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State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-176-19  
Relating to Exemptions Under Section 27156  
Of the Vehicle Code

Dinan Engineering, Inc.  
High Flow Intake Manifold

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 High Flow Intake Manifold, manufactured and marketed by Dinan Engineering, Inc., 865 Jarvis Drive, Morgan Hill, CA 95037, 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 1999 through 2002 model year BMW vehicles equipped with 4.4L eight cylinder engines as described in the table below. The High Flow Intake Manifold consists of a higher capacity air intake manifold designed to permit greater airflow into the engine at high engine speeds.

Model	Model Year	Engine Size	Part Number
540I	1999-2002	4.4L	D760-5400
740I, 740iL	1999-2001	4.4L	D760-5400
X5 4.4I	2000-2002	4.4L	D760-5400

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

This Executive Order shall not apply to any High Flow Intake Manifold advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with the transfer to an ultimate purchaser.

Changes made to the design or operating conditions of the High Flow Intake Manifold, 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 High Flow Intake Manifold using any identification other than that shown in this Executive Order or marketing of the High Flow Intake Manifold 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 system 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 that the use of the High Flow Intake Manifold may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on emissions test data from a Cold Start CVS Federal Test Procedure performed on a 2002 model year BMW 540i certified to the Low Emission Vehicle standards with Dinan Engineering, Inc's High Flow Intake Manifold and High Flow Air Flow Meter. The test results, in grams per mile with the deterioration factors applied, are listed below.

2002 BMW 540i	TEST	NMOG	CO	NOx	HCHO
	Standard	0.075	3.4	0.2	0.015
	Modified	0.055	0.1	0.1	0.001

Results from the emission tests showed that vehicle emissions with the High Flow Intake Manifold and High Flow Air Flow Meter installed did not exceed the exhaust emissions standard for the vehicle. Similar impact on exhaust emissions is expected from the installation of the High Flow Intake Manifold on the applicable 4.4L vehicle models

This Executive Order is also based on the On-Board Diagnostic II (OBDII) testing conducted on the same test vehicle. Test data showed that the High Flow Intake Manifold will not affect the vehicle's ability to perform its OBDII monitoring.

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, INC'S HIGH FLOW INTAKE MANIFOLD.

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 of 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 24<sup>TH</sup> day of February 2003.



Allen Lyons, Chief  
Mobile Source Operations Division