 E.O. Book

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-22-10
Relating to Certification of New Motor Vehicles

SAAB-SCANIA AKTIEBOLAG

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 Saab-Scania Aktiebolag exhaust emission control systems for 1978 model-year passenger cars are certified for the vehicles described below:

Engine Family: BSI20CA
Engine: 121.1 CID
Transmission: 4-Speed Manual
Exhaust Emission Control Systems: Fuel Injection, 3-Way Catalyst with Lambda Control, Turbocharged

Models and Engine Codes as listed in attachment.

The following are the recommended values to be listed on the window decal required by California Assembly-Line Test Procedures for 1978 model-year vehicles:

Engine Family	Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per Mile
BSI20CA	0.22	2.9	0.9

BE IT FURTHER RESOLVED: That the above models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (13 California Administrative Code, Section 2290) for the aforementioned model year, or have been granted a temporary exemption from the aforementioned "Specifications" by Executive Order AA-22-1 series.

BE IT FURTHER RESOLVED: That the above models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-powered Motor Vehicles except Motorcycles".

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

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California, this 21 day of October, 1977.

G. C. Hass

G. C. Hass, Chief
Vehicle Emissions Control Division

STAFF USE ONLY

1978 MODEL-YEAR CERTIFICATION APPLICATION CHECK OFF SHEET

☒ PASSENGER CARS ☐ LIGHT-DUTY TRUCKS ☐ MEDIUM-DUTY VEHICLES

Manufacturer Saab-Scania

Marketing Agreement with another manufacturer:

1.	Part I Submittal	
	a. Date Received	6 May 77
	b. Date ARB Response	
2.	Authorized Signature	al
3.	Vehicle Description	al
4.	Exh. Emis. Control Sys. Descr.	al
5.	Engine Parameters	al
6.	Ignition & Fuel System Descr.	al
7.	Test Route, Equipment, and Fuel Description	al
8.	Projected Calif. Sales Data	al
9.	Test Fleet Composition: Date ARB Approved	al
	a. Durability Fleet	June 23, 77
	b. Emission Data Fleet	June 23, 77
10.	Carry-over Vehicles? No Dur. No Emis.	al
11.	Fill pipe Specification Submission AA-22-1	al

1.	Part II Submittal	
	a. Data Received	22 Sept 77
2.	Exh. Durability Test Data	al
	a. Durability Fleet Maint.	al
3.	Exh. Emission Test Data	al
	a. Emis. Data Fleet Maint.	al
4.	Confirm. Test Lab. EPA	al
5.	Add't'l. 91 RON Statement	al
6.	Maint., Warr., & Train Descr.	al
7.	Statement on General Stds.:	al
	Safety, Increase in Emiss.	al
8.	Statement on Mtg. All Reg.	al
9.	Statement that Test & Prod. Vehicles are Identical	al
10.	Ignition & Fuel System	al
	Part No. & Calibration	al
11.	Aux. Exh. Emis. Cont. Devices Part No. & Calibration	al
12.	Tune-up Label	al
13.	Evap. System(s) Evaluated	al
14.	EPA Certificate	al

Engine Family BSI20CA

Exhaust Emission Control System** TWC w/ Control

Projected Exhaust Emissions at 50,000 Miles (grams/miles)***

Engine Size (CID)	Trans.	Inertia Weight Class	Calibration	Vehicle I.D. Number	HC 0.41(0.9)*	CO 9.0(17)*	NOx 1.5(2.0)*
121.1	M4	3000		99-951	0.25	2.9	0.80
					0.22	2.9	0.9

evap dF = 0

*** Includes a MCCF value of 0.89 and D.F. values of 1.000 1.000 1.150.

* Numbers in Parenthesis refer to light-duty trucks and medium-duty vehicles except NOx is 2.3 for medium-duty vehicles.

Executive Order No. A- 22-10

Application Processed by Al Smythe Date

Reviewed by Robert P. Weis 10/21/77 Date

**Abbreviations

Exhaust Emission Control System

AI - Air Injection
CAI - Catalyst Air Injection
CAB - Chamber Air Bleed
DD - Dual Displacement
EFE - Early Fuel Evaporation
EFI - Electronic Fuel Injection
EGR - Exhaust Gas Recirculation
EM - Engine Modifications
ESAC - Electronic Spark Advance Control
FI - Fuel Injection
OC - Oxidation Catalyst
PAI - Pulse Air Injection
RC - Reduction Catalyst
TC - Turbocharged
TR - Thermal Reactor

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Saab-Scania Executive Order No. A-22-10 Page 1

Engine Family BSI20CA Engine (CID) 121.1

ABBREVIATIONS

Distributor
C-Centrifugal Advance
V-Vacuum Advance
VR-Vacuum Retard
HEI-High Energy Ignition
EI-Electronic Ignition

Fuel System
EFI, FI
nV-nVenturi Carburetor
VV-Variable Venturi

Exhaust Emissions Control System
AI-Air Injection
CAI-Catalyst Air Injection
CAB-Chamber Air Bleed
DD-Dual Displacement
EFI-Electronic Fuel Injection
EGR-Exhaust Gas Recirculation
EM-Engine Modification
EFE-Early Fuel Evaporation
ESAC-Electronic Spark Advance Control
FI-Fuel Injection
OC-Oxidation Catalyst
PAI-Pulse Air Injection
RC-Reduction Catalyst
TC-Turbo Charged
TR-Thermal Reactor
TWC-Three Way Catalyst (Feedback Control)

EGR Syst. Service
I-Inspect, repair/replace as needed
R-Replace

Engine Code	Model	Transmission
P02	EMS-3CKL Saab 99 Hatchback	M4

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

☒ Passenger Cars ☐ Light-Duty Trucks ☐ Medium Duty Vehicles

Manufacturer Saab-Scania Executive Order No. A-22-10 Page 2

Engine Family BSI 20CA Engine (CID) 121.1 Engine Code

Emission Control System TWC, FI with λ control +10%(A/C) Yes ☐ No ☒

Eng. Code	Vehicle Models (If Coded see attachment)	Trans	Inertia Weight Class	Distributor Type CV Mfgr. Part Number	Fuel System Type FI Mfgr. Part Number	EGR System None Part No. Service	Tune-Up Specification (1) Basic Timing (2) Idle Mixture (3) Idle Speed
BSI 20CA (P02)	Saab 99 Turbo	M4	3000	Bosch 0237005001	Bosch Fuel distributor 0438 100 032 Air Flow sensor 0438 120 073 Warm-up regulator 0438 140 051		(1) 20° BTDC @ 2000 RPM (2) 0.75% + 0.25/-0.50 CO with oxygen sensor and evap purge lines disconnected (3) 875 ± 50 in neutral

Comments: No models have special road load HP settings.
See page 1 for abbreviations and model codes.

Date of Issue Revisions: