

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-176-33

Relating to Exemptions Under Section 27156  
of the California Vehicle Code

Dinan Engineering, Inc.  
High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks

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 Throttle Body and High Flow Throttle Bodies and Velocity Stacks, produced and marketed by Dinan Engineering, Inc. of 865 Jarvis Drive, Morgan Hill, California 95037, 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 2000 through 2006 model year BMW vehicles as listed in Exhibit A, excluding the 2003 to 2006 model year BMW vehicles with engine test groups 3BMXV02.5M56, 4BMXV02.5M56, 5BMXV02.5M56, or 6BMXV02.5M56 which have been certified to a Low Emission Vehicle II Super Ultra Low Emission Vehicle (LEV II SULEV) emission standards.

The High Flow Throttle Body includes a modified throttle body with a larger diameter for increased air flow. The High Flow Throttle Bodies and Velocity Stacks are a set of eight throttle bodies and velocity stacks located in the intake plenum chamber of the 2000 to 2003 model year 4.9L V8 BMW Z8 and M5. The High Flow Throttle Bodies and Velocity Stacks are both modified with a larger inner diameter, the velocity stack is also slightly shorter than the stock velocity stack. No other modifications are required for installation other than the replacement of the stock unit with Dinan's unit.

This Executive Order is valid provided that the installation instructions for the High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks 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 High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks, 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 High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks 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 High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks using any identification other than that shown in this Executive Order or marketing of the High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks 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 High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks units may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on submitted emission test data generated on a 2006 model year BMW 325i, engine test group 6BMXV03.0N52, certified to the Low Emission Vehicle II Ultra Low Emission Vehicle (LEV II ULEV) emission standards. Test results on the BMW 325i showed that emission levels, with Dinan Engineering, Inc.'s High Flow Throttle Body installed, met the applicable emission standards when tested using the Cold-Start CVS-75 Federal Test Procedure (FTP) and the Supplemental Federal Test Procedure (SFTP US06) test cycles. Examination of the OBD II system showed the High Flow Throttle Body did not affect OBD II system operation. Results from emission testing conducted at Automotive Testing and Development Services, Inc., located in Ontario, California are listed below with deterioration factors applied.

	CVS-75 FTP			
	NMOG	CO	NOx	HCHO
Standards	0.040	1.7	0.05	0.008
Device	0.026	0.1	0.03	0.001

	US06	
	NMHC+NOx	CO
Standards 4k	0.14	8.0
Device	0.02	0.9

Similar effect on vehicle emissions is expected with the installation of the High Flow Throttle Body and High Flow Throttle Bodies and Velocity Stacks on vehicles listed in Exhibit A of this Executive Order.


The Air Resources Board 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 THROTTLE BODY AND HIGH FLOW THROTTLE BODIES AND VELOCITY STACKS.

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 11<sup>th</sup> day of February 2008.

  
Annette Hebert, Chief  
Mobile Source Operations Division

# Exhibit A

## Dinan "High Flow Throttle Body"

Dinan Part #	BMW Model	Model Years	Engine Size	Stock dia. (mm)	Dinan dia. (mm)
D760-3250	** 325i	2001-05	2.5L	64.0	68.0
	** 325xi	2001-05	2.5L		
	** 325ci	2001-06	2.5L		
	525i	2001-05	2.5L		
	Z3 2.5i	2001-02	2.5L		
	Z4 2.5i	2003-05	2.5L		
	X3 2.5i	2004-06	2.5L		
D760-3300	330i	2001-05	3.0L	68.0	71.0
	330xi	2001-05	3.0L		
	330ci	2001-06	3.0L		
	530i	2001-05	3.0L		
	X5 3.0i	2001-06	3.0L		
	Z3 3.0i	2001-02	3.0L		
	Z4 3.0i	2003-05	3.0L		
	X3 3.0i	2004-06	3.0L		
D760-3400	M3	2001-06	3.2L	50.0	52.0
	M Roadster	2001-2002	3.2L		
	M Coupe	2001-2002	3.2L		
D760-3440	X5 4.4i	2000-03	4.4L	80.0	83.0
	X5 4.6is	2002-03	4.6L		
	540i	1999-2003	4.4L		
	740i, 740iL	1999-2002	4.4L		
D760-3600	545i	2004-05	4.4L	80.0	83.0
	645ci	2004-05	4.4L		
	745i	2002-05	4.4L		
	745Li	2002-05	4.4L		
	X5 4.4i	2004-06	4.4L		
	X5 4.8i	2004-06	4.8L		
D760-3650	550i	2006-08	4.8L	84.0	87.0
	650i	2006-08	4.8L		
	750i	2006-08	4.8L		
	750Li	2006-08	4.8L		
D760-3700	325i	2006	3.0L	76.0	79.0
	325xi	2006	3.0L		
	330i	2006	3.0L		
	330xi	2006	3.0L		
	525i	2006-07	3.0L		
	525xi	2006-07	3.0L		
	530i	2006-07	3.0L		
	530xi	2006-07	3.0L		
	D760-3800	M5	2006-08		
M6		2006-08	5.0L		
D760-5020*	Z8	2000-03	4.9L	50.0	52.0
	M5	2000-03	4.9L		
D760-0015	Mini Cooper S	2002-06	1.6L	56.0	59.8

\* Throttle Body with velocity stack

\*\* Excludes 325 models w/ engine test groups

3BMXV02.5M56  
 4BMXV02.5M56  
 5BMXV02.5M56  
 6BMXV02.5M56