

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-215-3
Relating to Exemptions Under Section 27156
of the Vehicle Code

EDELBROCK CORPORATION
"TUBULAR EXHAUST SYSTEM P4529975"

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 Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-5;

IT IS ORDERED AND RESOLVED: That the tubular exhaust system part number P4529975 manufactured by Edelbrock Corporation of 2700 California Street, P.O. Box 2936, Torrance, California 90509-2936, has been found not to reduce the effectiveness of required motor vehicle pollution control devices and, therefore, is exempt from the prohibitions in Vehicle Code Sections 27156 and 38391 when installed on 1991 Dodge Dakota 5.2L V8 pick-up truck.

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 installation instructions for the tubular exhaust system P4529975 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 tubular exhaust system 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 the tubular exhaust system using identification other than that shown in this Executive Order or marketing of the tubular exhaust system for an application other than those listed in the exemption application, and on this Executive Order, shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the tubular exhaust system shall not be construed as exemption to sell, offer for sale, or advertise any component of the tubular exhaust system as an individual device.

This Executive Order does not constitute any opinion as to the effect the use of the tubular exhaust system 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 EDELBROCK CORPORATION'S TUBULAR EXHAUST SYSTEM P4529975 SHOWN ABOVE.

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 will be submitted to the Attorney General of California for such action as he deems advisable.

Executed at El Monte, California, this 25th day of August, 1992.



R.B. Summerfield
Assistant Division Chief
Mobile Source Division

State of California
AIR RESOURCES BOARD

EVALUATION OF EDELBROCK CORPORATION'S TUBULAR EXHAUST SYSTEM P/N P4529975
FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156 AND
TITLE 13, SECTION 2222, CALIFORNIA CODE OF REGULATIONS

August, 1992

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by

Mobile Source Division

State of California
AIR RESOURCES BOARD
9528 Telstar Avenue
El Monte, CA 91731-2990

(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

Edelbrock Corporation (Edelbrock) of 2700 California Street, P.O. Box 2936, Torrance, California 90509-2936 has applied for an exemption from the prohibitions in Vehicle Code Sections 27156 and 38391 for their Tubular Exhaust System (TES) part number P4529975 for installation on 1991 Dodge Dakota 5.2L V8 pick-up truck. The TES P4529975 is to be marketed by Mopar Performance. The Edelbrock's TES is an exhaust manifold designed to replace the existing system and provides for the connection of all original equipment manufacturer (OEM) emission control devices. The installation of the TES does not require any modifications or adjustments to the emission control system of the applicable vehicle. The applicant conducted back-to-back CVS-75 tests using a 1991 Dodge Dakota pick-up truck powered by a 5.2L engine at an independent laboratory. Confirmatory testing was also conducted by the Air Resources Board at the Haagen-Smit Laboratory.

Results from the tests showed that the installation of the Edelbrock's TES would not reduce the effectiveness of the pollution control system of the applicable vehicle. Based on the test data, staff recommends that the exemption be granted as requested and that Executive Order D-215-3 be issued.

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I. INTRODUCTION

Edelbrock Corporation (Edelbrock) of 2700 California Street, P.O. Box 2936, Torrance, California 90509-2936 has applied for an exemption from the prohibitions in Vehicle Code Sections 27156 and 38391 for their Tubular Exhaust System (TES) part number P4529975 for installation on 1991 Dodge Dakota 5.2L V8 pick-up truck. The TES P4529975 is to be marketed by Mopar Performance.

I. CONCLUSION

Results from tests conducted at Automotive Testing and Development Services, Inc. (ATDS) in Ontario, California, and confirmatory tests by the Air Resources Board (ARB) showed that the TES has met the requirements for California Procedures for Exemption of Add-on and Modified Parts.

Based on the test results, staff concludes that the installation of the Edelbrock's TES on 1991 Dodge Dakota 5.2L V8 pick-up trucks will not reduce the effectiveness of the emission control system of the vehicles.

III. RECOMMENDATION

The staff recommends that the exemption be granted as requested and that Executive Order No. D-215-3 be issued, permitting the advertisement, sale and installation of the Edelbrock's TES on 1991 Dodge Dakota 5.2L V8 pick-up truck.

IV. DEVICE DESCRIPTION

The Edelbrock's TES is an exhaust system designed to improve the gas dynamics of engine exhaust. It conducts gases through individual primary tubes from the cylinder heads to 4-into-1 collector on each side of the

exhaust manifold, and then to a 2-into-1 collector which fits directly to the catalytic converter. The TES is functionally identical to the cast iron exhaust manifolds and tubular steel collector pipes of the OEM exhaust system. The manufacturer claims that the design dimensions of the TES optimize the flow characteristics of the exhaust gases from the cylinder heads to the catalytic converter, thereby promoting improved volumetric and combustion efficiency.

TES provides for connection of all OEM emission control devices on the applicable vehicles at the required location. The installation of the TES is done by fitting only, and requires no welding, modifications or adjustments to the emission control system of the vehicle. Complete installation kits, including bolts, flanges, washers and gaskets are supplied with the device.

V. DEVICE EVALUATION

The applicant has submitted test results conducted at Automotive Testing Development Services, Inc. (ATDS), an independent test laboratory, in Ontario, California. One CVS-75 test was conducted on a 1991 Dodge Dakota pick-up truck powered by a 5.2L V8 engine, in the baseline (unmodified) configuration, and one CVS-75 test was conducted with the Edelbrock's TES P4529975 installed. Confirmatory testing was conducted by the ARB at Haagen-Smit Laboratory in El Monte, California. The test results are shown bellow:

<u>Test Mode</u>	<u>CVS-75 Test Results</u> (ATDS, Inc.)			<u>Fuel Econ. (mpg)</u> <u>City</u>
	<u>Exhaust Emissions (gm/mi)</u>			
	<u>THC</u>	<u>CO</u>	<u>NOx</u>	
Baseline	0.456	3.312	1.212	14.541
TES	0.555	4.219	0.977	13.983
(gm/mi)/% Change	+0.099/21.7	+0.907/27.4	-0.235/19.4	-3.8

CVS Test Results
(Air Resources Board)

<u>Test Mode</u>	<u>Exhaust Emissions (gm/mi)</u>			<u>Fuel Econ. (mpg)</u>
	<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>City</u>
Baseline	0.462	4.846	0.997	14.677
Baseline	0.608	4.691	1.068	14.374
Average	0.535	4.768	1.032	14.525
Device	0.641	4.083	1.110	14.299
Device	0.606	3.912	1.019	14.261
Average	0.623	3.997	1.064	14.280
(gm/mi)/% Change	+0.088/16.4	-0.771/16.2	+0.032/3.1	-1.7

The test results are within the 0.1gm/mi HC, 1.0gm/mi CO, and 0.1gm/mi NOx emission increases over the baseline as allowed under the "Procedures for Exemption of Add-on and Modified Parts."