

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-134
Relating to Exemptions under Section 27156
of the Vehicle Code

NATIONAL FUELSAVER CORPORATION
GASAVR-PLATINUM INJECTION

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 Gasaver-Platinum Injection manufactured by National Fuelsaver Corporation, Brookline, MA 02146 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 1983 and older model-year vehicles, except those equipped with diesel engines.

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 GASAVR-PLATINUM INJECTION 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.

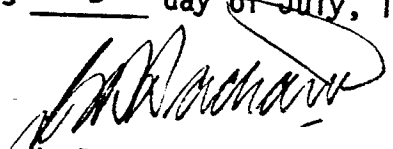
Section 17500 of the Business and Professions Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

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 25th day of July, 1983.


K. D. Drachand, Chief
Mobile Source Control Division

State of California
AIR RESOURCES BOARD

EVALUATION OF NATIONAL FUELSAVER CORPORATION'S GAS-AVER-PLATINUM INJECTION
DEVICE FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156

July, 1983

State of California
AIR RESOURCES BOARD

EVALUATION OF NATIONAL FUELSAVER CORPORATION'S GAS-AVER-PLATINUM INJECTION
DEVICE FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156

by

Mobile Source Control 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

National Fuelsaver Corporation has applied for exemption from the prohibitions of Vehicle Code Section 27156 for an add-on device known as the Gasaver-Platinum Injection.

The operating principles of the Gasaver device were evaluated and found not to adversely affect the emission ^hcontrolling components on current model-year vehicles. It was also found during the evaluation that the Gasaver device has no effect on the fuel economy of the vehicle tested.

Since the device does not adversely affect vehicle emissions, the staff recommends that the exemption be granted for the vehicles as requested.

CONTENTS

	<u>Page Number</u>
<u>SUMMARY</u>	i
<u>CONTENTS</u>	ii
I. <u>INTRODUCTION</u>	1
II. <u>CONCLUSIONS</u>	1
III. <u>RECOMMENDATION</u>	1
IV. <u>DEVICE DESCRIPTION AND OPERATION</u>	2
V. <u>DISCUSSION</u>	3

State of California
AIR RESOURCES BOARD

EVALUATION OF NATIONAL FUELSAVER CORPORATION'S GASAVER-PLATINUM INJECTION
DEVICE FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156

I. INTRODUCTION

National Fuelsaver Corporation, Brookline, MA 02146, has applied for exemption from the prohibitions of Vehicle Code Section 27156 for an aftermarket add-on device known as the "Gasaver-Platinum Injection". Exemption is sought for use of the device on all 1983 and older model-year vehicles except those with diesel engines.

This report describes the Board's evaluation of the device and its findings.

II. CONCLUSIONS

The Board's staff determined through an engineering evaluation that the Gasaver device when installed on typical emission controlled vehicles would not adversely affect the vehicle's exhaust emissions.

The comparative laboratory tests performed by the Board revealed that the device has little or no effect on emissions and fuel economy of a 1981 model-year vehicle equipped with 3-way catalyst and closed-loop feed-back controls.

III. RECOMMENDATION

Since the use of the device has no adverse emissions effect, the staff recommends that the Gasaver device be exempted from the prohibitions of Vehicle Code 27156 for 1983 and older model-year vehicles, except those equipped with diesel engines.

IV. DEVICE DESCRIPTION AND OPERATION

The Gasaver device is basically a vapor injection system. It consists of a plastic container (reservoir), tubing to remotely connect the reservoir to the engine's intake manifold and a proprietary fluid.

The reservoir is made of molded plastic. There are two openings on the reservoir; an outlet nipple with a 0.005 inch orifice at the upper part of the reservoir and an inlet opening close to the bottom of the reservoir. A 5/8 inch fill pipe is made an integral part of the reservoir. It is open at the top to the atmosphere; its bottom is connected to the reservoir's inlet opening. A fill line is marked on the side of the reservoir to indicate and limit the reservoirs' filling to approximately one-half of its volume (nominal fill is approximately one pint).

A "T" connector is used to link the connecting tubing through existing vacuum lines to the engine's intake manifold. The tubing ends are simply slipped over the "T" connector and the outlet nipple on the reservoir and are not clamped.

The Gasaver concentrate (approximately 1 oz.) is a proprietary fluid and mixed with 12 oz. of water, possibly distilled.

In operation, negative pressure from the engine intake manifold is applied to the upper portion of the reservoir through the connecting tubing. This allows air from the atmosphere to enter through the fill pipe into the bottom portion of the reservoir. The air then bubbles through the fluid and rises to the upper portion of the reservoir to be mixed there with the liquid vapor. This mixture is then drawn into the engine's intake manifold and mixed with the air/fuel mixture charge being delivered to the engine cylinders.

V. DISCUSSION

In the past, the Board has evaluated more than a dozen vapor injectors which operate in a manner similar to the Gasaver device. During these evaluations, it was found that the air-bleed orifice size of the device determines whether the device would adversely affect vehicular emissions. The Gasaver's orifice (0.005 of an inch) is well below the maximum allowable limit.

During 1981, the Board performed comparative laboratory tests on a typical vehicle to determine the device's possible effect on exhaust emissions and fuel economy. The test data show that neither exhaust emissions or fuel economy were influenced by the device even after 1000 miles of use.

The applicant alleges that the platinum solution aids in a faster and more complete burning of fuel and "fuel savings will gradually improve up to the 15-25 percent during the first 800-1000 miles of Gasaver use".

Additionally, the applicant suggests that the platinum contained within the concentrate coats the combustion chamber of the engine, which then reacts in a similar manner as a catalytic converter found on most 1975 and newer vehicles. However, there is no explanation offered by the applicant as to how the platinum will adhere to the combustion chamber.

The surface area of the engine's combustion chamber is approximately 60,000 times smaller than the surface area of a typical catalytic converter due to the porosity of the substrate used. Furthermore, the amount of platinum found in the Gasaver concentrate was measured and found to be one hundredth of that found in a typical catalytic converter.

The Board is unaware of any valid laboratory tests which substantiate the alleged benefit that the Gasaver device will aid in combustion and subsequently, increase fuel savings.
