

Thank you for purchasing a Borla Performance Stainless Steel Header.

Precision manufactured using aircraft quality T-304 stainless steel; these headers are designed to endure years of heavy use. Installing the Borla Performance Stainless Steel Headers on your vehicle will eliminate the restrictive design of the stock exhaust manifolds, allowing your engine to discharge exhaust gas easier. The result is more horsepower and torque and longer engine life, with easy bolt-on installation. These installation instructions have been written to help you in the installation of your Borla Performance Stainless Steel Headers. Please read it completely before attempting installation.

This Borla Performance Stainless Steel Header (Part number 17221) has been designed for the 2003 Nissan 350Z equipped with a 3.5L V6 engine and automatic or manual transmissions.

Borla Performance Industries recommends that an exhaust shop or professional after market parts installer, who has all the necessary equipment, tools and experienced personnel needed for proper installation, should perform the installation of this system. However, if you decide to perform the installation, we recommend someone should help you. Ensure the installer uses all under car safety precautions including eye protection.

Please take time to read and understand the following...

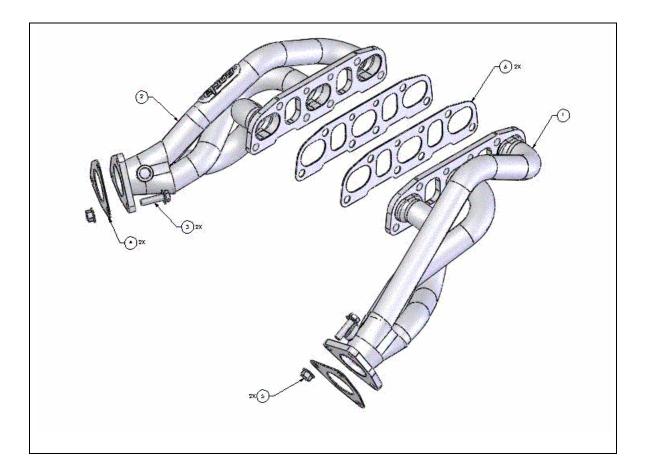
By installing your Borla Performance Stainless Steel Headers, you indicate that you have read this document and you agree with the terms stated below.

It is the responsibility of the purchaser to follow all installation instruction guidelines and safety procedures supplied with your Borla Performance Stainless Steel Headers.

Borla Performance Industries assumes no responsibility for damages occurring from misuse, abuse, improper installation, improper operation, lack of responsible care, or all previously stated reasons resulting from incompatibility with other manufacturer's products and/or systems.

Included with your Borla Performance Stainless Steel Headers is a warranty card. Please read it carefully before you begin any work on your vehicle. If you should have any questions regarding our warranty policy, installation, or any other matter pertaining to your new Borla Performance Stainless Steel Headers, please give us a call at the number provided on the warranty card.

Borla Performance Stainless Steel Headers Bill of Materials



- 1. Right header assembly
- 2. Left header assembly
- 3. Hex head bolt (qty 2)
- 4. Collector gasket (qty 2)
- 5. Hex nut (qty 2)
- 6. Header gasket (qty. 2)

Caution??? <u>Never</u> work on a hot exhaust system. Serious injury in the form of burns can result. If the vehicle has been in use and the exhaust system is hot, allow vehicle to cool for at least 1 hour. Always wear eye protection when working underneath any vehicle.

Note: It is our recommendation that you use a hoist or hydraulic lift to facilitate the installation of your new Borla Performance Stainless Steel Headers.

Note: Before removing the original exhaust manifolds from your vehicle, please compare the parts you have received with the bill of materials provided on the previous page to assure that you have all the parts necessary for the installation of your new Borla Performance Stainless Steel Headers.

Original Exhaust Manifold Removal

Note: With a used vehicle, we suggest a penetrating spray lubricant to be applied liberally to all exhaust fasteners and allowing a significant period of time for the chemical to lubricate the threads before attempting to disassemble.

