State of California AIR RESOURCES BOARD

Relating to Exemptions under Section 27156 of the Vehicle Code

D & S ENTERPRISES "MILEAGE MAKER"

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 simplified "Mileage Maker" device (combination of a fuel heater and a fuel pressure regulator) manufactured by Olde Worlde, Inc. and distributed by D & S Enterprises, of 5425 Waterside Drive, Jacksonville, Florida 32210, 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 motor vehicles equipped with a six- or eight-cylinder carbureted engine. Vehicles equipped with a fuel injected or a turbocharged engine are excluded.

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 "MILEAGE MAKER".

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 18^{H} day of October, 1983.

K. D. Drachand, Chief Mobile Source Division

STATE OF CALIFORNIA AIR RESOURCES BOARD

EVALUATION OF D & S ENTERPRISES' SIMPLIFIED "MILEAGE MAKER" DEVICE FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA ADMINISTRATIVE CODE.

October 11, 1983

Issue Date: October 11, 1983

EVALUATION OF D & S ENTERPRISES' SIMPLIFIED "MILEAGE MAKER" DEVICE FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA ADMINISTRATIVE CODE.

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Mobile Source 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

D & S Enterprises of Jacksonville, Florida, has requested an exemption from the prohibitions in California Vehicle Code Section for their combined fuel heater and fuel pressure regulator device, a simplified version of the "Mileage Maker" manufactured by the Olde Worlde, Inc., in Greenboro, North Carolina. D & S Enterprises has requested that the device be exempted for 1983 and older model-year motor vehicles equipped with a six- or eight-cylinder carbureted engine, excluding those equipped with a fuel injected or a turbocharged engine.

Based on an engineering evaluation of each component (fuel heater and fuel pressure regulator) of the device, the staff concludes that the device will not have an adverse affect on exhaust emissions from the vehicles for which exemption is requested. The staff, therefore, recommends that D & S Enterprises be granted an exemption for their device for the vehicles requested and that Executive Order D-139 be issued.

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EVALUATION OF D & S ENTERPRISES' SIMPLIFIED "MILEAGE MAKER" DEVICE FOR EXEMPTION FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156

IN ACCORDANCE WITH SECTION 2222, TITLE 13,

OF THE CALIFORNIA ADMINISTRATIVE CODE.

I. INTRODUCTION

D & S Enterprises, of 5425 Waterside Drive, Jacksonville, Florida 32210, has requested an exemption of an add-on device from the prohibitions in California Vehicle Code Section 27156. They have requested that their combined fuel heater and fuel pressure regulator device, which is a simplified version of the "Mileage Maker", be exempted for 1983 and older model-year motor vehicles equipped with a six- or eight-cylinder carbureted engine, excluding those equipped with a fuel injected or a turbocharged engine.

II. CONCLUSION

Based on an engineering evaluation of each component (fuel heater and fuel pressure regulator) of the device, the staff concludes that the device will not have an adverse effect on exhaust emissions from the vehicles for which exemption is requested.

III. RECOMMENDATIONS

The staff recommends that D & S Enterprises be granted an exemption for their simplified "Mileage Maker" device for 1983 and older model-year motor vehicles equipped with a six- or eight-cylinder carbureted engine, excluding those equipped with a fuel injected or a turbocharged engine. The staff also recommends issuance of Executive Order D-139.

IV. DEVICE DESCRIPTION AND OPERATION

The complete "Mileage Maker" device is a combination of a fuel heater, a fuel pressure regulator, an air conditioner compressor cut-off switch, and a water/vapor injector. It is manufactured by Olde Worlde, Inc. and is exempted for California sale under Air Resources Board Executive Order D-130. The simplified device is a combination of a fuel heater and a fuel pressure regulator only. It is packaged with installation hardware and instructions and sold as a kit.

The fuel heater and fuel pressure regulator are positioned in series between the fuel pump and carburetor inlet. The fuel heater consists of a heat exchanger, a thermostat switch, and a solenoid valve. When the fuel in the thermostat chamber is below 120°F, the solenoid valve allows engine coolant to flow through the heat exchanger and heats the fuel. When the fuel in the thermostat chamber reaches a temperature of 120°F, the solenoid valve will be closed thus cutting off the flow of engine coolant to the heat exchanger. As fuel flows out the heater exchanger, at a maximum temperature of 120°F, the fuel passes through the fuel pressure regulator and into the carburetor inlet. Carburetor inlet fuel pressure is limited to 3.5 psi by the design of the fuel pressure regulator.

No modifications to the OEM tune-up specifications are required, nor permitted, when the "Milege Maker" is installed.

V. DISCUSSION

The complete "Mileage Maker" consisting of a fuel heater, a fuel pressure regulator, an air conditioner compressor cut-off switch and a water/vapor injector has been previously evaluated and exempted by the Air Resources Board under Executive Order D-130. The device manufacturer, by Olde Worlde, Inc., has permitted D & S Enterprises to distribute and sell the device, and has transferred to them their ARB files and contents therein.

D & S Enterprises has decided to modify the device by deleting the water/vapor injector and air conditioner compressor cut-off switch components.

The staff has evaluated the design parameters of each component of the simplified "Mileage Maker" device. The design parameters are as follows.

- fuel heater maximum fuel temperature of 120°F into carburetor inlet.
- fuel pressure regulator maximum fuel pressure of 3.5 psi into carburetor inlet.

The staff has previously evaluated these components individually and has noted that these design parameters will not have an adverse effect on exhaust emissions or driveability of motor vehicles for which exemption is requested.