

LG PRO LONG TUBE HEADERS C5 CORVETTE

“THE MOST POWERFUL HEADERS ON THE PLANET”

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972-429-1963



Thank you for purchasing LG headers for your C5 Corvette.

Parts Inventory:

1. Driver side header
2. Passenger side header
3. X- pipe with O2 sensor bungs
4. 2 high flow cats OR 2 cat delete pipes
5. Driver side rear flow tube
6. Passenger side rear flow tube
7. 6 3" stainless steel band clamps
8. 1 pair of flat to square O2 adapters ('97 to '03 cars)
9. 2 pairs of square to square O2 extensions ('04 only)
10. AIR injection pipe ('97 thru '00 cars only)

Optional

1. Pair LS1 style exhaust gaskets
2. Stainless Stage 8 Locking header bolts

Instructions:

Removal:

Start by supporting the car on a lift, or 4 jack stands on a level surface about two or more feet off of the ground. Disconnect negative battery cable before any work begins.

Once noting the placement of the stock exhaust parts you will need to start by removing the old exhaust components. Start by removing the fuel rail covers on top of the engine. These simply unclip and pull off. The driver side is a little trickier as you need to route the fuel line through the cut out in the cover. Once that is done then set them aside. You will also have to unbolt and remove the oil dipstick from the passenger side of the engine.

Move on to removing the spark plug wires and spark plugs from the engine. Be careful not to drop any of the spark plugs as this will damage the plug and cause a misfire condition. Also make sure to pull by the boot on the wires or they will separate. If your car has over 30,000 miles now is a good time to think about new wires. Once this is done, the next electrical part that needs to be completed is removal of the factory O2 sensors. There are 4 sensors in the stock exhaust. Unclip the sensors from their wires and make note which sensors are used in the front and which are used in the rear.

At this point it is time to start removing the factory exhaust system. Start by unbolting all of the clamps on the under side of the car and all of the factory hanger bolts. There is a 2 bolt flange at the mufflers at the rear that will need to be un-bolted first. Remove the exhaust manifold to H pipe bolts and remove the factory H pipe to the mufflers. At this point you can move back up top and remove the bolts that hold the manifolds onto the engine. Before removing all bolts please remove the AIR injection fittings from the top of the manifolds. Removing the coil brackets to the valve covers will make this job much easier. The manifolds should drop out from the top down. Now you have removed all components of the factory exhaust system and are ready to start the install of the header system.

Install:

Start by installing the driver side header from the bottom side of the car. The headers should slide into the engine compartment by pointing the collector towards the inside of the car and down, and rotate into place. You can 'hang' them from the head bolts until you can go back on the top side. I suggest installing only a front and rear bolt with the gasket first then only starting the rest of the bolts before installing the rest of the system.

Now install the header on the passenger side to start the rest of the install. The header should install from the bottom up. We also only recommend using GM header gaskets for the 2000 LS1 Camaro/Corvette as these use the same port design as the headers and have proven the best seal.

Once under the car it is now time to start installing the rest of the pipes. The front O2 sensors should be installed into the headers and tightened down. You will need to drill two ¼” holes at the front of the center plate to hold each O2 sensor wire with a zip tie to keep them from burning on the headers as shown in Figure 1. Please note, it may be necessary to unclip part of the factory harness to give enough slack and free play in the wires. ****NOTE FOR 1997 to 2003 Models****: These cars will only use two O2 sensors at this time. The sensors have a built in heater circuit to bring the sensors up to operating conditions sooner and enter the car into closed loop sooner. The early cars have a weak heater in their front sensors. We have found best results to use the rear sensors in the front location by using the supplied adapter harness. Rear sensors should be removed inside the computer or a new set of rear sensors should be used in the rear location.

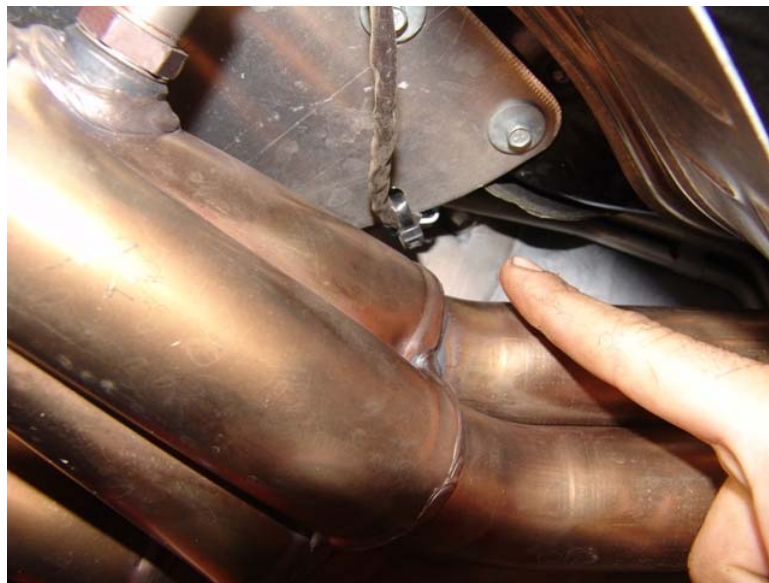


Figure 1: Front O2 sensor wire hold down.

The catalytic converters (or off-road pipes) slip into place just after the headers. Please slide the clamps onto the pipes as you work your way back so that you can come back later and tighten everything down as you go once everything is aligned. The X pipe is next in the install. Before installing the X pipe please transfer the rear stock O2 sensors and place them into the X pipe. Note the location of the O2 sensor holes and place them closest to the catalytic converters (or off-road pipes). At this time it is also necessary to drill a hole in the plate just above the exhaust. This hole will allow the O2 sensor wires from the rear to feed up above the exhaust and not become burned on the exhaust as shown in Figure 2. We drill a 1 to 1 ½” hole in the plate to allow the wires to feed above the plate as shown in the picture below. Please run the wires through this hole and above the exhaust while installing the X pipe for easiest install. Also make note of the angle of the O2 sensors themselves. They should lay very close to the X pipe as to give the most clearance, if not the bungs may have to be ‘tweaked’ a bit to lay them over.



Figure 2: X-pipe location with hole drilled for 02 sensor wires (front is to the right).

At this point the rest of the system can be loosely hung into place. The installed system should look like the picture in Figure 4.



Figure 3: Assembled system (off-road shown).

Before final tighten of all of the clamps care must be taken to insure that all pipes are located correctly taking special care to note placement of the rear pipes as they go over the rear end of the car. While tightening the exhaust clamps down make sure that each clamp is clear of the frame rails, and each other. Special care must be taken on the clamps around the X pipe as they can rotate too far and the bolt will rattle on the center plate support. Once the install is complete please give the exhaust a once over and make sure no pipes are touching, clamps are free of each other and that the bolts are not making contact with any part of the car.

Once the car is complete please drive the car to check for leaks and any rattles that might pop up after install. The header and pipe fitment is more critical since the pipes are so much larger so time must be taken to make sure all pipes are in their right place.

Some tips for those making these a race header. Please note; if you are using these on a track only car and have removed the AIR injection system, please remove the flanges from the headers and weld them shut as block off plates can cause problems.

I thank you for choosing LG Motorsports and know that you will enjoy years of trouble free horsepower and torque from your new Corvette equipped with the most POWERFUL HEADERS ON THE PLANET, LG Motorsports Pro Long Tubes!

Lou Gigliotti
President LG Motorsports



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