

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-123  
Relating to Exemptions under Section 27156  
of the Vehicle Code

THE ENGINE SAVER DEVICE

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 Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the Engine Saver device manufactured by Mr. Stanley Chial, 1107 Curtiss Avenue, No. 1, San Jose, CA 95125, 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 1982 and older model year vehicles with conventional vacuum-operated PCV systems.

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

Changes made to the design or operating conditions of the device, as exempted by the Air Resources Board, that adversely affect the performance of a vehicle's pollution control system 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. Exemption of a kit shall not be construed as an exemption to sell, offer for sale or advertise any component of a kit as an individual device.

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 ENGINE SAVER 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.

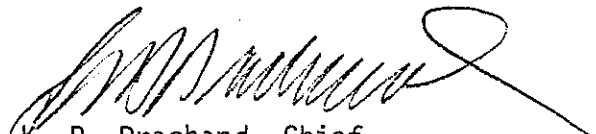
Section 17500 of the Business and Professions Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

Section 43644 of the Health and Safety Code provides as follows:

"43644. (a) No person shall install, sell, offer for sale, or advertise, or, except in an application to the state board for certification 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 certified by the state 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 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 El Monte, California, this 15<sup>th</sup> day of March, 1982.

  
K. D. Drachand, Chief  
Mobile Source Control Division

State of California  
AIR RESOURCES BOARD

March 3, 1982

Staff Report

Evaluation of the "Engine Saver" for Exemption from the Prohibitions in Section 27156 of the Vehicle Code in Accordance with Section 2222, Title 13, of the California Administrative Code

I. INTRODUCTION

Mr. Stanley M. Chial has requested exemption from the prohibitions in Vehicle Code Section 27156 for the Engine Saver device. This device is intended for use on vehicles with conventional vacuum-operated PCV systems and is designed to entrap oil particles mixed among the blow-by gases.

II. DEVICE DESCRIPTION AND OPERATION

The Engine Saver device consists of a one-quart glass jar and an aluminum lid with two ports for connection through rubber hoses to the engine's PCV system (see Figure 1). An "O" ring is provided to ensure leakproof sealing between the lid and the jar.

In operation the blow-by gases (mixed with small amounts of oil particles) are drawn through the device into the intake manifold. The inertia of the heavier oil particles and the manner in which the inlet and outlet ports are situated cause the oil particles to separate from the blow-by gases and to settle in the bottom of the jar. The entrapped oil is later discarded.

### III. DEVICE EVALUATION

Neither the applicant nor the ARB performed exhaust emissions tests on vehicles equipped with the Engine Saver device. However, the ARB did perform a bench test to determine if the device would have any air leaks when vacuum was applied to its connection ports.

The ARB has evaluated more than a half dozen devices which operate on the same principle as the Engine Saver device. The purpose of such devices is to remove the oil particles in the blow-by gas and to lessen the chances of cylinder misfire due to oil fouling of the spark plugs. The value of these devices is, therefore, dependent upon the condition of the engine; i.e., the amount of oil in the blow-by gases.

The ARB's bench test of the Engine Saver resulted in several changes by the device manufacturer to correct poor sealing of the device. The revisions included a larger diameter (3/16") "O" ring, chamfering the lid edge for better contact with the "O" ring, and smaller diameter hose connection ports. A bench test after all the above changes showed leakproof operation of the device under prevailing maximum engine manifold vacuum conditions.

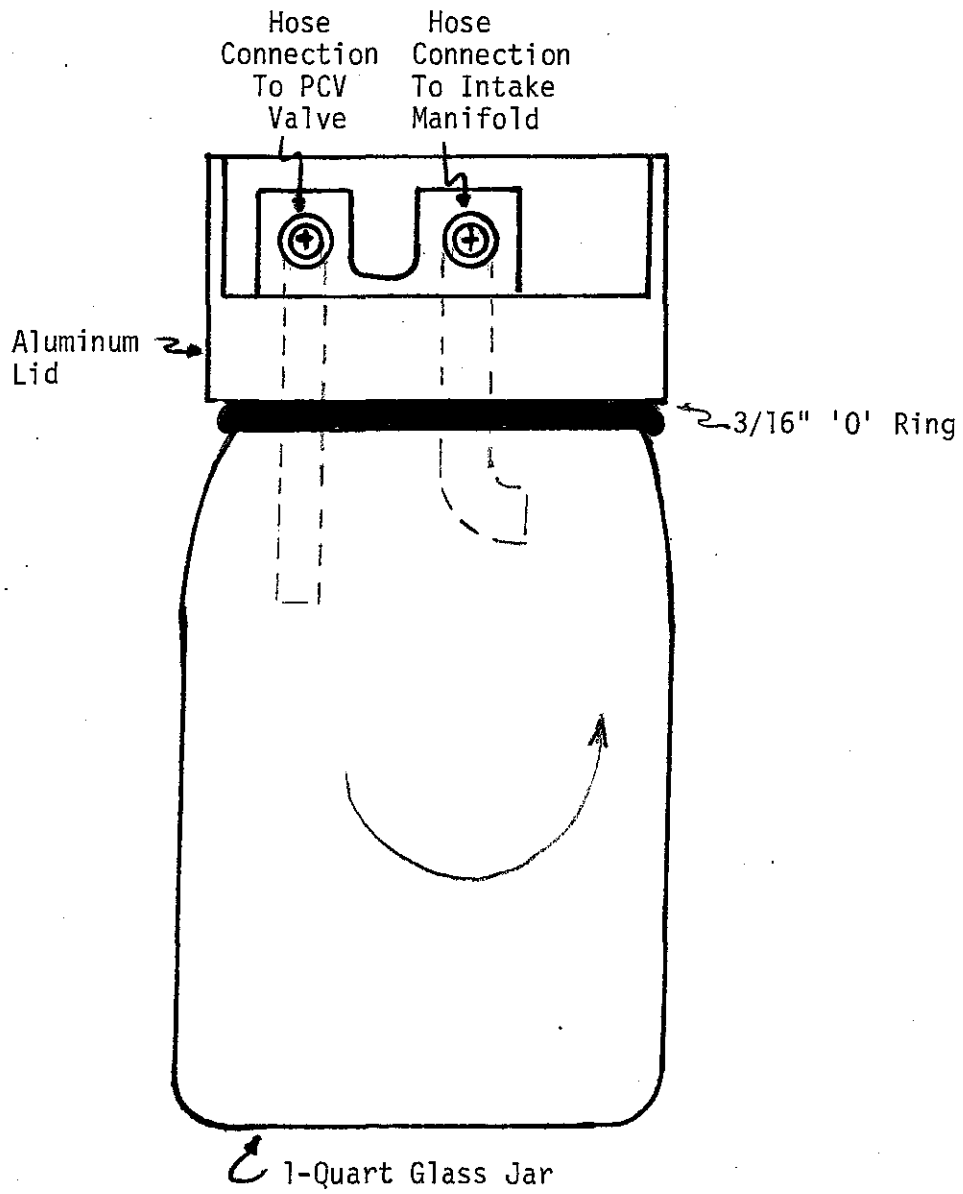
### IV. CONCLUSIONS AND RECOMMENDATIONS

It is the staff's opinion that the Engine Saver device in its present configuration after revisions would not leak and cause any adverse emission problems.

The staff recommends, therefore, that the Engine Saver device be exempted from the prohibitions in Section 27156 of the California Vehicle Code for 1982 and older model year vehicles with conventional vacuum-operated PCV systems.

FIGURE 1

ENGINE SAVER DEVICE



Drawing Not to Scale