

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-161-66

Relating to Exemptions Under Section 27156
of the Vehicle Code

Gale Banks Engineering.
Git, Stinger, StingerPlus and PowerPack Kits

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 Git, Stinger, StingerPlus and PowerPack kits, manufactured and marketed by Gale Banks Engineering, 546 Duggan Avenue, Azusa, California 91702 has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the following truck/motorhome applications equipped with the 5.9L Cummins ISB/ISC turbo-diesel engine:

Dodge Cummins Pickup

<u>Kit</u>	<u>Model-Year*</u>	<u>Part No.</u>
GIT	1998 ½	49305
	1999	49306
	1994-98	46381
Stinger (std. cab)	1998 ½	49310
	1999	49311
Stinger (ext. cab)	1998 ½	49312
	1999	49313
Stinger-Plus (std. cab)	1999	49320
Stinger-Plus (ext. cab)	1999	49321
PowerPack (std. cab)	1999	49330
PowerPack (ext. cab)	1999	49331

Cummins ISB/ISC Powered Class A Motorhomes and Medium Duty Trucks

<u>Kit</u>	<u>Model-Year*</u>	<u>Part No.</u>
ISB Stinger	1997 - 1999	49242
ISB PowerPack	1997 - 1999	49255
ISC Stinger	1997 - 1999	49292
ISC PowerPack	1997 - 1999	49293

* Excluded from this Executive Order are vehicles equipped with 1999 model-year Cummins engine families, XCEXH0359BAI, XCEXH0359BAJ, and XCEXH0359BAK, which have been certified to the EURO III emission standards under the Settlement Agreement.

The **Git Kit for Dodge Cummins Pickup** includes a large diaphragm replacement wastegate actuator, and a fuel calibration module or fuel calibration plate for earlier models.

The **Stinger Kit for Dodge Cummins ISB Pickup** includes a low restriction air filter element, large diaphragm replacement actuator, mandrel bent turbine outlet pipe, intermediate pipe, extension pipe (where necessary), muffler, tailpipe, and fuel calibration module.

The **Stinger-Plus Kit for Dodge Cummins ISB Pickup** includes a low restriction air filter element, replacement turbine housing with large diaphragm actuator, mandrel bent turbine outlet pipe, intermediate pipe, extension pipe (where necessary), muffler, tailpipe and fuel calibration module.

The **PowerPack Kit for Dodge Cummins ISB Pickup** includes a low restriction air filter element, replacement inlet casting, replacement turbine housing with large diaphragm actuator, mandrel bent turbine outlet pipe, intermediate pipe, extension pipe (where necessary), muffler, tailpipe and fuel calibration module.

The **Stinger for class A motorhomes** includes a replacement turbine housing with large diaphragm actuator and fuel calibration module.

The **PowerPack for class A motorhomes** includes a replacement turbine housing with large diaphragm actuator, replacement inlet casting and a fuel calibration module.

The fuel calibration module on all kits is an add on device that is designed to increase fuel pressure during boost conditions. It is installed between the electronic fuel pump and the MAP sensor.

This Executive Order shall not apply to any Gale Banks Engineering's Git, Stinger, StingerPlus and PowerPack Kits advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

This Executive Order is valid provided that the installation instructions for the Git, Stinger, StingerPlus and PowerPack Kits 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 Git, Stinger, StingerPlus and PowerPack Kits, 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 Git, Stinger, StingerPlus and PowerPack Kits using any identification other than that shown in this Executive Order or marketing of the Git, Stinger, StingerPlus and PowerPack Kits for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the Git, Stinger, StingerPlus and PowerPack Kits shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

This Executive Order does not constitute any opinion as to the effect the use of the Git, Stinger, StingerPlus and PowerPack Kits may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on emissions test data which showed that the worst case kit, PowerPack, did not adversely affect tailpipe emissions during comparative Cold Start 505 Federal Test Procedure. 1999 Dodge Ram 2500 was used as the test vehicle.

	HC	CO	NOX	PARTICULATES	Opacity
Stock	0.17	1.0	9.0	0.108	-----
PowerPack	0.06	1.5	9.8	0.062	4.7% avg.
Difference	-0.11	0.5	0.8	-0.046	
% Change	-65%	50%	8.8%	-43%	

Test results showed that tailpipe emissions during comparative Cold Start 505 Federal Test Procedure with the PowerPack installed on the vehicle did not cause exhaust emissions to exceed the baseline emissions by more than the allowed limits of 10 percent or 0.1 grams per mile on hydrocarbon (HC) and oxides of nitrogen (NOx), 15 percent or 1.0 grams per mile carbon monoxide (CO), and 15 percent or 0.03 grams per mile on particulates as specified in the "Procedures for Exemption of Add-On and Modified Parts".

This Executive Order is also based on an On Board Diagnostic II (OBD II) testing conducted on the same vehicle. Test data showed that the PowerPack when installed on the vehicle did not affect the vehicle's ability to perform its OBD II monitoring.

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 GALE BANKS ENGINEERING'S GIT, STINGER, STINGERPLUS AND POWERPACK KITS.

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.

Executive Order D-161-60, dated September 2000, is superseded and of no further force and effect.

Executed at El Monte, California, this 27th day of March 2002.



Allen Lyons, Chief
New Vehicle/Engine Programs Branch