

Corporate Office: PerTronix Inc. 440 E. Arrow Highway, San Dimas, California 91773 \* Phone 909.599.5955 • FAX 909.599.6424

# **Installation Instructions and Warranty Information**

6685S 2011-13 Mustang 5.0





WARNING: These headers are legal for Off Highway use (except in California or states that have adopted California emission standards) or Racing use (which may never be used on a Highway), or for use on pre emission controlled motor vehicles/motor vehicle engines (pre 1966 domestic vehicles certified to California standards, pre 1968 domestic vehicles certified to Federal standards and all pre 1968 Foreign vehicles) Only.

Read all instructions carefully before attempting installation.

PerTronix© thanks you for choosing JBA HEADERS, the best fitting, highest quality header on the market. 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.

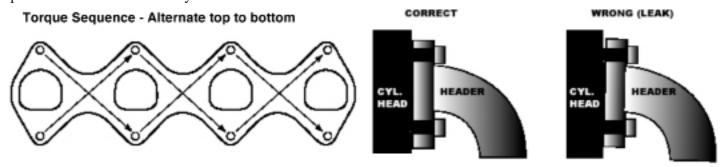
- 1. Due to the extreme difficulty in installing this header, it is highly recommended that the installation be performed on a lift. You will be installing these headers from underneath and also must have the means to lift the motor up within the chassis using a tall screw type jack.
- 2. Do not attempt to work on a hot engine. Heat causes metal to expand and makes removal of fasteners difficult at best. Disconnect the negative battery cable from the battery.
- 3. Spray WD-40 or some type of penetrating oil on all accessible fasteners and fittings before attempting to remove them.
- 4. Unplug the O2 sensors from the catalytic converter assembly. unbolt the convertros from the factory headers and unclamp them from the factory H Pipe. remove the convertors.
- 5. Unclamp the factory H Pipe from the exhaust pipe and remove the H Pipe from the car.

### **Driver side:**

- 6. Remove the nut on the driver side motor mount to allow the engine to be raised.
- 7. Place the jack under the oil pan using a block of wood to distribute the load.
- 8. Lift the motor approximately 2-3". Unbolt the aluminum motor mount stand from the block and remove the aluminum stand.

- 9. Remove the bolts that attach the steering shaft U Joints to the steering rack and the steering column, Remove the shaft.
- 10. Remove the nuts attaching the header to the cylinder head. Some of these are very difficult to access. Remove the studs from the cylinder head and remove the factory header.
- 11. Slide the JBA Long Tube header into position. Slip the Gasket between the header and the block and install the studs back into the cylinder head. Install the original nuts back onto the studs and tighten them evenly a little at a time, if you tighten one or two completely you may not be able to get a wrench on the remaining ones to tighten them. Take your time on with a turn or two on each one.

Note: To ensure a tight seal - use an alternating torque sequence to snug the header to the head working both top and bottom bolts in evenly. Failure to do this will result in leaks.



- 12. Place the aluminum motor mount stand back in place, install and tight the three bolts to the block.
- 13. Lower the motor so that the motor mount stand contacts the rubber mount. Reinstall the nut on the motor mount and tighten.

## Passenger Side:

- 14. Remove the passenger side motor mount nut to allow the engine to be raised. Remove the three bolts from the starter. Remove the wires from the starter and remove it from the car.
- 15. Remove the nut on the driver side motor mount to allow the engine to be raised.
- 16. Place the jack under the oil pan using a block of wood to distribute the load.
- 17. Lift the motor approximately 2-3". Unbolt the aluminum motor mount stand from the block and remove the aluminum stand.
- 18. Remove the nuts attaching the header to the cylinder head. Some of these are very difficult to access. Remove the studs from the cylinder head and remove the factory header.
- 19. Slide the JBA Long Tube header into position. Slip the Gasket between the header and the block and install the studs back into the cylinder head. Install 2 of the original nuts back onto the studs loosely to hold the header.
- 20. Reinstall the starter motor.
- 21. Install the remaining nuts and tighten them evenly a little at a time as you did with the Drivers side.
- 22. Install the aluminum motor mount stand and tighten the bolts to the block. Lower the motor back onto the rubber mount and tighten the nut.
- 23. Slip the steering shaft back into position and tighten the pinch bolts.
- 14. Install the 02 sensors into the headers using a dab of anti sieze. Ford Racing recommends using the upper location for the most accurate readings, Some tuners like to use the collector location. Install the Plugs in which ever location you do not use. If you need extensions JBA has those available
- 15. JBA offers Hi Flow X & H pipes to use with these headers (call your performance retailer or JBA direct for more info) or you can use the supplied reducers to build your own exhaust system.
- 16. 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.
- 17. Periodically check and retighten the header bolts

#### **Parts List:**

- (1) Driver's Side Header Assembly
- (1) Passenger's Side Header Assembly
- (2) 02 bung plugs
- (2) V Band Clamp
- (2) Gaskets
- (2) Reducers

# 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.

