# State of California AIR RESOURCES BOARD

#### **EXECUTIVE ORDER D-526-4**

Relating to Exemptions under Section 27156 of the Vehicle Code

Volant Performance Cool Air Intake 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 Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the installation of the Cool Air Intake Kits, produced and marketed by Volant Performance, 10285 Indiana Court, Rancho Cucamonga, California 91730, has been found not to reduce the effectiveness of the applicable vehicle pollution control systems, and therefore, is exempt from the prohibitions in Section 27156 of the Vehicle Code for installation on those vehicles listed in the attached Exhibit A.

The Volant Performance Cool Air Intake Kits include the following main components: open-element air filter, filter enclosure (as applicable), intake system tubing, crankcase ventilation hose (as applicable), assorted brackets, and hardware.

This Executive Order is valid provided that installation instructions for the Volant Performance Cool Air Intake Kits do not recommend tuning the vehicles to specifications different from those of the vehicle manufacturer.

Changes made to the design or operating conditions of the Volant Performance Cool Air Intake Kits, as exempt by the Air Resources Board, which adversely affect the performance of the vehicles' emission control system, shall invalidate this Executive Order.

Marketing of the Volant Performance Cool Air Intake Kits using any identification other than that shown in this Executive Order or for an application other than that listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the Volant Performance Cool Air Intake Kits shall not be construed as exemption to sell, offer for sale, or advertise any component of the system as an individual device.

This Executive Order shall not apply to any Volant Performance Cool Air Intake 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 does not constitute any opinion as to the effect the use of the Volant Performance Cool Air Intake Kits may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on prior evaluations utilizing a 2002 Chrysler PT Cruiser (engine family 2RXV0148V40, ULEV, PC) and a 2007 Chevrolet Tahoe 5.3L (engine family 7GMXT05.3380, LEV II ULEV) which resulted in the issuance of Executive Orders D-526 and D-526-1, respectively. Additionally, emission testing in the modified configuration using the Cold-Start CVS-75 Federal Test Procedure, Supplemental Federal Test Procedure (US06), and an examination of the On-Board Diagnostic II (OBD II) system were conducted on a 2009 Dodge Charger R/T with a 5.7 liter engine (engine family 9CRXV05.7UPO, LEV II ULEV) to evaluate the Cool Air Intake Kit. Results from emissions testing conducted at Automobile Club of Southern California, are shown below (in grams per mile):

FTP	120K	<u>NMOG</u>	<u>co</u>	<u>NOx</u>	<u>HCHO</u>
	Emission Level (Avg., DF applied)	0.060	0.883	0.015	0.0029
	STD	0.070	2.1	0.4	0.011
US06		NMHC + NOx		<u>co</u>	
	Emission Level STD	0.093 0.140		0.901 8.0	

The emission test results in the modified configuration were below the applicable certification standards. Examination of the OBD II system showed the Cool Air Intake Kits do not affect OBD II operation.

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 California Code of Regulations, Title 13, Section 2222, et seq. Further, if test results or other evidence provides the ARB with reason to suspect that the Volant Performance Cool Air Intake Kits will affect the durability of emission control systems, Volant Performance shall be required to submit durability data to show that the durability of vehicle emission control systems are not, in fact, affected and/or that the add-on or modified parts demonstrate adequate durability.

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 VOLANT PERFORMANCE'S COOL AIR INTAKE 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 Executive Order. The Executive Order may be revoked only after a ten day written notice of intention to revoke the Executive Order, in which period the holder of the Executive 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 Executive Order may not be revoked until a determination is made after the hearing that grounds for revocation exist.

Executed at El Monte, California, this \_\_\_\_\_\_ day of February 2012.

Annette Hebert, Chief

Mobile Source Operations Division

Exhibit A

MAKE	MODEL	MODEL YEAR	DISP (L)	COOL AIR INTAKE P/N
Chrysler	300	2004-2010	5.7	16857152
Chrysler	300	2004-2010	6.1	16861
Dodge	Challenger	2008-2010	5.7	16857154
Dodge	Charger/Magnum	2004-2010	6.1	16861
Dodge	Charger	2005-2010	5.7	16857153
Dodge	Magnum	2004-2010	5.7	16857151
Dodge	Dakota/Durango	1997-1999	3.9/5.2	26852
Dodge	Dakota/Durango	1999-2002	3.9/5.2	26952
Dodge	Dakota/Durango	1999-2002	4.7	26847
Dodge	Durango	1997-1999	3.9/5.2	16852
Dodge	Durango	2004-2006	5.7	16957
Dodge	Neon	2000-2005	2.0	26420C
Dodge	Nitro	2007-2009	2.8	166286
Dodge	Nitro	2007-2009	3.7	166376
Dodge	Nitro	2007-2011	4.0	168406
Dodge	Ram	1994-2000	3.9/5.2/5.9	16859
Dodge	Ram 1500 / 2500	2001	3.9/5.2/5.9	16959
Dodge	Ram 1500 / 2500	2002-2006	5.9	16059
Dodge	Ram 1500 / 2500	2002-2007	4.7	16847
Dodge	Ram 1500 / 2500	2002-2007	4.7	168476
Dodge	Ram 1500 / 2500	2002-2008	5.7	16857
Dodge	Ram 1500 / 2500	2002-2008	5.7	168576
Dodge	Ram 1500 SRT 10	2004-2006	8.3	16083
Dodge	Ram 1500	2009-2012	5.7	160576
Dodge	Viper	2003-2006	8.3	26083150 ·
Jeep	Cherokee	1991-2003	4.0	27740
Jeep	Cherokee	2005-2009	6.1	17861
Jeep	Grand Cherokee	1999-2004	4.7	27847
Jeep	Liberty	2002-2005	3.7	27637
Jeep	Wrangler	1997-2006	4.0	27640
Jeep	Wrangler	1998-1999	4.0	17640
Jeep	Wrangler	2000-2006	4.0	17540
Jeep	Wrangler	2007-2011	3.8	17638

