State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-7-202
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:** WWWWX01.9233 **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:

<table>
<thead>
<tr>
<th>Miles</th>
<th>Non-Methane Hydrocarbons</th>
<th>Carbon Monoxide</th>
<th>Nitrogen Oxides</th>
<th>Particulates</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>0.08</td>
</tr>
<tr>
<td>100,000</td>
<td>0.31</td>
<td>4.2</td>
<td>1.0</td>
<td>n/a</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Miles</th>
<th>Non-Methane Hydrocarbons</th>
<th>Carbon Monoxide</th>
<th>Nitrogen Oxides</th>
<th>Particulates</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>0.06</td>
</tr>
<tr>
<td>100,000</td>
<td>0.03</td>
<td>0.2</td>
<td>0.7</td>
<td>n/a</td>
</tr>
</tbody>
</table>

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 1998 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 24th day of February 1998.

R. B. Summerfield, Chief
Mobile Source Operations Division
### 1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

**MANUFACTURER:** VOLKSWAGEN  
**ENG FAM:** VWVWV01_29233  
**EVP FAM:** n.a.  

**ALL ENG CODES IN ENG FAM:**  
- CA: 49S  
- 508 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 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.  
**SERVICE ACCUM:** Mod AMA  
**NMHC TEST PROCEDURE:** N/A X  
**R/L TEST PROC:** SHED 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 SEP91)

<table>
<thead>
<tr>
<th>Engine Code</th>
<th>Vehicles Models (if coddled see attachment)</th>
<th>Trans. Type</th>
<th>ETW</th>
<th>DPA or RLHP</th>
<th>Ignition (ECM/PCM)</th>
<th>EGR System</th>
<th>Catalytic Converter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALH 50 ST</td>
<td>New Beetle TDI Diesel sedan</td>
<td>M</td>
<td>3,125</td>
<td>8.0</td>
<td>038 906 018 M</td>
<td>038 131 501 A</td>
<td>045 131 701 B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>038 906 018 BD</td>
<td>038 131 501 A</td>
<td></td>
</tr>
<tr>
<td>ALH 50 ST</td>
<td>New Beetle TDI Diesel sedan</td>
<td>A</td>
<td>3,250</td>
<td>7.8</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
</tr>
</tbody>
</table>

**DATE ISSUED:** 11-17-97  

**REVISIONS:** _ _ _