State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-418-27

Relating to Exemptions Under Section 27156
of the California Vehicle Code

Roush Industries
ROUSHcharger 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-14-012;

IT IS ORDERED AND RESOLVED: That the installation of the ROUSHcharger Kit, manufactured and marketed by Roush Industries of 12249 Levan Road Livonia, Michigan 48150, 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 2017 model year Ford 5.0L Mustang and the 2015 and 2016 Ford 5.0L F-150 Truck.

The Roushcharger Kit for the Ford Mustang (part numbers 421823 / M-6066-M8627) includes an Eaton TVS2300 roots type axial flow supercharger assembly, intercooler, air cleaner lid with the stock hydrocarbon absorber heat staked in a stock location and orientation, conical air filter, lower air box housing, intake tubing, intake manifold, high flow fuel injectors, recalibrated stock mass air flow sensor, and a new fuel calibration modified to operate with the supercharger. The Roush Industries Roushcharger Kit utilizes an 85 mm diameter pulley. Maximum boost produced by the supercharger would be 11.0 pounds per square inch. The stock crankshaft pulley and radiator thermostat are retained. **Installation of the ROUSHcharger Kit requires the removal of the stock air filter housing and all intake air tubing. If the stock air filter housing contains the vehicle's tune-up & emissions control decal, a replacement decal must be placed in a similar location.**

The Roushcharger Kit for the Ford F-150 (part numbers 421983 and 421984) includes an Eaton TVS2300 roots type axial flow supercharger assembly, intercooler, air cleaner lid (no hydrocarbon absorber on stock vehicle), conical air filter, intake tubing, intake manifold, high flow fuel injectors, recalibrated stock mass air flow sensor, and a new fuel calibration modified to operate with the supercharger. The Roush Industries Roushcharger Kit utilizes either a 75 or 80mm diameter pulley. Maximum boost produced by the supercharger would be 11.0 pounds per square inch. The stock crankshaft pulley and radiator thermostat are retained. **Installation of the ROUSHcharger Kit requires the removal of the stock air filter housing and all intake air tubing. If the stock air filter housing contains the vehicle's tune-up & emissions control decal, a replacement decal must be placed in a similar location.**

This Executive Order is valid provided that the installation instructions for the ROUSHcharger Kit will not recommend tuning the vehicle to specifications different from those of Roush Industries.

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

This exemption is issued based on prior submitted emissions test data, from Roush Industries, Livonia, Michigan, on a 2015 model year Ford Mustang (Test Group FFMXV05.0VIM) certified to the Low Emission Vehicle III Ultra Low Emission Vehicle (LEV III ULEV 125) standards and tested using the Cold Start Federal Test Procedure (FTP) and the Supplemental Federal Test Procedure (SFTP) test cycles and new data on a 2016 model year Ford F-150 (Test Group GFMXT05.03DK) certified to the Low Emission Vehicle II Ultra Low Emission Vehicle (LEV II ULEV) standards and tested using the Cold Start Federal Test Procedure (FTP) test cycle:

Mustang

Useful Life FTP	NMOG+NOx	CO	HCHO	
Emission Level	0.082	0.8	0.002	Test 1
(w/ df applied)	0.080	0.9	0.002	Test 2
Standards	0.125	2.1	0.004	

Useful Life SFTP	NMHC+NOx	CO
Emission Level	0.10	0.9
(Composite w/ df)	0.10	0.8
Standards	0.14	4.2

F-150

Emission Levels	NMOG	CO	NOx	HCHO
Useful Life w/ df	0.058	0.8	0.03	0.001
Emission Standards Useful Life	0.070	2.1	0.04	0.011

Test results showed that the ROUSHcharger Kit when installed on the vehicle did not cause exhaust emissions to exceed the applicable emission standards during the Cold Start Federal Test Procedure and the applicable Supplemental Federal Test Procedure. This Executive Order is also based on the On-Board Diagnostic II (OBD II) testing conducted on the Mustang. The ROUSHcharger Kit when installed on the test vehicle did not affect the vehicle's ability to perform its OBD II monitoring.

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 ROUSH INDUSTRIES' ROUSHCHARGER 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 day of June 2016.

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division