

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-556

Relating to Exemptions Under Section 27156  
of the Vehicle Code

AVENGER SUPERCHARGERS  
AVENGER SUPERCHARGER KIT

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-02-003;

IT IS ORDERED AND RESOLVED: That the installation of the Avenger Supercharger Kit, manufactured and marketed by Avenger Superchargers, 4712 Austin Bluffs Parkway, Colorado Springs, Colorado, 80918 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 the following vehicle application: 1987-2001 4.0L Jeep Cherokee, 1991-2002 2.5L Jeep Wrangler and Dodge Dakota, and 1991-2003 4.0L Jeep Wrangler.

The Avenger Supercharger Kit includes the following main parts: Autorotor supercharger with a maximum boost of 5 psi., 70 mm diameter supercharger pulley, intake manifold, an intercooler, electronic water pump, and a set of 25 lbs. fuel injectors. The MAP sensor is relocated from the throttle body to the side fender wheel well. The stock air filter housing is retained.

This Executive Order is valid provided that the installation instructions for the Avenger Supercharger Kit will not recommend tuning the vehicle to specifications different from those submitted by the device manufacturer.

This Executive Order shall not apply to any Avenger Superchargers' Avenger Supercharger Kit advertised, offered for sale, sold with, or installed on a new motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Changes made to the design or operating conditions of the Avenger Supercharger Kit, 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 Avenger Supercharger Kit using any identification other than that shown in this Executive Order or marketing of the Avenger Supercharger Kit 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 Avenger Supercharger Kit 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 Avenger Supercharger Kit may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on emissions test data generated on a 2002 4.0L Jeep Wrangler certified to the Low-Emission Vehicle (LEV) emission standards. Emission levels of the modified vehicle met the applicable emission standards over the Cold-Start CVS-75 Federal Test Procedure (FTP). Results are in grams per mile with deterioration factors applied.

	NMOG	CO	NOx	HCHO
Standards	0.100	4.4	0.4	0.018
Device	0.057	1.1	0.1	0.001

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

This Executive Order is granted based on submitted emissions test data which showed that the Avenger Superchargers' Supercharger Kit did not adversely affect tailpipe emissions during the Cold Start CVS-75 Federal Test Procedure. However, the ARB finds that reasonable grounds exist to believe that use of the Avenger Superchargers' Supercharger Kit 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, Avenger Superchargers 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 THE AVENGER SUPERCHARGER KIT.**

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 18<sup>TH</sup> day of March 2003.



Allen Lyons, Chief  
Mobile Source Operations Division