State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-213-16
Relating to Exemptions Under Section 27156
of the Vehicle Code

VORTECH ENGINEERING, INC.
6.5 PSI. GEARCHARGER 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 Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the add-on A, R, S, T, SC, and RC Trim V-1 Gearcharger Systems, manufactured by Vortech Engineering, Inc., of 5351 Bonsai Ave., Moorpark, California 93021 with a maximum boost of 6.5 psi., 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 the vehicle applications listed in Exhibit A, excluding any vehicle certified to a transitional low emission vehicle (TLEV) or low emission vehicle (LEV) emission standards.

The following 1998 model-year engine families certified to the TLEV or LEV emission standards are excluded from this Executive Order: **Ford vehicles**, WFMXV03.8ABA WFMXV04.6DBA (Mustang), WFMXT04.02DC, WFMXT04.0AAA, WFMXT04.0DAA, WFMXT04.0EAA, WFMXT04.0FAA, and WFMXA05.4JGC (Trucks), **GM Trucks:** WGMXA04.3188, WGMXT04.3185, WGMXT04.3187, WGMXA05.7185, and WGMXA05.7186, **Chrysler Trucks**: WCRXT0242220, WCRXT0242120, WCRXA0360H31, WCRXA0360H32, and WCRXA0360J31.

Installation of the Gearcharger System may require the installation of the following: Vortech Fuel Management System on the fuel return line, installation of a supplemental fuel pump, and modifications made to the intake air ducting. **Vehicles that are certified to an Enhanced Evaporative Emission Standard must maintain the stock air filter housing.**

Changes made to the design or operating conditions of the device, as exempt by the Air Resources Board, that adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the A, R, S, T, SC, and RC Trim V-1 Gearcharger Systems using any identification other than that shown in this Executive Order or marketing of the A, R, S, T, SC, and RC Trim V-1 Gearcharger Systems for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the ARB.

This Executive Order does not constitute any opinion as to the effect the A, R, S, T, SC, and RC Trim V-1 Gearcharger Systems may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on prior emissions testing on a 1990 F-350 truck with a 7.5L gasoline engine, comparative intake manifold air pressure testing, using the Hot 505 drive cycle, on a 1992 Ford Mustang with a 5.0L engine, 1995 Chevrolet Camaro with a 5.7L engine, and a 1990 General Motors C1500 truck with a 5.7L engine, and On Board Diagnostic II (OBD II) testing on a 1996 Mustang with a 4.6L engine and a 1997 Camaro with a 5.7L engine. The V-1 Gearcharger System did not affect the tailpipe emissions or intake manifold pressure, and on OBD II vehicles the Gearcharger System did not affect the vehicle's ability to perform its OBD II monitoring. However, the ARB finds that reasonable

grounds exist to believe that use of the A, R, S, T, SC, and RC Trim V-1 Gearcharger Systems may adversely affect emissions of motor vehicles 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 A, R, S, T, SC, and RC Trim V-1 Gearcharger Systems adversely affect 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 A, R, S, T, SC, and RC Trim V-1 Gearcharger Systems will affect the durability of the emission control system, Vortech 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 ensure 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 CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF VORTECH ENGINEERING, INC.'S A, R, S, T, SC, and RC TRIM V-1 GEARCHARGER SYSTEMS.

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 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.

Executive Order D-213-8, dated September 1993, D-213-9, dated July 1995, D-213-10, dated April 1996, D-213-11, dated July 1996, D-213-12, dated September 1997, D-213-13, dated February 1998, D-213-14, dated March 1998, is superseded and of no further force and effect.

The Bureau of Automotive Repair will be notified by a copy of this order.

Executed at El Monte, California, this 31st day of August 1998.

