

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-38
Relating to Exemptions under Section 27156
of the Vehicle Code

SOLAR VOLT COMPANY
"SOLAR VOLT"

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 "Solar Volt" distributor rotor manufactured by Solar Volt Company, 1002 E. Walnut, Fullerton, California 92631 has been found to not 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 1966-74 model-year 8 cylinder vehicles only.

The "Solar Volt" is a double sided nonconductive printed circuit attached to the top of a specially designed ignition distributor rotor.

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.

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 "SOLAR VOLT" DEVICE.

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 29 day of August, 1974.

WILLIAM SIMMONS
Executive Officer

State of California

AIR RESOURCES BOARD

August 26, 1974

Staff Report

Evaluation of the Solar Volt Company
"Solar Volt"
device for Exemption from the Prohibitions of
Section 27156 of the Motor Vehicle Code

I. Introduction

Solar Volt Company of 1002 E. Walnut, Fullerton, California 92631 has applied for exemption from the prohibitions of Section 27156 of the Vehicle Code for its "Solar Volt" device. This section prohibits the installation of any device which may reduce the effectiveness of the motor vehicle emission control system. The applicant is requesting the exemption be granted for all 1974 and older model-year 8-cylinder vehicles.

The Air Resources Board has adopted criteria for the evaluation of "after-market" devices for compliance with Section 27156. The basis for evaluation is defined in the "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Motor Vehicle Code," dated February 17, 1971.

II. System Description and Function

The "Solar Volt" device is a specially designed distributor rotor. The device includes a double-sided printed circuit board attached to the top of a modified distributor rotor. The two circuits are completely insulated from each other and do not interfere with the existing ignition system when installed on a vehicle. Figure 1 shows a picture of one of the typical designs.

Evaluation of the Solar Volt Company
"Solar Volt" Device for Exemption
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The applicant claims that the "Solar Volt" device is designed to deliver to the combustion chambers of an engine a so-called non-burning radiation on each of the cycles of the engine cylinders other than the firing cycles.

The ARB staff believes that this device produces no measurable affect on the combustion process and will have no effect on the existing emission control systems of a motor vehicle. Since the device has no influence on the engine electrical system, radiation cannot and will not be produced or transduced by such a device.

III. System Evaluation

A. Applicant's Data

The applicant submitted Olson Laboratories, Inc., report # 8862-5101 on the "Solar Volt" device dated July 22, 1974. The report contains exhaust emission data obtained from a 1974 Chevrolet Chevelle V-8 (# 392 J0J).

The following table summarizes the data obtained.

Federal Hot CVS Exhaust Emissions in gm/mi

	<u>HC</u>	<u>CO</u>	<u>NOx</u>
Baseline	1.00	13.46	1.37
Device	0.93	12.23	1.30
% Reduction	7.0	9.1	5.1

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B. ARB Engineering Evaluation

The ARB Engineering staff after an evaluation of the operating principles and design of the "Solar Volt" device decided not to perform any emission tests at the ARB Laboratories. Based on the electrical characteristics of the device, the staff is of the opinion that this device will have no effects on the existing emission control system of a motor vehicle. This decision was based on the following:

- 1 - The two printed circuits are insulated from each other and do not permit any electrical continuity or interfere with the engine electrical system.
- 2 - The device is made from nonconductive materials.
- 3 - There is no such radiation of any kind emitted from or transduced by the device.
- 4 - The circuit design and measured dielectric resistance was sufficient to preclude electrical bridging between adjacent distributor terminals.
- 5 - The applicant's test data show no significant change in emissions with the device when compared with the baseline vehicle.

IV. Conclusion and Recommendation

The staff recommends that the "Solar Volt" ignition distributor roter manufactured by Solar Volt Company of Fullerton, California, be granted an exemption from the prohibitions of Section 27156 for 1974 and older model year 8-cylinder vehicles only.

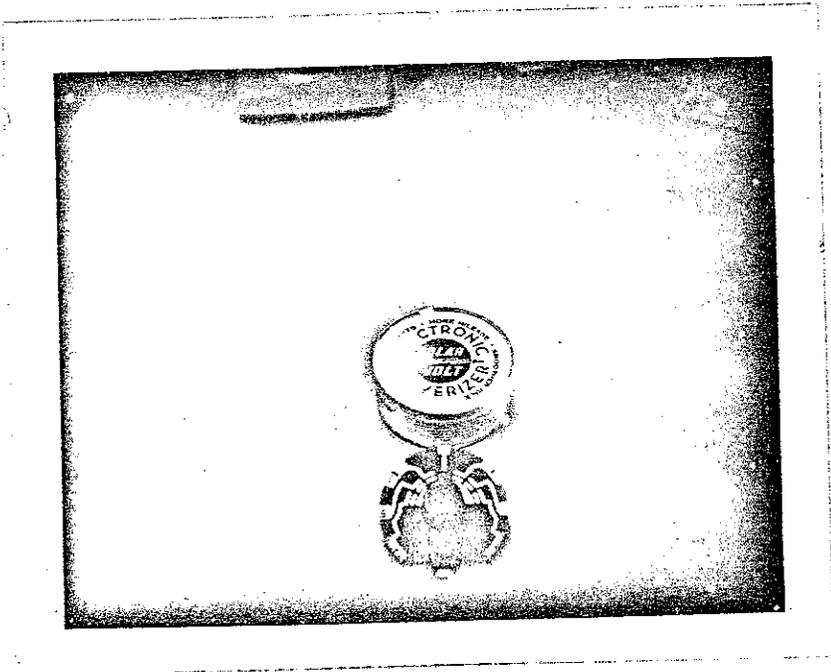


FIGURE 1
Solar Volt Distributor Rotor