

**INSTRUCTION SHEET** 

Application: 2005-2011 Corvette

# Borla Performance Cat−Back™ Exhaust System

Part Number 647-249 647-250 647-251 606-777 606-813 606-830

Exhaust Svstems



These Borla Performance Cat-Back™ Exhaust Systems (PN's 647–249, 647–250, 647–251, 606–777,606–813,606–830) are designed for the Chevrolet Corvette C6 equipped with a 6.2L V–8 engine, automatic or manual transmissions.

Borla Performance Industries recommends that an exhaust shop or professional after market parts installer, who has all the neces-sary 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...

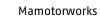
- By installing your Borla Performance Exhaust System, you indicate that you have read this document and you agree with the terms stated below.
- It is the responsibility of the purchaser to follow all installation instruction guidelines and safety procedures supplied with your Borla Performance Exhaust System.
- · Borla Performance Industries assumes no responsibility for damages occurring from misuse, abuse, improper installa-

tion, im-proper 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.





@CorvettePassion

MidAmericaMotorworks

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# Description (cont.)



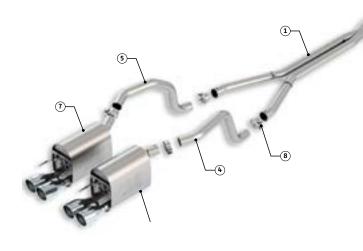
		647-249		
ITEM NO.	QTY.	DESCRIPTION		
1	1	X-PIPE ASSEMBLY		
2	1	FLARED PIPE: Ø2.50 X 4.00"		
3	1	2-BOLT FORMED FLANGE		
4	1	RH OVER AXLE PIPE: Ø2.50 X 33.00"		
5	1	LH OVER AXLE PIPE: Ø2.50 X 32.35"		
6	1	RH MUFFLER ASSEMBLY		
7	1	LH MUFFLER ASSEMBLY		
8	5	S/S ACCUSEAL CLAMP Ø2.50		





647-250

ITEM NO.	QTY.	DESCRIPTION
1	1	X-PIPE ASSEMBLY
2	1	FLARED PIPE: Ø2.50 X 4.00"
3	1	2-BOLT FORMED FLANGE
4	1	RH OVER AXLE PIPE: Ø2.50 X 33.00"
5	1	LH OVER AXLE PIPE: Ø2.50 X 32.35"
6	1	RH MUFFLER ASSEMBLY
7	1	LH MUFFLER ASSEMBLY
8	5	S/S ACCUSEAL CLAMP Ø2.50



		647-251	
ITEM NO.	QTY.	DESCRIPTION	
1	1	X-PIPE ASSEMBLY	
2	1	FLARED PIPE: Ø2.50 X 4.00"	
3	1	2-BOLT FORMED FLANGE	
4	1	RH OVER AXLE PIPE: Ø2.50 X 33.00"	
5	1	LH OVER AXLE PIPE: Ø2.50 X 32.35"	
6	1	RH MUFFLER ASSEMBLY	
7	1	LH MUFFLER ASSEMBLY	
8	5	S/S ACCUSEAL CLAMP Ø2.50	

