

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-231-23

Relating to Exemptions Under Section 27156  
of the California Vehicle Code

Whipple Industries, Inc.  
Ford 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-02-003;

IT IS ORDERED AND RESOLVED: That the installation of the Ford Supercharger Kit, manufactured and marketed by Whipple Industries, Inc., 3292 N. Weber, Fresno, California 93722, 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 Ford Motor Company vehicles as listed in Exhibit A which is attached hereto and incorporated herein.

The Ford Supercharger Kit consists of the following main components: Twin Screw Whipple supercharger, intake manifold, bypass valve, 160 degree thermostat to replace the stock thermostat, and a new air cleaner housing with a high-flow element. The kit also includes a reflashed ECM and a set of high flow injectors. Some kits may include an intercooler. Boost is limited to 10 pound per square inch.

This Executive Order is valid provided that the installation instructions for the Ford Supercharger Kit will not recommend tuning the vehicle to specifications different from those submitted by the device manufacturer.

Changes made to the design or operating conditions of the Ford 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 Ford 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 Ford Supercharger Kit using any identification other than that shown in this Executive Order or marketing of the Ford 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 Ford Supercharger Kit may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on emission test results in the modified configuration using the Cold-Start CVS-75 Federal Test Procedure, Supplemental Federal Test Procedure (US06/SC03), and an examination of the On-Board Diagnostic II (OBD II) system. A 2005 model year Ford F-150 with a 5.4 liter engine (5FMXT05.4R4P, LEV II LEV, LDT) was used for the evaluation of the Ford Supercharger Kit. Results from emissions testing conducted at Roush Emissions Laboratory, Livonia, Michigan, are shown below (in grams per mile with deterioration factors applied):

		CVS-75			US06/SC03		
		NMOG	CO	NOx	HCHO	NMHC+NOx	CO
Standards	50k	0.075	3.4	0.05	0.015	0.60/0.44	11.8/4.0
Device		0.059	2.0	0.03	0.001	0.01/0.02	3.4/1.1

The emission test results in the modified configuration were below the applicable certification standards. Examination of the OBD II system showed the Ford Supercharger Kit does not affect 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.

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 FORD 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 27<sup>TH</sup> day of September 2005



