

Installation Instructions and Warranty Information

2005-10 Ford Mustang 4.0L V-6 PN # 1617S





This Product has been granted a California Air Resources Board (CARB) "E.O" (Executive Order) Exemption, or is considered a Direct Replacement or Consolidated Replacement part. It is 50 State Legal when installed on the appropriate vehicle per the Manufacturer Application guide and Installation Instructions.

Read all instructions carefully before attempting installation.

PerTronix[©] thanks you for choosing JBA <u>HEADERS</u>, 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.

INSTALLATION INSTRUCTIONS

- 1. Place the vehicle in a location where the floor is solid and flat, with adequate lighting. Allow the engine to cool, do not attempt to work on a hot engine. Heat causes metal to expand and makes removal of fasteners difficult at best. 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. Disconnect the negative battery cable.
- 3. Apply penetrating oil on all accessible fasteners and fittings before attempting to remove them.
- 4. Disconnect the four 02 sensors. Loosen the clamps on the exhaust to H-Pipe connection and, then unbolt and remove the H-Pipe.
- -Drivers Side-
- 1. Remove the EGR tube by loosening the nut on the manifold (make sure that the fitting in the manifold does not move or it may kink the EGR tube; hold the fitting in place with a stubby 1" wrench)
- 2. Remove the nuts attaching the exhaust manifold to the cylinder head.
- 3. Remove the oil dipstick.
- 4. Remove the exhaust manifold.
- 5. Use an E7 female Torx socket to remove the exhaust studs (if you do not have an E7 female torx socket, you can use the double-nut" method; this will take more time, but it works just as well)
- 6. Remove the gaskets and any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent will ease the removal of any gasket material. Use care not to get debris into ports or spark plug holes.
- 7. Remove the two small bolts attaching the coil pack bracket to the intake manifold. Remove the two bolts attaching the coil pack bracket to the cylinder head (One bolt has a 15mm head, the other bolt has a 10mm head).
- 8. From the top install the header using the supplied gasket, bolts &lock washers. Be sure to position the coil pack bracket on the outside of the header. Re-install the coil pack bracket using the original large bolt, and a new bolt supplied in the hardware kit (8mm x 25mm). There are two extender brackets for the top mounts. Re-use the original bolts at the intake side, and two new bolts and nuts on the bracket side.
- 9. Re-install the dipstick.
- 10. Re-install the EGR tube.
- -Passenger side-
- 1. Unbolt and remove the exhaust manifold.
- 2. Use an E7 female torx socket to remove the exhaust studs (if you do not have an E7 female torx socket, you can use the double-nut" method; this will take more time, but it works just as well)
- 3. Remove the gaskets and any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent will ease the removal of any gasket material. Use care not to get debris into ports or spark plug holes.
- 4. Remove the two small bolts attaching the coil pack bracket to the intake manifold. Remove the two bolts attaching the coil pack bracket to the cylinder head (One bolt has a 15mm head, the other bolt has a 10mm head).
- 5. From the top, slip header into place. Install with gasket and hardware supplied. Be sure to locate bracket on outside of header. Re-install the coil pack bracket using the original large bolt, and a new bolt supplied in the hardware kit (8mm x 25mm). There are two extender brackets for the top mounts. Re-use the original bolts at the intake side, and two new bolts and nuts on the bracket side.
- 6. Re-connect the H-pipe using bolts, washers and nuts supplied. Apply Hi Temp Sensor Safe Silicone to the collector domes. Reconnect the exhaust.
- 7. Reconnect the 02 sensors. Reconnect the battery cable.
- 8. Check that all bolts are tight. Make sure that all wiring, fuel lines, transmissions lines, brake lines etc are clear of the headers and the exhaust and relocate as necessary.
- 9. 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

Parts List:

- Left Side HeaderRight Side Header
- 2 Header Gaskets
- 1 6mm x 25 Hex Bolts
- 1 CARB Sticker

- 2 1/4 x 1" Hex Bolt
- 2 1/4 Lock Washer
- 2 1/4 Nut
- 16 8mm x 25 Header Bolts

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.

