State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-182-8 Relating to Exemptions Under Section 27156 of the Vehicle Code

WALKER MANUFACTURING "3-WAY PLUS OXIDATION 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, Walker Manufacturing of 3901 Willis Road, P.O. Box 157, Grass Lake, Michigan 49240 has applied to the ARB for exemption from the prohibitions in Vehicle Code Sections 27156 and 38391 for their new aftermarket 3-way plus oxidation catalytic converter for fuel injected vehicle application up to 5.8L and 5,500 lbs. test weight, using the following part numbers:

	Y VI-	
Converter Typ	De Universal/Part/No.	Direct-Fit Part No.
Y		
TWC + OC	15140, 15141, 15142, 15143	15546, 15575, 15577

WHEREAS, persuant to the authonity 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 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 Sections 27156 and 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 or any of its 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 converter for application other than one listed in the 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.

WALKER MANUFACTURING "3-WAY PLUS OXIDATION CATALYTIC CONVERTER"

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- 3. Any oral or written references to this Executive Order or its content by Walker Manufacturing, 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.
- 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 $\frac{244}{24}$ day of August, 1992.

R.B. Summerfield / Assistant Division Chief Mobile Source Division

State of California AIR RESOURCES BOARD

EVALUATION OF WALKER MANUFACTURING NEW AFTERMARKET 3-WAY PLUS OXIDATION CATALYTIC CONVERTER FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTIONS 27156 AND 38391, AND TITLE 13, CALIFORNIA CODE OF REGULATIONS, SECTION 2222(h)

August, 1992

EVALUATION OF WALKER MANUFACTURING NEW AFTERMARKET 3-WAY PLUS OXIDATION CATALYTIC CONVERTER FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTIONS 27156 AND 38391, 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

Walker Manufacturing (Walker) of 3901 Willis Road, P.O. Box 157, Grass Lake, Michigan 49240 has applied for an exemption for their new aftermarket three-way plus oxidation (TWC + OC) catalytic converter for fuel injected vehicle applications up to 5.8L engine size and 5,500 lbs. vehicle weight, under the California regulations for new aftermarket catalytic converters.

Emissions data submitted show that the catalytic converter meets the requirements of Vehicle Code Sections 27156 and 38391, 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-182-8 be issued.

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I. <u>INTRODUCTION</u>

Walker Manufacturing (Walker) of 3901 Willis Road, P.O. Box 157, Grass Lake, Michigan 49240 has applied for an exemption for their new aftermarket three-way plus oxidation (TWC + OC) catalytic converter for fuel injected vehicles up to 5.8L engine size and 5,500 lbs. vehicle weight. The converter part numbers are shown below:

 Converter Type
 Universal Part No.
 Direct-Fit Part No.

 TWC + OC
 15140, 15141, 15142, 15143
 15546, 15575, 15577

II. <u>CONCLUSION</u>

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. <u>RECOMMENDATION</u>

The staff recommends that the exemption be granted as requested and that Executive Order No. D-182-8 be issued, permitting the advertisement, sale and installation of the new aftermarket catalytic converter.

IV. <u>DEVICE DESCRIPTION</u>

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The Walker three-way plus oxidation catalyst uses ceramic monolithic substrates which are coated with palladium and rhodium. The substrates are enclosed in an outer stainless steel shell. Heat shields are welded on top and bottom of the converter shell. The catalytic converter is sold 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. <u>DEVICE EVALUATION</u>

Walker has submitted the test data on the catalytic converter. The emission tests were conducted by Automotive Testing and Development Services, Inc. (ATDS), Huntington Beach, California. Testing consist of two CVS-75 emission tests on the test vehicle with the converter installed and then two CVS-75 tests with exhaust backpressure simulator. The two test catalytic converters were previously aged using two 1990 fuel injected Ford F-250 trucks with 5.8L engine displacement, and 5500 lb. vehicle test weight. The carry-over emission test vehicle was a 1992 TBI Dodge Ram B350, 5.9L and 5,500 lbs vehicle test weight. The test results and conversion efficiencies for the converter are shown below:

	<u>Simulator</u>	<u>Converter 1</u>	<u>Converter 2</u>	Avg. Conv. Eff.
HC (g/mi)	2.451	0.427	0.356	84.0%
CO (g/mi)	45.502	7.207	6.361	85.1%
NOx(g/mi)	3.034	1.253	1.293	58.0%

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 Walker and on test data from ATDS.

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