## State of California AIR RESOURCES BOARD

## **EXECUTIVE ORDER D-215-77**

## Relating to Exemptions Under Section 27156 of the California Vehicle Code

Edelbrock Corporation E-Force Supercharger Kit, Part No. 1580, 1582, and 1588

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 E-Force Supercharger Kit, manufactured and marketed by the Edelbrock Corporation, 2700 California Street, Torrance, California 90509, 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 vehicle applications:

Part No.	Application	Supercharger Pulley Dia. (Inches)
1580	1996 to 2004 model year Ford Mustang equipped with a 4.6L engine	s 3.25
1580	2005 to 2009 model year Ford Mustang equipped with a 4.6L engine	s 3.88
1580	1996 to 2001 model year Ford Mustang equipped with a 4.6L engine	s Cobra 3.50
1582	2010 model year Ford Mustangs equipped with a 4.6L engine	ped 3.88
1588	2011 model year 5.0L Ford Mustangs with engine familyBFMXV05.4VEK	3.75

The E-Force Supercharger Kit consists of the following main components: Eaton supercharger, intake manifold, bypass valve, high flow injectors, mass air flow sensor, intercooler, and a reflashed ECM. The stock crankshaft pulley and thermostat are retained on all applications. Boost is limited to 5 pounds per square inch. The new ECU calibration has no user adjustments. The breather hose may be replaced with an SAE30R9 rated hose or a Ford replacement equivalent.

Additional components are: 1996 to 2009 model year applications, new air cleaner housing that uses the stock air cleaner lid. 2010 model year applications, a new air cleaner lid with hydrocarbon paper. 2005 and 2006 model year applications the thermostat is relocated. 2005 to 2010 model year applications, new 85mm single bore throttle body.

This Executive Order is valid provided that the installation instructions for the E-Force Supercharger Kit will not recommend tuning the vehicle to specifications different from those of the kit manufacturer.

Changes made to the design or operating conditions of the E-Force Supercharger Kit, 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 E-Force 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.

Marketing of the E-Force Supercharger Kit using any identification other than that shown in this Executive Order or marketing of the E-Force Supercharger Kit 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 E-Force Supercharger Kit 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 one test vehicle modified with the E-Force Supercharger Kit. Test results showed that emission levels, with the supercharger kit installed, met the applicable emission standards when tested using the Cold-Start CVS-75 Federal Test Procedure (FTP) test cycle and the Supplemental Federal Test Procedure (SFTP) test cycle. Examination of the OBD II system showed that the supercharger kit did not affect OBD II system operation. Results from emissions testing conducted at the Auto Club Emissions Laboratory, located in Diamond Bar, California, are shown below (in grams per mile).

2008 Ford Mustang	CVS-75 FTP				SFTP US06/SC03	
•	NMOG	CO	NOx	HCHO	NMHC+NOx	CO
Standards*, 50K	0.040	1.7	0.05	0.008	0.14/0.20	8.0/2.7
Device Test 1**	0.028	1.2	0.02	0.000	0.02/0.01	3.0/0.4
Device Test 2**	0.032	1.1	0.02	0.000		
Average	0.030	1.1	0.02	0.000		
Average w/df	0.032	1.2	0.03	0.001		

<sup>\*</sup>LEV II ULEV CVS-75 FTP emissions standards.

OBD II testing was also conducted on a modified 2006 model year Mustang, which showed that the supercharger system with the modified radiator thermostat did not affect the OBD II system operation.

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.

<sup>\*\*</sup> Two FTP tests were required because the Auto Club has a CVS measurement system.

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 E-FORCE SUPERCHARGER KIT.

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 \_\_\_\_\_\_ 2444 day of February 2011.

Annette Hebert, Chief

Mobile Source Operations Division