



2005/2006 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. 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. Mark the rack and the frame so that the marks can be lined up for proper steering alignment at re-assembly. Disconnect the two hard lines for the power steering, and lower the rack out of the way.
2. Install headers by inserting both in from the bottom.
3. Install the factory gaskets in between header flange and block. Tighten bolts holding flange onto head to factory torque specs.
4. One thing that you may have to do when installing headers is to center the rack/steering shaft in the header opening. Due to production variances and tolerance stack ups, we have seen variances car to car that make moving the rack so that the steering shaft is centered in the header opening necessary. To do this, first make sure that the header is installed with the gasket and all bolts tight. Loosen the rack mounting bolts and slide the rack over to the passenger or drivers side as necessary. You may also have to bend a retaining clip on the steering shaft out of the way for proper clearance. Spin the steering to full lock both ways and make sure to have adequate clearance-if not, readjust the rack as necessary. Once this is completed the steering wheel will not be centered. With the front of the vehicle off the ground, center the steering wheel and then spin both tie rods the exact same number of turns (one clockwise and the other counterclockwise), until the steering wheel is perfectly straight and the front wheels are perfectly straight. **DO NOT DRIVE THE VEHICLE IF THE STEERING SHAFT IS CONTACTING THE HEADER!**
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 harness extensions.
6. If using off road pipes, the rear O2 sensors will need to be turned off using a software program such as LS1 edit.
7. After trial fitting the off road pipes (or catalytic converters), and rear pipes, cut four small $\frac{1}{4}$ - $\frac{1}{2}$ " 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.



8. Install the catalytic converters (or off road pipes), the front 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. For the gasket on the two-bolt flange, we use red high temp RTV, making sure the surfaces are clean and grease free. Then assemble the joint to factory torque specs. Tighten all band clamps tight enough to prevent the pipes from rotating.
9. 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" exhaust system for the 2005 GTO.
10. Check all fasteners for proper torque (see your factory assembly manual for proper torque specs).
11. 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.