

## VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0110 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 and 39516 and Executive Order G-45-9;

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.

MODE YEAI		TEST GROUP		VEHICLE TYPE	EXHAUST EMISSION STANDARD CATEGORY	FUEL TYPE				
2002	2 200	XT2.43L5T	. з	751-5750 Pounds Loaded Vehicle Weight Light-Duty Truck	Low Emission Vehicle (LEV)	Gasoline				
No.		EVAPORATIVE FAMILY (EVAP)		SPECIAL FEATURES & EMISSION CONTROL SYSTEMS (E	CS) *= not applicable	TWC = 3-way catalytic converter O2S = oxygen sensor HO2S = heated O2S AFS/HAFS = air/fuel sensor (aka. universal O2S) / heated AFS MFI = multiport fuel injection SFI = sequential MFI TC/SC = turbo/super				
1	2VVXR01	2VVXR0133AAA		TWC, HAFS, HO2S, SFI, TC	, CAC, OBD (P)					
2	*	*		*		charger CAC = charge air cooler OBD (F) / OBD (P) =				
3	+	+		*	on-board diagnosis; full / partial compliance (prefix) 2 = parallel (2) (suffix) = series					
EVA.		ENGIN SIZE (L			S SUBJECT TO SFTP					
1	1	2.4		Volvo V70 XC AWD						

The exhaust and evaporative emission standards (STD) and certification emission levels (CERT) for the listed vehicles are as follows. Any debit in the manufacturer's compliance plan for "NMOG Fleet Average" (passenger cars and light-duty trucks) or "Vehicle Equivalent Credit" (medium-duty vehicles) shall be equalized as required. The 50° Fahrenheit standards and CERT levels are listed below or compliance has been met based on the manufacturer's submitted compliance plan in lieu of actual testing.

NMOG FLEET AVERAGE [g/mi]			NMOG [g/mi] @RAF = 0.94		CH4 = methane NMOG = non-CH4 organic gas NMHC = non-CH4 hydrocarbon CO = carbon monoxide NOx = oxides of nitrogen HCHO = formaldehyde PM = particulate matter RAF = reactivity adjustment factor											
CERT	STD		CH4 RAF = 1		CO [g/mi]		NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]			Hwy NOx [g/mi]		
0.100	0.095	1	CERT	STD	CERT	STD	CERT	•	STD	CERT	STD	CER1	г ѕт	î D	CERT	STD
	@ 50K		0.068	0.100	0.9	4.4	0.1		0.4	1	18	1	•		0.01	0.5
K = 1000 miles	@ 100K		0.083 0.130	0.130	1.1	5.5	0.1		0.5	1	23	*	*		0.01	0.7
	@ 50°F, 4K	:	0.092	0.200	1.4	4.4	0.04		0.4	1	36	•	*		•	*
CO [g/mi] @ 20°F, 50K			g = gram mg = milligram		NMHC+NOx [g/mi] (composite)		NMHC+NOx [g/mi] [US06]		CO [g/mi] [US06]		NMHC+NOx [g/mi] [SC03]		mi]	CO [g/mi] [SC03]		
CERT	CERT STD		mi = mile		CERT	STD	CERT	·	STD	CERT	STD	CERT	ST	D	CERT	STD
2.7	12.5		@ 4K		*	•	•		•	*	*	•	•		•	*
F = degree	Fahrenheit			@ 100K	•	•	*		•	•		•	*		•	*
@	EVAPORATIVE FAMILY 1				EVAPORATIVE FAMILY 2 E			EV	EVAPORATIVE FAMILY 3			EVAPORATIVE FAMILY 4				
100K	3-D 2	-D	RL	ORVR	3-D	2-D	RL 0	DRVR	3-D	2-D	RL	ORVR	3-D	2-D	RL	ORVR
CERT	0.9 1	1.8	0.00	0.00	•	•	•	•	•	•	•	•	•	*	*	*
STD	2.0 2.5		0.05	0.20	•	•	•	-	•	*	*	*		•	•	٠
2-D, 3-D [g/	test] = 2-day,	3-day	y diurnal a	ind hot-soak		RL [g/mi] =	running k	055	1	ORVR [g/g:	illon of fue	dispense	d] = on-bo	ard refu	eling vapo	r recovery

**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 (labeling), 1968.1 or 1968.1(m)(6.2) (on-board diagnostic systems; full or partial compliance), 2035 et seq. (emission control warranty), 2235 (fuel tank fill pipes and openings), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles).

**BE IT FURTHER RESOLVED:** That the listed vehicle models have been certified on the condition that the manufacturer provide all on-board diagnostic demonstration data required by 13 CCR Section 1968.1(g) by December 3, 2001. Failure to submit the required demonstration data by the specified date, or failure of the submitted demonstration data to show compliance with the test procedures, shall be cause for the Air Resources Board to revoke this Executive Order and vehicles sold under the revoked conditional certification shall be deemed uncertified.

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.

R. B. Summerfeld, Chief Mobile Source Operations Division