

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-96-2
Relating to Exemptions Under Section 27156
of the Vehicle Code

HALEM INDUSTRIES, INC.
(Pass Master Models PM-3, PM-4, PM-6, and PM-8)

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 Models PM-3, PM-4, PM-6, and PM-8 manufactured by Halem Industries, Inc., Cocoa, FL 32922 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.

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 9th day of August, 1983.


K. D. Drachand, Chief
Mobile Source Control Division

State of California
AIR RESOURCES BOARD

EVALUATION OF HALEM INDUSTRIES, INC.'S PASS MASTER DEVICE FOR EXEMPTION FROM
THE PROHIBITIONS IN VEHICLE CODE SECTION 27156.

July, 1983

State of California
AIR RESOURCES BOARD

EVALUATION OF HALEM INDUSTRIES, INC.'S PASS MASTER DEVICE
FOR EXEMPTION FROM THE PROHIBITIONS IN 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 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

Halem Industries, Inc. has requested that their current Executive Order D-96-1 for the "Pass Master", a temporary air conditioning cut-out device, be updated to include 1983 and older model-year vehicles.

The staff has determined that the device would not adversely affect exhaust emissions as demonstrated from previously submitted comparative emission test data. Additionally, an engineering evaluation determined that a vehicle's driveability would not be degraded with the use of the device.

Based on the above, the staff recommends that the requested exemption be granted and that Executive Order D-96-2 be issued.

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>RECOMMENDATIONS</u>	1
IV. <u>DEVICE DESCRIPTION</u>	2
V. <u>DISCUSSION</u>	2

EVALUATION OF HALEM INDUSTRIES, INC.'S PASS MASTER DEVICE FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156.

I. INTRODUCTION

Halem Industries, Inc., Cocoa, FL 32922 has requested that their present Executive Order D-96-1 for the "Pass Master" device be updated to include 1983 and older model-year vehicles.

The Pass Master is an aftermarket add-on device which automatically deactivates the vehicle's air conditioning compressor during certain driving modes. There are four separate models of the device (PM-3, PM-4, PM-6, and PM-8) for installation on four, six, and eight cylinder engine equipped vehicles.

This report describes the Board's evaluation of the device for use on late model-year vehicles.

II. CONCLUSIONS

Based upon previously submitted comparative exhaust emission test data on vehicles equipped with the device and on the principles of operation, the staff has determined that the Pass Master will not adversely affect exhaust emissions. Additionally, it has been determined through an engineering evaluation that the device would not degrade the driveability of vehicles on which it is equipped.

III. RECOMMENDATION

Since the Pass Master has been determined not to adversely affect exhaust emissions or driveability of vehicles so equipped, the staff recommends that the Pass Master models PM-3, PM-4, PM-6 and PM-8 be granted exemption from the prohibitions in Vehicle Code Section 27156 and that Executive Order D-96-2 be issued.

IV. DEVICE DESCRIPTION

The Pass Master device consists of a vacuum operated electrical switch and tubing which remotely connects the device to the engine's intake manifold. The device will only function on vehicles equipped with air conditioning and after the vehicle operator has manually activated it. The vacuum operated switch is installed in series with the electrical wire which normally activates the electro/mechanical clutch of the air conditioning compressor.

In operation, the device interrupts the electrical signal to the air compressor clutch during heavy acceleration periods which have low manifold vacuum. After acceleration, the manifold vacuum reverts to a normal level and the electrical signal to the compressor clutch is restored.

The Pass Master models vary only in the set points in which deactivation and subsequent activation occurs. The models PM-3, PM-4, PM-6, and PM-8 are for four cylinder exports, four cylinder, six cylinder, and eight cylinder engine domestic vehicles, respectively.

V. DISCUSSION

The exhaust emissions levels and fuel economy of a vehicle are optimized when accessories which require mechanical or electrical power to operate are not used. The Pass Master device allows automatic short term interruption of one such accessory, the air conditioning unit. It should be noted that if an individual is truly concerned with fuel economy, the vehicle's air conditioning should not be used. Thereby the addition of the Pass Master device would become superfluous.

For several years original equipment manufacturers have been using a similar operating circuit to deactivate the air conditioning clutch during heavy accelerations to gain passing power, especially on today's smaller engine vehicles.

The four models of the device are designed with fixed off-on set points for various engine displacements. The smallest size engine receives the device with the lowest off-on points while the largest size engine receives the device with highest off-on points. Off points of the four models are 2, 3, 5 and 7" Hg while the on point are 3, 4, 6, and 8" Hg.

AIR RESOURCES BOARD

HAAGEN-SMIT LABORATORY

TELSTAR AVENUE

EL MONTE 91731

PHONE: (213) 575-6800



Reference No. A-83-293

AUG 10 1983

Mr. Norman Halem
Halem Industries, Inc.
414 High Point Drive
Cocoa, FL 32922

Dear Mr. Halem:

This is in response to your July, 1983, request to update Executive Order D-96-1 for the Pass Master device.

Attached, please find Executive Order D-96-2 and our July, 1983, Staff Report exempting the "Pass Master" device from the prohibitions of Vehicle Code Section 27156 for 1983 and older model-year vehicles.

We are unable to grant 1984 exemption as you requested since the 1984 new car certification has not been completed.

If you have any questions, please contact Mr. John Chao, Manager, Aftermarket Parts and Modification Evaluation Section at (213) 575-6839.

Sincerely,

A handwritten signature in cursive script, appearing to read 'K. D. Drachand'.

K. D. Drachand, Chief
Mobile Source Control Division

Attachment (2)