State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-184-10
Relating to Exemptions Under Section 27156
of the Vehicle Code

MAREMONT EXHAUST PRODUCTS, INC.
"NEW AFTERMARKET THREE-WAY CATALYTIC CONVERTER"

WHEREAS, Vehicle Code Sections 27156 and 38391, and Title 13, California Code of Regulations (hereafter "CCR") Section 2222(h), authorize the California Air Resources Board (ARB) and its Executive Officer to exempt new aftermarket catalytic converters from the prohibitions of Vehicle Code Section 27156.

WHEREAS, Maremont Exhaust Products, Inc. of 2400 Industrial Park, Loudon, Tennessee 37774, has applied to the ARB for exemption from the prohibitions in Vehicle Code Sections 27156 and 38391 for their new aftermarket three-way catalytic converter (TWC) for the following application:

Converter Type	Use	Part Number	Max. Eng. Size	Max. Test Weight
TWC	TWC	29001,29002,29003	2.5L (151 CID)	3,375 lbs.

The catalysts can be used to replace non-functioning original equipment manufacturer (OEM) catalysts on fuel injected vehicles that are no longer under vehicle manufacturer's emission control systems warranty, if the need for the replacement is established.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Division by Health and Safety Code Section 39516 and Executive Order G-45-9, the ARB finds that the above aftermarket catalytic converter complies with the California Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h). Emission performance of the catalytic converter was based on durability mileage accumulation of 25,000 miles using the AMA durability driving schedule (Reference Appendix IV, Title 40, part 86, Code of Federal Regulations (June 28, 1977)).

IT IS HEREBY RESOLVED that the above catalytic converter is exempt from the prohibitions in Vehicle Code Section 27156 for installation on the approved application vehicles subject to the following conditions:

1. No changes are permitted to the converter as described in the application for exemption. Any changes to the converter or any of its components, and other factors addressed in this order must be evaluated and approved by the ARB prior to marketing in California.

2. Marketing of the converter using identifications other than those shown in the exemption application, and in this Executive Order, or marketing of the converter for application other than the ones listed in the submitted application catalog shall be prohibited unless prior approval is obtained from the ARB. Exemption of this product shall not be construed as an exemption to sell, offer for sale, or advertise any components of the converter as individual devices.

3. Any oral or written references to this Executive Order or its content by Maremont Exhaust Products, Inc., its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any emissions reduction claims for the catalytic converter and is only a finding that the converter is exempt from the prohibitions of Vehicle Code Section 27156.

4. Upon installation, the catalytic converter must carry a manufacturer's warranty for 25,000 miles on the substrates and 50,000 miles or five years on the shell.

5. Maremont must submit production audit test data for the catalyst to the ARB for review for the production audit reporting period of August 15, 1995, in accordance with Paragraph IX of California Evaluation Procedures for New Aftermarket Non-Original Equipment Catalytic Converters. Thereafter, the ARB may accept Maremont's quality control procedures as alternative to production audit testing for subsequent production audit report.

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 it, during 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 is made, after the hearing, that grounds for revocation exist.

Executed at El Monte, California, this 19th day of July 1995.

R.B. Summerfield
Assistant Division Chief
Mobile Source Division

State of California
AIR RESOURCES BOARD

EVALUATION OF MAREMONT EXHAUST PRODUCTS, INC. NEW AFTERMARKET THREE-WAY CATALYTIC CONVERTER FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156, AND TITLE 13, CALIFORNIA CODE OF REGULATIONS, SECTION 2222(h)

July 1995

EVALUATION OF MAREMONT EXHAUST PRODUCTS, INC. NEW AFTERMARKET THREE-WAY CATALYTIC CONVERTER FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156, AND TITLE 13, CALIFORNIA CODE OF REGULATIONS, SECTION 2222(h)

by

Mobile Source Division

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

SUMMARY

Maremont Exhaust Products, Inc. (Maremont) of 2400 Industrial Park Boulevard, Loudon, Tennessee 37774, has applied for an exemption of their new aftermarket three-way catalytic converter (TWC) from the prohibitions in Vehicle Code Sections 27156 and 38391, in accordance with California regulations on new aftermarket catalytic converters. The two catalysts were aged using 1989 Chevrolet 2.5L/3375 lbs. vehicles. The front substrate contains palladium and rhodium, and the rear substrate contains palladium only. The vehicle application limit for the catalyst is 2.5L/3375 lbs.

