## State of California AIR RESOURCES BOARD

## **EXECUTIVE ORDER D-507-3**

Relating to Exemptions Under Section 27156 of the Vehicle Code

High Performance Systems, LLC Mercedes Benz 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 Mercedes Benz Supercharger Kit, manufactured and marketed by High Performance Systems, LLC, 3207 W. Pendleton Avenue, Santa Ana, California, 92704 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 1998 through 2005 Mercedes Benz vehicles equipped with an 8 or 6 cylinder engine, except 2005 model-year Mercedes Benz vehicles with engine test group 5MBXV05.0U2A.

The Mercedes Benz Supercharger Kit includes the following main parts: Magnuson roots type supercharger, intake manifold, intercooler, high flow injectors, air intake tubing, fuel pressure regulator (vehicles with a fuel return system only), K&N style filter in a new air box, and a fuel management unit. The Mercedes Benz Supercharger Kit retains the stock fuel and vacuum hoses, crankshaft pulley, and radiator thermostat. The throttle body and mass airflow sensor are relocated to the inlet housing of the supercharger, a new wiring harness extension that uses factory connectors is included as part of the relocation of these components. A modification is also made to the stock Mass Air Flow Sensor electronics to limit output voltage during boost conditions. Maximum boost is rated at 7 psi.

Supercharger Model	Engine Displacement	Supercharger Pulley	
<u>Diameter*</u>			
MP-90	3.2L	3.3"	
	3.5L	3.1"	
MP-112	4.3L	3.3"	
	5.0L	2.9"	
	5.5L	2.6"	

<sup>\*</sup>Pulley sizes may vary by +/- 0.2 inches to achieve the 7 psi. maximum boost.

This Executive Order is valid provided that the installation instructions for the Mercedes Benz 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 High Performance Systems, LLC's Mercedes Benz 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 Mercedes Benz 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 Mercedes Benz Supercharger Kit using any identification other than that shown in this Executive Order or marketing of the Mercedes Benz 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 Mercedes Benz 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 Mercedes Benz 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 2004 Mercedes Benz CLK 500 certified to the Low Emission Vehicle II Low Emission Vehicle (LEV II LEV) emission standards. Emission levels of the modified vehicle met the applicable emission standards over the Cold-Start CVS-75 Federal Test Procedure (FTP) and the Supplemental Federal Test Procedure (US06/SC03) test cycles. Results are in grams per mile with deterioration factors added to CVS-75 results:

	CVS-75				US06/SC03	
	NMOG	CO	NOx	HCHO	NMHC+NOx	CO
Standards	0.075	3.4	0.05	0.015	0.14/0.20	8.0/2.7
Device	0.029	0.5	0.04	0.001	0.06/0.02	2.5/0.7

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 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 HIGH PERFORMANCE SYSTEMS, LLC'S MERCEDES BENZ 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.

Allen Lyons, Chief

Mobile Source Operations Division