

Installation Instructions and Warranty Information

6673S 2005-10 Mustang 4.6L 3V 2.5" Collector 6675S/36675S 2005-10 Mustang 4.6L 3V 3" Collector





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.

For refinement, both Ford V-8 engines are installed using hydro mount bushings on either side of the block. These liquid-filled engine mounts are tuned to quell specific unwanted vibration. Under extreme driving conditions these mounts allow excessive engine movement. We recommend replacing these motor mounts with performance mounts available from Steeda PN# 555-4005.

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 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. Loosen the clamps connecting the H-pipe to the exhaust system. Disconnect the exhaust system from the H-pipe assembly. Unplug the O2 sensors and remove the converter assembly from the vehicle.

Driver side:

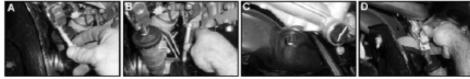
4. Remove the nut on the driver side motor mount to allow the engine to be raised.

5. Remove the nuts attaching the manifold to the cylinder head.

6. Raise the engine approximately 1", remove the manifold. With the manifold out - lower the engine.

7. Remove the two lower rear exhaust studs, and the three rear top studs. Remove the dipstick.

8. (A) Remove the lower bolt from the steering shaft coupler at the power steering rack. (B) Remove the bolt attaching the steering rack to the frame on the driver's side. Loosen the same bolt on the passenger side. (C) Slide the power steering rack forward on the driver's side approx. 1". (D) Remove steering shaft coupler from the rack. (See images)



9. Install the JBA Header gasket on the remaining studs.

10. Raise engine about 1" and install the new JBA Header. Install the supplied bolts w/ lock washers where you removed the studs. Re-install the dipstick. You will have to space the top mount away from the head with the spacer provided. Reconnect the steering coupler, move the Rack back into place.

Replace the mounting bolt and tight both bolts securely. Lower engine, replace mount nut.

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.

Torque Sequence - Alternate top to bottom CORRECT WRONG (LEAK)

Passenger Side:

11. Remove the passenger side motor mount nut to allow the engine to be raised. Remove the three bolts from the starter. Let it rest on the frame for now. Raise the engine approximately 1" - then unbolt and remove the manifold.

12. Leave the top forward stud in place, remove the other seven. Install the JBA Headers Gasket.

13. Slip the new header into place. (With the engine raised, slip the header past the starter boss till the boss is between the 3rd and 4th tubes. Then lower the engine until the header will slip over the starter boss. Then raise the engine up to finish the placement of the header. You will have to lower it to finish the installation). Replace the motor mount nut, and tighten securely.



14. Replace the starter. Install the 02 sensors into the headers using a

light dab of anti sieze. Connect the O2 sensors using the supplied extension harnesses.

15. Install the apporpriate JBA Mid Pipe (sold seperately) to complete your installation. Re-connect the exhaust. Reconnect the battery cable. Recheck everything for adequate clearance on A/C lines, steering shaft, brake lines, etc.

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

(16) 8mm Header fasteners w/ lock washers

- (1) Dipstick tube spacer (3/8" Nut)
- (2) O2 Sensor Harness Extensions
- (2) JBA Header Gaskets

## 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.

