

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-7-137-1
Relating to Certification of New Motor Vehicles

VOLKSWAGEN AG

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 1990 model-year Volkswagen AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family: LVW1.8V5FWE8 Displacement: 1.8 Liters (109 Inches³)
Equipped with the following exhaust emission control systems:

- Heated Oxygen Sensor
- Three-Way Catalyst
- Multipoint Electronic Fuel Injection
- Supercharger
- Charge Air Cooler

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the exhaust emission standards for this engine family:

| <u>Hydrocarbons</u> <u>(Grams per Mile)</u> | <u>Carbon Monoxide</u> <u>(Grams per Mile)</u> | <u>Nitrogen Oxides</u> <u>(Grams per Mile)</u> |
|--|---|---|
| 0.41 | 7.0 | 0.7 |

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

| <u>Hydrocarbons</u> <u>(Grams per Mile)</u> | <u>Carbon Monoxide</u> <u>(Grams per Mile)</u> | <u>Nitrogen Oxides</u> <u>(Grams per Mile)</u> |
|--|---|---|
| 0.17 | 2.0 | 0.5 |

BE IT FURTHER RESOLVED: That the listed models are certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Code of Regulations which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying to the optional NOx standard based on actual sales of 1989 model-year California-certified passenger cars.

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 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 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 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 (California Health and Safety Code Section 43205).

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

This Executive Order cancels and supersedes Executive Order A-7-137 dated November 1, 1988.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 7th day of August, 1989.



K. D. Drachand, Chief
Mobile Source Division

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer VW AG Engine Family LVW1.8V5FWE8
 Evap. Family KME 1 Engine Type Otto
 Displacement (Liters) 1.8

ABBREVIATIONS

Ignition System

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

Exhaust Emissions Control System

AIP - Air Injection-Pump
 AIV - Air Injection-Valve
 EGR - Exhaust Gas Recirculation
 EIC - Electronic Injection Control
 (Diesel only)
 EM - Engine Modification
 SPL - Smoke Puff Limiter or
 Throttle Delay
 TOC - Trap Oxidizer Continual
 TOP - Trap Oxidizer Periodical
 DBC - Dual Bed Catalyst
 OC - Oxidation Catalyst System
 TWC - Three-Way Catalyst System
 WUOC - Warm-Up Oxidation Catalyst
 WUTWC - Warm-Up Three-Way-Catalyst
 OS - Oxygen Sensor
 HOS - Heated Oxygen Sensor

Special Features

CFI - Central Fuel
 Injection
 EPFI - Electronic Port Fuel
 Injection
 MPFI - Mechanical Port Fuel
 Injection
 SFI - Sequential Fuel
 Injection
 DID - Diesel
 Injection-Direct
 DIP - Diesel
 Injection-Precharber
 TC - Turbocharger
 SC - Supercharger
 IC - Intercooler or Aftercooler
 CCV - Combustion
 Chamber Valve
 OBD - On-Board Diagnostics

Fuel System

CFI, EPFI, MPFI, SFI, DID, DIP, HOS, OS
 nV - nVenturi Carburetor - VW - Variable Venturi Carburetor

VEHICLE MODELS:

Corrado

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

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars X Light-Duty Trucks Medium-Duty Vehicles Gas X Diesel
 Manufacturer VW AG Engine Family LW 1.8 V5FWB
 Displacement (Ltr.) 1.8 Engine Type Otto
 Emission Control System EPFI, TWC, HOS

| Engine Code | Vehicle Models (Dyno HP) | Trans. Type | Equiv. Test Weight | Ignition System Part No. | Fuel System Part No. | EGR Valve Part No. | Catalyst Part No. |
|-------------|--------------------------|-------------|--------------------|--------------------------|---|--------------------|--------------------------------|
| PG | Corrado (5.6) | M6 | 3,000 | EI-ESAC 037 905 205 G | EPFI 037 906 022 B 037 906 022 CD | — | 535 131 701 A 535 131 701 B |

Comments:

See page one for abbreviations and evaporative emission family identification 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.