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## **Installation Instructions and Warranty Information**

### **2005-2006 Nissan Frontier 4.0L V6**



## **Part # 1410S**

**WARNING:** These headers are legal for Off Highway use (except in California or states that have adopted California emission standards) or Racing use (which may never be used on a Highway), or for use on pre emission controlled motor vehicles/motor vehicle engines (pre 1974 domestic vehicles certified to California standards, pre 1974 domestic vehicles certified to Federal standards and all pre 1974 Foreign vehicles) Only.

**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.

NOTE: Installation of this product requires an adequate workspace, general mechanic's tools, general mechanical "know-how" and a reasonable degree of experience. Most auto enthusiasts with these resources will have little difficulty installing these headers. However, you should carefully read these instructions before attempting to install these headers. If in doubt, consult a professional mechanic. (Better to do it now than to get stuck halfway through the installation.)

By installing your JBA Performance Exhaust product, you indicate that you have read this document and agree with the following terms. The Purchaser is responsible for following all installation instructions and safety guidelines supplied with JBA Performance Exhaust products.

PerTronix© assumes no responsibility for damages resulting from improper operation, misuse, abuse, or lack of responsible care, or any problems resulting from incompatibility with other manufacturer's products.

Included with your installation instructions is a copy of the product warranty. Please read it carefully before you begin any work on your vehicle.

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.

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 important when installing the header, to install all bolts loosely, then tighten evenly to ensure the flat installation of the flange. It is normal for the flange to be raised off the cylinder head the thickness of the sealing bead.

To prevent leakage, it is important to tighten the flanges on any set of JBA headers carefully by using the proper procedure. 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. Do not attempt to work on a hot engine. Heat causes metal to expand and makes fasteners more difficult to remove and can cause burns.
2. Remove negative battery cable.
3. If a lift is not available, raise the front of the vehicle 2 feet or higher to obtain adequate access to the exhaust system. Use large base jack stands. Do not rely on a jack. Block the tires to prevent the vehicle from rolling off the jack stands
4. Apply penetrating oil to all fasteners before attempting to remove them.
5. From underneath, remove the four nuts connecting the exhaust to the catalytic converters. Remove the two 12mm headed bolts from the front exhaust hanger. Push the exhaust system back as far as it will go (about 1 ").

### **DRIVERS SIDE**

1. Remove the three bolts attaching the heat shield to the exhaust manifold. Wiggle the heat shield off to the side to get access to the upper stud on the catalytic converter.
2. Disconnect the O2 sensor plug. Remove from the bracket.

3. Remove the three 14mm nuts attaching the converter to the manifold. Remove the converter from the vehicle.
4. Remove the heat shield.
7. Carefully remove the six nuts attaching the manifold to the cylinder head.  
(NOTE: The nuts are easily stripped, a 6 sided socket is recommended.)
8. Remove the manifold.
9. 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.
10. Install header using the original gasket, or a new factory gasket, with the original nuts.

## **PASSENGER SIDE**

This side is easiest to access through the wheel well.

1. Remove right front wheel, and inner fender well.
2. Remove three 10mm headed bolts attaching the heat shield to the manifold.
3. Remove the O2 sensor from the Catalytic Converter.
4. Remove the three nuts attaching the convertor to the manifold and remove the convertor from the truck.
5. Place a board between the oil pan and a jack to support the motor.
6. Reaching over the upper control arm with a 12" extension and a 18mm socket, remove the two bolts attaching the motor mount to the frame. Raise engine about 1".
7. Reposition heat shield to allow access to the manifold bolts.
8. Remove the six nuts attaching manifold to head.
9. Remove the manifold and heat shield. 1. 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.
10. Slip header into place from underneath.
11. Install header reusing the original gasket, or a new factory gasket, with the original nuts.
12. Lower engine. Secure motor mount.

## **EXHAUST**

1. Reinstall both converter assemblies using factory hardware and supplied bolts with lock washers and nuts. Reconnect O2 sensors.
2. Reconnect exhaust to the converters using factory hardware. Reconnect exhaust hanger.
3. Check that all bolts are tight. Make sure that all wiring, fuel lines, transmission lines, brake lines, etc. are clear of headers and exhaust and relocate as necessary.
4. Re-install inner fender-well, and tire. Reconnect the negative battery cable
5. Start the engine and check for leaks. Test Drive, let engine cool and retorquing all hardware.
6. After 100 miles, and periodically Re-torque the header bolts.

**Parts List:**

- (1) Driver side header assembly**
- (1) Passenger side header assembly**
- (2) 10mm – 1.25 x 35 Bolts with nuts and lock washers**

**\*This product is designed to re-use the original manufacturer's 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.



