

Installation Instructions

JBA <u>Headers</u> for JEEP Wrangler 4.0



Part # 1526S 1991-99 Part # 1527S 2000-06



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 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. 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. Before continuing allow enough time for fuel pressure to bleed down.

2. Disconnect the negative battery cable from the battery.

3. If a lift is not available, 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.

4. Apply penetrating oil on all accessible fasteners and fittings before attempting to remove them.

5. From below disconnect the exhaust system from the exhaust manifold.

6. Remove the air cleaner assembly.

7. Remove the serpentine belt.

8. Unbolt the power steering pump from intake manifold.

9. Unplug wire harness from fuel injectors.

10. Disconnect the various electrical connectors, O2 sensor, TPS, temp sender, etc. Unbolt the wire harness trough and swing out of the way.

11. Disconnect vacuum lines on intake manifold.

12. Unbolt the fuel line bracket from side of intake manifold.

NOTE: Working with raw fuel is hazardous. Use appropriate caution.

13. Using the proper tool, disconnect the fuel line from fuel rail. Cover the end of fuel line to insure against contamination, and minimize leakage.

14. Remove bolts attaching intake manifold to cylinder head. Remove manifold.

15. Remove two nuts, and one bolt attaching exhaust manifold to head. Remove exhaust manifold.

16.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.

17. Place the supplied gasket over exhaust studs and dowel pins.

18. Install header using factory nuts, and bolt.

19. Pre-install the two lower center bolts. Leave the bolts loose enough to slip the intake manifold under the washers, and over the dowel pins.

20. Install the remaining intake bolts. Tighten the intake manifold bolts to factory specs, using proper torque sequence.

21. Reconnect all electrical connectors, vacuum lines, and re-attach wire trough.

22. Reconnect the fuel line. Push and pull a couple of times to insure proper engagement. Reattach fuel line bracket.

23. Reconnect the power steering pump and serpentine belt.

24. Reinstall the air cleaner assembly.

25. Reconnect the exhaust system to the header using the supplied hardware.

26. Reconnect the battery cable. Energize the ignition switch several times without starting the engine, and check for fuel leaks.

27. 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.

28. 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:

- (1) JBA Headers
- (1) Head flange gasket
- (2) Collector bolts with nuts and lock washers