

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-528-2

Relating to Exemptions Under Section 27156
of the Vehicle Code

Kleemann USA, Inc.
Kleemann Comfort Power Compressor 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 Kleemann Comfort Power Compressor Kit, manufactured and marketed by Kleemann USA, Inc., 2845 Ore Mill Road, # 7, Colorado Springs, Colorado 80904 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 1998 through 2003 Mercedes-Benz vehicles with either a 6 or 8-cylinder engine.

<u>Part No.</u>	<u>Model Year</u>	<u>Models</u>
1122083206	1998-2001	C260, C280, C320, CLK320, SLK320
	1998-2000	E320
	1998-1999	ML320
	2002	SLK320
1132085508	1998-2001	E55, CLK430, CLK55, ML430, ML55, S430, S55, CL55, G500, ML500
	1998-2000	E430, S500
	2002	E55, ML500, CLK55
	2002-2003	S55, CL55, G500, ML55
	1999-2000	C43

Vehicles certified to the Ultra-Low-Emission Vehicle (ULEV) and/or the Supplemental Federal Test Procedure (SFTP) standards are excluded from this Executive Order.

The Kleemann Comfort Power Compressor Kit consists of an Autorotor supercharger with a pulley diameter of 87mm for the 6 cylinder engine and 75mm for the 8 cylinder engine. The factory fuel system is modified with an additional fuel pressure regulator that raises fuel rail pressure in proportion to the positive manifold pressure. The factory intake manifold is replaced with a new manifold housing that contains the supercharger and intercooler assembly. The EGR tube inside the manifold is modified to ensure even distribution of gases into each cylinder. The factory electric air injection pump is relocated to the inside fender area. Maximum boost pressure is 7 psi. The C class models receive a voltage step up device for the fuel pump when in the boost mode. A 500 ohm resistor, designed to prevent a lean condition during high RPMs, is installed inline with the output signal of the mass air flow meter.

This Executive Order shall not apply to any Kleemann USA, Inc.'s Kleemann Comfort Power Compressor Kit advertised, offered for sale, sold with, or installed on a new motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

This Executive Order is valid provided that the installation instructions for the Kleemann Comfort Power Compressor Kit 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 Kleemann Comfort Power Compressor 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 Kleemann Comfort Power Compressor Kit using any identification other than that shown in this Executive Order or marketing of the Kleemann Comfort Power Compressor 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 Kleemann Comfort Power Compressor 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 Kleemann Comfort Power Compressor Kit may have on any warranty either expressed or implied by the vehicle manufacturer.

The Executive Order is issued based on previously submitted emissions test data (Executive Order D-528) which showed that the Kleemann Comfort Power Compressor Kit did not adversely affect tailpipe emissions during a Cold Start CVS-75 Federal Test Procedure. A 2000 Mercedes-Benz E320 with a 3.2L engine, and certified to the Low Emission Vehicle (LEV) emission standards was used as the test vehicle. Results of the emission testing with the Kleemann Comfort Power Compressor Kit installed are shown below.

	NMOG	CO	NOx	HCHO
Standards	0.075	3.4	0.2	0.015
Device w/df	0.026	0.4	0.1	0.001

Test results showed that the Kleemann Comfort Power Compressor Kit did not cause exhaust emissions to exceed the applicable emission standards with deterioration factors applied. This Executive Order is also based on an On-Board Diagnostic II (OBD II) test conducted on the same vehicle. Test data showed that the Kleemann Comfort Power Compressor Kit when installed on the vehicle did not affect the vehicle's ability to perform its OBD II monitoring.

The ARB finds that reasonable grounds exist to believe that use of the Kleemann Comfort Power Compressor Kit may adversely affect emissions of motor vehicles when operating under conditions outside the parameters of the Cold Start CVS-75 Federal Test Procedure.

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 Kleemann Comfort Power Compressor Kit 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 Kleemann Comfort Power Compressor Kit will affect the durability of the emission control system, Kleemann USA, Inc. 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.

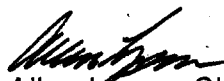
In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 KLEEMANN USA, INC.'S KLEEMANN COMFORT POWER COMPRESSOR 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 17TH day of June 2003.



Allen Lyons, Chief
Mobile Source Operations Division