State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-53 Relating to Exemptions under Section 27156 of the Vehicle Code

E.O.

CONTROLLABLE ENERGY PRODUCTS "OSCILLATOR UNIT"

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39023 of the Health and Safety Code;

IT IS ORDERED AND RESOLVED: That the installation of "Oscillator Unit" manufactured by Controllable Energy Products, 401 Atlanta Ave. #50, Huntington Beach, CA 92646 has been found not to reduce the effectiveness of required motor vehicle pollution control devices and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for 1975 and older model-year vehicles.

This device consists of a capacitor and inductance encapsulated in plastic and can be identified by Controllable Energy Products molded into the casing. The unit can be inserted into each spark plug lead or inserted into the ignition coil to distributor lead.

This Executive Order is valid provided that installation instructions for this device will not recommend tuning the vehicle to specifications different than those listed by the vehicle manufacturer.

Changes made to the design or operating conditions of the device as originally submitted to the Air Resources Board for evaluation that adversely affect the performance of the vehicle's pollution control devices shall invalidate this Executive Order.

Marketing of this device using an identification other than that shown in this Executive Order or marketing of this device for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

This Executive Order does not constitute any opinion as to the effect that the use of this device may have on any warranty either expressed or implied by the vehicle manufacturer.

"OSCILLATOR UNIT"

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THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE "OSCILLATOR UNIT".

No claim of any kind, such as "Approved by Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication.

Section 17500 of the Business and Professions Code makes unlawful, untrue or misleading advertising, and Section 17534 makes violation punishable as a misdemeanor.

Sections 39130 and 39184 of the Health and Safety Code provide as follows:

"39130. No person shall install, sell, offer for sale, or advertise, or, except in an application to the board for certification of a device, represent, any device as a motor vehicle pollution control device unless that device has been certified by the board. No person shall sell, offer for sale, advertise, or represent any motor vehicle pollution control device as a certified device which, in fact, is not a certified device. Any violation of this section is a misdemeanor."

"39184. (a) No person shall install, sell, offer for sale, or advertise, or, except in an application to the board for accreditation of a device, represent, any device as a motor vehicle pollution control device for use on any used motor vehicle unless that device has been accredited by the board. No person shall sell, offer for sale, advertise, or represent any motor vehicle pollution control device as an accredited device which, in fact, is not an accredited device. Any violation of this subdivision is a misdemeanor.

Any apparent violation of the conditions of this Executive Order will be submitted to the Attorney General of California for such action as he deems advisable.

Executed at Sacramento, California, this $\frac{18}{18}$ day of April, 1975.

WILLIAM SIMMONS Executive Officer

State of California AIR RESOURCES BOARD March 31, 1975

Staff Report

Evaluation of Controllable Energy Products "Oscillator Unit" for Compliance with the Requirements of Section 27156 of the California Motor Vehicle Code

I. Introduction

Controllable Energy Products has submitted an application requesting an exemption from Section 27156 of the California Motor Vehicle Code for the "Oscillator Unit" (Reference - Exhibit A). Vehicle Code Section 27156 prohibits the installation of any device or mechanism which reduces the effectiveness of the required emission control devices. This vehicle code section also authorizes the Air Resources to exempt devices from this prohibition if a finding shows a device will not adversely affect the performance of the emission control system. The applicant is requesting the exemption be granted for all 1975 and older model year vehicles.

II. System Description

The "Oscillator Unit" is a capacitor and inductance connected in parallel and encapsulated in plastic with the terminal at each end of the circuit. The unit can be inserted into each spark plug lead or inserted into the ignition coil to distributor lead. Evaluation of Controllable Energy Products "Oscillator Unit" for Compliance with the Requirements of Section 27156 of the California Motor Vehicle Code

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According to the applicant, the purpose of this device is to increase the voltage of the spark by decreasing voltage losses in the ignition leads with his oscillator unit.

III. System Evaluation

The applicant did not submit any emission data indicating that the device will not have any adverse effect on the emission control system.

The Air Resources Board staff evaluated the device by comparing the electrical output characteristics of an ignition system with and without the device. Tests were conducted on the Air Resources Board ignition system simulator which consists of a Sun distributor tester, Tektronix oscilliscope, Sun ignition analyzer, and associated accessories.

The ARB evaluation consisted of measuring the available voltage, spark duration, spark rise time and spark current. The results of the testing indicated that there was no effect of the device on the above parameters and therefore the quality of the spark with the device. The data and results are presented as Table I.

Table I

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•	Secondary Voltage Available	18	.7 Kilovolts	18.7 Kilovolts
	Secondary Voltage Required	12	Kilovolts	12 Kilovolts
	Required Voltage Rise Time	35	Microseconds	35 Microseconds
	Spark Duration	1500	Microseconds	1500 Microseconds
	Spark Voltage (average)	1	Kilovolt	l Kilovolt

Baseline

Device

2.

Evaluation of Controllable Energy Products "Oscillator Unit" for Compliance with the Requirements of Section 27156 of the California Motor Vehicle Code

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Table I (Cont'd)

	Baseline	Device
Spark Current (average)	28 Milliamps	28 Milliamps
Spark Power (average)	28,000 Milliwatts	28000 Milliwatts
 Spark Energy	42 Millijoules	42 Millijoules

IV. Conclusion and Recommendation

The staff is of the opinion that this device will not affect the performance and operation of the emission control system since it has little or no effect upon the spark quality. Therefore, the staff recommends that the Controllable Energy Products be granted an exemption from the prohibitions of Section 27156 for the "Oscillator Unit" on 1975 and older model year vehicles.

