

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-265-2
Relating to Exemptions Under Section 27156
of the Vehicle Code

MOPAR PERFORMANCE
SBEC COMPUTER

Pursuant to the authority vested in the Air Resources Board (ARB) 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 SBEC Computer manufactured by Mopar Performance have been found not to reduce the effectiveness of required motor vehicle pollution control devices and, therefore, are exempt from the prohibitions of Section 27156 of the Vehicle Code for the following vehicles: The 1992 & 1993 Dodge Dakota trucks powered by a 3.9L V6 Magnum engine must use SBEC Computer, P/N P5249383 and Dodge Dakota trucks powered by a 5.2L V8 Magnum engine must use SBEC Computer, P/N P5249384.

This Executive Order is valid provided that installation instructions for the SBEC Computer 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 ARB, 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 ARB.

This Executive Order does not constitute any opinion as to the effect the use of this device may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on results from emissions tests conducted in accordance with Cold-Start CVS-75 Federal Test Procedure. However, the ARB finds that reasonable grounds exist to believe that use of the SBEC Computer may adversely affect emissions of motor vehicles when operating under conditions outside the parameters of the previously prescribed test procedures. Accordingly, the ARB reserves the right to conduct additional emission tests, in the future, as such tests are developed, that will more adequately measure emissions from all cycle phases. If such test results demonstrate that the SBEC Computer adversely affect emissions during off-cycle conditions (defined as those conditions which are beyond the parameters of the Cold-Start CVS-75 Federal Test Procedure), this Executive Order shall be effectively rescinded as of the date the test results are validated. Further, if such test results or

other evidence provides the ARB with reason to suspect that the SBEC Computer will affect the durability of the emission control system, Mopar Performance shall be required to submit durability data to show that the durability of the vehicle emission control system is not, in fact, affected and/or that the add-on or modified part demonstrates adequate durability.

In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 MOPAR PERFORMANCE' SBEC COMPUTER.

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.

Section 17500 of the Business and Professions Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

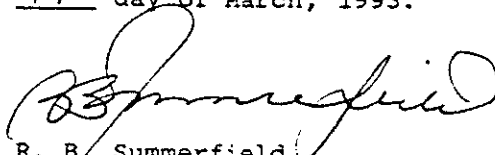
Section 43644 of the Health and Safety Code provides as follows:

"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 may result in its rescission or submission to the Attorney General of California for such action as he deems advisable.

The Bureau of Automotive Repair will be notified by copy of this order.

Executed at El Monte, California, this 17th day of March, 1993.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division

State of California
AIR RESOURCES BOARD

EVALUATION OF MÓPAR PERFORMANCE'S SBEC COMPUTER
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE
SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF
THE CALIFORNIA CODE OF REGULATIONS

March 1993

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by

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(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 the mention of trade names or commercial products constitute endorsement or recommendation for use.)

SUMMARY

Mopar Performance has applied for an exemption from the prohibitions of Vehicle Code Section 27156 for their SBEC Computer. The SBEC Computer includes a programmable read only memory (PROM) computer chip for installation on 1992 & 93 Dodge Dakota pickup trucks powered by a Magnum 3.9L V6 or 5.2L V8 gasoline engine. Mopar Performance has submitted a completed application and all the required information, as well as exhaust emissions test data performed at The Milton Roy Company.

Based on the submitted information and results of the emissions tests performed at The Milton Roy Company, the staff concludes that the installation of Mopar Performance's SBEC Computer will not adversely affect exhaust emissions on the specified vehicles.

The staff recommends Mopar Performance be granted an exemption as requested and that Executive Order D-265-2 be issued.

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EVALUATION OF MOPAR PERFORMANCE'S SBEC COMPUTER FOR
EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE
WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

I. INTRODUCTION

Mopar Performance of 26311 Lawrence Ave., Center line, MI 48015-9760, has applied for an exemption from the prohibitions of Vehicle Code Section 27156 for their SBEC Computer. The SBEC Computer includes a programmable read only memory (PROM) computer chip, for installation on 1992 & 93 Dodge Dakota pickup trucks powered by a Magnum 3.9L V6 or 5.2L V8 gasoline engine. Mopar Performance has submitted a completed application and all the required information, as well as exhaust emissions test data performed at The Milton Roy Company on a 1993 5.3L Dodge Dakota truck.

II. CONCLUSION

Based on the submitted information and the results from exhaust emissions test performed at The Milton Roy Company, the staff concludes that Mopar Performance's SBEC Computer will not adversely affect exhaust emissions from vehicles for which the exemption is requested.

III. RECOMMENDATION

The staff recommends that Mopar Performance be granted an exemption as requested and that Executive Order D-265-2 be issued.

IV. SBEC COMPUTER DESCRIPTION

Many computer controlled vehicles are equipped with an electronic control unit (ECU) which is programmed using a PROM. Signals detected by the vehicle's sensors are fed directly into the ECU where they are analyzed and compared to the operational data programmed inside the PROM. The PROM sends out signals for appropriate adjustments to be made in the engine's operation in response to any changing conditions. For example, a PROM will make adjustments to the spark and fuel delivery of the engine to maintain

optimum performance and economy. Thus, by modifying data in the PROM, spark timing and fuel delivery can be adjusted.

Mopar Performance's SBEC Computer modify the spark tables and fuel curves of the original equipment manufacturer's (OEM) PROM under full throttle operation. Therefore, the PROM monitors and modifies the vehicle operation under open-loop modes. Mopar Performance claims these modifications translate to an increase in torque and horsepower. No modifications have been conducted on the SBEC Computer that would affect throttle response and driveability, under closed-loop conditions (normal day-to-day driving). The manufacturer claims that modifications offer enhanced performance and acceleration during high speed operation. Mopar Performance recommends the use of premium octane fuel to obtain optimum performance and avoid knocking which may be caused by advanced timing. Installation instructions, included with the SBEC Computer, is shown in Appendix A.

V. DISCUSSION OF THE SBEC COMPUTER

A 1993 5.2L Dodge Dakota truck, was used as the test vehicle to evaluate the effect of the SBEC Computer on tailpipe emissions. The test program consisted of one (cold start) CVS-75 FTP on the vehicle in the modified configuration. The results of the exhaust emissions test performed at The Milton Roy Company are shown in Table 1.

Table 1

Exhaust Emissions Test Results from The Milton Roy Company

<u>Test Mode</u>	<u>Dodge 5.2L truck</u> <u>Exhaust Emissions (gm/mi)</u>		
	<u>NMHC</u>	<u>CO</u>	<u>NOx</u>
Device	0.21	3.64	0.27
Emission Standards	0.50	9.0	1.0

The CVS-75 emissions test results at The Milton Roy Company demonstrated that the HC, CO and NOx emission levels are below the vehicle's emission standards. This demonstrates that the installation of the SBEC Computer will not adversely affect the exhaust emissions of the applicable vehicles.

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

Appendix A