MAKE	MODEL	MODEL YEAR	DISP (L)	COOL AIR INTAKE P/N
Cadillac Cadillac	Escalade/EXT/ESV Escalade/EXT/ESV	2009-2012 2009-2012	6.2 6.2	15453 154536
Chevrolet Chevrolet Chevrolet Chevrolet	Silverado Avalance Avalance	2009-2012 2009-2012 2009-2012 2009-2012 2009-2012	4.8/5.3/6.0/6.2 4.8/5.3/6.0/6.2 5.3/6.0 5.3/6.0 5.3/6.0	15453 154536 15453 154536 15453
Chevrolet Chevrolet Chevrolet	Suburban	2009-2012 2009-2012 2009-2012	5.3/6.0 5.3/6.0 5.3/6.0	154536 15453 154536
GMC GMC GMC GMC GMC GMC	Sierra Sierra Yukon Yukon Denali, XL Denali, XL	2009-2012 2009-2012 2009-2012 2009-2012 2009-2012 2009-2012	4.8/5.3/6.0/6.2 4.8/5.3/6.0/6.2 4.8/5.3/6.0/6.2 4.8/5.3/6.0/6.2 6.2 6.2	15453 154536 15453 154536 15453 154536
Ford Ford Ford Ford	Ford F150 Ford F150 Ford F150 Ford F150 Ford F150	2009-2011 2009-2011 2009-2011 2009-2011 2010-2011	4.6 4.6 5.4 5.4 6.2	19146 191466 19154 191546 19162
Nissan Nissan Nissan Nissan Nissan Nissan Nissan Nissan Nissan	Frontier/Xterra Frontier/Xterra Pathfinder Frontier/Xterra Pathfinder Frontier/Pathfinder Frontier/Pathfinder Xterra Titan/Armada Titan/Armada	2001-2004 2008-2011 2008-2011 2008-2011 2004-2008 2004-2008 2005-2008 2004-2012 2004-2012	3.3 4.0 4.0 4.0 4.0 4.0 4.0 5.6 5.6	12633 12540 12540 125406 125406 12640 126406 12740 12856 128566
Nissan Infinity Infinity	350Z QX56 QX56	2003-2006 2004-2011 2004-2011	3.5 5.6 5.6	12635 12856 128566

### **EVALUATION SUMMARY**

Manufacturer Name: Volant Performance

Name of Device: Cool Air Intake Kits

#### Background:

Volant Performance of 10285 Indiana Court, Rancho Cucamonga, California 91730, has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for the Cool Air Intake Kits designed for the vehicles specified in D-526-4, Exhibit A.

#### Recommendation:

Grant exemption to Volant Performance as requested and issue Executive Order D-526-4.

## **Device Description:**

Volant Performance's Cool Air Intake Kits are air intake systems specifically designed for installation on the vehicles listed in Exhibit A. The installation of the system does not require any major modifications to the original power train and emission control system, except for the modification of the factory air intake system to accommodate the Cool Air Intake Kit air filter and plumbing. On some models, relocation of the crankcase ventilation hose is required. In these cases, the Cool Air Intake Kits are supplied with crankcase ventilation hoses (as applicable, which may be silicone, and a color other than black). The Pro-5 filter element used in the Cool Air Intake Kits are an open-element, reusable oiled high grade cotton gauze filter media between a top and bottom aluminum screen, designed to be less restrictive than the original air filter.

The Cool Air Intake Kits are intended to increase the vehicle's volumetric efficiency and power output at particular engine loads and throttle openings. At heavy engine loads and increased throttle openings, the airflow into the engine is increased because the Cool Air Intake Kits are less restrictive than stock air filters. This allows more air to enter the engine, which is compensated by the vehicle engine control module with an increase in fuel flow, resulting in a higher power output. However, the fuel enrichment is limited and the typical net effect is an overall leaning effect of the fuel mixture. The leaning effect is manifested in a marginal, but measurable, NOx increase.

#### Discussion/Basis for the Recommendation:

This Executive Order is granted based on prior evaluations utilizing a 2002 Chrysler PT Cruiser (engine family 2RXV0148V40, ULEV, PC) and a 2007 Chevrolet Tahoe 5.3L (engine family 7GMXT05.3380, LEV II ULEV) which resulted in the issuance of Executive Orders D-526 and D-526-1, respectively. Additionally, emission testing in the modified configuration using the Cold-Start CVS-75 Federal Test Procedure, Supplemental Federal Test Procedure (US06), and an examination of the On-Board Diagnostic II (OBD II) system were conducted on a 2009 Dodge Charger R/T with a 5.7 liter engine (engine family 9CRXV05.7UPO, LEV II ULEV) to evaluate the

Cool Air Intake Kit. Results from emissions testing conducted at Automobile Club of Southern California Emissions Laboratory, are shown below (in grams per mile):

# 2009 Dodge Charger

FTP	120k	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>
	Emission Level	0.060	0.883	0.015	0.0029
	(w. DF applied) STD	0.070	2.1	0.4	0.011
US06		NMHC +		<u>CO</u>	
	Emission Level STD	0.093 0.140		0.901 8.0	

The emission test results in the modified configuration were below the applicable certification standards. Examination of the OBD II system showed the Cool Air Intake Kits do not affect OBD II operation.

The staff concludes that the Cool Air Intake Kits meet the requirements for a VC 27156 exemption for installation on the vehicles specified in the attached Exhibit A.