

Installation Instructions Part # 1410S 2005-16 Nissan Frontier/ Path inder 4.0LV6





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.

- 1. Remove battery cable.
- 2. 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 cat. 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.
- 5. Carefully remove the six nuts attaching the manifold to the cyl. head. (Note: The nuts are butter soft and will easily round off. A flank drive type of socket is recommended.)
- 6. Remove the manifold.
- 8. Remove the carbon build up from the cylinder head, being careful not to gouge the head surface. 9.Install header using the factory gasket with the original nuts.

PASSENGER SIDE

This side is easiest to access through the wheel well.

- 1. Raise right side, support on jack stand. Don't rely on the jack alone. Remove 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 Cat Converter.
- 4. Remove the three nuts attaching the cat. to the manifold. Remove the cat.
- 5. 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.
- 6. 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. Remove the carbon build up from the cyl. head, being careful not to gouge the head surface.
- 10. Slip header into place from underneath. Bolt the header to the head using the factory gasket with the original nuts.
- 11. Lower engine. Secure motor mount.

EXHAUST

- 1. Apply a thin bead of 02 sensor safe high temperature silicone to the factory catalytic converter gasket on the cat assemblies.
- 2. Reinstall both converter assemblies using factory hardware and supplied bolts with lock washers and nuts. Reconnect O2 sensors.
- 3. Reconnect exhaust to the converters using factory hardware. Reconnect exhaust hanger.
- 4. Recheck everything to ensure adequate clearance on brake lines, fuel lines, coolant hoses, etc.
- 5. Start engine, check for leaks.
- 6. Re-install inner fenderwell, and tire.
- 7. Re-torque the header nuts.

Parts List:

- (1) Left Side Header
- (1) Right Side Header
- (2) 10mm-1.25 x 35mm Bolts
- (2) 10mm Nuts
- (2) 10mm Lock Washers
- (1) CARB Sticker