

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-488-3
Relating to Exemptions Under Section 27156
of the Vehicle Code

MAGNA CHARGER CORPORATION
SUPERCHARGER KITS

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 Supercharger Kits manufactured and marketed by Magna Charger Corporation of 3172 Bunsen Avenue, Unit D, Ventura, California 93003 has been found not to reduce the effectiveness of required motor vehicle pollution control devices and, therefore, is exempt from the prohibitions of Section 27156 of the California Vehicle Code for the following vehicle applications, **excluding any vehicle certified to Ultra Low Emission Vehicle (ULEV) or lower emission standards:**

<u>General Motors</u>	Model-Year	Displacement	Applications
	1999-2001	4.8, 5.3, 6.0L	Trucks
	1999-2001	5.7L	Trucks
<u>Ford</u>	1994/1995	4.6L	Full Size Passenger Cars
	1994-1997	4.6L	Thunderbird & Cougar
	1996-2001	4.6L	Mustang
	1997-2001	4.6/5.4L	Trucks

The General Motors 4.8, 5.3, 6.0L Supercharger Kits includes the following main components: Eaton supercharger, intake manifold plenum, new fuel injectors (GM part number 17124531), new ECM calibration, and a throttle body adapter. The throttle body is moved to the supercharger inlet. The EGR valve is relocated onto the inlet duct between the throttle body and the supercharger in order to preserve stock EGR function. All other emission-related components are in the stock location relative to the throttle body. The following are the supercharger pulley specifications: The 4.8L engine uses a 3.4" diameter pulley, the 5.3L engine uses a 3.3" diameter pulley, and the 6.0L engine uses a 3.2" diameter pulley. Maximum boost is limited to 5 psi.

The General Motors 5.7L Supercharger Kits includes the following main components: Eaton supercharger with a 3.0" pulley, intake manifold plenum, throttle body adapter and FCC1 frequency calibrator. The throttle body is moved to the supercharger inlet. All other emission-related components are in the stock location. Maximum boost is limited to 6 psi.

The Ford Supercharger Kits includes the following main components: Eaton supercharger, intake manifold plenum, intake manifold runners, intercooler, throttle body adapter, electric water pump, high flow fuel pump, and fuel pressure regulator. The EGR valve is relocated between the throttle body and the supercharger intake. All other emission-related components are in the stock location. The following are the supercharger pulley specifications: 4.6L engine uses a 2.94" diameter pulley, and the 5.4L engine uses a 2.4" diameter pulley. Maximum boost is limited to 6 psi.

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

This Executive Order is valid provided that the installation instructions for the supercharger 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 device, as exempted by the Air Resources Board (ARB), that adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of this device using any identification other than that shown in this Executive Order or marketing of this device 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 that the use of this device may have on any warranty either expressed or implied by the vehicle manufacturer.

This exemption is issued based on submitted emissions test data from an independent laboratory which showed that the supercharger kit did not adversely affect exhaust emissions of the tested vehicle. The test results are shown below.

Independent Laboratory Test Results

1999 5.3L GMC 1500 Truck, LEV Cert.

	<u>NMOG</u>	<u>CO</u>	<u>NOX</u>	<u>HCHO</u>
Device (g/mi) with df's applied	0.077	1.7	0.2	0.001
Standard (g/mi)	0.160	4.4	0.4	0.018

1999 5.7L GMC Yukon 1500, LEV Cert.

	<u>NMOG</u>	<u>CO</u>	<u>NOX</u>	<u>HCHO</u>
Device (g/mi) with df's applied	0.100	2.1	0.2	0.001
Standard (g/mi)	0.160	4.4	0.4	0.018

1998 5.4L Ford Expedition, LEV Cert.

	<u>NMOG</u>	<u>CO</u>	<u>NOX</u>	<u>HCHO</u>
Device (g/mi) with df's applied	0.113	3.2	0.1	0.001
Standard (g/mi)	0.195	5.0	0.6	0.022

Test results showed that the supercharger kit when installed on the vehicles did not cause tailpipe emissions to exceed the applicable emission standards during the Cold Start CVS-75 Federal Test Procedure. This Executive Order is also based on the On-Board Diagnostic II (OBD II) testing conducted on the same test vehicles. Test data showed that the supercharger kit when installed on the vehicle 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 Magna Charger Corporation's Supercharger Kits 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 supercharger kit adversely affects 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 supercharger kit will affect durability of the emission control systems, Magna Charger Corporation 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 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 MAGNA CHARGER CORPORATION'S GENERAL MOTORS 5.3L SUPERCHARGER KIT.

No claims 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 Orders D-488, dated October 1999, D-488-1, dated February 1999, and D-488-2, dated May 2000 are superseded and of no further force and effect.

Executed at El Monte, California, this 25th day of September 2000.


R. B. Summerfield, Chief
Mobile Source Operations Division