

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-7-115  
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 1987 model-year Volkswagen AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
HVW1.8V5FWA9	109 (1.8)	Three-Way Catalyst Heated Oxygen Sensor (Electronic Fuel Injection)

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	0.7

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>
0.22	2.6	0.1

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code 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 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 1981 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 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.) and with Health and Safety Code Section 43204.

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 5 day of May, 1987.

  
K. D. Drachand, Chief.  
Mobile Source Division

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer	VW AG	Engine Family	HW1.8V5FWA9
Evap. Family	HWA	Engine Type	Otto
		Displacement (Liters)	1.8 (109)

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  
 CL - Closed Loop  
 EGR - Exhaust Gas Recirculation  
 EM - Engine Modification  
 OC - Oxidation Catalyst System  
 SPL - Smoke Puff Limiter or  
 Throttle Delay  
 TOC - Trap Oxidizer Continual  
 TOP - Trap Oxidizer Periodical  
 TR - Thermal Reactor  
 TWC - Three-Way Catalyst System  
 WUOC - Warm-Up Oxidation Catalyst  
 WUTWC - Warm-Up Three-Way-Catalyst

Special Features

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

Fuel System

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

VEHICLE MODELS:

Golf  
 Jetta

Engine: Front X Mid.     Rear      
 DRIVE SYSTEM: FWD X RWD     4WD Full Time     4WD Part Time

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars  X  Light-Duty Trucks \_\_\_\_\_ Medium-Duty Vehicles \_\_\_\_\_ Gas  X  Diesel \_\_\_\_\_  
 Manufacturer VW AG Engine Family  HW 1.8 V5FWA9   
 Displacement (Ltr.) 1.8 Engine Type  Otto   
 Emission Control System (EFI)HOS, TWC

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.
PF	Jetta Golf (7,0)	M5	2,625	EI-ESAC 191 905 351 A	MFI 037 906 031 C	---	165 131 701 C
PF	Jetta Golf (7,0)	A3	2,750	EI-ESAC 191 905 351 A	MFI 037 906 031 C	---	165 131 701 C
PF	Jetta Golf (7,0)	M 4+E	2,625	EI-ESAC 191 905 351 A	MFI 037 906 031 C	---	165 131 701 C

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.