

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-7-196  
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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1998 model-year Volkswagen AG exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Diesel

Engine Family: WVWXV01.9234 Displacement: 1.9 Liters (116 cubic inches)

Exhaust Emission Control Systems & Special Features:

Direct Fuel Injection  
Turbocharger  
Charge Air Cooler  
Oxidation Catalytic Converter  
Exhaust Gas Recirculation

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

The certification exhaust emission standards for this engine family in grams per mile are:

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Particulates</u> |
|--------------|---------------------------------|------------------------|------------------------|---------------------|
| 50,000       | n/a                             | n/a                    | n/a                    | 0.08                |
| 100,000      | 0.31                            | 4.2                    | 1-0                    | n/a                 |

The certification exhaust emission values for this engine family in grams per mile are:

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Particulates</u> |
|--------------|---------------------------------|------------------------|------------------------|---------------------|
| 50,000       | n/a                             | n/a                    | n/a                    | 0.07                |
| 100,000      | 0.21                            | 0.5                    | 0.8                    | n/a                 |

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth 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 under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's 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 "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

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 (Title 13, California Code of Regulations, 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 8<sup>th</sup> day of September 1997.



R. B. Summerfield, Chief  
Mobile Source Operations Division

**1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDUM-DUTY VEHICLES**

Manufacturer: VOLKSWAGEN Exh Eng Fam: WVWXV 01.9 234 Evap Fam: n.a.  
 All Eng Codes in Eng Fam: CA 49S 50S X AB965 ORVR: YES NO X  
 Exh Std: CA Tier-1 X TLEV LEV ULEV SULEV; US EPA Tier-1 X  
 Veh Class(es): PC X LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5  
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)  
 Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Bi-Fuel Gasoline Diesel X  
CNG LNG LPG M85 Other (specify) \_\_\_\_\_  
 Exh Emiss Test Fuel(s): Indo CBG CNG LPG M85 Other (specify) \_\_\_\_\_  
 Diesel: 13 CCR 2282 40 CFR 86.113-90 40 CFR 86.113-94 X  
 Evaporative Emission Test Procedure: California n.a. Federal n.a.  
 Service Accum: Std AMA X Mod AMA Mfr ADP Other (specify) \_\_\_\_\_  
 NMOG Test Procedure: N/A X Std Equip R/L Test Proc: SHED n.a. PtSource n.a.  
 Engine Config. 4 in line Displacement: 1.9 Liters 116 Cubic Inches  
 Valves per Cylinder: 2 Rated HP: 90 @ 3,750 RPM  
 Engine: Front X Mid. Rear Drive: FWD X RWD 4WD-FT 4WD-PT  
 Exhaust ECS (eg., EGR, MFI, TC, CAC, etc.) DFI / TC / CAC / OC / EGR / OBDII  
 (use abbreviations per SAE 1930 SEP93)

| Engine Code<br>(also list<br>CA/49ST/50ST) | Vehicles<br>Models<br>(if coded see<br>attachment) | Trans.<br>Type<br>A-auto<br>M-man. | ETW<br>or<br>Test<br>WT | DPA<br>or<br>RLHP | Ignition<br>(ECM/PCM)<br>Part No. | EGR<br>System<br>Part No.                     | Catalytic<br>Converter<br>Part No. |
|--|--|------------------------------------|-------------------------|-------------------|-----------------------------------|---|------------------------------------|
| AHU, AHH<br>50 ST                          | Passat TDI<br>Diesel<br>station wagon              | M                                  | 3,500                   | 6.4               | 028 906 021 EC<br>038 906 018 Q   | 028 131 501 E<br>028 131 501 L<br>1H0 906 627 | 3B0 131 701 K                      |
| AHU, AHH<br>50 ST                          | Passat TDI<br>Diesel<br>sedan                      | M                                  | 3,500                   | 6.4               | - " -                             | - " -   | - " -                              |
| AHU, AHH<br>50 ST                          | Passat TDI<br>Diesel<br>station wagon              | A                                  | 3,625                   | 6.1               | 028 906 021 EC<br>038 906 018 Q   | 028 131 501 E<br>028 131 501 L<br>1H0 906 627 | 3B0 131 701 K                      |
| AHU, AHH<br>50 ST                          | Passat TDI<br>Diesel<br>sedan                      | A                                  | 3,500                   | 6.1               | - " -                             | - " -   | - " -                              |

Date Issued: 12-16-96

Revisions: 08-25-97

**1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
 PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDUM-DUTY VEHICLES**

Manufacturer: VOLKSWAGEN Exh Eng Fam: WVWKV 01.9 234 Evap Fam: n.a.  
 All Eng Codes in Eng Fam: CA 49S 50S X AB965 ORVR: YES NO X  
 Exh Std: CA Tier-1 X TLEV      LEV      ULEV      SULEV     ; US EPA Tier-1 X  
 Veh Class(es): PC X LDT1      LDT2      MDV1      MDV2      MDV3      MDV4      MDV5       
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)  
 Fuel Type(s): Dedicated X Flex-Fuel      Dual-Fuel      Bi-Fuel      Gasoline      Diesel X  
                   CNG      LNG      LPG      M85      Other (specify)       
 Exh Emiss Test Fuel(s): Indo      CBG      CNG      LPG      M85      Other (specify)       
                           Diesel: 13 CCR 2282      40 CFR 86.113-90      40 CFR 86.113-94 X  
 Evaporative Emission Test Procedure: California n.a. Federal n.a.  
 Service Accum: Std AMA X Mod AMA      Mfr ADP      Other (specify)       
 NMOG Test Procedure: N/A X Std      Equiv      R/L Test Proc: SHED n.a PtSource n.a  
 Engine Config. 4 in line Displacement: 1.9 Liters 116 Cubic Inches  
 Valves per Cylinder: 2 Rated HP: 90 @ 3,750 RPM  
 Engine: Front X Mid.      Rear      Drive: FWD X RWD      4WD-FT      4WD-PT       
 Exhaust ECS (eg., EGR, MFI, TC, CAC, etc.) DFI / TC / CAC / OC / EGR / OBDII  
 (use abbreviations per SAE 1930 SEP93)

| Engine Code<br>(also list<br>CA/49ST/50ST) | Vehicles<br>Models<br>(if coded see<br>attachment) | Trans.<br>Type<br>A-auto<br>M-man. | ETW<br>or<br>Test<br>WT | DPA<br>or<br>RLHP | Ignition<br>(ECM/PCM)<br><br>Part No. | EGR<br>System<br><br>Part No.                 | Catalytic<br>Converter<br><br>Part No. |
|--|--|------------------------------------|-------------------------|-------------------|---------------------------------------|---|--|
| AHU, AHH<br>50 ST                          | Passat TDI<br>Diesel<br>station wagon              | M                                  | 3,500                   | 6.4               | 028 906 021 EC<br>038 906 018 Q       | 028 131 501 E<br>028 131 501 L<br>1H0 906 627 | 3B0 131 701 K                          |
| AHU, AHH<br>50 ST                          | Passat TDI<br>Diesel<br>sedan                      | M                                  | 3,375                   | 6.4               | - " -                                 | - " -   | - " -                                  |

Date Issued: 12-16-96

Revisions: