

VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0136

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED:

That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	TEST GROUP VEHICLE TYPE		EXHAUST EMISSION STANDARD CATEGORY	USEFU (mil		IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. ate in-use)	FUEL TYPE			
2005	5VVXT02.9U1T	LDT: 3751-5750 Pounds LVW	USEPA Bin 9a (opt)	EXH / EVAP		EXH	EVAP				
			Counted as ARB ULÉV	100K	100K	•	*	Gasoline			
No.	ECS &	SPECIAL FEATURES	EVAPORATIVE	FAMILY (EV		DISPLACEMENT (L)					
1	TWC, 2HAFS, i	102S, SFI, 2TC, CAC, OBD(P)	5VVXR0				(2)				
•		*		· · · · · · · · · · · · · · · · · · ·							
•		•	*					2.9			
•		*									

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

BE IT FURTHER RESOLVED:

That the exhaust and the evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's "NMOG Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

BE IT FURTHER RESOLVED:

That the listed vehicle models are federally certified, and are certified under the provisions of 13 CCR Section 1961(a)(14) and the incorporated test procedures.

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this

day of August 2004.

Allen Lyons, Chief

Mobile Source Operations Division

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

	NMOG FLEET NMOG @ RAF=* AVERAGE [g/mi] CH4 RAF = *		INMOG OF	MOG or HCHO=richane; NMOG=non-CH4 organic gas; NMHC=non-CH4 hydrocarbon; CO=carbon monoxide; NOx=oxid HCHO=formaldehyde; PM=particulate matter; RAF=reactivity adjustment factor; 2/3 D [g/test]=2/3 day diurnal+hot-soak; RL [g/mi]=running loss; ORVR [g/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg:										
CERT	STD	NMOG	NMHC	NMHC STD	Inot-soak: K	L Jo/mil≃runi	tina lass: OR	VR In/gallor	n disnansad)≕	an-haerd rei	ueling vapor r at test procedu		ram; mg=milli	gram .
0.043	0.076	CERT [g/mi]	CERT [g/mi]	[g/mi]	CO	g/mi]	NOx	[g/ml]	НСНО	[mg/mi]	PM [Hwy NO	x [g/mi]
		farmi	farmi		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
	@ 50K	0.027	*	0.100	0.3	3.4	0.1	0.2	0.4	15.	*	*	0.01	0.27
	@ UL	0.029	*	0.130	0.5	4.2	0.1	0.3	0.5	18.	•		0.01	0.40
Section Consumption	@ 50°F & 4K	•	*	*	*	*	•	. •		*	•	•	*	*
			C VEN 19 - MISSING PROPERTY AS	NAME OF STREET										

CO [g/mi] @ 20°F & 50K			NMHC+N (comp	Ox [g/mi] posite)	(comp	g/mi] posite)		+NOx [US06]	CO [US	g/mi] (06)		C+NOx [SC03]	CO [[g/mi] 203]
(2) 20	0°F & 50K		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	2.4	SFTP @ 4000 miles	*	٠	٠	*	0.06	0.25	1.2	10.5	0.12	0.27	0.7	3.5
STD	12.5	SFTP @ 100000 miles	0.16	1.04	•	*	*	*	3.0	14.6	*	•	1.8	4.9

	3-Days Diurnal + Hot Soak (grams/test) @ UL		al + Hot Soak est) @ UL	Running Loss (grams/mile) @ UL		On-Board Refueling Vapo Recovery (grams/gallon) @		
CERT	STD	CERT	STD	CERT	STD	CERT	STD	
0.9	2.0	1.8	2.5	0.000	0.05	0.001	0.20	
*	*	*	*	*	*	*		
*	*	*	*	*	*	*		
*	*	*	*	*	*	*	*	
	CERT	CERT STD	(grams/test) @ UL (grams/te	(grams/test) @ UL (grams/test) @ UL CERT STD CERT STD	(grams/test) @ UL (grams/test) @ UL (grams/m	(grams/test) @ UL (grams/test) @ UL (grams/mile) @ UL CERT STD CERT STD CERT STD	(grams/test) @ UL (grams/test) @ UL (grams/mile) @ UL Recovery (grams CERT STD CERT STD CERT O CERT	

^{* =} not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; O2S=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air- fuel ratio sensor / heated AFS; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; MFI= multiport fuel injection; SFI=sequential MFI; TBI=throttie body injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG= compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel

2005 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	IN-I COMPI (*=N/A or A/E=exi	IEDIATE JSE LIANCE full in-use; n. / evap. ste in-use)	PHASE-IN STD.	OBD II
					EXH	EVAP		
VOLVO	XC90 T6 AWD	5VVXR0133AAA	1	2.9	*	*	SFTP	Partial
VOLVO	XC90 T6 AWD EXECUTIVE	5VVXR0133AAA	1	2.9	*	*	SFTP	Partial