#### MID AMERICA MOTORWORKS

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## **INSTRUCTION SHEET**

Description (cont.)	٥		
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		-(10)	606-777
	ITEM NO.	QTY.	DESCRIPTION
	1	1	FLARED NIPPLE: Ø2.50 X 4.63"
<b>⊛</b> ¬	2	1	2-BOLT FLANGE .38" THK
L_(5)	3	1	X-PIPE ASSEMBLY
CEE 64	4	1	LH EXTENSION PIPE ASSEMBLY
	5	1	RH EXTENSION PIPE ASSEMBLY
	6	1	RH OVER AXLE PIPE: Ø2.50 X 32.00"
1534	7	1	LH OVER AXLE PIPE: Ø2.50 X 32.75"
	8	1	RH MUFFLER ASSEMBLY
	9	1	LH MUFFLER ASSEMBLY
	10	7	S/S ACCUSEAL CLAMP Ø2.50
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3~		_1	
	20	0	
			606-813
	ITEM NO.	QTY.	DESCRIPTION
	1	1	FLARED NIPPLE: Ø2.50 X 4.63"
	2	1	2-BOLT FLANGE .38" THK
	3	1	X-PIPE ASSEMBLY
CEL G	4	1	LH EXTENSION PIPE ASSEMBLY
	5	1	RH EXTENSION PIPE ASSEMBLY
	6	1	RH OVER AXLE PIPE: Ø2.50 X 32.00"
Marca I	7	1	LH OVER AXLE PIPE: Ø2.50 X 32.75"
	8	1	RH MUFFLER ASSEMBLY
	9	1	LH MUFFLER ASSEMBLY
	10	7	S/S ACCUSEAL CLAMP Ø2.50
	(2)		
3~			
	1	÷	
			606-830
	ITEM NO.	QTY.	DESCRIPTION
	1	1	FLARED NIPPLE: Ø2.50 X 4.63"
	2	1	2-BOLT FLANGE .38" THK
	3	1	X-PIPE ASSEMBLY
E B C	4	1	LH EXTENSION PIPE ASSEMBLY
	5	1	RH EXTENSION PIPE ASSEMBLY
	6	1	RH OVER AXLE PIPE: Ø2.50 X 32.00"
1 San	7	1	LH OVER AXLE PIPE: Ø2.50 X 32.75"
	8	1	RH MUFFLER ASSEMBLY
	9	1	LH MUFFLER ASSEMBLY
	10	7	S/S ACCUSEAL CLAMP Ø2.50
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### **Description** (cont.)

*Caution!!! Never 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 Rear Section 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 Rear Section Exhaust System.

### **Original Exhaust System 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. Starting with the factory mid-pipe, loosen and remove bolts on front flanges. Keep hardware for installation of your new exhaust system. (See Fig. 1)
- Remove hardware holding rear anti-sway bar to frame (keep hardware for reinstallation later). Reposition anti-sway bar below for clearance and installation of your new exhaust. (See Fig. 2)
- 3. NPP equipped vehicles: Disconnect and plug, and secure vacuum hose from exhaust valves.
- Loosen the clamps on the pipe in front of the rear axle. Remove the hardware on the hangars connecting the pipe to the vehicle. Keep this hardware for installation of your new exhaust system. Remove the mid-pipe. (See Figs. 3A & 3B)
- 5. Carefully remove the rear mufflers from the rubber isolators. (See Fig.4)

**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 Exhaust Systems. Use of such tools may result in bent flanges or gasket contact areas leading to exhaust leaks.

















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### **Description** (cont.)

## **Exhaust System Installation**

- 1. Orient components on floor referencing page 2-3 photos.
- 2. Using a 2nd person or a muffler stand to support X-pipe, install Flared Pipe to right-side using original hardware and 2-Bolt Formed Flange.
- 3. Place a clamp over right-side expanded end of X-pipe and insert into Flared Pipe inlet. Connect left-side flange using original hardware. (See Fig.5) D0 NOT TIGHTEN HARDWARE.
- 4. Place a clamp over each expanded end of the X-pipe Assembly. Starting with the R/H Over-Axle Pipe, route pipe over axle on right-side and insert end into inlet of the right-side of the X-Pipe. Repeat step for the L/H Over Axle Pipe. (See Fig. 6) DO NOT TIGHTEN HARDWARE.
- 5. Place a clamp over each expanded ends of each Over-Axle Pipe. Starting with the R/H Muffler Assembly, and insert inlet into R/H Over-Axle Pipe and carefully insert hangars into runner isolators. Repeat step for the L/H Muffler Assembly. (See Fig. 7) DO NOT TIGHTEN HARDWARE.
- 6. Reinstall original anti-sway bar hardware.
- Check your exhaust system for proper clearance under the vehicle and also for tip alignment. Starting at front flanges and moving to rear of vehicle, tighten flange hardware bolts. Orient position of bolt (on supplied clamps) between (not over) pipe notches and tighten to 35 ft. lbs. torque. (See Fig.8)
- 8. Align tips and tighten hardware. Loosen clamps to rotate or slide pipe for better alignment. (See Fig. 9)
- 9. Before starting your vehicle, make sure to check all wires, hoses, brake lines, body parts and tires for safe clearance from the exhaust system.
- 10. Start vehicle and check for any leaks. If any leaks are found, determine

cause (such as loose or incorrectly positioned clamp) and repair as necessary.

**Congratulations!!!** You have completed the installation of the world famous Borla Performance Stainless Steel Exhaust System.

**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.

