

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-115-12  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

HOLLEY PERFORMANCE PRODUCTS  
THUNDER 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 Thunder Supercharger kit (p/n 300-520), produced and marketed by Holley Performance Products, 1801 Russellville Road, P.O. Box 10360, Bowling Green, Kentucky 42102, 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 1997-2000 Ford F-150 & Expedition, 1997-1998 Ford F-250 Light-Duty, and 1998-1999 Lincoln Navigator vehicles equipped with the 5.4 liter SOHC V8.

The Thunder Supercharger kit includes the following main components: roots supercharger, intake manifold, boost controlled fuel pressure regulator, air-to-water intercooler, intercooler pump, throttle body, assorted brackets, tubing, and hardware. The diameter of the drive pulley is 6.0 inches, and the supercharger pulley diameter is 2.86 inches. Maximum boost is 7.0 psi.

This Executive Order is valid provided that the installation instructions for the Thunder Supercharger kit 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 Thunder 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 Thunder Supercharger kit advertised, offered for sale, sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Marketing of the Thunder Supercharger kit using any identification other than that shown in this Executive Order or marketing of the Thunder 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 Thunder 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 and examination of the On-Board Diagnostic II (OBD II) system. A 2000 Ford F-150 pick-up truck with a 5.4L fuel injected engine (YFMXA05.4HGC, LEV, MDV2) was used for the evaluation of the Thunder Supercharger kit. Results from emissions testing conducted at California Environmental Engineering are shown below (in grams per mile):

50k	NMOG	CO	NOx	HCHO
Emission Level	0.124	1.478	0.257	0.0014
(w. DF applied)				
STD	0.160	4.4	0.4	0.018
120k	NMOG	CO	NOx	HCHO
Emission Level	0.163	2.018	0.407	0.0021
(w. DF applied)				
STD	0.230	6.4	0.6	0.027

The emission test results in the modified configuration were below the applicable certification standards with the deterioration factors applied. Examination of the OBD II system showed the Thunder Supercharger kit does not affect OBD II operation. Therefore, based on the test results, the staff concludes that the Thunder Supercharger kit meets the criteria for exempting general criteria parts.

However, the ARB finds that reasonable grounds exist to believe that use of the Thunder Supercharger kit may adversely affect emissions of motor vehicles when operating under conditions outside the parameters of the CVS-75 Federal Test Procedure. 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 Thunder 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 Thunder Supercharger kit will affect the durability of the emission control system, Holley Performance Products, 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.

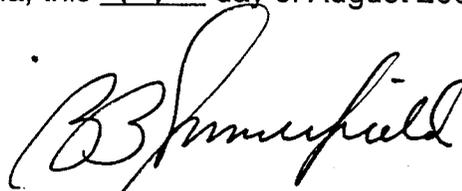
In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 HOLLEY PERFORMANCE PRODUCTS' THUNDER 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.

Executed at El Monte, California, this 17<sup>th</sup> day of August 2000.



R. B. Summerfield, Chief  
Mobile Source Operations Division