State of California AIR RESOURCES BOARD

Relating to Exemptions under Section 27156 of the Vehicle Code

LINDBERG COMBUSTION CONTROL SYSTEM

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 Lindberg Combustion Control System manufactured by the Lindberg International Corp., Berkeley, California 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 1976 and earlier gasoline fueled motor 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 LINDBERG COMBUSTION CONTROL SYSTEM.

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.

LINDBERG INTERNATIONAL LINDBERG COMBUSTION CONTROL SYSTEM

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 _____ day of January, 1982.

K. D. Drachand, Chief

Mobile Source Control Division

State of California AIR RESOURCES BOARD

Staff Report

November 25, 1981

Evaluation of Lindberg International Corporations "Lindberg Combustion Control System" in Accordance with Section 2222, Title 13 of the California Administrative Code.

I. INTRODUCTION

On October 9, 1974, the Lindberg Ecology Corporation was granted an Executive Order accrediting a retrofit device known as the Lindberg Combustion Control System as a non-mandatory NOx control device for 1966 through 1970 motor vehicles. This company, now known as Lindberg International, is seeking exemption from the prohibitions of California Vehicle Code Section 27156 for installation of the device on 1976 and older vehicles.

II. DEVICE DESCRIPTION

The Lindberg system is an injection system which introduces the water as steam through the positive crankcase vent port of the carburetor. The unique feature of this system is the "Reactor" which controls the fluid flow as a function of exhaust manifold temperature and vaporizes the water using exhaust manifold heat. A magnetic valve placed in the water reservoir acts as a flow limiter and an anti-siphon valve. The combination of the magnetic valve and the Reactor prevent water from entering the engine during low demand modes.

III. DEVICE EVALUATION

The Lindberg device has been extensively tested and accredited as a non-mandatory retrofit NOx control device for older vehicles. This device is designed to introduce water only during high demand modes.

Systems utilizing similar control concepts have been found not to increase emissions from late model vehicles.

IV. RECOMMENDATIONS

The staff finds that installation of the Lindberg Combustion Control System will have no adverse effect upon the emissions of a motor vehicle and recommends that E. O. D-121 exempting the "Lindberg Combustion Control System" from the prohbitions of V. C. 27156 be granted.