

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-176-12  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

DINAN ENGINEERING  
DINAN SUPERCHARGER SYSTEM

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 System, **designed to a maximum boost pressure of 6.5 psi., with a supercharger pulley diameter of 3.12" and a crankshaft pulley diameter of 5.00"**, manufactured and marketed by Dinan Engineering, 150 South Whisman, Building E, 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>
328i	1996 to 1999	2.8L
M3	1996 to 1999	3.2L
Z3	1996 to 1999	2.8L
528i	1997 to 1999	2.8L
M Roadster	1998/99	3.2L

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

This Executive Order is valid provided that the installation instructions for the supercharger kit will not recommend tuning the vehicle to specifications different from those submitted by the vehicle manufacturer. Dinan recommends that only 92 octane fuel be used.

The Dinan supercharger kit includes a Powerdyne supercharger, Lucas 28.8 lb./hr. injectors which replace the stock injectors, a new ECU calibration, automatic transmission Prom chip, K & N air filter, air flow meter bridge circuit, and modifications to the stock PCV system using a two way valve to redirect crankcase gases during boost conditions. The supercharger kit does not utilize an air bypass valve.

Changes made to the design or operating conditions of the 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.

This Executive Order shall not apply to any Dinan Engineering supercharger kit advertised, offered for sale, or sold with or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Marketing of the supercharger kit using any identification other than that shown in this Executive Order or marketing of the 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 supercharger kit shall not be construed as exemption to sell, offer for sale, or advertise any component of the kits as an individual device.

This Executive Order does not constitute any opinion as to the effect the use of the supercharger kit may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on the following emissions test data submitted by the kit manufacturer:

1998 M Roadster certified to a Transitional Low Emission Vehicle (TLEV) emission standard

	NMOG	CO	NOX	HCHO
Standards	0.125	3.4	0.4	0.015
device w/ dfs	0.113	2.0	0.2	0.003

Test results showed that the supercharger kit when installed on the vehicle did not cause tailpipe emissions to exceed the vehicle's applicable emission standard during a Cold Start CVS-75 Federal Test Procedure. This Executive Order is also based on On Board Diagnostic II (OBD II) testing conducted on the same test vehicle. Test data showed that the supercharger kit 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 shows that emissions are not affected during the Cold-Start CVS 75 Federal Test Procedure. However, the ARB finds that reasonable grounds exist to believe that use of the Dinan Engineering supercharger kit may adversely affect emissions of motor vehicle 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 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 supercharger kit will affect the durability of the emission control systems, Dinan Engineering 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.

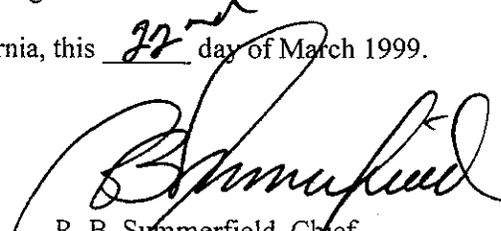
In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 SYSTEM.

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 22<sup>nd</sup> day of March 1999.



R. B. Summerfield, Chief  
Mobile Source Operations Division