- 1. Disconnect vehicles battery.
- 2. Taking all under car safety precautions, lift the vehicle using a hoist or hydraulic lift.
- 3. Remove plastic covers shown in figure 1 from vehicle. This does not absolutely need to be done but gives you a better view of the exhaust manifolds and hardware. You may leave them on if you choose to do so.
- 4. Unbolt and remove support bracket from vehicle as shown in figure 2.
- 5. Disconnect both lower oxygen sensors by unplugging the connectors.



Figure 1

Figure 2

- 6. Unbolt each flange shown in figure 3 connecting the catalytic converters to the Y-pipe assembly.
- 7. Unbolt both flanges connecting the exhaust manifolds to the catalytic converters and then remove each catalytic converter shown in figure 4 from the vehicle. Place the hardware to the side for use during the installation of your headers.

- 8. Disconnect and remove the upper oxygen sensors from the exhaust manifolds.
- 9. Unbolt both left and right side heat shields from the exhaust manifolds. Remove the right side heat shield from the vehicle. Because of the tight clearances on the left side, you will be unable to remove the heat shield without removing the exhaust manifold first.

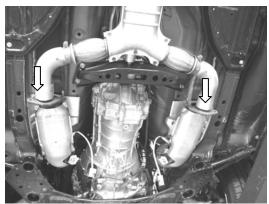


Figure 3



Figure 4

- 10. Unbolt both left and right side exhaust manifolds and remove them from the vehicle as shown in figure 5 making sure to remove the gaskets. Be sure to remove the left heat shield from the vehicle now that the exhaust manifold has been removed. Place the hardware to the side for use during the installation of your new headers.
- 11. Using a gasket scraper, remove any carbon build up or high spots from the header mounting surfaces.
- 12. Shown in figure 6 are the headers, gaskets and heat shields that were removed.



Figure 5



Figure 6

Borla Performance Stainless Steel Header Installation

Warning: Use extreme caution during installation. Torque all fasteners according to manufacturer's torque values and tightening sequence. <u>DO NOT</u> use air impact tools to tighten fasteners on Borla Performance Stainless Steel Headers. Use of such tools may result in bent flanges or gasket contact areas leading to exhaust leaks.

- 1. Install the upper oxygen sensors into each header.
- 2. Place each Borla Performance Stainless Steel Headers into position as shown in figure 5 and secure the flanges using the supplied gaskets and original hardware. Reconnect the upper oxygen sensors.
- 3. Place each catalytic converter into position as shown in figure 6 using the gaskets and hardware supplied as well as some of the original hardware. Secure the flanges to the vehicle manufacturer recommendations. Reconnect the lower oxygen sensors.
- 4. Using the original hardware, connect the catalytic converters to the Y-pipe assembly. Secure the flanges to the vehicle manufacturer recommendations.



Figure 5



Figure 6

- 5. Reconnect vehicles battery.
- 6. Before starting your vehicle, make sure to check all wires and hoses for safe clearance from the headers.
- 7. Start vehicle and check for any leaks. If any leaks are found, determine cause (such as loose hardware or incorrectly positioned gaskets) and repair as necessary.
- 8. Allow headers to reach normal operating temperature then shut engine off. Allow headers to cool and re-torque all hardware to vehicle manufacturer recommendations.
- 9. Install support bracket shown in figure 2 using the original hardware
- 10. Install plastic covers shown in figure 1 using the original hardware.

Note: When you first start your vehicle after the installation of your new Borla Performance Stainless Steel Headers, there may be some smoke and fumes coming from the system. This is a protective oil based coating used in the manufacturing of mandrel bent performance exhaust tubing. This is not a problem and will disappear within a very short period of time after the exhaust has reached normal operating temperatures.

Congratulations!!! You have completed the installation of the world famous Borla Performance Stainless Steel Headers.