# State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER D-427 Relating to Exemptions Under Section 27156 of the Vehicle Code

## NORTHERN CALIFORNIA DIAGNOSTIC LABORATORIES, INC. SPEEDTRAPP

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 Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the SpeedTrapp, manufactured and marketed by Northern California Diagnostic Laboratories, Inc., 2748 Jefferson Street, Napa, California 94558-4936 has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for all 1997 and older motorcycles.

This Executive Order is valid provided that the installation instructions for the SpeedTrapp will not recommend tuning the motorcycle to specifications different from those of the motorcycle manufacturer.

Changes made to the design or operating conditions of the device, as exempt by the Air Resources Board, which adversely affect the performance of the motorcycle's pollution control system shall invalidate this Executive Order.

Marketing of the SpeedTrapp using any identification other than that shown in this Executive Order or marketing of the SpeedTrapp 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 the SpeedTrapp shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

This Executive Order does not constitute any opinion as to the effect the use of the SpeedTrapp may have on any warranty either expressed or implied by the motorcycle 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 NORTHERN CALIFORNIA DIAGNOSTIC LABORATORIES, INC.'S SPEEDTRAPP.

No claim of any kind, such as "Approved by the Air Resources Board", may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten-day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination after hearing that grounds for revocation exist.

Executed at El Monte, California, this

R. B. Symmerfield, Chief

Mobile Source Operations Division

State of California AIR RESOURCES BOARD

EVALUATION OF NORTHERN CALIFORNIA DIAGNOSTIC LABORATORIES, INC.'S SPEEDTRAPP FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

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by

Mobile Source Operations Division 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

Northern California Diagnostic Laboratories, Inc. (NCDL) of 2748

Jefferson Street, Napa, California 94558 has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for their SpeedTrapp designed for 1997 and older motorcycles.

Based on an engineering evaluation the staff concludes that the SpeedTrapp will not adversely affect exhaust emissions from motorcycles for which the exemption is requested.

The staff recommends that NCDL be granted an exemption as requested and that Executive Order D-427 be issued.

### TABLE OF CONTENTS

		Page Number
SUMM	ARY	i
CONTENTS		ii
I.	INTRODUCTION	. 1
ÌI.	CONCLUSION	1
III.	RECOMMENDATION	1
IV.	SPEEDTRAPP DESCRIPTION	1
17	DISCUSSION OF THE CHEEDEDADD	ń

EVALUATION OF NORTHERN CALIFORNIA DIAGNOSTIC LABORATORIES, INC.'S SPEEDTRAPP FOR AN EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

#### I. <u>INTRODUCTION</u>

Northern California Diagnostic Laboratories, Inc. (NCDL) of 2748

Jefferson Street, Napa, California 94558 has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for their SpeedTrapp designed for 1997 and older motorcycles.

#### II. CONCLUSIONS

Based on an engineering evaluation, the staff concludes that NCDL's SpeedTrapp will not adversely affect exhaust emissions from the motorcycles for which the exemption is requested.

#### III. RECOMMENDATION

The staff recommends that NCDL be granted an exemption for their SpeedTrapp for installation on motorcycles. The staff also recommends that Executive Order D-427 be issued.

### IV. SPEEDTRAPP DESCRIPTION

The SpeedTrapp has been specifically designed for installation on 1997 and older motorcycles. The SpeedTrapp operates in conjunction with the original equipment manufacturer's (OEM) computer controlled fuel injection system and emission control system already certified with the stock engine.

The SpeedTrapp is a one inch thick aluminum plate which attaches to and covers the front of the carburetor and/or fuel injection intake manifold. The SpeedTrapp has a movable "sealing door" in the center of the device that is attached by a dowel running through the center and attached to a pivoting arm located on the side of the device, similar to a throttle body. When the motorcycle starts, manifold vacuum is created, this vacuum pulls on a spring loaded vacuum diaphragm located at the base of the device, which in turn is attached to and pulls on the pivot arm. This action causes the sealing door of the SpeedTrapp to fully open, and allow air to flow into the carburetor and/or fuel injection intake manifold. When the motorcycle is turned off, manifold vacuum ceases, the spring in the vacuum diaphragm then pushes the sealing door shut, creating an effective seal and preventing leakage to the atmosphere. The SpeedTrapp kit includes all necessary hardware to mount the SpeedTrapp to the existing throttle body or carburetor and the stock air cleaner.

#### V. <u>DISCUSSION OF THE SPEEDTRAPP</u>

An engineering evaluation was conducted to determine the impact of the SpeedTrapp on the motorcycle's emission control system. To understand what effect the SpeedTrapp may have on the motorcycle's emission control system, staff evaluated the device and its effect on tailpipe and evaporative emissions.

The SpeedTrapp is placed between the air filter and the carburetor, usually no other components are attached between the two parts. When a motorcycle is not running the SpeedTrapp's door remains in the closed position, air is unable to flow in or out of the engine. The opposite is true when the motorcycle is running, an intake manifold vacuum caused by the running engine opens the SpeedTrapp's door to allow air to be passed from the air cleaner to the engine's intake air system, the carburetor or throttle body.

Since the SpeedTrapp's door is designed to remain open when the engine is operating, there should be no effect on tailpipe emissions by the addition of the device. Similarly when the engine is not operating, this device would not cause an increase in the vapor loss to the atmosphere.

NCDL has submitted all the required information and fulfilled the requirements for an exemption.