

E.O.  
Book

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-13  
Relating to Certification of New Motor Vehicles

AB VOLVO, CAR DIVISION

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43100, 43102, 43103, and 43835; 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 AB Volvo, Car Division exhaust emission control systems are certified as described below for 1980 model-year gasoline-powered passenger cars.

<u>Engine Family</u>	<u>Displacement Cubic Inches</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
4C	130	Three Way Catalyst Closed Loop (Mechanical Fuel Injection)

Vehicle Models, Transmissions, Engine Codes and Evaporative Emission Control Families as listed on attachments.

The following are the certification emission values to be listed on the window decal required by California Assembly-Line Test Procedures for 1980 model-year vehicles:

<u>Engine Family</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
4C	0.26	3.8	0.6

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 except Motorcycles".

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 Administrative Code, Section 2290) for the aforementioned model year.

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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 1980 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That A B Volvo, Car Division has provided to the Executive Officer all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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 2<sup>nd</sup> day of November, 1979.

*K. D. Drachand, Acting Chief*

K. D. Drachand, Acting Chief  
Mobile Source Control Division

1980 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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 Engine Family 4C Engine (CID) 130

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 EEC-Electronic Engine Control  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Fuel System

EFI, MFI  
 nV-nVenturi Carburetor  
 VV-Variable Venturi

Exhaust Emissions Control System

AI-Air Injection  
 CL-Closed Loop  
 EGR-Exhaust Gas Recirculation  
 EM-Engine Modification  
 OC-Oxidation Catalyst  
 PAI-Pulse Air Injection  
 TR-Thermal Reactor  
 TWC-Three Way Catalyst

Special Features

CCAV-Combustion Chamber Air Valve  
 EFI-Electronic Fuel Injection  
 MFI-Mechanical Fuel Injection  
 TC-Turbo Charged

Engine Code

4C:1  
 4C:2

Model

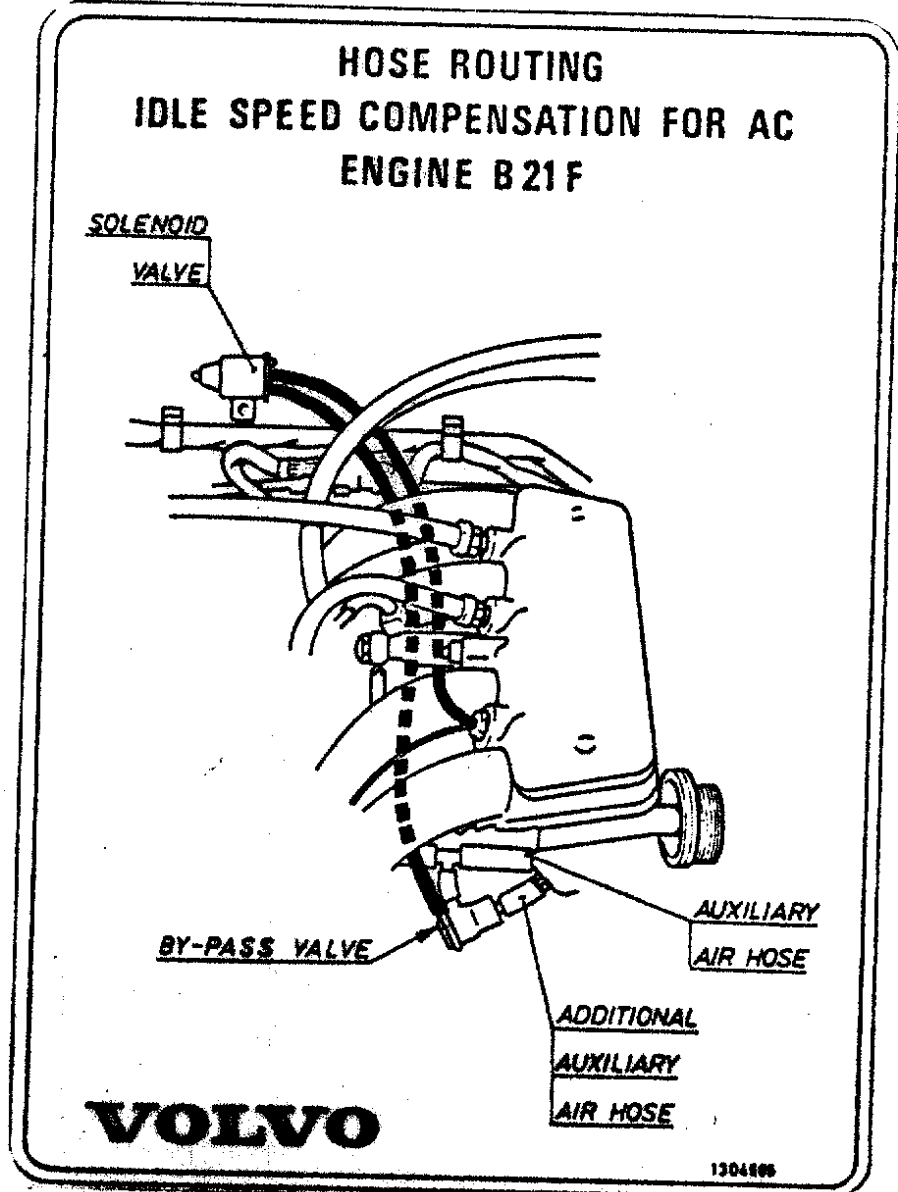
DL, GT 2-dr Sedan  
 DL, GL 4-dr Sedan  
 DL 4-dr Wagon

