CALIFORNIA
AIR RESOURCES BOARD

EXECUTIVE ORDER D-213-37

Relating to Exemptions Under Section 27156
of the California Vehicle Code

Vortech Engineering, Inc.
Supercharger Kits

Pursuant to the authority vested in the California 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 V-1, V-2, V-3, V-7, or V-9 Supercharger System with an A, E, F, S, Si, T, Ti, R, SQ, YS, or SC Trim, manufactured and marketed by Vortech Engineering, Inc., 1650 Pacific Avenue, Oxnard, California 93033, 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 following vehicles, as listed in Exhibit A.

The Vortech Engineering, Inc.'s Supercharger System consists of the following components:

Chrysler Kit Components

Trucks equipped with a 5.2 or a 5.9L engine: Vortech Supercharger, injector block & map sensor, ignition retard boost controller, a fuel management unit, and an open element air cleaner.

Cherokee/Grand Cherokee equipped with a 5.2L: Vortech Supercharger, ignition retard boost controller, a fuel management unit, an in-line auxiliary fuel pump, and an open element air cleaner.

General Motors Kit Components

Vehicles equipped with a V6 or V8 engine: Vortech Supercharger, a fuel management unit, an in-line auxiliary fuel pump, ignition retard boost controller (for V6 models only), and an open element air cleaner.

Ford Kit Components

Trucks equipped with a 4.6, 5.4, or a 6.8L engine: A Vortech Supercharger, an in-line auxiliary fuel pump, a fuel management unit, and an open element air cleaner.

Trucks equipped with a 7.5L engine includes: A Vortech Supercharger, an in-line auxiliary fuel pump, a fuel management unit, and a ignition retard boost controller.

Mustangs equipped with a 4.6L engines: A Vortech Supercharger and a fuel management unit for 1996 to 1998 model years, a fuel pump for 1996 to 1998 and for 2001 model years, a new set of fuel injectors for 1999 to 2001 model years, and an open element air cleaner.

Mustangs equipped with a 5.0L engines: A Vortech Supercharger, an open element air filter, ignition retard boost controller, in-line auxiliary fuel pump and a fuel management unit.

This Executive Order is valid provided that the installation instructions for the Supercharger Kits 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 Supercharger Kits as exempt by the California Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the Supercharger Kits using any identification other than that shown in this Executive Order or marketing of the Supercharger Kits for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the California Air Resources Board.

This Executive Order is granted based on **prior** submitted emissions test data on two vehicles certified to the Low Emission Vehicle (LEV) emission standard using the V-2 supercharger S Trim on the Durango and V-7supercharger on the F-150:

	1999 Dodge Durango, 5.9L				2000 Ford F-150, 5.4L			
	NMOG	CO	NOX	HCHO	NMOG	CO	NOX	HCHO
Standard	0.160	4.4	0.4	0.018	0.160	4.4	0.4	0.018
Device w/dfs	0.119	2.1	0.1	0.001	0.097	1.4	0.3	0.001

Test results showed that tailpipe emissions with the Supercharger Kits installed on the vehicles met the applicable emission standards during 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 vehicles. Test data showed that the Supercharger Kit when installed on the vehicles did not affect the vehicle's ability to perform its OBD II monitoring. Boost pressure was also measured during a wide-open-throttle acceleration conducted by the independent emissions test laboratory. Results were measured to be no greater than 7.5 psi on both vehicle applications.

The California 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 CALIFORNIA AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE SUPERCHARGER KITS.

No claim of any kind, such as "Approved by the California 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 12 day of July 2018.

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

Exhibit A

As of 2018.03.19

Based upon D-213-17 with addition of V-3 (self-contained) gearcase and exterior finish type

Chrysler Corp.

Part Number	Model years	Vehicle type/model	Engine size (liters)	Crank pulley dia. (in.)	S/C pulley dia. (in.)
4CB218-060	1991-1993	Dodge Dakota	5.2	7.00 (Stock)	3.125
4CD218-030	1994/95	Dodge Dakota/Ram	5.2/5.9	7.00 (Stock)	3.125
4CD218-040	1996	Dodge Dakota	5.2 LEV cert.	7.00 (Stock)	3.125
4CD218-040	1996-2000	Dodge Ram/T-300	5.2 LEV cert.	7.00 (Stock)	3.125
4CD218-050	1996	Dodge Dakota	5.9 LEV cert.	7.00 (Stock)	3.125
4CD218-050	1996-2000	Dodge Ram/T-300	5.9 LEV cert.	7.00 (Stock)	3.125
4CE218-010*	1997-2000	Dodge Dakota/Durango	5.9 LEV cert.	7.00 (Stock)	3.125
4CE218-020	1997-2000	Dodge Dakota/Durango	5.2 LEV cert.	7.00 (Stock)	3.125
4CJ218-010	1993-1995	Cherokee	5.2	7.00 (Stock)	3.125
4CJ218-020	1996-2000	Jeep Cherokee	5.2 LEV cert.	7.00 (Stock)	3.125
4CJ218-030	1996-2000	Jeep Cherokee	5.9 LEV cert.	7.00 (Stock)	3.125

