

#### Installation Guide for Chevrolet C8 Corvette PNs: 140908, 140908BC



# Please compare the parts in the box with the bill of materials provided to ensure that you have all the parts necessary for this installation.

These instructions have been written to help you with the installation of your Borla Performance exhaust system. Please read this document completely before beginning the installation of your system. To ensure this part number fits your specific model year, please visit our website for the latest model year listings at www.BORLA.com

To control care part attacked and your spectre mover your, prace that our movine for the mover your attacked at a set of the output of the set of the set

Thank you for purchasing a Borla Performance Cat-Back<sup>™</sup> exhaust system.

# Borla Performance Cat-Back<sup>™</sup> exhaust system PNs 140908, 140908BC are designed for the Chevrolet Corvette, equipped with a 6.2L V8 engine and RWD automatic transmission. Designed for C8 Corvettes equipped with GPF's.

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 exhaust system, 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 exhaust system.

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 exhaust system 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 exhaust system, please give us a call at the number provided on the warranty card.



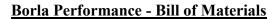
#### Minimum Required Tool List:

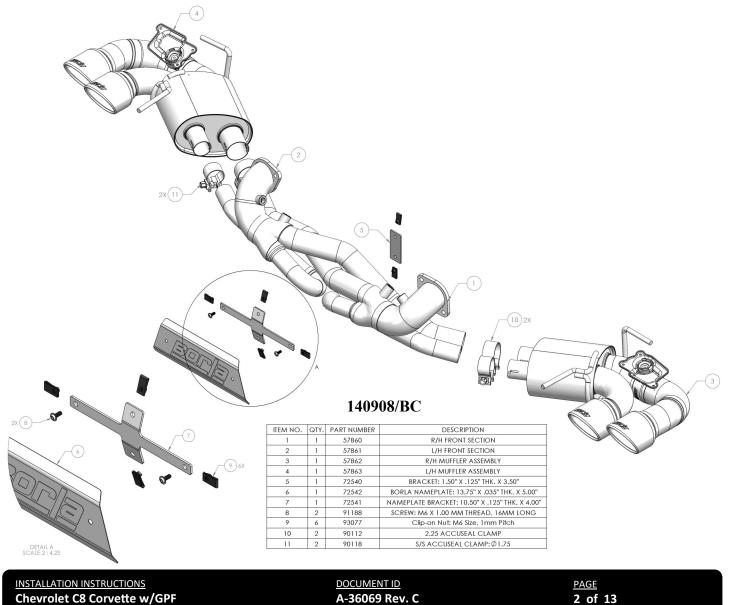
#### **TOOLS:**

- 1. 3/8" drive ratchet
- 2. 3/8" drive extension 6"
- 3. 3/8" drive extension 12" (2)
- 4. 3/8" socket swivel
- 5. 15mm socket
- 6. 13mm socket
- 7. 10mm socket
- 8. 7mm socket
- 9. 13mm wrench
- 10. 10mm wrench
- 11. T15 Torx

#### **SHOP SUPPLIES:**

1. Spray lubricant







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 under any vehicle.

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

Taking all under car safety precautions, lift the vehicle using a hoist or hydraulic lift. Once this has been done, you may begin the removal of your old exhaust system from your vehicle.

Note: Before removing the original exhaust system 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 Exhaust System.

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.

### **Original Exhaust System Removal**

- 1. Lubricate all hangers, rubber isolators, bolts and nuts.
- 2. Remove the rear wheels (Fig. 1).
- 3. Remove the rear splash guards (Figs. 2-3).
- Remove the rear fender liners (Figs. 4-5). The entire fender liner does not need to come out. You will only need to peel away the rear portion of the liner to access points behind it.



BORLA PERFORMANCE INDUSTRIES











- With the rear fender liner pulled back, loosen the hardware behind it (Figs. 5-6). The hardware will be one 10mm nut and two 7mm fasteners.
- 6. Loosen the hardware on the underside of the car behind the rear wheel well (Fig. 7).
- 7. Remove the screws on the top of the rear bumper cover (Figs. 7-8).
- 8. Lift the rear bumper cover away from the back of the car with two people (Fig. 9).
- 9. Using a third person, disconnect the three electrical connectors behind the rear bumper cover (Figs. 10-11).















