the 13mm bolts attaching the exhaust manifolds to the cylinder heads. Remove the manifolds.
- 12) Clean any carbon build up from the head surface. Be careful not to gouge the aluminum heads.
- 13) Wipe the gasket clean of any residue. Apply a thin coat of High-Temp, O2 safe RTV silicone to the manifold side of the gasket.
- 14) Install the headers using the stock gaskets and stock exhaust manifold bolts. Use care to insure the headers are tightened evenly.
- 15) Swap the front O2 sensors from the manifolds into the headers. Use a dab of anti-seize to prevent galling of the threads.
- 16) The converter assemblies must be cut approximately  $\frac{3}{4}$ " from the weld on the pipe.
- 17) Install the adapter flanges using the supplied clamps. Use anti-seize on the clamp bolts. Tighten until snug but do not final tighten at this time.

- 18) Slip the converter assemblies into the adapter flanges and connect to the exhaust pipes using the original band clamps. Align the exhaust and converter assemblies into the adapter flanges and tighten the band clamps.
- 19) The weld on the converter should touch the adapter flange. Tack weld the converter and adapter in at least three places on each side.
- 20) Remove the converter assemblies and completely weld the adapters to the converters.
- 21) Install the catalytic converter assemblies. Connect the exhaust and align the converter assemblies with the exhaust. Tighten all connection securely.
- 22) Recheck all steps, check for proper clearance around all fuel lines, brake lines and wiring harness.
- 23) Start the engine and check for leaks. Allow the engine to warm up, then shut the engine off and allow it to cool. Recheck the header bolts for correct tightness.

#### **Parts List**

<b><u>Qty</u></b>	<b><u>Description</u></b>
(1)	Drivers Side Header Assembly.
(1)	Passenger Side Header Assembly
(2)	2.50" – 2.25" Stacker Flanges
(2)	2.50" V-Band Clamps
(1)	CARB Emissions Sticker
(1)	Flowmaster Decal

#### **GM part numbers for replacement header gaskets-**

12576262 – Left Side  
 12608475 – Right Side