Ford Motor Company

Part Number	Model years	Vehicle type/model	Engine size (liters)	Crank pulley dia. (in.)	S/C pulley dia. (in.)
4FA218-01DL	1986-1993	Mustang Std. output	5	6	3.33
4FA218-01D	1986-1993	Mustang Std. output	5	6	3.33
4FA218-03D	1993	Mustang Cobra	5	6.88	3.33
4FA218-04DL	1986-1993	Mustang H.O.	5	6.88	3.33
4FA218-04D	1986-1993	Mustang H.O.	5	6.88	3.33
4FA218-07D	1986-1993	Mustang H.O. w/cooler	5	6.88	3.33
4FA218-08D	1993	Mustang Cobra w/cooler	5	6.88	3.33
4FA218-20D	1986-1993	Mustang S.H.O.	5	6.88	3.33
4FB218-04D	1986-1997	Truck	7.5	6.5	2.875
4FC218-030	1987-1996	F-series truck/Bronco	5.8	6.5	2.875
4FC218-040	1993-1995	Lightning truck	5.8	6.5	2.875
4FD218-050	1991-1994	Explorer/Ranger	4	Stock	2.875
4FE218-07D	1987-1996	F-series truck/Bronco	5	6.5	3.125
4FF218-010	1994-1998	Mustang V-6	3.8	7.38 (Stock)	3.33
4FF218-020	1999-2001	Mustang V-6	3.8	7.38 (Stock)	3.33
4FG218-010	1994/95	Mustang Std. output	5	6	3.33
4FG218-020	1994/95	Mustang H.O.	5	6.88	3.33
4FH218-010	1996-98	Mustang 2V	4.6	6.60 (Stock)	3.6
4FH218-050	1996-1998	Mustang 2V w/cooler	4.6	6.60 (Stock)	3.33
4FH218-060	1996-1998	Mustang 2V w/cooler	4.6	6.60 (Stock)	3.33
4FK218-010	1996-98	Mustang 4V	4.6	6.60 (Stock)	3.6
4FK218-050	1996-1998	Mustang 4V w/cooler	4.6	6.60 (Stock)	3.6
4FL218-010	1999	Mustang 2V	4.6	6.60 (Stock)	3.6
4FL218-020	2000-2001	Mustang 2V	4.6	6.60 (Stock)	3.6
4FL218-030	2000-2001	Mustang 2V w/cooler	4.6	6.60 (Stock)	3.33
4FL218-040	1999	Mustang 2V w/cooler	4.6	6.60 (Stock)	3.33
4FM218-010	1997-2001	F-series truck/Exped.	4.6 LEV cert.	6.7	3.6
4FM218-020**	1997-2001	F-ser. trk/Exped/Nav	5.4 LEV cert.	6.7	3.33
4FN218-010	1996-98	T-Bird/LincolnVIII	4.6	6.60 (Stock)	3.6
4FR218-010	1999	Mustang 4V	4.6	6.60 (Stock)	3.47
4FR218-030	2001	Mustang 4V	4.6	6.60 (Stock)	3.47
4FS218-010***	1999-2001	Mercury Cougar/Ford Contour	2.5	6.3	3.33
4FT218-010	1999-2001	Super duty trk/SUV	5.4 LEV cert.	6.7	3.33
4FT218-020	1999-2001	Super duty trk/SUV	6.8 LEV cert.	6.7	3.47

General Motors

Part Number	Model years	Vehicle type/model	Engine size (liters)	Crank pulley dia. (in.)	S/C pulley dia. (in.)
4GB218-050	1990-1995	Trucks (TBI)	5.0/5.7	7.5	3.125
4GC218-090	1988-1993	Trucks (TBI)	7.4	7.5	2.875
4GG218-090	1994/95	Trucks (TBI)	7.4	7.5	2.875
4GD218-050	1996-1998	Mid-size truck/SUV	4.3	7.5 (Stock)	3.125
4GM218-050	1996-1998	Full-size truck/SUV	5.0/5.7	7.00 (Stock)	3.6
4GF218-060	1988-1992	F-body/Camaro/Fbird	5.0/5.7	7.5	3.48
4GH218-050	1993	F-body/Camaro/Fbird	5.0/5.7	6	3.33
4GH218-060	1994-1997	F-body/Camaro/Fbird	5.0/5.7	6	3.33
4GV218-060	1994-96	Impala SS	5.7	7	3.125
4GV218-078	1992/93	Corvette	5.7	7	3.125
4GV218-088	1994-96	Corvette	5.7	7	3.125

*Tested at GM Powertrain using V-2 SQ supercharger on LEV vehicle

**Tested at GM Powertrain using V-7 YS supercharger on LEV vehicle

***Uses V-9 F-trim supercharger

Part numbering:

Note 1- Changing the last number of the part number from a '0' to an '8' denotes polished finish.

Note 2- Changing the last number of the part number from a '0' to an '4' denotes black finish.

Note 3- All of the above supercharger kits with an 'E', 'S', 'SI', SCI', 'SL', 'T', 'TI', 'R', 'SQ', 'TSQ', 'YSI', 'JT' or 'SC' suffix at the end of the standard part number will specify supercharger type.

Note 4- Adding "L" denotes optional self lubricating transmission. V3