

VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0176
New Passenger Cars, Light-Duty Trucks
and Medium-Duty Vehicles
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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 (PC=passenger car; LDT=light-dur MDV=medium-duty vahicle; LVW- vahicle weight; GVW=gross \	bebeci	STAND (LEV=low of transitions	AUST EMISSION ARD CATEGORY emission vehicle; TLE ILEV; ULEV=ultra LI EV=super ULEV)	٧×	EXHAUST & ORVR / EVAPORATIVE USEFUL LIFE (UL) (miles) FUEL TYPE (CNG/LNG=compre liquefied natural LPG=liquefied petro gas)				
201	2	CVVXJ03.0U2T			PC and LDT ≤ 6,000 pounds (PC; LDT 3,751-5,750 pounds	GVW LVW)	LEV II ULEV			120K / 150K	Gasoline			
No.		EVAPORATIVE No.			SPECIAL FEAT EMISSION CONTROL					OC/TWC=oxidizing/3-way cat. ADSTWC=adsorbing TWC				
1	CVVXR0130EB6			1	TWC, SFI, HO2S, HAFS, TC, CAC, OBD(F)					WU= warm-up cat. O2S/HO2S=oxygen sensor/heated C2S AFS/HAFS=air-fuel ratio sensor/heated AFS EGR=exhaust				
2	CVVXR0130ET3			2	•					gas recirculation AIR/PAIR=secondary air injection/pulsed AIR MFI/SFI= multiport fuel injection/sequential MFI TBI= throttle body injection TC/SC=turbo /super charger CAC=charge air cooler OBD (F) / (P)=full /partial on-board				
3		*			•									
4		. *		4		•					(2) suffix=series			
EVA No.		ECS No.	ENGINE SIZE (L)		VEHICLE Makes & Models			ECT TO SFTP UNDERLINED	AB	BBREVIATIONS:				
1					LVO: (LDT	OT 3.751-5.750 pounds LVW) XC70 T6 AWD; XC60 T6 AWD								
1		1	3,0		-		VOLVO: (PC) S80 T6 AWD							
2		1	1 3.0		VOLVO: (PC) S60 T6 AWD									
*		*	•		•									

The exhaust and evaporative emission standards (STD), as requested by the manufacturer, and certification emission levels (CERT) for the listed vehicles are as follows (compliance with the 50 °F testing requirement (for TLEV, LEV, ULEV, SULEV) 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 and LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required. (For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

	MOG F ERAGE	LEET [g/ml]	NMOG @ RAF= * CH4 RAF = *		NMOG or	nitrogen	HCHO=10	rmaldehvdi	o PM≔oar	ticulate m	atter R	\F=reactivit	tv adiustm	arbon mond ent factor	2/3 D la/test	1=2/3 Hav
ST	D	STD	NMOG	MOG NMHC	NMHC	mg=millig	stam mir	ı. (gvmı)≖rıı ≃mile K≈1	nmng 1066 1000 miles	OKVK (g F≖ded	rgason d Ireas Fah	ispenseaj≕ renheit :	on-board / SetPassine	efueling var plemental fe	or recovery derei test ru	g=gram
PC	PC LDT2		CERT	CERT	STD						, , -(,	19101910		P100110011001100	aciei wat pi	0000414
0.03	35	0.043	[g/mi]	[g/mi]	[g/ml]		[g/mi])x [g/ml]		CHO [m		PM [Hwy NO	x [g/ml]
						CERT	STD	CERT	r Sπ	CE	RT	STD	CERT	STD	CERT	STD
		@ 50K	0.015	٠	0.040	0.6	1.7	0.02	0.0	5	*	8	*	*	0.005	0.07
		@ UL	0.022	*	0.055	0.7	2.1	0.02	0.0	7	•	11	*	0.01	0.01	0.09
	@	50°F & 4K	0.033	*	0.080	0.7	1.7	0.01	0.0	5	•	16	*	*	•	*
@ 20	g/mi] °F&		or 50K (Th	# 1, TLEV) [NMHC+N (comp			g/mi] posite)		[US06]	CC	[g/ml] US06]		HC+NOx ii] [SC03]	CO	[g/mi] C03]
50	K	SFTP 2 = @	UL (Tier	i, TLEV)	CERT	\$TD	CERT	STD	CERT	STD	CER	T STD	CER	T STD	CERT	STD
CERT	1.2		SF	TP @ 4K	*	•	*		0.09	0.14	1.7	8.0	0.01	0.20	0.8	2.7
STD	10.0		SF	TP @ UL	+	*	*		•	•	*	•	*	*	•	٠
@ UL	E	VAPORATI	VE FAM	LY 1	EVA	EVAPORATIVE FAMILY 2				EVAPORATIVE FAMILY 3			EVAPORATIVE FAMILY 4			
	3-	2-D	RL	ORVR	3-D	2-D	RL	ORVR	3-D	2-D	RL.	ORVR	3-D	2-D	RL	ORVR
CERT	0.40	0.39	0.01	0.03	0.34	0.38	0.01	0.02	•	•	*	*		*	*	*
STD	0.50	0.65	0.05	0.20	0.50	0.65	0.05	0.20	*	*	*	*	*	*	*	•

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: The test group listed in this Executive Order is certified conditionally on the manufacturer providing test data to determine the greenhouse gas (GHG) emissions for the listed test group, expressed in grams per mile of carbon dioxide-equivalent (g/mi CO2-e), as required in section E.2.5.2 of the California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, as amended August 4, 2005 (the Test Procedures). Manufacturer shall provide the required data within 45 days after the date of the Executive Order unless (a) an extension is granted by the Executive Officer, or (b) the manufacturer demonstrates to the satisfaction of the Executive Officer that it is exempt from determining GHG emissions for the listed test group under section E.2.5.3 (Intermediate Volume Manufacturers) or E.2.5.4 (Small Volume Manufacturers) of the Test Procedures. Failure to comply with the certification requirement to determine the GHG emissions for the listed test group may be cause for the Executive Officer to revoke the Executive Order. Vehicles in the revoked Executive Order shall be deemed uncertified and subject to penalties authorized under California law. Notwithstanding the requirement therein, the manufacturer is not required to determine GHG emissions for any medium-duty vehicles in the listed test group that are not medium-duty passenger vehicles.

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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 January 2011

Annette Hebert, Chief

Mobile Source Operations Division