Emissions data submitted by the applicant show that the catalytic converter meets the requirements of Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h) for the stated application. Based on the above, the staff recommends that the exemption be granted as requested and that Executive Order D-184-10 be issued.

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I. INTRODUCTION

Maremont Exhaust Products, Inc. (Maremont) of 2400 Industrial Park Boulevard, Loudon, Tennessee 37774, has applied for an exemption from the prohibitions in Vehicle Code Sections 27156 and 38391 for their new aftermarket three-way catalytic converter (TWC) in accordance with California regulations on new aftermarket catalytic converters. The new aftermarket TWC is intended for use on light-duty fuel-injected vehicles as shown below:

Part Numbers	Max. Eng. Size	Max. Veh. Wt.
29001,29002,29003	2.5L	3,355 lbs.

Maremont will market the catalytic converter as a post-warranty replacement for applicable vehicles whose manufacturers' warranty has expired and the need for replacement of the original equipment manufacturer (OEM) catalytic converter has been established.

II. CONCLUSION

The applicant has submitted all the required information, and based on the submitted exhaust emissions test data, the staff concludes that the catalytic converter meets the criteria set forth in Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h) for the stated applications.

III. RECOMMENDATION

Staff recommends that the exemption be granted as requested and that Executive Order No. D-184-10 be issued, permitting the advertisement, sale, and installation of the new aftermarket catalytic converter on applicable vehicles.

IV. DEVICE DESCRIPTION

Maremont's new aftermarket TWC contains two substrates. The front substrate is coated with palladium and rhodium in the ratio of 8:1, the rear substrate is coated with palladium only. Air tube is not required on the converter. The front and rear substrates each measures 3.66 inches along the major axis, 3.66 inches along the minor axis, 1.96 inches long, and has a volume of 20.62 cubic inches. Front and rear metal loading is in the ratio of 1:1.2. The substrates are wrapped with compressed intumescent mat to prevent vibration and exhaust gases from by-passing the catalyst. The substrates are enclosed in a stainless steel shell using seam welding. A heat shield of aluminized steel is welded to the converter shell to protect the vehicle underbody from heat. The catalytic converter may be sold as a unit with installation instructions and kits as shown in Maremont's application catalog. It is also sold with a warranty for 25,000 miles on the substrates and five years or 50,000 miles on the container or shell.

V. DEVICE EVALUATION

Maremont submitted data from testing conducted by Roush Laboratories in Livonia, Michigan. Emissions tests were conducted on the following vehicle:

Application	Emission Test Vehicle	Engine Size	ETW
TWC	1987 Grand AM	2.5L	3,375 lbs.

The Air Resources Board (ARB) did not conduct confirmatory tests on the new aftermarket TWC due to heavy workload at the ARB's Haagen-Smit Laboratory. In lieu of confirmatory testing, the ARB is requiring Maremont to conduct product audit tests during the next production audit reporting period. The test results and conversion efficiencies for the converter are shown below:

Roush Laboratories, Livonia, Michigan

	Simulator	Cat. A	TWC Cat. B	Avg Eff.
HC (g/mi)	1.259	0.221	0.242	81.6%
CO (g/mi)	9.032	2.190	1.905	77.3%
NOx(g/mi)	1.277	0.446	0.424	65.9%

The above conversion efficiencies meet the minimum requirements of the California regulations on new aftermarket catalytic converters.