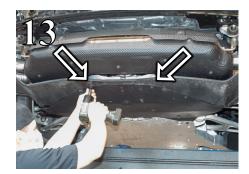
- 10. Rear bumper cover removed (Fig. 12).
- 11. Remove the screws on the lower cover (Fig. 13).
- 12. Lower cover removed (Fig. 14). Be sure to keep the hardware for later reinstallation.
- 13. Disconnect the electrical connector from the valve actuator to the exhaust valve (Fig. 15). There will 2 NPP (rear) valves.



BORLA PERFORMANCE INDUSTRIES

500 Borla Drive





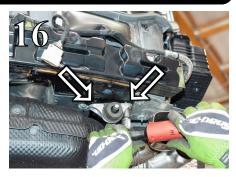






- 14. Remove the rear hanger bolts (Fig. 16).
- 15. Remove the bolts on the R/H and L/H front flanges (Figs. 17-18). Bolt loosening method pictured (Fig. 19).













- 16. Remove the hangers from the rubber isolators (Figs. 20-21).
- 17. Using an additional person, carefully remove the original exhaust system as a single piece (Fig. 22).
- 18. Original exhaust system removed (Fig. 23).
- 19. Remove the NPP (rear) exhaust valve actuators and rubber isolators (4) from the original exhaust system (Fig. 24).



BORLA PERFORMANCE INDUSTRIES

Johnson City TN, 37604-7523

500 Borla Drive









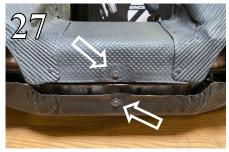


# **Original Exhaust System Removal Cont'd**

20. Remove all of the hardware from the heatshields and remove the heatshields from the exhaust system (Figs. 25-28). <u>Save all hardware as you</u> will be modifying these heatshields and installing them on your new system.











### **Original Exhaust System Removal Cont'd**

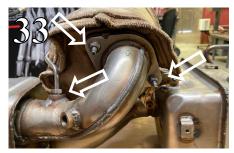
- 21. To modify the heatshields to be used on Borla system you must remove the ends of the heatshields that cover the muffler assemblies. We've found the best way to remove the rivets that connect them is to use a punch on the center of the rivet first to dislodge the pin and then drill out the remaining rivet (Fig. 29).
- 22. When you have finished removing the portion of the heatshields that cover the muffler assemblies you will be left with just the center portion that covers the x-pipe assembly and the GPFs (Figs. 30-31).
- 23. Start the removal of the GPFs from the original system by first removing the hardware on the front side of the exhaust which is a bracket coming off of the GPFs (Fig. 32).
- 24. On the rear of the exhaust system, remove the sensor (not pictured), the fuel line going into the bung, and the two nuts attaching the GPFs to the exhaust system (Figs. 33-34). <u>Save all of the hardware and gaskets you have removed, these will be used to install your new Borla system.</u>















#### Borla Performance Cat-Back TM Exhaust System Installation

- 1. Orient the components on shop floor according to the bill of materials drawing provided on page 2.
- 2. Attach GPFs to the Borla front pipes using the original gaskets and hardware. Install fuel hard lines into the bungs on the front pipe assemblies (Fig. 35). The fuel lines are shown as being bolted into place on the GPFs, but you will need to remove this hardware to install the upper heatshield.
- 3. Not shown is the installation of the original sensors into the bungs on the Borla front pipe assemblies. You will need to install these before installing the heatshields.
- 4. To get the alignment of the system correct, install the muffler assemblies without clamps onto the front pipe assemblies (Fig. 36).
- 5. Install the lower heatshield onto the exhaust system using the original hardware (Fig. 37). You will only attach it on the GPFs.
- 6. Install the upper heatshield onto the exhaust system using the original hardware (Fig. 38). When installing this heatshield, make sure to align the hole on the brackets of the fuel hardline with the threaded bracket on the GPFs so that when the heatshield is installed its hardware holds it securely in place.
- 7. Once heatshields are installed, remove the muffler assemblies.
- 8. Install the included heatshield mounting brackets using the original hardware (Fig. 39). The smaller bracket goes on the front side of the exhaust and the larger one goes on the rear.
- 9. Install the Borla cover plate onto the rear heatshield bracket (Fig. 39).

