

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-453-1  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

MOSS MOTORS  
MAZDA 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 Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the Mazda Supercharger Kit, manufactured by Jackson Racing and marketed by Moss Motors, 400 Rutherford Avenue, Goleta, California 93117 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 all 1990 to 1999 model year Mazda Miata vehicles powered by a 4 cylinder engine.

Moss Motors' Mazda Supercharger Kit includes an Eaton supercharger designed to give a maximum boost of 6 psi., a new fuel pressure regulator and an aftermarket open element air cleaner to replace the original equipment air cleaner. Modifications to the emissions control system include a relocation of the throttle body, and a 4 degree retard in ignition timing. The following are the applicable pulley sizes:

Application	Crank Pulley Dia.	Supercharger Dia.
1990-93	5.12"	2.88"
1994-99	5.125"	2.64"

This Executive Order is valid provided that the installation instructions for the supercharger will not recommend tuning the vehicle to specifications different from those submitted by Moss Motors. Moss Motors recommends that only 92 octane fuel be used.

Changes made to the design or operating conditions of the supercharger, 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 supercharger using any identification other than that shown in this Executive Order or marketing of the supercharger for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the Mazda Supercharger Kit shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

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

This Executive Order is granted based on the following emissions test data submitted by the kit manufacturer:

	1994 Mazda Miata		
	NMHC	CO	NOX
Standards	0.25	3.4	0.4
W/ device	0.12	1.3	0.3

1998 Honda Civic certified to a Low Emission Vehicle (LEV) emission standard

	NMOG	CO	NOX	HCHO
Standards	0.075	3.4	0.2	0.015
device w/ dfs	0.071	1.5	0.1	0.002

Test results showed that the Supercharger Kit when installed on the vehicles did not cause tailpipe emissions to exceed the vehicle's applicable emission standard during a 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 1999 Mazda Miata and 1998 Honda Civic. 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. The same emissions impact is expected when the Mazda Supercharger Kit is installed on the vehicles for which exemption is granted.

However, the ARB finds that reasonable grounds exist to believe that use of the Mazda Supercharger Kit 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 Mazda Supercharger Kit 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 Mazda Supercharger Kit will affect the durability of the emission control system, Moss Motors 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 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.

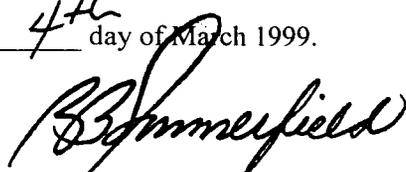
THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF MOSS MOTORS' MAZDA SUPERCHARGER KIT.

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 after hearing that grounds for revocation exist.

Executive Order D-453, dated April, 1998, is superseded and of no further force and effect.

Executed at El Monte, California, this 4<sup>th</sup> day of March 1999.



R. B. Summerfield, Chief  
Mobile Source Operations Division