

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-22-46
Relating to Certification of New Motor Vehicles

SAAB-SCANIA AB

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 1989 model-year Saab-Scania AB exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
KSA2.0V5FTC5	2.0 (121.1)	Three-Way Catalyst Heated Oxygen Sensor (Electronic Port Fuel Injection) (Turbocharger) (Intercooler) On-Board Diagnostics (Exempted)

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

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

<u>Hydrocarbons (Grams per Mile)</u>	<u>Carbon Monoxide (Grams per Mile)</u>	<u>Nitrogen Oxides (Grams per Mile)</u>
0.29	1.8	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 Administrative Code, 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, 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 regulations (Title 13, California Administrative Code, 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 29th day of August, 1988.


K. D. Drachand, Chief
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Saab-Scania AB Engine Family KSA2.0V5FTC5
 Evaporative Family K-9000 - 5 Engine Type S.I., 16-valve, 4 Cyl., Transverse
 Liters (CID) 2.0L (121.1 CID)

ABBREVIATIONS

<u>Ignition System</u>	<u>Exhaust Emissions Control System</u>	<u>Special Features</u>
CA-Centrifugal Advance	AIP-Air Injection-Pump	CCV-Combustion Chamber Valve
ECU-Electronic Control Unit	AIV-Air Injection-Valve	CFI-Central Fuel Injection or Throttle Body Injection
EI-Electronic Ignition	DBC-Dual Bed Catalyst	DID-Diesel Injection-Direct
ESAC-Electronic Spark Advance Control	EGR-Exhaust Gas Recirculation	DIP-Diesel Injection-Prechamber
VA-Vacuum Advance	EIC-Electronic Injection Control	EFI-Electronic Fuel Injection
VR-Vacuum Retard	EM-Engine Modification	IC-Intercooler or Aftercooler
	OC-Oxidation Catalyst	MFI-Mechanical Fuel Injection
	OS-Oxygen Sensor	OBD-On-Board Diagnostics
	HOS-Heated Oxygen Sensor	TC-Turbocharger
	SPL-Smoke Puff Limiter or Throttle Delay	
	TOC-Trap Oxidizer, Continual	
	TOP-Trap Oxidizer, Periodical	
	TWC-Three-Way Catalyst	
	WUOC-Warm-Up Oxidation Catalyst	
	WUTWC-Warm-Up Three-Way Catalyt	

Fuel System

CFI, CL, DID, DIP, EFI, MFI
 nV-nVenturi Carburetor

VEHICLE MODELS:

9000 Turbo 5-door
 9000 Turbo 4-door

Engine: Front X Mid. _____ Rear _____
 Drive: FWD X RWD _____ 4WD Full Time _____ 4WD Part Time _____

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars Light Duty Trucks Medium Duty Vehicles Gas Diesel

Manufacturer Saab-Scania AB

Engine Family KSA2.OV5FTC5

ECS and (Special Features) TWC, HOS, (EFI, TC, IC)

CID (liter) - Engine Type 121.1 CID (2.0L) S.I., 16-valve, 4-Cyl., Transverse

Engine Code	Vehicle Models (If Coded see Attachment) (HP)	Trans.	Equiv. Test Weight	Ign. System Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst Part No.
2023L13M	9000 Turbo 5-dr 9000 Turbo 4-dr	M5 M5	3500 3500	<u>Distributor</u> Saab #758139 Bosch #0 237 507 008	<u>Electronic Control Unit</u> Saab #8978355 Bosch #0 280 000 566	N/A	9392457
2023L13A	9000 Turbo 5-dr 9000 Turbo 4-dr	A4 A4	3500 3500	<u>Ignition Coil</u> Saab #8573834 Bosch #0 221 122 327	<u>Air Mass Meter</u> Saab #7538655 Bosch #0 280 212 013		
				<u>Power Stage</u> Saab #9390220 Bosch #0 227 100 139	<u>Oxygen Sensor</u> Saab #9392762 Bosch #0 258 003 028		
<p>***NOTE: FOR ADDITIONAL PART NUMBERS - SEE SECTION 20T1, PAGE 10.***</p>							

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 and equipment. If two test weights are listed, the lower weight will be used for testing.

Add 10% to dyno test Hp for air conditioning usage.