

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-502-4

Relating to Exemptions Under Section 27156  
of the California Vehicle Code

Brabus North America, Inc.  
Brabus 6.1 Liter Engine Upgrade

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 Brabus 6.1 Liter Engine Upgrade, produced and marketed by Brabus North America, Inc., 4040 Campus Drive, Newport Beach, California 92660, has been found not to reduce the effectiveness of the applicable vehicle pollution control systems and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the Mercedes Benz vehicles listed in the attached Exhibit A.

The Brabus 6.1 Liter Engine Upgrade consists of a bored engine block, polished cylinder heads, pistons, connecting rods, crankshaft, camshafts, valve springs, and recalibrated engine control unit.

This Executive Order is valid provided that the installation instructions for the Brabus 6.1 Liter Engine Upgrade will not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

Changes made to the design or operating conditions of the Brabus 6.1 Liter Engine Upgrade, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

This Executive Order shall not apply to any Brabus 6.1 Liter Engine Upgrade advertised, offered for sale, sold with, or installed on a new motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Marketing of the Brabus 6.1 Liter Engine Upgrade using any identification other than that shown in this Executive Order or marketing of the Brabus 6.1 Liter Engine Upgrade for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

This Executive Order does not constitute any opinion as to the effect the use of the Brabus 6.1 Liter Engine Upgrade may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on emission test results in the modified configuration using the Cold-Start CVS-75 Federal Test Procedure (FTP), the Supplemental Federal Test Procedure (US06), and an examination of the On-Board Diagnostic II (OBD II) system. A 2002 Mercedes Benz CL500 with a 4.3 liter engine (2MBXV05.0UBI, ULEV, PC) was used for the evaluation of the Brabus 6.1 Liter Engine Upgrade. Results from emissions testing conducted at California Environmental Engineering (OBD II testing) and Quantum Technologies (FTP and SFTP testing) are shown below (in grams per mile):

FTP	50k	NMOG	CO	NOx	HCHO
	Emission Level (w. DF applied)	0.015	0.197	0.040	0.00022
	STD	0.040	1.7	0.2	0.008
	100k	NMOG	CO	NOx	HCHO
	Emission Level (w. DF applied)	0.015	0.197	0.060	0.00022
	STD	0.055	2.1	0.3	0.011

US06	NMHC + NOx	CO
Measured	0.0110	0.291
Standard	0.14	8.0

The emission test results in the modified configuration were below the applicable certification standards. Examination of the OBD II system showed the Brabus 6.1 Liter Engine Upgrade does not affect OBD II operation. Therefore, based on the test results, the staff concludes that the Brabus 6.1 Liter Engine Upgrade meets the criteria for exempting general criteria parts.

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. Further, if test results or other evidence provides the ARB with reason to suspect that the Brabus 6.1 Liter Engine Upgrade will affect the durability of emission control systems, Brabus North America, Inc., shall be required to submit durability data to show that the durability of vehicle emission control systems are not, in fact, affected and/or that the add-on or modified part demonstrates adequate durability.

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 BRABUS 6.1 LITER ENGINE UPGRADE.

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 3<sup>RD</sup> day of December, 2002.



Allen Lyons, Chief  
Mobile Source Operations Division

Exhibit A

Model-Year	Manufacturer	Model
1998-1999	Mercedes Benz	C43
1998-2002	Mercedes Benz	E430
1999-2002	Mercedes Benz	E55
2000-2002	Mercedes Benz	S430
2000-2002	Mercedes Benz	S500
2001-2002	Mercedes Benz	S 55
2000-2002	Mercedes Benz	CL500
2001-2002	Mercedes Benz	CL 55
1999-2001	Mercedes Benz	ML430
2000-2002	Mercedes Benz	ML 55
2002	Mercedes Benz	ML 500
1998-2002	Mercedes Benz	CLK430
2001-2002	Mercedes Benz	CLK 55
1998-2002	Mercedes Benz	SL500 R129
2003	Mercedes Benz	SL500 R230