

# **Installation Instructions and Warranty Information**

Part # 1675S 2005-10 Ford Mustang GT 4.6L 3v V-8



The product accompanying this document has been granted a California Air Resources Board (CARB) exemption, an "E.O." number, or is a direct or consolidated replacement part. It is 50-state legal, when installed on the appropriate vehicles per the manufacturer's application guide.

PerTronix<sup>©</sup> 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. This installation requires jacking up the motor and removing the motor mounts. It is suggest that a lift is used for this operation. If not available, you will need to have the car at least 24" off the ground. Place vehicle in a location where the floor is solid and flat, with adequate lighting. 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 the jack stands. 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 and remove the battery and the battery tray this allows access to the pass side O2 sensor connection.
- 2. Apply penetrating oil on all accessible fasteners and fittings before attempting to remove them.
- 3. Loosen the clamps at the rear of the exhaust to H-Pipe connection.
- 4. Disconnect all 4 O2 Sensor plugs. Unbolt the exhaust flanges to stock manifolds and remove the H Pipe.

#### **Driver side-**

- 5. Remove the lower bolt from the steering shaft coupler at the power steering rack. Remove the bolt attaching the rack to the frame on the driver's side. Loosen the same bolt on the passenger side. Loosen from the bolt side, the nuts are welded to the crossmember. Slide the rack forward on the driver's side approximately 1" removing the steering shaft coupler from the rack as you do. Do not rotate the steering shaft more than 180 degrees.
- 6. If so equipped, remove the strut brace from the engine compartment. Place a jack with a board between the jack and the oil pan to support the motor. Remove the nut that holds the engine mount to the rubber isolator. Remove the four bolts from the engine mount on the side of the block on the drivers side. Raise the engine approximately 1"
- 7. Remove the heat shield from the stock manifold. Remove the nuts attaching the manifold to the cylinder head. Remove the factory manifold. Remove the O2 sensor from the manifold.
- 8. Remove the exhaust manifold studs from the cylinder head. Remove the dip-stick.
- 9. Apply a small amount of anti seize to the O2 sensor and install in the drivers side header. Apply a small amount of anti seize to the supplied header bolts. Place the JBA Gasket on the cylinder head using the top front & rear bolt holes and the supplied header bolts and washers. Leave the bolts loose to slide the header in place. Slip the header into place and install the remaining bolts and washers. Tighten the headers bolts evenly starting from the middle and working your way to the ends. Torque all the header bolts to 23 ft. Lbs.
- 10. Re-install the dipstick. You may have to bend it slightly to feed it between the header tubes.
- 11. Reconnect the steering coupler as you move the rack back into place. Replace the mounting bolt and tighten both bolts securely. Lower the engine, replace the motor mount bolts and tighten.

### Passenger side-

- 12. Place a jack with a board between the jack and the oil pan to support the motor. Remove the nut that holds the engine mount to the rubber isolator. Remove the four bolts from the engine mount on the side of the block on the drivers side. Raise the engine approximately 1"
- 13. Unbolt and remove the manifold. Remove the bolts attaching the starter, then swing starter out of the way.
- 14. Remove the studs from head. Place the JBA Gasket on the cylinder head using the top front & rear bolt holes and the supplied header bolts and washers. Leave the bolts loose to slide the header in place.
- 15. From below, slip the header into place and install the remaining bolts and washers. Torque all the header bolts to 23 ft. Lbs.
- 16. Reinstall the starter. Lower the engine, replace the motor mount bolts and tighten.
- 17. Re-connect the stock H Pipe, or install a JBA High Flow H Pipe, and re connect the O2 sensors.
- 18. Check to make sure that all the wiring, fuel lines, transmission cooler lines, brake lines, hoses, etc. are clear of the headers or any exhaust components and reroute or relocate those components as necessary.
- 19. Install the battery tray and battery. Install the Strut brace is removed. Re connect the battery. Start the car, check for leaks and test drive. Let the motor cool down and re-torque all fasteners.
- 20. Header bolts can become loose in normal use, periodically check and retighten as necessary.
- 17. Reconnect the battery.
- 19. Start the engine, check for leaks and test drive. Then let engine cool and then re-torque the header bolts.
- 20. Periodically check and retighten the header bolts.
- 17. Reconnect the battery.
- 19. Start the engine, check for leaks and test drive. Then let engine cool and then re-torque the header bolts.
- 20. Periodically check and retighten the header bolts.

#### **Parts List:**

- (1) Driver's Side Header Assembly
- (1) Passenger's Side Header Assembly
- (16) 8mm Header Bolts
- (16) 8mm Lock Washers

- (4) 3/8-16 x 2.5 "Collector Bolts
- (4) 3/8-16 Nuts
- (4) 3/8" Lock Washers
- (2) Header Gaskets



San Dimas, CA 91773

(909) 599-5955

This vehicle is equipped with:

Dougs Headers # D66XX JBA Headers # 16XXS

Legal for sale and installation in California

D-57-19 & D-57-27

# WARNING

This label is required to aid in passing the California smog check program. This label must be installed in an underhood location that is readily visible.

## 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.

