

## Installation Instructions and Warranty Information 6817S 97-00 Corvette 5.7L 6818S 01-04 Corvette 5.7L





This product is Not legal for Street or Off Highway use in California or in states that have adopted California Emissions Regulations and is only intended for Closed Course Competition use, except 1965 and Older US manufactured California Certified vehicles, 1967 or older US manufactured Federally Certified vehicles, or 1967 and older Foreign manufactured vehicles which may have any aftermarket add-on or modified part installed as long as the vehicle can still meet the tailpipe emission standards for the year of the vehicle and retain any original or retrofit crankcase control (PCV) devices and NOx device required for the year of the vehicle.

Read all instructions carefully before attempting installation.

PerTronix<sup>©</sup> thanks you for choosing JBA <u>HEADERS</u>, the best fitting, highest quality header on the mar-ket. In order to realize the full potential of our good fit, please read and understand these instructions completely prior to starting work.

Check to make sure you received the proper parts for your application. 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.

Notice: The coating of these headers can be marred or scratched during installation. If the header needs to be returned and is damaged, you will be charged for recoat.

JBA uses sealing beads on all 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, 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 pair of headers.

1. Place 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 oil on all accessible fasteners and fittings before attempting to remove them.

3. From the bottom side of the car, remove the exhaust midsection from the manifolds and rear flanges by the differential. Unplug the forward O2 sensors.

4. From above, remove the engine covers by tugging them up on their lower edge, and slipping the left side clear of the braided line. Remove the right side by unscrewing the oil cap and then tug up on the lower edge. Remove the spark plug wires, and spark plugs.

5. Unbolt the AIR tube fittings from the manifolds. Unhook the left one from the rubber hose and remove it from the car.

6. On the Drivers side, unplug the gang connectors from the coil packs and unbolt the metal coil pack brackets from the valve covers. (5 bolts each)

7. Loosen the serpentine belt. Remove the two bolts holding the alternator in its mount. Lift the alternator up and swing it toward the center of the engine - out of the way. Remove the dipstick.

8. Remove the bolts attaching the manifolds to the heads (6 each side).

9. Starting on the driver side, remove the lower nut from the driver side motor mount (see picture) raise the left side of the engine approximately 1". Remove the bolts holding the motor mount tower to the frame and the motor mount from the motor. Remove the steering shaft lower bolt and move the steering away from the motor. Remove the factory manifold from the top, you may have to rotate it around to get it out. Remove the 02 sensor from the header and test fit it in the new JBA header before installing the header, occasionally the threads may have to be chased to install the 02 sensor.

10. Remove the sensor that is just above the oil filter, then remove the oil filter. From the top, install the new JBA header from above using the supplied gasket and hardware. Leave the header loose and reinstall the motor mount and motor mount tower, then lower the engine and reinstall the lower nut in driver side motor mount. Reinstall the sensor on the motor and oil filter. Slip the V Band Clamp over the end of the collector before tightening the header to the engine as it is very tight around the transmission area and will be hard to do after the header is fully bolted up. Install the 02 sensor using a bit of sensor safe anti seize. Tighten the header to the motor using the supplied gaskets and header bolts with lock washers. Torque bolts to 13 ft.lbs. Reinstall the steering shaft and bolt.

11. On the passenger side remove the lower nut on the passenger side motor mount and raise the passenger side of the

motor approximately 1". Remove the two bolts from the starter and let the starter rest on the oil pan shelf. Install the new JBA header from above using the supplied gasket and hardware but leave a little loose. Reinstall the starter then tighten header fasteners. Lower the engine and re-secure the motor mount. Re-install the dipstick. Slip the V Band Clamp over the end of the collector before tightening the header to the engine as it is very tight around the transmission area and will be hard to do after the header is fully bolted up. Install the 02 sensor using a bit of sensor safe anti seize.

12. From above, install the new JBA Headers using the supplied bolts, lock washers and gaskets (Apply a small amount of anti-seize to the threads of the bolts before installing on aluminum heads). Torque to 13 lbs./in on aluminum heads.

13. Re-install the spark plugs, and plug wires. Reinstall coil packs, attach gang connector. Reconnect O2 sensor connectors.

14. Using the supplied gaskets and hardware provided, re-attach AIR tubes to header. Check to make sure the AIR bolts do not bottom out on the header tubes.

15. Cut the exhaust pipes ahead of the catalytic converters right at the weld. This is double wall so be patient while cutting. Bolt the exhaust midsection back in place and rotate the reducer until it fits the front of the cat. Weld he reducers to the cat inlets once everything is properly in place If necessary lower the exhaust to weld the top of the reducers to the cats..

16 Recheck Everything! Check for adequate clearance everywhere on brake lines, etc.

17. Reconnect the battery cable and install engine covers.

18. Start the engine and let it warm up. Check for leaks. Shut engine off and let it cool down. Check to make sure all fasteners are tight.

19. Periodically check and retighten the header bolts.

1997-03 Corvettes use a flat connector on the O2 Sensor. it is generally agreed that this is a problematic type of O2 sensor. It is recommended that 97-03 owners mover the rear O2 sensor to the front position and shut off the rears in the computer. Optionally you can get an extension for the flat type from Casper Electronics, part #109013. For all cars that use the Square type O2 sensor, you will possibly need 2 extensions, JBA part #6611W.

## Parts List:

- (1) Driver's Side Header Assembly
- (1) Passenger's Side Header Assembly
- (12) 8mm 1.25 x 25mm Header bolts (Torque to 13 lbs./ft on aluminum heads)
- (2) Header gaskets
- (2) Air tube gaskets
- (4) 8mm x 25 bolts for AIR tube
- (2) Header Reducers
- (2) V-Band Clamps

## LIMITED ONE YEAR WARRANTY

All JBA HEADERS and exhaust products are guaranteed, to the original purchaser, to be free of defects in materials and workmanship for one year. This warranty covers the replacement or repair of the product only and does not cover the cost of removal and installation, customer applied aftermarket coatings or any discoloration or corrosion of finished surfaces.

Damage or product failure resulting from collision, improper installation, off-road use, road hazards, the use of exhaust insulating wrap or like products or rust occurring after installation, is not covered by the warranty. The warranty extends only to the original purchaser.

Should a part become defective it should be returned to the original selling retailer and must be accompanied with the sales receipt. If there is no retailer in your area, call the factory for a return authorization and return your part prepaid to the factory for inspection. PerTronix reserves the rights to replace or repair the alleged defective part and return the part freight collect.

