

# Installation Instructions Part # 1528S 2007-11 JEEP Wrangler 3.8L V6





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

NOTE: This installation requires removal of Right Front Fender, to reinstall it is required that you obtain the plastic "T" Fasteners that hold the fender on from the Jeep Dealer. The part # is 68039280AA 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.

- 2. Disconnect the negative battery cable from the battery.
- 3. If a lift is not available, raise the front of the vehicle 2 feet or higher 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.
- 4. Apply penetrating oil on all accessible fasteners and fittings before attempting to remove them.
- 5. From underneath, remove bolts attaching exhaust pipes to manifolds.

## **Drivers Side**

- 1. Remove bolts attaching heat shields to manifold. Remove heat shields.
- 2. Remove bolt attaching manifold to cyl. head. Remove manifold
- 3. The rear two spark plug wires need to be changed. Disconnect the wires from the coil pack noting their position. Remove them from the spark plugs.
- 4. The new JBA wire with two 90\* ends goes on the middle plug, the longer boot goes on the plug end. Route the wire under where the header will go, around to the front, and up to the coil pack. The rear wire will go on later.
- 5. Install header using the supplied hardware, and re-using the original gasket or a new factory gasket. Apply a little high-temp RTV silicone to the gasket.
- 6. The rear plug wire can now be installed. The 45\* end goes on the plug, and the wire gets routed up over one of the heater hoses, and back to the coil pack.

# Passenger side

- 1. The passenger side is easiest to install with the fender removed. After removing the five small bolts from the under side, and disconnecting the wire for the side light, the fender is held on with plastic "T" fasteners. The back side of the fender is not accessible to release the clips, a healthy pull is required to remove the fender.
- 2. Remove the bolts attaching the heat shield to the manifold. Remove the heat shields.
- 3. Remove the bolt attaching the manifold to the head. Remove the manifold.
- 4. Install header using the supplied hardware, and re-using the original gasket or a new factory gasket. Apply a little high-temp RTV silicone to the gasket.
- 5. Apply a little high-temp, sensor-safe, RTV silicone to the flare of the exhaust pipes. Re-connect the exhaust to the headers using the hardware provided.
- 6. Check for adequate clearance on all fuel lines, wire looms, heater hoses, spark plug wires, etc.
- 15. Re-connect Negative battery cable.
- 7. Start engine and check for leaks.
- 8. Replace fender, connect wire for side marker.
- 9. Test drive and allow to cool down. Check all bolts and re torque as necessary.
- 9. Headers require periodic maintenance, including re-tightening header bolts. They should be checked every 5000 miles, or when you change the oil.

### Parts List:

- (1) JBA Plug Wire
- (1) Passenger's Side Header Assembly
- (1) Driver's Side Assembly
- (4) 3/8"-16x2" Bolts
- (4) 3/8"-16x2" Nuts
- (4) 3/8" Lock Washer
- (4) 3/8" Flat Washers