

# JBA<sup>®</sup> performance exhaust

Corporate Office: PerTronix Inc. 440 E. Arrow Highway, San Dimas, California 91773 \* Phone 909.599.5955 • FAX 909.599.6424

## Installation Instructions and Warranty Information Part # 1400S 2004-16 Nissan Armada / Titan Infinity QX56/QX80 5.6L V8 Oval Port Only



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.

### **WARNING**

This product can expose you to chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov/product](http://www.P65Warnings.ca.gov/product)

Read all instructions carefully before attempting installation.

Rev.7 5-22-17 DSL

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.

## INSTALLATION OF THESE HEADERS REQUIRES WELDING READ ALL INSTRUCTIONS BEFORE ATTEMPTING INSTALLATION

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 battery cables 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. Unbolt the factory exhaust from the catalytic converter assemblies on each side and move the exhaust back a few inches.

Driver side:

1. Support the engine using a floor jack with a block of wood under the oil pan. Use caution when doing this as you are going to remove the motor mount and need to make sure the engine will not shift.
2. With the engine properly supported, unbolt the two bolts attaching the mount to the frame and 4 bolts attaching it to the engine block. Now lift the engine approx. 1".
3. With the engine raised, loosen the (4) screws attaching the heat shield to the factory manifold.
4. Remove the O2 sensor from the factory manifold.
5. With the O2 sensor out of the way, remove the heat shield. It will not come out easily. Extreme force may be required.
6. Remove the nuts attaching the factory manifold to the cyl. head. Be careful, the nuts round off easily.
7. Remove the manifold/cat assembly from the truck.
8. The Catalytic Converter is welded to the factory manifold and needs to be cut from the factory manifold. The following steps are critical to retain the integrity of the Emissions system and must be done properly for the vehicle to remain legal for road use.
9. Make a mark 3/16 of an inch above the factory weld at the converter. This measurement is critical to maintain the cat in the original factory location. Now carefully make your cut as squarely as possible.
10. Temporarily install your new JBA Header (3 nuts will do).
11. Lower the engine and reinstall the motor mount.
12. Bolt the driver side converter to the exhaust system, then move the entire exhaust system forward into place. Reconnect the passenger side manifold/cat assembly to the exhaust. The exhaust/cats should easily bolt back into the factory position with no binding or force necessary. This is important to maintain original location of the cats for proper running and engine calibration. Make certain that the exhaust system is all the way back into original position.
13. Align the driver side header collector with the catalytic converter so that the converter slips into the collector. With it properly aligned and in place, tack-weld the two together securely enough that it cannot move.
14. With the header and converter tacked together, unbolt the converter from the exhaust system, remove the motor mount, raise the engine up again, and then remove the header/converter assembly.
15. Finish welding the header and catalytic convert together. Make sure there are no pinhole leaks. (Avoid prolonged exposure to high temperature and heat build up by welding in segments and allowing cat assembly to cool)
16. Install the header/cat assembly on the driver side using the supplied gasket.
17. Lower the engine and reinstall the motor mount securely.
18. Reinstall the O2 sensor.

Passenger Side:

1. Remove the engine oil dipstick tube by unbolting from the engine and then pulling and wiggling the tube out of the boss.
2. Repeat steps 2 through 18 to install the passenger side header.
3. Reinstall the oil dipstick tube and bolt it to the engine.
4. Lower the engine and reinstall the motor mount bolts securely
5. Bolt the exhaust to the catalytic convertors
6. 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.
7. Reconnect the negative battery cable.
8. Start the engine, check for leaks and test drive. Then let the engine cool and then re-torque the header bolts.
9. After 100 miles check and retighten the header bolts.

Parts List:

- (1) Driver Side Header Assembly
- (1) Passenger Side Header Assembly
- (2) Header gaskets (Header to Head flange)

 440 E. Arrow Hwy. San Dimas, CA 91773 (909) 599-5955	This vehicle is equipped with:
	<b>JBA Headers # 14XXS, 16XXS 18XXS, 20XXS</b>
	Legal for sale and installation in California <b>CARB EXECUTIVE ORDER D-57-33</b>

**WARNING**  
This label is required to aid in passing the California smog check program. This label must be installed in an underhood location that is readily visible.

**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.