R. B. Summerfield, Chief
Mobile Source Operations Division

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
4CB218-060S	1991-1993	Dodge Dakota	5.2	7.00 (Stock)	3.125
4CB218-068	1991-1993	Dodge Dakota	5.2	7.00 (Stock)	3.125
4CB218-068S	1991-1993	Dodge Dakota	5.2	7.00 (Stock)	3.125
4CC218-060	1994	Dodge Dakota	5.2	7.00 (Stock)	3.125
4CC218-060S	1994	Dodge Dakota	5.2	7.00 (Stock)	3.125
4CC218-068	1994	Dodge Dakota	5.2	7.00 (Stock)	3.125
4CC218-068S	1994	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
4CD218-030S	1994/95	Dodge Dakota/Ram	5.2/5.9	7.00 (Stock)	3.125
4CD218-038	1994/95	Dodge Dakota/Ram	5.2/5.9	7.00 (Stock)	3.125
4CD218-038S	1994/95	Dodge Dakota/Ram	5.2/5.9	7.00 (Stock)	3.125
4CJ218-010S	1993-1995	Cherokee	5.2	7.00 (Stock)	3.125
4CJ218-018S	1993-1995	Cherokee	5.2	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.
4FA218-010	1986-1993	Mustang Std. output	5.0	6.00	3.33
4FA218-018	1986-1993	Mustang Std. output	5.0	6.00	3.33
4FG218-010	1994/95	Mustang Std. output	5.0	6.00	3.33
4FG218-018	1994/95	Mustang Std. output	5.0	6.00	3.33
4FA218-030	1993	Mustang H.O. Cobra	5.0	6.88	3.33
4FA218-030S	1993	Mustang H.O. Cobra	5.0	6.88	3.33
4FA218-038	1993	Mustang H.O. Cobra	5.0	6.88	3.33
4FA218-038S	1993	Mustang H.O. Cobra	5.0	6.88	3.33
4FA218-040	1986-1993	Mustang H.O.	5.0	6.88	3.33
4FA218-040S	1986-1993	Mustang H.O.	5.0	6.88	3.33
4FA218-048	1986-1993	Mustang H.O.	5.0	6.88	3.33
4FA218-048S	1986-1993	Mustang H.O.	5.0	6.88	3.33
4FF218-010S	1994-1998	Ford Mustang	3.8	7.38 (Stock)	3.33
4FF218-018S	1994-1998	Ford Mustang	3.8	7.38 (Stock)	3.33
4FG218-020	1994/95	Mustang H.O.	5.0	6.88	3.33
4FG218-020S	1994/95	Mustang H.O.	5.0	6.88	3.33
4FG218-028	1994/95	Mustang H.O.	5.0	6.88	3.33
4FG218-028S	1994/95	Mustang H.O.	5.0	6.88	3.33
4FH218-010S	1996-98	Mustang 2V	4.6	6.50 (Stock)	3.60
4FH218-018S	1996-98	Mustang 2V	4.6	6.50 (Stock)	3.60
4FK218-010S	1996-98	Mustang 4V	4.6	6.50 (Stock)	3.60
4FK218-018S	1996-98	Mustang 4V	4.6	6.50 (Stock)	3.60
4FN218-010S	1996-98	T-Bird/LincolnVIII	4.6	6.50 (Stock)	3.60
4FN218-018S	1996-98	T-Bird/LincolnVIII	4.6	6.50 (Stock)	3.60
4FB218-040	1986-1995	Truck	7.5	6.50	2.875
4FB218-040S	1986-1995	Truck	7.5	6.50	2.875
4FB218-048	1986-1995	Truck	7.5	6.50	2.875
4FB218-048S	1986-1995	Truck	7.5	6.50	2.875

