

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-553-2

Relating to Exemptions Under Section 27156  
of the California Vehicle Code

BD Engine Brake  
Turbo Thruster 2 (Part Number 1047511)

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 Turbo Thruster 2, manufactured and marketed by BD Engine Brake, Unit A10-33733 King Road, Abbotsford B.C. Canada, V3S 7M9, 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 1994 through 2003 pick-up trucks equipped with the Ford 7.3L diesel engine.

The Turbo Thruster 2 is a radial flow turbocharger turbine with area/radius ratio of 0.84. Maximum boost is listed at 22 pounds per square inch (psi). No other changes or modifications are required for installation.

This Executive Order is valid provided that the installation instructions for the Turbo Thruster 2 will not recommend tuning the vehicle to specifications different from those of the kit manufacturer.

Changes made to the design or operating conditions of the Turbo Thruster 2, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the Turbo Thruster 2 using any identification other than that shown in this Executive Order or marketing of the Turbo Thruster 2 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 is granted based on submitted emissions test data generated on one test vehicle modified with the Turbo Thruster 2. Test results showed that emission levels, with the supercharger installed, did not exceed a ten percent increase over stock emission levels when tested using the Hot 505 Federal Test Procedure (FTP) test cycle. Results from emissions testing conducted at Automotive Testing and Development Services, located in Ontario, California are shown below (in grams per mile).

	THC	NMHC	CO	NOx	PM
Stock	0.133	0.133	1.036	4.163	0.6943
Modified	0.120	0.119	0.993	4.084	0.6056
chg	-0.013	-0.014	-0.043	-0.079	-0.089
% chg	-9.8%	-10.5%	-4.2%	-1.9%	-12.8%

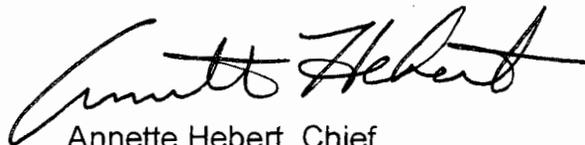
The Air Resources Board reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 Turbo Thruster 2.

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 6 day of March 2012.



Annette Hebert, Chief  
Mobile Source Operations Division