

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-183-3
Relating to Exemptions Under Section 27156
of the Vehicle Code

PERFECTION AUTOMOTIVE PRODUCTS CORPORATION
"3-WAY CATALYTIC CONVERTER PART NUMBERS
23032, 23035, 23037, 23038"

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 in Vehicle Code Sections 27156 and 38391.

WHEREAS, Perfection Automotive Products Corporation of 12445 Levan Road, Livonia, Michigan 48150, 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:

Type	Part Numbers	Max. Eng. Size	Max. Veh. Wt.
TWC	23032, 23035, 23037, 23038	3.8L Fuel Injected	4250 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 G-45-5, the ARB finds that the above aftermarket catalytic converter complies with the California Vehicle Code Sections 27156 and 38391, 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)).

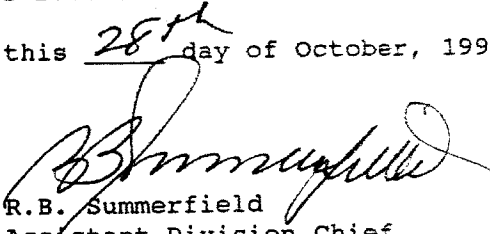
IT IS HEREBY RESOLVED that the above catalytic converter is exempt from the prohibitions in Vehicle Code Sections 27156 and 38391 for installation on applicable vehicles subject to the following conditions:

1. No changes are permitted to the catalytic converter as described in the application for exemption. Any changes to the catalytic converter or any of their components, applicable model year, or 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 or marketing of the catalytic converter for vehicle application other than the one listed in this order 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 catalytic converter as individual devices.

3. Any oral or written references to this Executive Order or its content by Perfection Automotive Products 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 catalytic converter is exempt from the prohibitions of Vehicle Code Sections 27156 and 38391.
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.

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 28th day of October, 1992.


R.B. Summerfield
Assistant Division Chief
Mobile Source Division

Surge

State of California
AIR RESOURCES BOARD

EVALUATION OF PERFECTION AUTOMOTIVE PRODUCTS CORPORATION NEW AFTERMARKET
3-WAY CATALYTIC CONVERTER FOR EXEMPTION FROM THE PROHIBITIONS IN
VEHICLE CODE SECTION 27156 AND TITLE 13, CALIFORNIA
CODE OF REGULATIONS, SECTION 2222(h)

October, 1992

EVALUATION OF PERFECTION AUTOMOTIVE PRODUCTS CORPORATION NEW AFTERMARKET
3-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

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

Perfection Automotive Products Corporation (Perfection) of 12445 Levan Road, Livonia, Michigan 48150, 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 for new aftermarket catalytic converters. The new converter with part numbers 23032, 23035, 23037, and 23038 is for use on fuel injected vehicles with engine displacement up to 3.8L, and maximum test weight of 4250 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-183-3 be issued.

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EVALUATION OF PERFECTION AUTOMOTIVE PRODUCTS CORPORATION NEW AFTERMARKET
3-WAY CATALYTIC CONVERTER FOR EXEMPTION FROM THE PROHIBITIONS IN
VEHICLE CODE SECTION 27156 AND TITLE 13, CALIFORNIA
CODE OF REGULATIONS, SECTION 2222(h)

I. INTRODUCTION

Perfection Automotive Products Corporation (Perfection) of 12445
Levan Road, Livonia, Michigan 48150, has applied for an exemption from the
prohibitions from 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
intended application for the new aftermarket catalytic converter is shown
below:

<u>Type</u>	<u>Part Numbers</u>	<u>Max. Engine Size</u>	<u>Max. Veh. Wt.</u>
TWC	23032, 23035, 23037, 23038	3.8L Fuel Injected	4250 lbs.

The part numbers correspond to nominal exhaust pipe neck sizes of 1-3/4",
2", 2-1/4", and 2-1/2".

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 application.

III. RECOMMENDATION

The staff recommends that the exemption be granted as requested and
that Executive Order No. D-183-3 be issued, permitting the advertisement,
sale and installation of the new aftermarket TWC.

IV. DEVICE DESCRIPTION

The substrates of Perfection's three-way catalytic converter are
coated with palladium. The catalytic converter was assembled with one
reducing and one oxidizing substrates enclosed in an outer stainless steel
shell. The substrates are wrapped with interam mat to prevent vibration and

exhaust gases from by-passing the catalyst. A heat shield of aluminum is welded to the converter shell to protect the vehicle underbody from heat. The catalytic converter is sold as a unit with installation instructions and kits as shown in the 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

Perfection has submitted test data on the TWC. The tests were conducted by Roush Laboratories, Livonia, Michigan. The two test converters were aged on 1992 fuel injected Pontiac Bonneville powered by a 3.8L engine, and equipped with closed-loop system. CVS-75 emission tests to determine the conversion efficiency of the catalytic converter were conducted on the same vehicles at equivalent test weight of 4250 lbs. The vehicle application for the new three-way converter is limited to fuel injected vehicles powered by an engine with up to 3.8L displacement, and 4250 lbs. vehicle test weight, in order to conform to the "worst case" requirement of the California regulations. The test results and conversion efficiencies for the converter are shown below:

TWC Part Nos. 23032, 23035, 23037, 23038

	<u>Simulator 1</u>	<u>Converter 1</u>	<u>Converter 2</u>	<u>Average Eff.</u>
HC (g/mi)	1.629	0.188	0.193	88.2%
CO (g/mi)	14.143	2.768	2.998	79.6%
NOx(g/mi)	5.670	1.061	1.159	80.4%

All of the conversion efficiencies meet the requirements of the California regulations. The staff based the evaluation of the new aftermarket catalytic converter on the information submitted by Perfection, and test data from Roush Laboratories.