

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-231-31

Relating to Exemptions Under Section 27156
of the California Vehicle Code

Whipple Industries, Inc.
Whipple Supercharger

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 Whipple Supercharger, 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 Ford Motor Company 5.4L passenger cars listed in Exhibit A.

The Whipple Supercharger Kit includes a twin screw Whipple supercharger, open element air filter with intake air tubing, 123 mm diameter mass air flow sensor with stock electronics, optional fuel pump, optional single blade throttle body or 63.5 mm dual blade throttle body, and a new ECM calibration. Installation would not require any modification to any fuel or emission related tubing and the stock crankshaft pulley, coolant thermostat, and fuel injectors are retained. **The Whipple supercharger is designed to be a direct bolt-on replacement to the stock supercharger.** The new ECM calibration and/or programmer does not have any emission related user adjustments nor can it be capable of allowing the user to upload new fuel and timing maps.

This Executive Order is valid provided that the installation instructions for the Whipple Supercharger 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 Whipple 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.

This Executive Order shall not apply to any Whipple Supercharger 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 Whipple Supercharger using any identification other than that shown in this Executive Order or marketing of the Whipple 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.

This Executive Order does not constitute any opinion as to the effect the use of the Whipple Supercharger 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 a 2008 model year 5.4L Ford Mustang certified to the Low Emission Vehicle II Low Emission Vehicle (LEV II LEV) emission standards and modified with the Whipple Supercharger Kit using the 2.9L compressor and the 3.0 inch diameter supercharger pulley. The test vehicle was also equipped with a single blade throttle body and replacement fuel pump. Test results showed that emission levels, met the applicable emission standards when tested using the Cold-Start CVS-75 Federal Test Procedure (FTP) and the Supplemental Federal Test Procedure (SFTP US06/SC03) test cycles. Boost pressure was measured at 22 psi. Examination of the OBD II system showed the Whipple Supercharger did not affect OBD II system operation. Results from emission testing conducted at the Roush Emissions Laboratory, Livonia, Michigan are listed below with deterioration factors applied.

2008 model year Ford Mustang	CVS-75 FTP			
	NMOG	CO	NOx	HCHO
Standards	0.075	3.4	0.05	0.015
Device Test	0.059	1.5	0.04	0.001
	US06/SC03			
	NMHC+NOx	CO		
Standards 4k	0.14/0.20	8.0/2.7		
Device	0.02/0.01	4.9/1.1		


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 WHIPPLE SUPERCHARGER.

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 23 day of September 2009.



Annette Hebert, Chief
Mobile Source Operations Division

Exhibit A

YEARS	MAKE	WHIPPLE KIT #	ENGINE (LITER)	MAX BOOST PSI	COMPRESSOR SIZE	CRANK PULLEY SIZE	SC PULLEY
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	3.4L	Stock	3.500
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	3.4L	Stock	3.750
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	4.0L	Stock	3.250
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	4.0L	Stock	3.375
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	4.0L	Stock	3.500
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	4.0L	Stock	3.625
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	4.0L	Stock	3.750
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	4.0L	Stock	3.875
2005-2007	Ford GT	WIK-5.4-4VGT	5.4L	15	4.0L	Stock	4.000
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.3L	Stock	2.500
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.3L	Stock	2.625
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.3L	Stock	2.750
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.3L	Stock	2.875
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.3L	Stock	3.000
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	2.500
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	2.625
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	2.750
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	2.875
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	3.000
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	3.125
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	3.250
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	3.375
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	3.500
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	2.9L	Stock	3.625
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.000
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.125
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.250
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.375
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.500
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.625
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.750
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	3.875
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	3.4L	Stock	4.000
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	4.0L	Stock	3.000
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	4.0L	Stock	3.125
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	4.0L	Stock	3.250
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	4.0L	Stock	3.375
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	4.0L	Stock	3.500
2007-2010	Shelby GT500 / GT500KR	WK-5.4-GT500	5.4L	22	4.0L	Stock	3.625
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