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## Installation Instructions and Warranty Information

## 6632S 1996-04 Mustang 4.6L 2V 6635S 1999-04 Mustang Cobra 4.6L DOHC





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 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.

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. Disconnect the exhaust system from the catalytic converter assembly. Unplug O2 sensors and remove the converter assembly from the vehicle.

4. Unbolt the starter from the bell housing and let it hang out of the way.

5 Loosen the EGR tube located at the rear of the driver side manifold.

6. Remove the motor mount nut under the passenger side manifold.

7. Now raise the passenger side of the engine by placing a wood block under the oil pan and jacking it up approximately 1".

8. With the engine raised, unbolt the passenger side manifold and remove the manifold studs.

9. Install the passenger side header using the supplied hardware and gasket. Apply a small amount of anti-seize to all header bolts before threading. Torque to 13 lbs./in. Reconnect the air fitting if equipped.

10. With the passenger side header installed, lower the engine onto the motor mount and tighten the motor mount nut.

11. Reinstall the starter.

12. Disconnect the steering shaft from the steering rack and swing it out of the way.

13. Disconnect the EGR tube from the driver side manifold and remove the driver side manifold and dipstick tube. Make sure to remove all of the manifold studs. (For easier access remove the oil filter)

14. From underneath the vehicle, slip the new header into place. Then, from the top, slide the dipstick tube through the header between the second and third tube, and the head flange. Guide the tube under the motor mount and into its hole. (Start on top and finish underneath.)

15. Loosely attach the EGR tube to the new header. Then install the header using the supplied hardware and gasket. Remember to prepare the header bolts with anti-seize and torque to 13 lbs./in. Reconnect the air fitting if equipped.

16. Tighten the EGR tube. Now reconnect the steering shaft to the steering rack. Attach the dipstick tube to the head using the supplied spacer and original bolt. (Don't forget to reinstall the oil filter.)

17. Install JBA h-pipe (part number 6625H or 6625HC) or custom intermediate exhaust after the headers. Connect h-pipes to the exhaust system.

NOTE: Apply a small bead of high temperature silicone around the dome on the passenger side header for added leak protection.

18. Reconnect the battery cable.

19. Re-check everything for adequate clearance on A/C lines, steering shaft, brake lines, etc.

20. 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.

21. Periodically check and retighten the header bolts.

Parts List:

- (1) Driver 's Side Header Assembly
- (1) Passenger 's Side Header Assembly
- (2) Header gaskets (Header to Head flange)
- (1) Base flange gasket
- (18) 8mm x 1.25 Header bolts w/lock washers (Torque to 13 lbs./in on aluminum heads)
- (2) 3/8" x 1-1/2" Collector bolts w/washers -(2 flat washers and 1 lock washer per)
- (2) 3/8" x /2" Collector bolts w/washers -(2 flat washers and 1 lock washer per)
- (2) 8mm flat washers
- (1) 8mm x 1.25 nut
- (1)Dipstick tube spacer

## 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.

