

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-58  
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 1990 model-year Volvo Car Corporation emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family: LVV2.3V5FE80 Displacement: 2.3 Liters (141 Inches<sup>3</sup>)

Equipped with the following exhaust emission control systems:

- Exhaust Gas Recirculation
- Heated Oxygen Sensor
- Three-Way Catalyst
- Multipoint Electronic Fuel Injection
- On-Board Diagnostic System

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

The following are the emission standards for this engine family:

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.41	7.0	0.4

The following are the certification emission values for this engine family:

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.33	3.0	0.3

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered 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" (Title 13, California Code of Regulations, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards 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" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Code of Regulations, Section 1968) 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 (Health and Safety Code Section 43205).

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, 1989.



K. D. Drachand, Chief  
Mobile Source Division

Manufacturer Volvo Car Corp Eng. Family LVV2.3V5FE80

Pass Cars X Lt-Duty Trucks      Med-Duty Vehicles      Gas X Diesel     

Eng. Type L-4 Liter (CID) 2.3 (141) Evap. Family E2/E3

Emission Control Sys. (Use SAE Abbrev.) MPI, HO2S, TWC, EGR, OBD

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

Eng. Code/ (Cert Std.)	Veh. Models (If Coded see Attachmt.)	Trans. Type: A-Auto M-Man.	Equiv. Test Weight	RLHP or DPA	Ign. Sys. (ECU/PROM) Part No.	EGR Syst. Part No.	Catalyst Part No.
FE80:1	240 DL/GL	M5			0227400140	72040111 or 72040121	3501957
	Sedan	M47	3250	9.3			
	Wagon		3375	9.7			
FE80:2	240 DL/GL	A4			"	72040311 or 72040321	"
	Sedan	AW70	3375	9.1			
	Wagon		3375	9.7			
FE80:3	740 GL	M5			"	72040111 or 72040121	1389966
	Sedan	M47	3375	7.7			
	Wagon		3500	8.5			
FE80:4	740 GL	L4			"	72040311 or 72040321	"
	Sedan	AW70L	3375	7.7			
	Wagon		3500	8.5			

Date of Issue: \_\_\_\_\_ Revisions: \_\_\_\_\_