

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-176-15
Relating to Exemptions Under Section 27156
of the Vehicle Code

DINAN ENGINEERING
Supercharger Systems
(Stage 1 Kit, Stage 3 Kit, Stage 4 Kit & Intercooled 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-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the Supercharger Systems (Stage 1 Kit, Stage 3 Kit, Stage 4 Kit & Intercooled Supercharger Kit), manufactured and marketed by Dinan Engineering, Inc., 150 S. Whisman, Mountain View, California 94041 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 installation on the following BMW vehicle applications:

<u>Model</u>	<u>Model Years</u>	<u>Engine Size</u>
525i	1991 to 1995	2.5L
325i	1992 to 1995	2.5L
M3	1994 to 1995	3.0L
M3	1996 to 1999	3.2L
328i	1996 to 1999	2.8L
Z3	1996 to 1999	2.8L
528i	1997 to 1999	2.8L
M Roadster	1998 to 2000	3.2L
M Coupe	1998 to 2000	3.2L

The 1999 model-year engine family, XBMXV02.8LEV, certified to a LEV emission standard is excluded.

Dinan's Supercharger Systems

Stage 1 Kit: Kit includes a Vortech V-1S supercharger with a 3.43" diameter pulley and a 5.14" diameter crankshaft pulley with a **max. boost pressure of 6.5 psi.**, Lucas 28.8 lb./hr. injectors which replace the stock injectors, a new ECU calibration, Turbotronics 9 or 10 (air flow meter bridge circuit), inlet and discharge supercharger tubing, and an open element K&N-type air filter. The PCV system is modified with a two way valve to redirect crankcase gases during boost conditions. The supercharger kit does not utilize an air bypass valve.

Stage 3 Kit: Same components and modifications as the Stage 1 Kit with the inclusion of a new increased diameter throttle body.

Stage 4 Kit: Same components and modifications as the Stage 1 Kit with the inclusion of a new increased diameter throttle body, new air flow meter, and a new intake manifold (applicable to vehicles equipped with an on-board-diagnostic II (OBD II) system).

Intercooled Supercharger Kit: Same components and modifications as the Stage 1 Kit with the inclusion of a new increased diameter throttle body, new air flow meter, new intake manifold (applicable to vehicles equipped with an OBD II system), new high pressure fuel regulator, and an intercooler. The supercharger uses a 3.03" diameter pulley and a 5.5" diameter crankshaft pulley with a **max. boost pressure of 10 psi.**

Dinan recommends use of high octane fuel with the Supercharger Systems.

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

This Executive Order shall not apply to any Dinan Engineering, Inc. Supercharger Systems advertised, offered for sale, or 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 Supercharger Systems, 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 Supercharger Systems using any identification other than that shown in this Executive Order or marketing of the Supercharger Systems 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 Supercharger Systems may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on the following submitted emissions test data on a 1998 BMW M-Roadster certified to a transitional low-emission vehicle standard. The vehicle in the modified configuration, with the Intercooled Supercharged Kit installed, met the applicable emission standards. Testing consisted of one Cold Start CVS-75 Federal Test Procedures in the modified configuration. The following test results are in grams per mile with deterioration factors applied:

1998 BMW M-Roadster

	NMOG	CO	NOx	HCHO
Standard	0.125	3.4	0.4	0.015
Device w/dfs	0.109	2.7	0.2	0.002

This Executive Order is also based on On Board Diagnostic II (OBD II) testing conducted on the same vehicle. Test data showed that the Supercharger System 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 Supercharger Systems 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 Systems adversely affect 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 Systems will affect the durability of the emission control system, Dinan Engineering, 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.

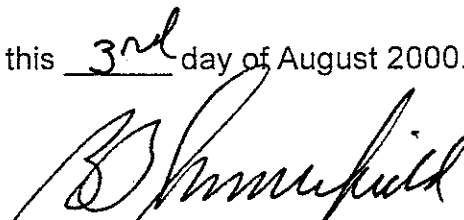
In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 DINAN ENGINEERING'S SUPERCHARGER SYSTEMS.

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 after hearing that grounds for revocation exist.

Executed at El Monte, California, this 3rd day of August 2000.


R. B. Summerfield, Chief
Mobile Source Operations Division

File Room

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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-177
Relating to Exemptions Under Section 27156
of the Vehicle Code

PRODUCTS FOR POWER
"NEW AFTERMARKET OXIDATION CATALYTIC CONVERTER"

WHEREAS, Vehicle Code Section 27156 and Title 13 California Code of Regulations (hereafter "CCR") Section 2222(h), authorize the California Air Resources Board (ARB) and its Executive Officer to exempt new aftermarket catalytic converters from the prohibitions of Vehicle Code Section 27156.

WHEREAS, Products for Power has applied to the ARB for exemption from the prohibitions of Vehicle Code Section 27156 for the two-way catalytic converter series 4000:

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Division by Health and Safety Code Section 39516 and Executive Order G-45-5, the Air Resources Board finds that the above aftermarket catalytic converter complies with the California Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h).

IT IS HEREBY RESOLVED that the above catalytic converter is exempt from the prohibitions of Vehicle Code Section 27156 for installation on the approved application vehicles subject to the following conditions:

1. This exemption shall not apply to any catalytic converters advertised, offered for sale or sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.
2. No changes are permitted to the converter as described in the application for exemption. Any changes to the converter, applicable model year, or other factors addressed in this order must be evaluated and approved by the Air Resources Board prior to marketing in California.
3. Marketing of the converter using an identification other than that shown in the exemption application or marketing of the converter for an application other than those listed in the application catalog shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of this product shall not be construed as an exemption to sell, offer for sale, or advertise any component of the product as an individual device.

4. Any oral or written references to this Executive Order or its content by Products for Power, its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any emissions reduction claims for the catalytic converter and is only a finding that the converter is exempt from the prohibitions of Vehicle Code Section 27156.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after ten day written notice of intention to revoke it, during 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 26th day of May, 1988.



K. D. Drachand, Chief
Mobile Source Division