

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-276-6  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

BORLA PERFORMANCE INDUSTRIES  
CHEVROLET\GMC EXHAUST HEADER SYSTEMS

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the Chevrolet\GMC Exhaust Header System manufactured out of T-304 stainless steel tubing by Borla Performance Industries of 5901 Edison Drive, Oxnard, California 93033, has been found not to reduce the effectiveness of required motor vehicle pollution control devices and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the General Motors vehicle applications as listed in Exhibit A, which is attached hereto and incorporated herein.

This exemption shall not apply to any device, apparatus, or mechanism advertised, offered for sale or sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

This Executive Order is valid provided that the installation instructions for this device will not recommend tuning the vehicle to specifications different from those submitted by the system manufacturer.

Changes made to the design or operating conditions of the device, as exempted by the Air Resources Board, that adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of this device using any identification other than that shown in this Executive Order or marketing of this device for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

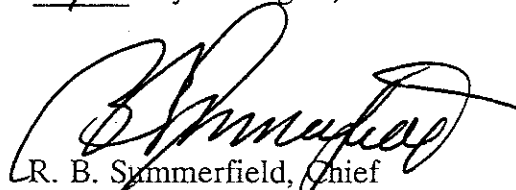
This Executive Order does not constitute any opinion as to the effect that the use of this device may have on any warranty either expressed or implied by the vehicle manufacturer.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF BORLA PERFORMANCE INDUSTRIES' CHEVROLET/GMC EXHAUST HEADER SYSTEMS.

No claims of any kind, such as "Approved by the Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after ten day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination after hearing that grounds for revocation exist.

Executed at El Monte, California, this 4th day of August, 1997.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division

## EXHIBIT A

| Parts | Listing |               |                   |             |
|-------|---------|---------------|-------------------|-------------|
| 17050 | 94-95   | Chevy/GMC     | Sub/Tahoe/Trk     | 5.0/5.7Ltr  |
| 17056 | 94-95   | Chevy/GMC     | Sub/Trk 3/4 ton   | 7.4Ltr      |
| 17066 | 93-94   | Chevy/Pontiac | Camaro/Trans Am   | 5.7Ltr      |
| 17069 | 96-97   | Chevy/GMC     | Sub/Tahoe/Trk     | 5.0/5.7 Ltr |
| 17080 | 96-97   | Chevy/GMC     | Sub/Trk           | 7.4Ltr      |
| 17084 | 96-97   | Chevy/GMC     | Astro/Safari      | 4.3 Ltr     |
| 17087 | 95-97   | Chevy/Pontiac | Camaro/Trans Am   | 5.7Ltr      |
| 17088 |         | Chevy/GMC     | Sub/Trk 3/4 ton   | 5.7 Ltr     |
| 17089 | 94-97   | Chevy/GMC     | Caprice/Impala SS | 5.7 Ltr     |
| 17090 | 96-97   | Chevy/GMC     | Sub/PU 4 wd       | 7.4 Ltr     |
| 17091 | 96-97   | Chevy/GMC     | Van               | 5.7 Ltr     |
| 17092 | 95-97   | Chevy/GMC     | S10, S15 P/U      | 4.3 Ltr     |
|       |         |               | Blazer/Jimmy      |             |
| 17093 | 96-97   | Chevy/GMC     | PU 1500           | 4.3 Ltr     |
| 17055 | 81-85   | GMC           | P1000             | 4.8 Ltr     |
| 17076 | 81-85   | GMC           | P1000             | 4.8 Ltr     |

State of California  
AIR RESOURCES BOARD

EVALUATION OF BORLA PERFORMANCE INDUSTRIES  
CHEVROLET/GMC EXHAUST HEADER SYSTEMS  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE  
SECTION 27156 IN ACCORDANCE WITH SECTION 2222,  
TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

July, 1997

State of California  
AIR RESOURCES BOARD

EVALUATION OF BORLA PERFORMANCE INDUSTRIES  
CHEVROLET/GMC EXHAUST HEADER SYSTEMS  
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CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222,  
TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

by

Mobile Source Operations Division  
9528 Telstar Avenue  
El Monte, CA 91734-8001

(This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.)

## SUMMARY

Borla Performance Industries of 5901 Edison Drive, Oxnard, California 93033, has applied for exemption from the prohibitions in Section 27156 of the California Vehicle Code for the Chevrolet/GMC Exhaust Header Systems listed in the Appendix .

Borla Performance Industries has submitted a complete application with all the required information. Based on the results from exhaust emission tests performed at the Air Resources Board laboratory on a 1997 Chevrolet Suburban, the staff concludes that Borla Performance Industries' Chevrolet/GMC Exhausts Header Systems will not adversely affect exhaust emissions from vehicles for which an exemption is requested.

The staff recommends that Borla Performance Industries be granted an exemption from the prohibitions in Vehicle Code Section 27156 and that Executive Order D-276-6 be issued.

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EVALUATION OF BORLA PERFORMANCE INDUSTRIES  
CHEVROLET/GMC EXHAUST HEADER SYSTEMS  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE  
SECTION 27156 IN ACCORDANCE WITH SECTION 2222,  
TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

I. INTRODUCTION

Borla Performance Industries of 5901 Edison Drive, Oxnard, California 93033, has applied for an exemption from the prohibitions of Vehicle Code Section (VC) 27156 for the vehicles listed in the Appendix. Borla Performance Industries has submitted a completed application and all the required information, as well as exhaust emissions test data performed at the Air Resources Board laboratory on a 1997 5.7L Chevrolet Suburban truck.

