# State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-215-10
Relating to Exemptions Under Section 27156
of the Vehicle Code

EDELBROCK CORPORATION

Performer 600 Series Emission Carburetor, part no. 1400

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

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the Performer 600 Series Emission Carburetor, part no. 1400 manufactured by the Edelbrock Corporation of 2700 California St., P.O. Box 2936, Torrance, California 90503-2936, 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 1980 and older nonfeedback General Motors vehicles equipped with a V8 gasoline engine.

The following are the specifications of the Performer 600 Series Emission Carburetor, part no. 1400: electric choke, primary bore 1.44", secondary bore 1.69", idle jet 0.031", primary main jet 0.098", secondary main jet 0.095", inlet seat 0.0935", pump jet 0.028", spark advance port 0.136" x 0.4", EGR port 0.1" x 0.04", metering rod 0.073" x 0.047", and step-up spring 5.0" orange.

This Executive Order is valid provided that installation instructions for the Performer 600 Series Emission Carburetor, part no. 1400 will not recommend tuning the vehicle to specifications different from those submitted by the Edelbrock Corporation.

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

Marketing of this device using an 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 ARB.

This Executive Order does not constitute any opinion as to the effect 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 THE EDELBROCK CORPORATION'S PERFORMER 600 SERIES EMISSION CARBURETOR, PART NO. 1400.

No claim 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.

Section 17500 of the Business and Professions Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

Section 43644 of the Health and Safety Code provides as follows:

"43644, (a) No person shall install, sell, offer for sale, or advertise, or, except in an application to the state board for certification of a device, represent, any device as a motor vehicle pollution control device for use on any used motor vehicle unless that device has been certified by the state board. No person shall sell, offer for sale, advertise, or represent any motor vehicle pollution control device as a certified device which, in fact, is not a certified device. Any violation of this subdivision is a misdemeanor."

Any apparent violation of the conditions of this Executive Order may result in its rescission or submission to the Attorney General of California for such action as he deems advisable.

The Bureau of Automotive Repair will be notified by copy of this order.

Executed at El Monte, California, this 16 day

day of November 1993.

R/B. Summerfield

Assistant Division Chief

Mobile Source Division

State of California AIR RESOURCES BOARD

EVALUATION OF THE EDELBROCK CORPORATION'S PERFORMER 600 SERIES EMISSION CARBURETOR, PART NO. 1400 FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

by

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(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 the mention of trade names or commercial products constitute endorsement or recommendation for use.)

State of California AIR RESOURCES BOARD

EVALUATION OF THE EDELBROCK CORPORATION'S PERFORMER 600 SERIES EMISSION CARBURETOR, PART NO. 1400 FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

November 1993

#### SUMMARY

The Edelbrock Corporation has applied for an exemption from the prohibitions of Vehicle Code Section 27156 for their Performer 600 Series Emission Carburetor, part no. 1400. The Performer 600 Series Emission Carburetor, part no. 1400 is designed to be a direct replacement carburetor for installation on 1980 and older non-feedback General Motors vehicles powered by a V8 gasoline engine. The Edelbrock Corporation has submitted a completed application and all the required information, as well as exhaust emissions test data performed at the Edelbrock Emissions Laboratory.

Based on the submitted information and results of emission tests performed at the Edelbrock Emissions Laboratory, the staff concludes that the installation of the Edelbrock Corporation's Performer 600 Series Emission Carburetor, part no. 1400 will not adversely affect exhaust emissions on the specified vehicles.

The staff recommends that the Edelbrock Corporation be granted an exemption as requested and that Executive Order D-215-10 be issued.

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EVALUATION OF THE EDELBROCK CORPORATION'S PERFORMER 600 SERIES EMISSION CARBURETOR, PART NO. 1400 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

The Edelbrock Corporation of 2700 California St., Torrance, California 90503-2936, applied for an exemption from the prohibitions of Vehicle Code Section 27156 for their Performer 600 Series Emission Carburetor, part no. 1400. The Performer 600 Series Emission Carburetor, part no. 1400 is designed to be a direct replacement carburetor for installation on 1980 and older non-feedback General Motors vehicles powered by a V8 gasoline engine. The Edelbrock Corporation has submitted a completed application and all the required information, as well as exhaust emissions test data performed at the Edelbrock Emissions Laboratory on a 1979 5.7L Chevrolet El Camino.

## II. CONCLUSION

Based on the submitted information and the results from exhaust emission tests performed at the Edelbrock Emissions Laboratory, the staff concludes that the Edelbrock Corporation's Performer 600 Series Emission Carburetor, part no. 1400 will not adversely affect exhaust emissions from vehicles for which the exemption is requested.

# III. RECOMMENDATION

The staff recommends that the Edelbrock Corporation be granted an exemption as requested and that Executive Order D-215-10 be issued.

# IV. PERFORMER 600 SERIES EMISSION CARBURETOR DESCRIPTION

The Performer 600 Series Emission Carburetor, part no. 1400, are specifically designed for installation on 1980 and older non-feedback General Motors vehicles powered by a V8 gasoline engine. The carburetors operate in conjunction with the original equipment manufacturer (OEM) emission control system already certified with the stock engines. The

purpose of using the Performer 600 Series Emission Carburetor, part no. 1400 is to offer a direct replacement new carburetor for 1980 and older GM V8 vehicles.

The following are the specifications of the Performer 600 Series

Emission Carburetor, part no. 1400: electric choke, primary bore 1.44",

secondary bore 1.69", idle jet 0.031", primary main jet 0.098", secondary

main jet 0.095", inlet seat 0.0935", pump jet 0.028", spark advance port

0.136" x 0.4", EGR port 0.1" x 0.04", metering rod 0.073" x 0.047", and

step-up spring 5.0" orange.

# V. <u>DISCUSSION OF THE PERFORMER 600 SERIES EMISSION CARBURETOR</u>

A 1979 Chevrolet El Camino powered by a 5.7L engine was used for the evaluation of the Performer 600 Series Emission Carburetor, part no. 1400. The dynamometer inertia weight and loading used during the testing were 4000 lbs. and 12.2 hp, respectively.

The Edelbrock Corporation submitted emission test results conducted by the Edelbrock Emissions Laboratory which consisted of one (cold start) CVS-75 FTP on the vehicle in the baseline configuration (Rochester Quadrajet installed) followed by one (cold start) CVS-75 FTP on the vehicle in the modified configuration (Performer 600 Series Emission Carburetor, part no. 1400 installed). The test results are shown in Table 1.

Table 1

CVS-75 TEST RESULTS

(Edelbrock Emissions Laboratory)

•	1 2	<u>HC</u>	<u>co</u>	<u>NOx</u>
	:	(grams/mile)		
Baseline	:	0.32	1.93	1.91
Modified	•	0.28	2.31	1.5
Difference		-0.04	0.38	-0.41

The CVS-75 emissions test results at the Edelbrock Emissions Laboratory show that the difference between the HC, CO and NOx emission levels of the device emission test result and the baseline emission test results are within the 10 percent or 0.1 g/mi increase allowed in HC and NOx, or 15 percent or 1.0 g/mi increase in CO as allowed under "The Procedures for Exemption of Add-On and Modified Parts". This demonstrates that the installation of the Performer 600 Series Emission Carburetor, part no. 1400 will not adversely affect the exhaust emissions of the applicable vehicles. The Air Resources Board did not conduct confirmatory testing to validate the emission test results submitted by the Edelbrock Corporation.

The Edelbrock Corporation has submitted all the required information and fulfilled the requirements for an exemption.