

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-360-1  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

ADVANCED MOTORSPORTS SOLUTIONS  
VR6 Supercharger 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 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 VR6 Supercharger System, manufactured and marketed by Advanced Motorsports Solutions, 850 West 18th Street, Unit A, Costa Mesa, California, 92627 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 1992 through 1999 Volkswagens equipped with the 2.8 liter engine.

The VR6 Supercharger System includes the following main parts and modifications: Vortech V-1 S-Trim supercharger with a maximum boost of 8.5 psi., a 3.12" diameter supercharger pulley, a new PROM chip that modifies timing and fuel tables during boost conditions, an open element K&N style air cleaner that is mounted onto the intake side of the supercharger, a check valve for the evaporative purge line, a small air cleaner to provide clean air to the secondary air injection system, and the PCV hose is routed to the intake side of the supercharger. The manufacturer recommends 92 octane fuel.

This Executive Order is valid provided the installation instructions for the VR6 Supercharger System will not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

This Executive Order shall not apply to any VR6 Supercharger System 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 VR6 Supercharger System, 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 VR6 Supercharger System using any identification other than that shown in this Executive Order or marketing of the VR6 Supercharger System 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 VR6 Supercharger System 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 VR6 Supercharger System may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on submitted emissions test data which showed that the VR6 Supercharger System did not adversely affect tailpipe emissions during the Cold Start CVS-75 Federal Test Procedure. Testing was conducted on a 1998 Volkswagen GTI, equipped with a 2.8 liter engine, certified to the Tier 1 emission standard. Emission levels of the modified vehicle met the applicable emission standards. The following test results are in grams per mile with the deterioration factors applied:

	NMHC	CO	NOx
Standard	0.25	3.4	0.4
Device w/dfs	0.12	1.7	0.1

This Executive Order is also based on On Board Diagnostic II (OBD II) testing conducted on the same vehicle. Test data showed that the VR6 Supercharger System when installed on the vehicle did not affect the vehicle's ability to perform its OBD II monitoring.

However, the ARB finds that reasonable grounds exist to believe that use of the Advanced Motorsports Solutions' VR6 Supercharger System 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 supercharger 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 supercharger will affect the durability of the emission control systems, Advanced Motorsports Solutions 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 ADVANCED MOTORSPORTS SOLUTIONS' VR6 SUPERCHARGER SYSTEM.

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 is made after the hearing that grounds for revocation exist.

Executed at El Monte, California, this 11<sup>TH</sup> day of October 2000.

A handwritten signature in black ink, appearing to read "R. B. Summerfield", followed by the word "FOR" in capital letters.

R. B. Summerfield, Chief  
Mobile Source Operations Division