II. CONCLUSIONS

Based on the submitted information and the results from comparative exhaust emissions tests performed at the Air Resources Board laboratory, the staff has determined that Borla Performance Industries's Chevrolet/GMC Exhaust Headers will not have any adverse effects on the exhaust emissions from vehicles for which the exemption is requested.

III. RECOMMENDATION

The staff recommends that Borla Performance Industries be granted an exemption from the prohibitions in California Vehicle Code Section 27156 for those vehicles listed in Appendix 1 and that Executive Order D-276-6 issued.

IV. DEVICE DESCRIPTION

The Borla Chevrolet/GMC Exhaust Headers are designed for installation on the vehicles listed in the Appendix. The exhaust manifold system operates in conjunction with the original equipment manufacturer's (OEM) computer controlled fuel injected system and emission control systems.

The purpose of modifying the exhaust system of the engine is to improve engine performance throughout the R.P.M. range. As with the original equipment manufacturer's (OEM) exhaust system, Borla Performance Industries' Chevrolet/GMC Exhaust Header systems, routes exhaust gases from the engine into the catalytic converter. The manufacturer states that by extracting exhaust gases more efficiently, fuel economy will also improve.

The Chevrolet/GMC Exhaust Header systems are manufactured using T-304 stainless steel tubing. The Exhaust Header systems utilize Borla's proprietary V-8 engine header design, with the exception of the Exhaust Header system designed for the 4.3 liter Chevy/GMC S10/S15/Blazer/Jimmy/1500 series light duty trucks and the 4.8 liter in-line six cylinder GMC P1000, which utilize a tri-y design (6 into 2 into 1). The systems include all installation hardware and pre-catalyst tubing. Installation instructions are shown in the Appendix.

Installation of Borla Performance Industries' Chevrolet/GMC Exhaust Header systems does not alter the OEM location of the oxygen sensor and the catalyst. The tune-up specifications also are unaltered from OEM specifications.

#### V. DISCUSSION

A 1997 Chevrolet Suburban equipped with a 5.7 liter fuel injected engine was used for the evaluation of the Chevrolet/GMC Exhaust Header system. The exhaust emission tests were performed at the Air Resources Board laboratory. Testing consisted of the CVS-75 Federal Test Procedure (FTP) in the baseline (OEM) configuration followed by the CVS-75 FTP in the modified (headers installed) configuration. A summary of the test results are shown below:

Air Resources Laboratory  
(Based on Cold-Start CVS-75 FTP)

On a 1997 Chevrolet Suburban with a 5.7L Engine  
Exhaust Emission Test Results (gm/mi)

|                  | <u>Non-Methane<br/>Hydrocarbons</u> | <u>Carbon<br/>Monoxide</u> | <u>Nitrogen<br/>Oxides</u> |
|------------------|-------------------------------------|----------------------------|----------------------------|
| Baseline 1       | 0.212                               | 2.202                      | 0.189                      |
| Baseline 2       | 0.238                               | 2.534                      | 0.164                      |
| Baseline 3       | 0.218                               | 2.507                      | 0.153                      |
|                  |                                     |                            |                            |
| Headers 1        | 0.169                               | 2.115                      | 0.272                      |
| Headers 2        | 0.184                               | 2.248                      | 0.252                      |
|                  |                                     |                            |                            |
| Baseline Average | 0.223                               | 2.414                      | 0.169                      |
| Headers Average  | 0.177                               | 2.182                      | 0.262                      |
| Difference       | -0.046                              | -0.232                     | +0.093                     |

The test results from the exhaust emission tests show that the vehicles emissions with the Borla Chevrolet/GMC Exhaust headers installed comply with the procedures for "Exemption of Add-On and Modified Parts". The staff concludes that the installation of the Borla Chevrolet/GMC Exhaust Headers will not have an adverse effect on exhaust emissions on the vehicles for which the exemption is requested. Borla Performance Industries has submitted all the required information and fulfilled the requirements for an exemption.

APPENDIX

## APPENDIX

## PARTS APPLICATION

| Parts | Listing |               |                   |             |
|-------|---------|---------------|-------------------|-------------|
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## Installation Instructions for Borla ® Headers

Borla ® Performance Exhaust Systems and Headers should be installed by qualified persons only!!

1. Lift vehicle and support
2. Disconnect and remove O2 sensor
3. Unbolt exhaust flanges
4. Remove clamp at front of the catalytic converter, DO NOT REMOVE CATALYTIC CONVERTER!
5. Lower vehicle
6. Remove upper half of fan shroud
7. Remove spark plug wires, spark plugs, heat riser and dip stick
8. Remove Exhaust Manifolds
9. Raise vehicle and remove Y-Pipe
10. Working from the top, slip headers with gaskets into place and start all bolts
11. Tighten bolts from center towards ends
12. Install dip stick, spark plugs, spark plug wires and heat riser
13. Use O2 sensor extension provided and install O2 sensor
14. From below, install y-pipe using OEM gaskets with the nuts and bolts supplied
15. Tighten clamps on y-pipe and converter
16. Start engine, let it warm up to operating temperature and re-tighten header bolts.

**WARNING!!!!!! HEADER WILL BE EXTREMELY HOT — DO NOT TOUCH !!!!!**