

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-7-119  
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 1988 model-year Volkswagen AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems</u>
	<u>Liters</u>	<u>(Cubic Inches)</u>	<u>(Special Features)</u>
JVW2.2V6FFAO	2.2	(136)	Three-Way Catalyst Heated Oxygen Sensor (Mechanical Port 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</u> <u>Grams per Mile</u>	<u>Carbon Monoxide</u> <u>Grams per mile</u>	<u>Nitrogen Oxides</u> <u>Grams per Mile</u>
0.1	7.0	0.7

The following are the certification 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>
0.16	1.6	0.2

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 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.

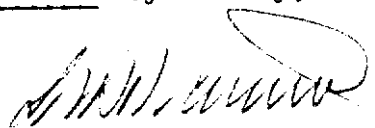
BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s] ..." (Title 13, California Administrative Code, Section 1968) for the aforementioned model year.

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.) 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 14<sup>th</sup> day of July, 1987.

  
K. D. Drachand, Chief  
Mobile Source Division

E.O. # A-7-119

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer VOLKSWAGEN AG Engine Family JVW 2.2 V6FFA0

Liter (CID) 2.22 (136) Engine Type L 5

Emission Control System (Special Features) TWC, HOS, (MFI)

Engine Code	Vehicle Models (If coded see attachment) (Dyno HP)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst Part No.
NLCHMA	Quantum syncro Wagon (10.0)	M5	3250	ECU 211905351 D,or 191905351 A,or 191905351 B,or 191905351 C CA, VA 034905205 F	MFI 034133353 ECU 811906264 C,or 811906264 D	N/A	853131701 D,o 853131701 G

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.

Date of Issue 04-22-87 Revisions:

E.O. # A-7-119

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer	<u>VOLKSWAGEN AG</u>	Engine Family	<u>JVW 2.2 V6FFA0</u>
Evaporative Family	<u>VWBN</u>	Engine Type	<u>L 5</u>
		Liters (CID)	<u>2.22 (136)</u>

## ABBREVIATIONS

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

VEHICLE MODELS:                      Quantum syncro Wagon

Engine:    Front   X      Mid.           Rear       

Drive:      FWD           RWD           4WD Full Time   X      4WD Part Time