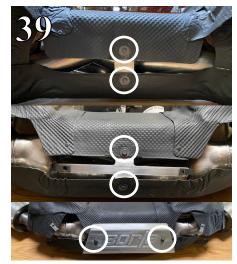
BORLA PERFORMANCE INDUSTRIES 500 Borla Drive Johnson City TN, 37604-7523 805-986-8600







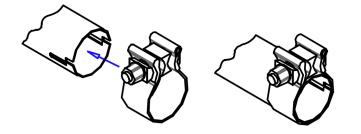






### Borla Performance Cat-Back TM Exhaust System Installation

- 10. Using a second person, lift the entire exhaust assembly into position and install the original hardware connecting the flanges of the GPFs to the vehicle (Figs. 40-41). Do not fully tighten the bolts yet.
- 11. Ensure that all required equipment has been transferred to the Borla muffler assemblies before installation (Fig. 42). Install valve actuator, rubber isolator, hanger bracket, and slide clamps over inlets.
- 12. Connect the R/H muffler assembly to the front pipe/X-pipe assembly (Fig. 43). Do not tighten the clamps yet.
- 13. Tighten the bolts on the R/H hanger bracket (Fig. 43).
- 14. Repeat previous steps for the L/H muffler assembly.
- 15. Start the vehicle and check for a check engine light (CEL). If a CEL is observed, refer to the valve troubleshooting sheet or call Borla customer service.
- 16. Fully tighten the nuts on the front flanges.
- 17. Loosely tighten the hardware on the clamps on the Borla muffler assemblies. Position the bolt between, not over the notches on the pipes. See image below for reference.



18. Adjust tip height as shown: 1.9"-2.0" from the vehicle's impact absorber to the edge of the Borla exhaust tip (Fig. 44).













ormance Cat-Back TM

# **Borla Performance Cat-Back** <sup>TM</sup> **Exhaust System Installation**

- 19. Dry fit the bumper cover and check tip fitment (Fig. 45). If necessary, adjust the system fitment by loosening the clamps and sliding the mufflers before fully installing the rear bumper cover.
- 20. If the exhaust system fitment is correct, continue to the next steps.
- 21. Orient the position of bolt (on supplied clamps) between (not over) pipe notches and tighten to 35 ft. lbs. torque.
- 22. Reconnect all electrical connectors between the rear bumper cover and the vehicle (Figs. 46-47).
- 23. Tighten the screws on the top of the rear bumper cover (Fig. 48).
- 24. Tighten the screws on the bottom of the rear bumper cover (Fig. 49).



BORLA PERFORMANCE INDUSTRIES

Johnson City TN, 37604-7523

500 Borla Drive











### Borla Performance Cat-Back TM Exhaust System Installation

- 25. Remove the rear wheels (Fig. 50).
- 26. Tighten the screws on the rear wheel well liners (Fig. 51).
- 27. Reinstall the wheel well cover (Fig. 52).
- 28. Tighten the screws on the bottom of the rear bumper cover (Fig. 53).
- Tighten the screws inside the lateral portion of the rear bumper cover (Fig. 54).
- 30. Check your exhaust system for proper clearance under the vehicle and also for tip alignment.
- 31. Ensure tips are aligned (Fig. 55).
- 32. Ensure all hardware is tightened.
- 33. Before starting your vehicle, make sure to check all wires, hoses, brake lines, body parts and tires for safe clearance from the exhaust system.
- 34. Start the vehicle and check for any leaks. If any leaks are found, determine cause (such as loose or incorrectly positioned clamp) and repair as necessary.

ATTENTION: After installation, the exhaust valves should be re-calibrated according to GM Document ID 5406413. Borla Performance Industries recommends taking your car to the nearest Chevrolet dealer for exhaust valve recalibration services. Failure to re-calibrate the valves may result in a check engine light and/or negatively impact valve longevity.

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

NOTE: When you first start your vehicle after the installation of your new Borla Performance Exhaust System, 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.

INSTALLATION INSTRUCTIONS Chevrolet C8 Corvette w/GPF DOCUMENT ID A-36069 Rev. C BORLA PERFORMANCE INDUSTRIES 500 Borla Drive Johnson City TN, 37604-7523 805-986-8600













<u>PAGE</u> 13 of 13