

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-73  
Relating to Certification of New Motor Vehicles

VOLVO CAR CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1994 model-year Volvo Car Corporation exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: RVV2.4VHGFEA Displacement: 2.4 Liters (149 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Multiport Fuel Injection
- Heated Oxygen Sensor
- Three Way Catalytic Converter
- Exhaust Gas Recirculation
- Secondary Air Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
50,000	0.25	3.4	0.4
100,000	0.31	4.2	n/a

The certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
50,000	0.12	1.4	0.1
100,000	0.13	1.8	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That on January 14, 1993, the Air Resources Board adopted the repeal of the currently-effective requirement that each manufacturer certify a minimum of 80 percent of its projected sales of 1994 model-year California-certified passenger cars and light-duty trucks to the phase-in standards for NMHC, or the more stringent standards in section 1960.1(g)(2) of Title 13, California Code of Regulations. If the repeal of such requirement does not become effective, the manufacturer shall submit a plan for compliance with the requirement; passenger cars and light-duty trucks not meeting such phase-in or more stringent standards shall be certified only to the extent allowed under the requirement.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2290).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.


BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 8<sup>th</sup> day of September, 1993.

  
R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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Manufacturer Volvo Car Corp Engine Family RVV2.4VHGFEA

Passenger Car X (PC) Light-Duty Truck      (T1/T2) Medium-Duty Vehicle      (M1/M2/M3/M4/M5)

Stds Type: Tier 1 (Tier 0/1, AB965, TLEV, LEV, ULEV) Veh. Type (FFV, HEV (type A/B/C)):     

Fuel Type: Gasoline Evaporative Family: RVV1058BYPOA

Engine Config. I-5 Liter (CID) 2.4 (149)

Engine: Front X Mid.      Rear      Drive: FWD X RWD      4WD-FT      4WD-PT     

Exhaust ECS & Special Features (incl. CARB, MFI, etc.) MFI, HO2S, TWC, EGR, AIR  
(use abbreviations per SAE 1930 MAY91)

Engine Code rt. Std.)	Vehicle Models (if coded see attachment)	Trans. Type A-automatic M-manual	ETW	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalyst Part No.
RA55:2	850	A			0227400221/222	72183601	9146019
	Sedan	AW 50-42	3500	6.3			
	Wagon	AW 50-42	3625	8.1			