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:

Engine Family	Displacement Liters (Cubic Inches)	Exhaust Emission Control Systems (Special Features)
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:

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.41	7.0	0.4

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

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
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

Attachment 3

E.O. # A-22-46

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

Ignition System

CA-Centrifugal Advance
ECU-Electronic Control Unit
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

Fuel System

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

Exhaust Emissions Control System

AIP-Air Injection-Pump
AIV-Air Injection-Valve
DBC-Dual Bed Catalyst
EGR-Exhaust Gas Recirculation
EIC-Electronic Injection Control
EM-Engine Modification
OC-Oxidation Catalyst
OS-Oxygen Sensor
HOS-Heated Oxygen Sensor
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

Special Features

CCV-Combustion Chamber Valve
CFI-Central Fuel Injection or Throttle Body Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EFI-Electronic Fuel Injection
IC-Intercooler or Aftercooler
MFI-Mechanical Fuel Injection
OBD-On-Board Diagnostics
TC-Turbocharger

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 ____

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E.O. # A-22-46

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

X Passenger Cars __ Light Duty Trucks __ Medium Duty Vehicles X Gas __ Diesel

Manufacturer Saab-Scania AB

Engine Family KSA2.0V5FTC5

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	Distributor Saab #758139 Bosch #0 237 507 008 Ignition Coil Saab #8573834 Bosch #0 221 122 327	Electronic Control Unit Saab #8978355 Bosch #0 280 000 566 Air Mass Meter Saab #7538655 Bosch #0 280 212 013	N/A	9392457
2023L13A	9000 Turbo 5-dr 9000 Turbo 4-dr	A4 A4	3500 3500	Power Stage Saab #9390220 Bosch #0 227 100 139	Oxygen Sensor Saab #9392762 Bosch #0 258 003 028		

NOTE: FOR ADDITIONAL PART NUMBERS - SEE SECTION 20T1, PAGE 10.

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.