State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-184-3 Relating to Exemptions Under Section 27156 of the Vehicle Code

MAREMONT CORPORATION "NEW AFTERMARKET THREE-WAY CATALYTIC CONVERTER"

WHEREAS, Vehicle Code Section 27156 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 Corporation has applied to the ARB for exemption from the prohibitions of Vehicle Code Section 27156 for their new aftermarket three-way catalytic converter series 28801 for the following applications:

Vehicle Type Max. Engine Size Maximum Veh. Weight

Fuel Injection 5.7L (350 CID) 4,000 lbs

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 9-45-5, the Air Resources Board 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).

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

- No changes are permitted to the converter as described in the application for exemption. Any changes to the converter, applicable model year, or other factors addressed in this order must be evaluated and approved by the Air Resources Board prior to marketing in California.
- 2. Marketing of the converter using identifications other than those shown in the exemption application or marketing of the converter for applications other than those listed in the application catalog shall be prohibited unless prior approval is obtained from the Air Resources Board. 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 Corporation, 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 exempt from the prohibitions of Vehicle Code Section 27156.

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 4

day of August, 1989.

K. D. Drachand, Chief Mobile Source Division

State of California AIR RESOURCES BOARD

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

EVALUATION OF MAREMONT NEW AFTERMARKET THREE-WAY

CATALYTIC CONVERTER FOR EXEMPTION

FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 AND

TITLE 13, CALIFORNIA CODE OF REGULATIONS, SECTION 2222(h)

by -

Mobile Source Division

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

(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 Corporation (Maremont) of Carol Stream, Illinois, has applied for exemption for their new aftermarket three-way catalytic converter under the California regulations for new aftermarket catalytic converters. The three-way converter, series number 28801, is applicable only to fuel injection vehicles with inertia weight of 4,000 lbs and engine displacement of 5.7 liters (350 CID).

Emissions data submitted show that the Maremont catalytic converter meets the requirements of Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h). Based on the above, the staff recommends that the exemption be granted as requested.

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

I. <u>INTRODUCTION</u>

Maremont Corporation of Carol Stream, Illinois, has applied for an exemption for their new aftermarket three-way catalytic converter in accordance with the California regulations on new aftermarket catalytic converters. The converter will be used only on fuel injected vehicles with maximum vehicle weight of 4,000 lbs and engine displacement of 5.7 liters (350 CID).

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).

III. RECOMMENDATION

The staff recommends that the exemption be granted as requested and that Executive Order No. D-184-3 permitting the advertisement, sales and installation of the new aftermarket three-way catalytic converter be issued.

IV. DEVICE DESCRIPTION

The Maremont three-way catalytic converter consists of honeycomb type substrates coated with platinum and palladium plus rhodium and enclosed in an outer shell or container of stainless steel.

The Maremont Corporation three-way catalytic converter uses materials and construction similar to the original equipment manufacturers. The catalytic converter is sold with installation instructions and kits as shown in the Maremont application catalog. The converter is also sold with a two year or 25,000 miles warranty on the substrates and five years or 50,000 miles on the container or shell.

V. DEVICE EVALUATION

Maremont Corporation provided test data for the three-way catalytic converter. The tests were conducted by Automotive Testing and Development Services, Inc. (formerly Olson Engineering, Inc.), Huntington Beach, California. Two CVS-75 emission tests were conducted on the test vehicle with the converter installed and two CVS-75 tests were conducted with exhaust backpressure simulator. The tests were conducted on a fuel injected 1988 Chevrolet Cheyenne with inertia weight of 4,750 lbs and engine displacement of 5.7 liters following the 25,000 miles mileage accumulation on each of the two test converters. The mileage accumulation vehicles were a 1980 Oldsmobile Delta 88 with inertia weight of 4,000 lbs and engine displacement of 5.7 liters, and a 1980 Buick Electra Wagon with inertia weight of 4,500 lbs and engine displacement of 5.7 liters. The test results and conversion efficiencies are shown below:

	<u>Simulator</u>	Converter 1	<u>Converter 2</u>	<u>Average Efficiency</u>
HC	2.972	0.439	0.445	85.1%
CO	18.148	3.818	3.718	79.2%
NOx	1.085	0.374	0.383	65.1%

All of the conversion efficiencies meet the standards set by the California regulation which are 70% for HC and CO, and 60% for NOx.

The staff based the evaluation of the new aftermarket three-way catalytic converter on the test data from Automotive Testing and Development Services, Inc. In previous testing on a carbureted vehicle, the same catalytic converters demonstrated average conversion efficiencies of 92.2% for HC, 82.0% for CO, and 58.2% for NOx. Based on these test results, the staff has limited the applicability of the converter to fuel injected vehicles only.