



## **2011+ SHELBY GT500 HEADER INSTALLATION INSTRUCTIONS**

Thanks for purchasing Stainless Works Muscleflow Headers for your 2011+ Shelby GT500. We have gone to great pains to make sure that our exhaust systems fit and sound great. Please follow these steps to ensure that your installation goes as planned.

1. Stainless Works recommends the use of Permatex Hi-Temp RTV silicon gasket maker as an option to or in conjunction with the use of factory gaskets. The recommended RTV is Sensor-Safe P/N 101BR or 27BR, available at NAPA and other retailers.
2. Disconnect the battery before starting work on the exhaust system for your vehicle. Reconnect the battery when the job is completed.
3. Your exhaust system can be installed by a weekend warrior but the use of a lift is recommended for ease of installation. If using a jack, the vehicle must be placed on a level hard surface and jack stands are required for safety reasons.

### **Removal of Old System**

4. Raise and support vehicle.
5. Remove battery and battery box (8mm).
6. Remove air intake.
7. Remove oil service cover (underneath car) and front undercar valence (8mm and 7 mm).
8. Remove crossbar under engine (four 15mm nuts).
9. Loosen clamps at rear of H-pipe and loosen exhaust system. If you are replacing the exhaust system, remove it completely from the car by removing hangers on mufflers and slide out of the car (requires 13 mm and 15 mm).
10. Before removing lead pipes and manifolds take out O2 sensors (either unplug or take out with 7/8" wrench).
11. Mark steering shaft for later reassembly in the exact same location and remove 13 mm bolt and push shaft up on frame rail out of way. (Leverage a pry bar against frame rail).
12. Remove starter (three 10mm bolts) hang it out of the way with zip ties.
13. Remove EGR fitting on passenger side manifold and remove both manifolds (EGR fitting is removed with a crescent wrench).
14. Remove manifold studs with 5 mm socket.
15. Loosen the top nut for motor mounts (15mm) but remove driver side bolts completely and leave in general location but totally loose for installing headers.
16. When ready to install headers use drain pan and remove oil filter for driver side header.
17. Remove dipstick for install.

18. Remove three 8mm bolts from rubber and metal heater hose that blocks bottom of driver side header and undo clamp in engine bay to make metal hose loose.
19. Removal of alternator makes ease of header bolt tightening much easier (bolts 15mm, belt tensioner is 15mm).

### **Installation of Headers and Lead Pipes**

20. Apply sensor safe RTV silicone (or factory gaskets) to flange on headers and anti-seize to EGR fitting.
21. Install O2 extensions on first before installing headers. Zip tie the connections at both ends to assure that they will not separate. This will prevent any problems with a check engine light (CEL).
22. Before installing either header with the new header bolts (provided) put the bottom bolts with washers in until about 7/16" gap to head to set headers on and to actually install the bolts.
23. Raise driver side of motor up to install driver side header/ install passenger side header.
24. Put all header bolts in before tightening any of them.
25. Tighten header bolts to OEM specifications.
26. After header installed, bolt motor mount back onto block and with both top nut mounts loose move motor towards passenger side of compartment as far as it will go (which is only about 1/4" or so.).
27. Lower motor down and tighten mounts.
28. Install the front bolt and rear bolt for the rubber and metal heater hose. The middle bolt will not be able to be reinstalled.
29. Reinstall alternator, steering shaft, oil filter, starter, crossbar, air intake, battery box and battery.
30. Install cats with welded lead pipes (or offroad lead pipes) to X-pipe loosely first then all together put onto headers. Adjust as necessary and tighten all clamps.
31. After connected to headers and either factory exhaust or aftermarket exhaust install O2 sensors and zip tie the slack. If installing a Stainless Works catback system, please refer to those Installation Instructions.
32. Check oil level and refill to OEM specs. Reconnect the battery.
33. Be sure to have adequate clearance around all wires, hoses and lines. **If anything is in contact with the exhaust system, it will melt.** Make sure to have at least 1/2" of clearance and wrap any suspect areas with DEI thermal barrier wrap.
34. After double checking for clearance and making sure all lines, wires and hoses are secured, drive the car for 10-20 miles and re-check all clamps and clearances. Your system may be tack welded at the joints/ clamps to reduce shifting of the system during heating and cooling cycles. Make certain to disconnect the battery before performing any welding.