## State of California AIR RESOURCES BOARD

## **EXECUTIVE ORDER D-176-46**

Relating to Exemptions Under Section 27156 of the California Vehicle Code

Dinan Corporation

Dinan High Performance Intercooler

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-14-012;

IT IS ORDERED AND RESOLVED: That the installation of the Dinan High Performance Intercooler, manufactured and marketed by Dinan Corporation, 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 those gasoline powered vehicles listed in Exhibit A, excluding those 2.0L vehicles certified to a Low Emission Vehicle II Super Ultra Low Emission Vehicle (LEV II SULEV) emission standard.

The Dinan High Performance Intercooler consists of either an air to water intercooler or an air to air intercooler, depending on stock application, and are designed to be at least 23 percent larger in volume compared to the stock intercooler. There are no user adjustments for proper installation and no sensors are moved or modified. No changes are made to the ECU calibration with installation. Stock air cleaner housing is not modified with installation.

This Executive Order is valid provided that the installation instructions for the Dinan High Performance Intercooler 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 Dinan High Performance Intercooler 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 Dinan High Performance Intercooler using any identification other than that shown in this Executive Order or marketing of the Dinan High Performance Intercooler 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 exemption is issued based on submitted emissions test data, from Automotive Testing and Development Services, Inc. of Ontario, California, on a 2015 model year BMW 650i certified to the Low Emission Vehicle II Ultra Low Emission Vehicle standards and tested using the Cold Start Federal Test Procedure (FTP) and Supplemental Federal Test Procedure US06 test cycle:

	CVS					
	NMOG	CO	NOx	HCHO		
Standards	0.040	1.7	0.05	0.008		
Device Test w/df	0.007	0.3	0.01	0.000		
	US06					
	NMHC+NOx		CO			
Standards 4k	0.14		8.0			
Device	0.04		1.2			

Test results showed that the Dinan High Performance Intercooler when installed on the vehicle did not cause exhaust emissions to exceed the applicable emission standards during the FTP and SFTP. This Executive Order is also based on the On-Board Diagnostic II (OBD II) testing conducted on the same test vehicle. The Dinan High Performance Intercooler when installed on the test vehicle did not affect the vehicle's ability to perform its OBD II monitoring.

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 THE DINAN HIGH PERFORMANCE INTERCOOLER.

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.

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

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 \_\_\_\_\_\_ day of November 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

## Exhibit A

BMW Model	Model Years	Engine	Dinan Part#	Notes
135i coupe/conv	2008-10	3.0L T	D330-0010	1
135i coupe/conv	2011-13	3.0L T	D330-0010	1
135is coupe/conv	2013	3.0L T	D330-0010	1
1-M Coupe	2011	3.0L T	D330-0010	1
228i coupe	2014-16	2.0L T	D330-0021	1,3
228i xDrive coupe	2015-16	2.0L T	D330-0021	1,3
228i convertible	2015-16	2.0L T	D330-0021	1,3
228i xDrive convertible	2015-16	2.0L T	D330-0021	1,3
320i sedan	2013-16	2.0L T	D330-0021	1
320i xDrive sedan	2014-16	2.0L T	D330-0021	1
328i sedan	2012-16	2.0L T	D330-0021	1,3
328i xDrive sedan	2012-16	2.0L T	D330-0021	1,3
328i xDrive wagon	2014-16	2.0L T	D330-0021	1,3
328i xDrive Gran Turismo	2014-16	2.0L T	D330-0021	1,3
M235i coupe	2013-16	3.0L T	D330-0021	1
M235i xDrive coupe	2014-16	3.0L T	D330-0021	, 1
M235i convertible	2015-16	3.0L T	D330-0021	. 1
M235i xDrive convertible	2016	3.0L T	D330-0021	1
335i sedan/coupe/conv	2007-10	3.0L T	D330-0009 D330-0013	1 * 1 *
335i xDrive sedan/coupe	2007-10	3.0L T	D330-0009 D330-0013	1 * 1 *
335is coupe/conv	2011-13	3.0L T	D330-0015	1
335i sedan	2011	3.0L T	D330-0015	1
335i xDrive sedan	2011	3.0L T	D330-0015	1
335i coupe/conv	2011-13	3.0L T	D330-0015 D330-0012	1 * 1 *
335i xDrive coupe	2011-13	,3.0L T	D330-0015 D330-0012	1 *
335i sedan	2012-15	3.0L T	D330-0021	1
335i xDrive sedan	2012-15	3.0L T	D330-0021	1
335i xDrive Gran Turismo	2014-15	3.0L T	D330-0021	1
428i coupe/conv	2014-16	2.0L T	D330-0021	1,3
428i xDrive coupe/conv	2014-16	2.0L T	D330-0021	1,3

BMW Model	Model Years	Engine	Dinan Part#	Notes
428i Gran Coupe	2015-16	2.0L T	D330-0021	1,3
428i xDrive Gran Coupe	2015-16	2.0L T	D330-0021	1,3
435i coupe/conv	2014-16	3.0L T	D330-0021	1
435i xDrive coupe/conv	2014-16	3.0L T	D330-0021	1
435i Gran Coupe	2015-16	3.0L T	D330-0021	1
435i xDrive Gran Coupe	2015-16	3.0L T	D330-0021	1
Z4 sDrive35i	2009-14	3.0L T	D330-0011	1
Z4 sDrive35is	2011-14	3.0L T	D330-0011	1
550i	2011-13	4.4L T	D330-0014	2
550i xDrive	2011-13	4.4L T	D330-0014	2
550i	2014-16	4.4L T	D330-0017	2
550i xDrive	2014-16	4.4L T	D330-0017	2
550i GT	2013-16	4.4L T	D330-0017	2
550i GT xDrive	2013-16	4.4L T	D330-0017	2
650i	2011-12	4.4L T	D330-0014	2
650i xDrive	2011-12	4.4L T	D330-0014	2
650i	2013-16	4.4L T	D330-0017	2
650i xDrive	2013-16	4.4L T	D330-0017	2
750i, Li	2009-12	4.4L T	D330-0014	2
750i, Li xDrive	2010-12	4.4L T	D330-0014	2
750i, Li	2013-15	4.4L T	D330-0017	2
750i, Li xDrive	2013-15	4.4L T	D330-0017	2
X5 xDrive50i	2011-14	4.4L T	D330-0016	2
X6 xDrive50i	2008-14	4.4L T	D330-0016	. 2

## NOTES:

- Single Dinan intercooler replaces the single stock air-to-air intercooler located in the center lower grille.
- 2 Dual Dinan intercoolers replace the dual stock air-to-water intercoolers, one for each cylinder bank.
- 3 This application <u>excludes</u> engine families certified to the Low Emission Vehicle II Super <u>Ultra Low Emission Vehicle</u> (LEV II SULEV) emission standards:
  - -- 2016 model year GBMXV02.0N26
  - -- 2015 model year FBMXV02.0N26
  - -- 2014 model year EBMXV02.0N26
  - -- 2013 model year DBMXV02.0N26
  - -- 2012 model year CBMXV02.0N26
- \* On applications with multiple part numbers, Dinan offers kits which fit either the standard bumper fascia, or the optional BMW M-Technic bumper fascia.