State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-70
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 Volvo Car Corporation 1993 model-year exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: PVV2.3V5FP88 Displacement: 2.3 Liters (141 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Heated Oxygen Sensor
Multiport Fuel Injection
Exhaust Gas Recirculation
Three Way Catalytic Converter
Pulsed 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:

| Miles | Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides |
|---|---|---|---|
| 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:

| Miles | Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides |
|---|---|---|---|
| 50,000 | 0.11 | 1.4 | 0.1 |
| 100,000 | 0.12 | 1.5 | N/A |

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, 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" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the requirements of 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 (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 26th day of August, 1992.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

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Manufacturer Volvo Car Corp Engine Family PVV2.3V5FP88

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: F3

Engine Config. I-4 Liter (CID) 2.3 ( 141 )

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

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

| Engine Code (Emt. 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. |
|---|---|---|---|---|---|---|---|
| FP88:2 | 240 | A | | | 0227400196 (VCC P/N 3507348) | 72183500 | 3501957 |
| | Sedan | AW70 | 3375 | 9.1 | | | |
| | Wagon | AW70 | 3500 | 10.0 | | | |
| FP88:4 | 940 | A | | | 0227400196 (VCC P/N 3507348) | 72183500 | 1389966 |
| | Sedan | AW71L | 3500 | 6.7 | | | |
| | Wagon | AW71L | 3625 | 7.4 | | | |

1992-05-15