



## 2004 GTO HEADER INSTALLATION INSTRUCTIONS

Thanks for purchasing Stainless Works headers for your GTO. We have gone to great pains to make sure that our headers fit and perform flawlessly. Please follow these steps to ensure that your installation goes as planned. The factory manifold bolts can be re-used and we recommend using new GM manifold gaskets.

1. Remove factory manifolds and lead pipes back to the factory two bolt flange. Disconnect O2 sensors before removing from car. We also recommend disconnecting the battery and ECM before welding (if required).
2. In order to install Stainless Works long tube headers, it will be necessary to drop the steering rack and steering shaft in order to install the driver's side header. Disconnect the two hard lines for the power steering, and lower the rack out of the way.
3. Install headers by inserting both in from the bottom.
4. Install the factory gaskets in between header flange and block. Tighten bolts holding flange onto head to factory torque specs.
5. Install O2 sensors with never-seize on the threads-be sure not to touch or get never seize on the O2 element. Connect the O2 sensor harness' using the supplied O2 extenders.
6. Reinstall the steering shaft and rack and torque to proper specs. The rack will need to be centered perfectly in the opening in order for the steering shaft to turn properly. Align the steering shaft by moving the rack left to right to center the shaft in the header opening. You will need to bend the end of the retaining clip (located on the steering shaft U joint) for proper clearance. If there is any contact with the header, re-align the rack to obtain proper clearance. **DO NOT DRIVE THE CAR IF THE STEERING SHAFT CONTACTS THE HEADER.**
7. If using off road pipes, O2 simulators will be required for proper PCM operation, or the rear O2 sensors will need to be turned off using a software program such as LS1 edit.
8. After trial fitting the collector extensions, off road pipes (or catalytic converters), and rear pipes, cut four small 1/4-1/2" deep grooves with a fine tooth hacksaw blade on the expanded (outer) pipe to allow the pipe to compress and seal on the mating pipe. Deburr each piece after notching to ensure easy assembly.
9. Install the collector extensions, then the catalytic converters (or off road pipes), and lastly the rear bends with the two bolt flanges welded in place. We highly recommend using red high temp RTV inside of each pipe joint to allow the pipes to be disassembled. For the gasket on the two bolt flange, we use red high temp RTV, making sure the surfaces are clean and grease free. Allow the RTV to skin for 5-10 minutes, then assembly the joint to factory torque specs. Tighten all band clamps with a 1/4" drive ratchet. If the band clamps are over-torqued they will snap-you want the clamp tight enough to prevent the pipes from rotating.
10. The Stainless Works 3" rear pipes with the two bolt flange welded in place are much larger than the factory two bolt flange opening-this is not a mismatch and will work fine with the stock exhaust or other aftermarket 2 1/2" exhaust systems. It will work optimally with Stainless Works 3" chambered exhaust system for the 2004 GTO.
11. Check all fasteners for proper torque (see your factory assembly manual for proper torque specs).
12. Make sure to have adequate clearance around all exhaust pipes and drive car for 10-20 miles at legal speeds. Re-torque fasteners after heat cycling to allow for expansion.