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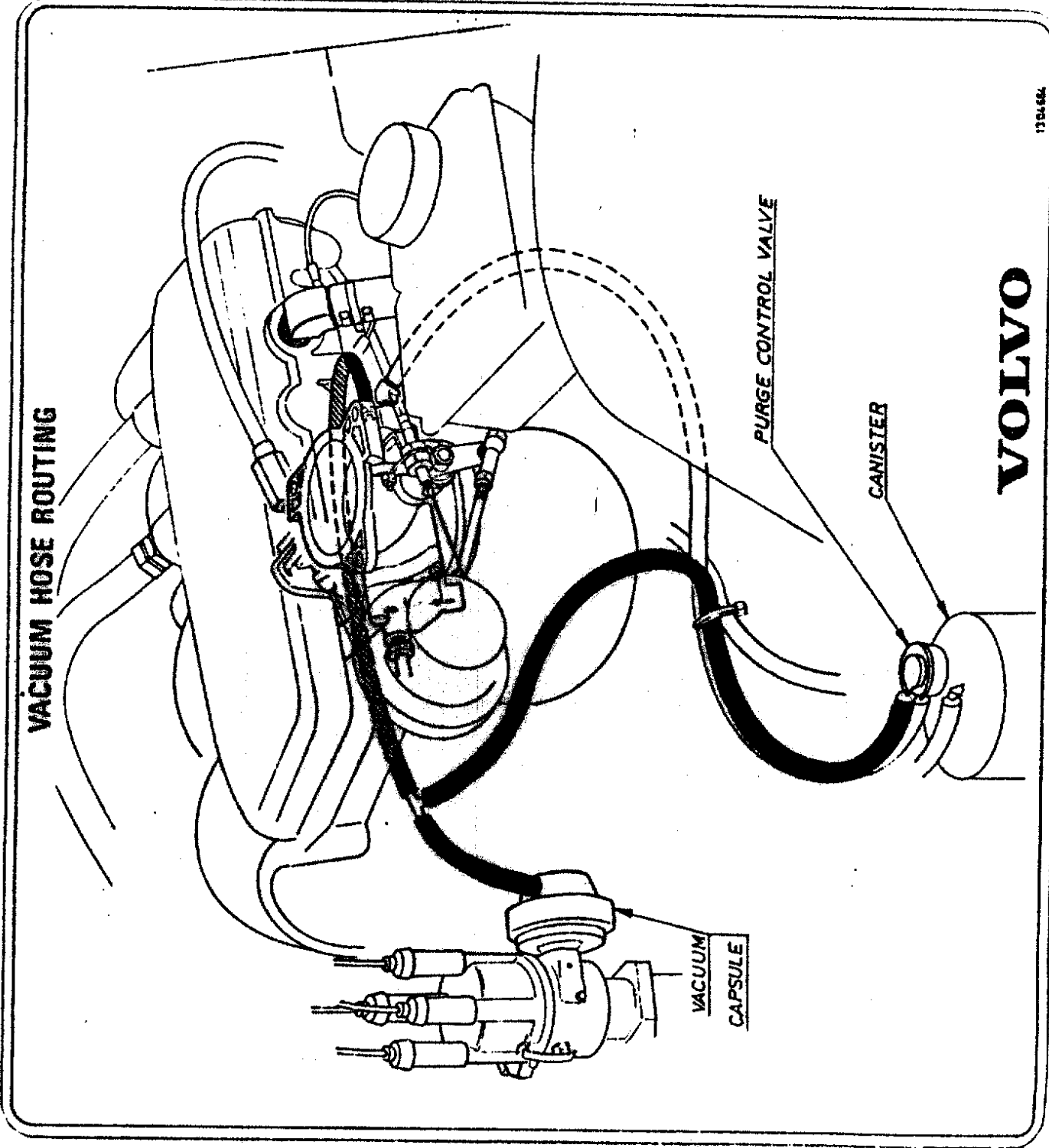
VEHICLE EMISSION CONTROL INFORMATION		
MANUFACTURER: VOLVO, SWEDEN	ENGINE DISPLACEMENT: 130 CU IN	
EVAPORATIVE FAMILY: E2	ENGINE FAMILY: 4C	
EXHAUST EMISSION CONTROL SYSTEM:	MFI, OXYGEN SENSOR, TWC	
TUNE-UP SPECIFICATIONS WITH NO ACCESSORIES IN OPERATION AND TRANSMISSION IN NEUTRAL		
ITEM	CONDITIONS	SPECIFICATIONS
IGNITION TIMING	IDLE RPM ADJUSTED TO 750 ± 50 VACUUM HOSES DISCONNECTED	8° ± 2° BTDC
IDLE AIR-FUEL MIXTURE	OXYGEN SENSOR DISCONNECTED IDLE RPM ADJUSTED TO 950 CO SAMPLED FROM TAP UPSTREAM OF CATALYST VACUUM HOSES CONNECTED	IDLE CO: 2.0 <sup>+0.5</sup> - 1.0 %
IDLE RPM	OXYGEN SENSOR CONNECTED	950 ± 50 RPM
VALVE LASH	WARM ENGINE	0.016-0.018 INCHES
THIS VEHICLE CONFORMS TO US EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1980 MODEL YEAR NEW LIGHT DUTY VEHICLES COMPLIANCE DEMONSTRATED BELOW 4000 FEET		
<b>VOLVO</b>		1246493

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Passenger Cars     Light-Duty Trucks     Medium-Duty Vehicles     Gas     Diesel

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Engine Family 4C

CID-Type 130-I4

Engine Code

ECS (Special Features) TWC (MFI)

+ 10% (A/C)

Yes X No

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Test Weight Class (Inertia)	Ign. System CA, VA, EI Distributor Part No.	Fuel System MFI Part No.	EGR Valve Part No.	Label Ident.
4C:1 4C:2	DL 2-dr Sedan GT 2-dr Sedan	M4 M5 A3	(3000) 3250	Bosch 0 237 002 039 1276403	Bosch Air/Fuel Control Unit 0 438 040 075 1306148  Air Flow Sensor 0 438 120 078 1266807  Fuel Distributor 0 438 100 073 1306361		See Page 3
	DL 4-dr Sedan	A3 M4					
	GL 4-dr Sedan	M5 A3	(3500) 3375				
	DL 4-dr Sedan (w/sunroof)	A3					
	DL 4-dr Sedan	M5					
	DL 4-dr Wagon	M4					
		M5 A3	(3500) 3500				

Comments. See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model, equipment and inertia weight class.

Date of Issue -