

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-96  
Relating to Exemptions under Section 27156  
of the Vehicle Code

HALEM INDUSTRIES  
PASS MASTER 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 Pass Master Device manufactured by Halem Industries, 414 Highpoint Drive, Cocoa, Florida 32922 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 1979 and older model-year vehicles equipped with conventional gasoline burning engines and some 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 PASS MASTER 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 17<sup>th</sup> day of December, 1979.

*K. D. Drachand by PLW*  
K. D. Drachand, Acting Chief  
Mobile Source Control Division

State of California  
AIR RESOURCES BOARD

Staff Report

November 30, 1979

Evaluation of the Halem Industries  
"Pass Master" Device In Accordance  
with Section 2222, Title 13  
of the California Administrative Code

I. Introduction

Halem Industries, 414 Highpoint Drive, Cocoa, Florida 32922 has applied for an exemption from Section 27156 of the California Vehicle Code for the "Pass Master" device. The applicant intends to market the device for 1979 and older model year gasoline powered internal combustion engines and some diesels.

II. System Description and Function

The purpose of the device is to turn off the vehicle air conditioner compressor during engine power demand periods such as acceleration or climbing hills. It consists of a manifold vacuum switch which monitors engine vacuum drop during power demand periods and interrupts the voltage to the air conditioner compressor clutch during this period. This idles the compressor and permits the 5 to 15 horsepower compressor drag to be used to move the vehicle.

### III. System Evaluation

The applicant submitted tests performed by the U.S. Energy Research and Development Administration.

Pertinent excerpts from this report are as follows:

#### Fuel Economy - Miles per gallon - Air conditioner in operation

	<u>device off</u>	<u>device on</u>	<u>% increase</u>
7 1979 Olds. Cutlass (8 cyl)	11.50	12.78	11.1
1977 Ford Pinto (4 cyl)	17.18	18.31	6.6

The agency also performed emission tests on the same vehicle. Only the hot transient and the stabilizing phase of the CVS 75 tests were used.

		<u>device off</u>	<u>Grams Per Mile</u> <u>device on</u>	<u>% change</u>
Cutlass	HC	.40	.32	-20.0
	CO	9.36	3.37	-64.0
	NOx	2.61	2.37	-9.2
Pinto	HC	1.13	.82	-27.4
	CO	24.10	16.00	-33.6
	NOx	2.79	2.60	-6.8

The applicant also submitted tests performed at the Auto Club of Southern California in Los Angeles. Pertinent excerpts are as follows:

The test consisted of CVS-75 cold starts on a 1972 Chevrolet Nova. Air conditioner in operation

	<u>device off</u>	<u>Grams Per Mile device on</u>	<u>% change</u>
HC	1.11	0.89	-19.8
CO	17.86	12.65	-29.2
NOx	2.57	2.34	-8.9
MPG	11.43	11.91	+4.2

#### IV. System Evaluation

Based on the submitted data, the staff is of the opinion that the device does not violate the prohibitions in California Vehicle Code Section 27156. There is also some fuel economy benefit, which is to be expected; and, therefore the applicant's claim of improved mileage is valid.

#### V. Recommendation

Based on the test data and submitted information, the staff is of the opinion that the "Pass Master" device should be exempt from the prohibitions in Section 27156 of the California Vehicle Code. The staff therefore recommends adoption of Executive Order D-96.