4FC218-030	1987-1996	F-series truck/Bronc	5.8	6.50	2.875
4FC218-030S	1987-1996	F-series truck/Bronc	5.8	6.50	2.875
4FC218-038	1987-1996	F-series truck/Bronc	5.8	6.50	2.875
4FC218-038S	1987-1996	F-series truck/Bronc	5.8	6.50	2.875
4FC218-040	1993-1996	Lightning truck	5.8	6.50	2.875
4FC218-040S	1993-1996	Lightning truck	5.8	6.50	2.875
4FC218-048	1993-1996	Lightning truck	5.8	6.50	2.875
4FC218-048S	1993-1996	Lightning truck	5.8	6.50	2.875
4FE218-070	1987-1996	F-series truck/Bronc	5.0	6.50	3.125
4FE218-070S	1987-1996	F-series truck/Bronc	5.0	6.50	3.125
4FE218-078	1987-1996	F-series truck/Bronc	5.0	6.50	3.125
4FE218-078S	1987-1996	F-series truck/Bronc	5.0	6.50	3.125
4FD218-050	1991-1994	Explorer/Ranger	4.0	Stock	2.875
4FD218-050S	1991-1994	Explorer/Ranger	4.0	Stock	2.875
4FD218-058	1991-1994	Explorer/Ranger	4.0	Stock	2.875
4FD218-058S	1991-1994	Explorer/Ranger	4.0	Stock	2.875
4FM218-010S	1996-1998	F-series truck/Exped	4.6	6.70	3.60
4FM218-018S	1996-1998	F-series truck/Exped	4.6	6.70	3.60
4FM218-020S	1996-1998	F-ser. trk/Exped/Nav	5.4	6.70	3.33
4FM218-028S	1996-1998	F-ser. trk/Exped/Nav	5.4	6.70	3.33
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	7.00	3.125
4GB218-050S	1990-1995	Trucks (TBI)	5.0/5.7	7.00	3.125
4GB218-058	1990-1995	Trucks (TBI)	5.0/5.7	7.00	3.125
4GB218-058S	1990-1995	Trucks (TBI)	5.0/5.7	7.00	3.125
4GC218-090	1988-1993	Trucks (TBI)	7.4	7.50	2.875
4GC218-090S	1988-1993	Trucks (TBI)	7.4	7.50	2.875
4GC218-098	1988-1993	Trucks (TBI)	7.4	7.50	2.875
4GC218-098S	1988-1993	Trucks (TBI)	7.4	7.50	2.875
4GG218-090	1994/95	Trucks (TBI)	7.4	7.50	2.875
4GG218-090S	1994/95	Trucks (TBI)	7.4	7.50	2.875
4GG218-098	1994/95	Trucks (TBI)	7.4	7.50	2.875
4GG218-098S	1994/95	Trucks (TBI)	7.4	7.50	2.875
4GD218-050S	1996-1998	Mid-size truck/SUV	4.3	7.00 (Stock)	3.125
4GD218-058S	1996-1998	Mid-size truck/SUV	4.3	7.00 (Stock)	3.125
4GM218-050S	1996-1998	Full-size truck/SUV	5.0/5.7	7.00 (Stock)	3.60
4GM218-058S	1996-1998	Full-size truck/SUV	5.0/5.7	7.00 (Stock)	3.60
4GF218-060	1988-1992	F-body/Camaro/Fbir	5.0/5.7	7.00	3.48
4GF218-060S	1988-1992	F-body/Camaro/Fbir	5.0/5.7	7.00	3.48
4GF218-068	1988-1992	F-body/Camaro/Fbir	5.0/5.7	7.00	3.48
4GF218-068S	1988-1992	F-body/Camaro/Fbir	5.0/5.7	7.00	3.48
4GH218-050	1993	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33
4GH218-050S	1993	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33

4GH218-058	1993	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33
4GH218-058S	1993	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33
4GH218-060	1994-1997	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33
4GH218-060S	1994-1997	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33
4GH218-068	1994-1997	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33
4GH218-068S	1994-1997	F-body/Camaro/Fbir	5.0/5.7	6.00	3.33
4GV218-068	1994/95	Impala SS	5.7	7.00	3.125
4GV218-068S	1994/95	Impala SS	5.7	7.00	3.125
4GV218-078	1992/93	Corvette	5.7	7.00	3.125
4GV218-078S	1992/93	Corvette	5.7	7.00	3.125
4GV218-088	1994-96	Corvette	5.7	7.00	3.125
4GV218-088S	1994-96	Corvette	5.7	7.00	3.125