

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-500  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

VAN AAKEN DEVELOPMENTS, LTD.  
CANBUS PUMP CONTROLLER, MODEL # R-12

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 CanBus Pump Controller, Model # R-12, manufactured and marketed by Van Aaken Developments, Ltd., Telford Avenue, Crowthorne, Berkshire RG45 6XA, United Kingdom 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 1998 1/2 and 1999 Dodge Ram Trucks equipped with the 5.9L ISB Cummins Turbo Diesel engine.

The CanBus Pump Controller includes one electronic module. The module is installed in the engine compartment in line between the electrical connections on diesel injection pump with no user adjustments. The CanBus Pump Controller increases engine torque by increasing the fuel flow rate during medium and high load engine conditions.

This Executive Order is valid provided the installation instructions for the CanBus Pump Controller will not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

This Executive Order shall not apply to any CanBus Pump Controller advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

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

Marketing of the CanBus Pump Controller using any identification other than that shown in this Executive Order or marketing of the CanBus Pump Controller 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 CanBus Pump Controller 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 CanBus Pump Controller may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on the following submitted emissions test data:

	HC	CO	NOX	PM	Opacity
Stock	0.20	1.7	10.0	0.187	4.6%
Device	0.21	1.9	10.6	0.068	18.3%
Difference	0.01	0.2	0.6	-0.119	
% Change	5.0%	12%	6%	-64%	

Test results showed that tailpipe emissions during comparative Cold Start 505 Federal Test Procedure with the CanBus Pump Controller, Model # R-12 installed on the vehicle did not cause exhaust emissions to exceed the baseline emissions by more than the allowed limits of 10 percent or 0.1 grams per mile on hydrocarbon (HC) and oxides of nitrogen (NOx), 15 percent or 1.0 grams per mile carbon monoxide (CO), and 15 percent or 0.03 grams per mile on Particulates as specified in the "Procedures for Exemption of Add-On and Modified Parts."

However, the ARB finds that reasonable grounds exist to believe that use of the Van Aaken Developments, Ltd.'s CanBus Pump Controller 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 turbocharger adversely affects 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 turbocharger will affect the durability of the emission control systems, Van Aaken Developments, Ltd. 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.

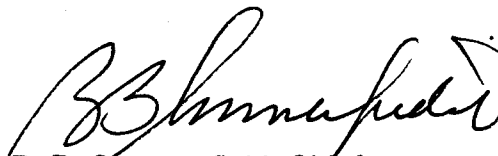
In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 VAN AAKEN DEVELOPMENTS, LTD.'S CANBUS PUMP CONTROLLER.

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 12<sup>th</sup> day of September 2000.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division