

Superseded by D-188-S

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-188-1
Relating to Exemptions Under Section 27156
of the Vehicle Code

TRI-D INDUSTRIES, INC.
"NEW AFTERMARKET CATALYTIC CONVERTERS"

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, TRI-D Industries, Inc. has applied to the ARB for exemption from the prohibitions of Vehicle Code Section 27156 for their new two-way (oxidation) catalytic converters for the following applications:

<u>Converter Type</u>	<u>Engine Size</u>	<u>Maximum Veh. Weight</u>
TD-2000 2-way	5.7L (350 CID)	5250 lbs
TD-4000 2-way	3.8L (231 CID)	3750 lbs
TD-6000 2-way	5.7L (350 CID)	4000 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 Air Resources Board finds that the above aftermarket catalytic converters comply 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 converters are exempt from the prohibitions of Vehicle Code Section 27156 for installation on the approved application vehicles subject to the following conditions:

1. No changes are permitted to the converters as described in the application for exemption. Any changes to the converters, 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 converters using an identification other than those shown in the exemption application or marketing of the converters for an application 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 component of the converters as an individual device.

TRI-D INDUSTRIES, INC.
"NEW AFTERMARKET CATALYTIC
CONVERTERS"

EXECUTIVE ORDER D-188-1
(Page 2 of 2)

3. Any oral or written references to this Executive Order or its content by TRI-D Industries, 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 converters and is only a finding that the converters are 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 20th day of September, 1989.


K. D. Drachand, Chief
Mobile Source Division

State of California
AIR RESOURCES BOARD

EVALUATION OF TRI-D INDUSTRIES, INC. NEW AFTERMARKET
CATALYTIC CONVERTERS FOR EXEMPTION
FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 AND
TITLE 13, CALIFORNIA CODE OF REGULATIONS, SECTION 2222(h)

September, 1989

EVALUATION OF TRI-D INDUSTRIES, INC. NEW AFTERMARKET
CATALYTIC CONVERTERS 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

TRI-D Industries, Inc. (TRI-D) of 820 East 5th Street, Port Clinton, Ohio 43452, has applied for exemption for their new aftermarket two-way catalytic converters TD-2000, TD-4000 and TD-6000 under the California regulations for new aftermarket catalytic converters. The TD-2000 converter is to be used on 5.7 liter vehicles up to 5250 lbs. The TD-4000 converter is to be used on 3.8 liter vehicles up to 3750 lbs, and the TD-6000 converter is to be used on 5.7 liter vehicles up to 4000 lbs.

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

CONTENTS

	<u>Page Number</u>
<u>SUMMARY</u>	i
<u>CONTENTS</u>	ii
I. <u>INTRODUCTION</u>	1
II. <u>CONCLUSION</u>	1
III. <u>RECOMMENDATION</u>	1
IV. <u>DEVICE DESCRIPTION</u>	1
V. <u>DEVICE EVALUATION</u>	2

EVALUATION OF TRI-D INDUSTRIES, INC. NEW AFTERMARKET CATALYTIC CONVERTERS
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 AND
TITLE 13, CALIFORNIA CODE OF REGULATIONS, SECTION 2222(h)

I. INTRODUCTION

TRI-D Industries, Inc. of 820 East 5th Street, Port Clinton, Ohio 43452, has applied for an exemption for their new aftermarket two-way or oxidation catalytic converters in accordance with the California regulations on new aftermarket catalytic converters. The converters and their applications are shown below:

<u>Series No</u>	<u>Engine Size</u>	<u>Max. Veh. Wt.</u>
TD-2000	5.7L (350 CID)	5250 lbs
TD-4000	3.8L (231 CID)	3750 lbs
TD-6000	5.7L (350 CID)	4000 lbs

II. CONCLUSION

The applicant has submitted all the required information and based on the submitted exhaust emissions test data, the staff concludes that the two-way catalytic converters meet 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-188-1 be issued, permitting the advertisement, sale and installation of the new aftermarket catalytic converters.

IV. DEVICE DESCRIPTION

The TRI-D catalytic converters consist of honeycomb type substrates coated with palladium and rhodium. The substrate is enclosed in an outer shell or container of stainless steel. The converters use materials and construction similar to the original equipment manufacturers. The catalytic converters are sold with installation instructions and kits as shown in the application catalog. They are also sold with a two year or 25,000 mile warranty on the substrates and five years or 50,000 miles on the container or shell.

V. DEVICE EVALUATION

TRI-D Industries, Inc. provided test data on the catalytic converters. The tests were conducted by DMACS Engineering Laboratories, Inc., Telford, Pennsylvania. Two CVS-75 emission tests were conducted on each of the test vehicles with the converters installed and two CVS-75 tests were conducted with exhaust backpressure simulator. The tests were conducted following the 25,000 mileage accumulation on each of the two test converters. The mileage accumulation vehicles had test weights and engine displacement equal or higher than the test vehicle.

Exemption for each converter application is limited to the actual test or inertia weight and engine size of either the mileage accumulation vehicle or the test ("slave") vehicle, whichever has the lower parameters. The test results and conversion efficiencies of the converters are shown below:

	<u>TD-2000</u>			
	<u>Simulator</u>	<u>Converter 1</u>	<u>Converter 2</u>	<u>Average Efficiency</u>
HC (g/mi)	3.71	0.48	0.51	86.7%
CO (g/mi)	39.78	6.36	6.35	84.0%
	<u>TD-4000</u>			
HC (g/mi)	2.82	0.47	0.63	80.5%
CO (g/mi)	24.50	4.85	4.36	81.2%
	<u>TD-6000</u>			
HC (g/mi)	3.13	0.40	0.41	87.0%
CO (g/mi)	33.04	2.00	2.79	92.7%

All of the conversion efficiencies meet the requirements of the California regulations. The staff based the evaluation of the new aftermarket catalytic converters on the information submitted and tests data from DMACS Engineering Laboratories, Inc.