Allen Lyons, Chief  
Mobile Source Operations Division

## Exhibit A

YEARS	MAKE	WHIPPLE KIT #	ENGINE (LITER)	COMPRESSOR SIZE	CRANK PULLEY SIZE	SC PULLEY
1996-2004	Ford Mustang	WIK-4.6-2V-A	4.6L	2.3L	6.555	4.000
1996-2004	Ford Mustang	WIK-4.6-2V-B	4.6L	2.3L	6.555	4.250
1996-2004	Ford Mustang	WIK-4.6-2V-A-IC	4.6L	2.3L	6.555	3.250
1996-2004	Ford Mustang	WIK-4.6-2V-B-IC	4.6L	2.3L	6.555	3.500
1996-2004	Ford Mustang	WIK-4.6-2V-C-IC	4.6L	2.3L	6.555	3.625
1996-2004	Ford Mustang	WIK-4.6-2V-D-IC	4.6L	2.3L	6.555	3.750
1996-2004	Ford Mustang	WIK-4.6-2V-E-IC	4.6L	2.3L	6.555	3.875
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-A	4.6L	2.3L	6.555	3.250
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-B	4.6L	2.3L	6.555	3.375
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-C	4.6L	2.3L	6.555	3.500
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-D	4.6L	2.3L	6.555	3.625
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-E	4.6L	2.3L	6.555	3.750
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-A-IC	4.6L	2.3L	6.555	3.250
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-B-IC	5.4L	2.3L	6.555	3.375
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-C-IC	5.4L	2.3L	6.555	3.500
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-D-IC	5.4L	2.3L	6.555	3.625
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-E-IC	5.4L	2.3L	6.555	3.750
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-A	5.4L	2.3L	6.555	3.875
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-B	5.4L	2.3L	6.555	4.000
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-C	5.4L	2.3L	6.555	4.125
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-A-IC	5.4L	2.3L	6.555	3.875
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-B-IC	5.4L	2.3L	6.555	4.000
1996-2004	Ford F150/F250/F350/Expedition	WIK-5.4-2V-C-IC	5.4L	2.3L	6.555	4.125
1998-2001	Ford Mustang Cobra	WIK-4.6-4V-A-IC	4.6L	2.3L	6.555	3.000
1998-2001	Ford Mustang Cobra	WIK-4.6-4V-B-IC	4.6L	2.3L	6.555	3.125
1998-2001	Ford Mustang Cobra	WIK-4.6-4V-C-IC	4.6L	2.3L	6.555	3.250
1998-2001	Ford Mustang Cobra	WIK-4.6-4V-D-IC	4.6L	2.3L	6.555	3.385
1998-2006	Ford F250/F350	WIK-6.8LA	6.8L	2.3L	7.500	3.485
1998-2006	Ford F250/F350	WIK-6.8LA-IC	6.8L	2.3L	7.500	3.250
1999-2004	Ford Lightning/Harley Truck	WIK-5.4L-2V23A	5.4L	2.3L	7.500	2.750
1999-2004	Ford Lightning/Harley Truck	WIK-5.4L-2V23B	5.4L	2.3L	7.500	3.000
1999-2004	Ford Lightning/Harley Truck	WIK-5.4L-2V23C	5.4L	2.3L	7.500	3.250
1999-2004	Ford Lightning/Harley Truck	WIK-5.4L-2V33A	5.4L	3.3L	7.500	4.500
1999-2004	Ford Lightning/Harley Truck	WIK-5.4L-2V33B	5.4L	3.3L	7.500	4.750
1999-2004	Ford Lightning/Harley Truck	WIK-5.4L-2V33C	5.4L	3.3L	7.500	5.000
2002-2004	Ford Cobra	WIK-4.6L-4V23A	4.6L	2.3L	7.500	3.250
2002-2004	Ford Cobra	WIK-4.6L-4V23B	4.6L	2.3L	7.500	3.500
2002-2004	Ford Cobra	WIK-4.6L-4V33A	4.6L	3.3L	7.500	4.500
2002-2004	Ford Cobra	WIK-4.6L-4V33B	4.6L	3.3L	7.500	4.750
2002-2004	Ford Cobra	WIK-4.6L-4V33C	4.6L	3.3L	7.500	5.000
2002-2006	Ford Ranger/Mazda B-Series	WIK-3.0LA	3.0L	1.2L	5.830	2.750
2002-2006	Ford Ranger/Mazda B-Series	WIK-3.0LB	3.0L	1.2L	5.830	2.875
2002-2006	Ford Ranger/Mazda B-Series	WIK-3.0LC	3.0L	1.2L	5.830	3.000
2002-2006	Ford Ranger/Mazda B-Series	WIK-3.0LD	3.0L	1.2L	5.830	3.125
2004-2006	Ford F150/F250/F350/Expedition	WIK-5.4L-3VA-IC	5.4L	2.3L	6.500	3.250
2004-2006	Ford F150/F250/F350/Expedition	WIK-5.4L-3VB-IC	5.4L	2.3L	6.500	3.385
2004-2006	Ford F150/F250/F350/Expedition	WIK-5.4L-3VC-IC	5.4L	2.3L	6.500	3.500
2004-2006	Ford F150/F250/F350/Expedition	WIK-5.4L-3VA	5.4L	2.3L	6.500	3.385
2004-2006	Ford F150/F250/F350/Expedition	WIK-5.4L-3VB	5.4L	2.3L	6.500	3.500
2005-2006	Ford F250/F350	WIK-6.8L-3VA-IC	6.8L	2.3L	6.500	3.000
2005-2006	Ford F250/F350	WIK-6.8L-3VB-IC	6.8L	2.3L	6.500	3.125
2005-2006	Ford F250/F350	WIK-6.8L-3VC-IC	6.8L	2.3L	6.500	3.250
2005-2006	Ford F250/F350	WIK-6.8L-3VA	6.8L	2.3L	6.500	3.125
2005-2006	Ford F250/F350	WIK-6.8L-3VB	6.8L	2.3L	6.500	3.250
2005-2006	Ford F250/F350	WIK-6.8L-3VC	6.8L	2.3L	6.500	3.385

IC = INTERCOOLED