

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-616-1

Relating to Exemptions under
Section 27156 of the Vehicle Code

Lotus Sport
Supercharger Kit

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-02-003;

IT IS ORDERED AND RESOLVED: That installation of the Supercharger Kit, manufactured by Lotus Sport of Potash Lane, Hethel, Norfolk NR14 8EZ, United Kingdom have been found not to reduce the effectiveness of the applicable vehicle pollution control systems, and therefore, the Supercharger Kit are exempt from the prohibitions in Section 27156 of the Vehicle Code for installation on the following naturally aspirated vehicle applications:

Kit Part Number	Vehicle Application
LOTAC05460	2005 model year 1.8 liter Lotus Elise
LOTAC05461	2006-2007 model year 1.8 liter Lotus Elise/Exige
LOTAC05462	2008 model year 1.8 liter Lotus Elise/Exige

The Supercharger Kit consists of a roots-type Eaton supercharger/intake manifold assembly rated at a maximum boost of 6.09 pounds per square inch using a 67.7mm diameter pulley and the stock 130mm crankshaft pulley. The kit also includes higher flow rate fuel injectors, a new engine control unit, and assorted parts to complete the installation.

This Executive Order is granted based on emissions tests submitted by Lotus Cars Limited in certifying the 2008 model year 1.8 liter Lotus Elise/Exige supercharged model (E.O. A-037-0037-1, test group 8LTXV01.8JHB) Low Emission Vehicle (LEV) II LEV, and on submitted emission test data conducted on a 2005 model year 1.8 liter Lotus Elise LEV I LEV with supercharger kit and on engineering evaluation of SC03 test results.

The 2008 model year 1.8 liter supercharged Lotus Elise/Exige certification emission test results are shown below (in grams per mile):

	FTP				US06/SC03	
	NMOG	CO	NOx	HCHO	NMHC+NOx	CO
Standards, 50K	0.075	3.4	0.05	0.015	0.14/0.20	8.0/2.7
Emission results	0.058	1.8	0.02	0.008	0.07/0.03	1.3/1.3
Standards, 120K	0.090	4.2	0.07	0.018		
Emission results	0.073	2.1	0.04	0.008		

The 2005 model year 1.8 liter Lotus Elise (with supercharger installed) submitted emission test results are shown below (in grams per mile with deterioration factors applied):

	FTP			US06	
	NMOG	CO	NOx	NMHC+NOx	CO
Standards, 50K	0.075	3.4	0.5	0.14	8.0
Emission results	0.058	0.57	0.08	0.04	2.3
Standards, 100K	0.090	4.2	0.03		
Emission results	0.072	0.85	0.10		

The SC03 test results for the 2008 model year supercharged Lotus Elise are well below the applicable emission standards. Due to the similarities in design between 2005 and 2008 model year supercharger kits, an engineering evaluation showed the SC03 test results for the 2005 model year 1.8 liter Lotus Elise (with supercharger installed) will also be well below the applicable emission standards. Examination of the OBD II system in the 2008 and 2005 model year Lotus vehicles showed the Lotus Sport Supercharger Kit does not affect OBD II system operation.

If evidence provides the Air Resources Board with reasons to suspect that the Lotus Sport Supercharger Kit will affect the durability of the emission control system, Lotus Sport 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 parts demonstrate adequate durability.

This Executive Order is valid provided that installation instructions for the Lotus Sport Supercharger Kit do not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

Changes made to the design or operating conditions of the Lotus Sport Supercharger Kit, as exempt by the Air Resources Board, which adversely affect the performance of the vehicles' emission control system, shall invalidate this Executive Order.

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

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

This Executive Order does not constitute any opinion as to the effect the use of the Lotus Sport Supercharger Kit may have on any warranty either expressed or implied by the vehicle manufacturer.

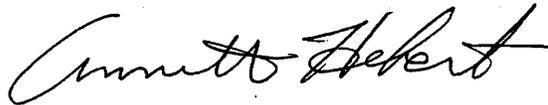
No claim of any kind, such as "Approved by the Air Resources Board," may be made with respect to the action taken herein in any advertising or other oral or written communication.

In addition to the foregoing, 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 California Code of Regulations, Title 13, 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 LOTUS SPORT'S SUPERCHARGER KIT.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order. The Executive Order may be revoked only after a ten day written notice of intention to revoke the Executive Order, in which period the holder of the Executive 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 Executive Order may not be revoked until a determination is made after the hearing that grounds for revocation exist.

Executed at El Monte, California, this 16 day of April 2009.



Annette Hebert, Chief
Mobile Source Operations Division