### State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-7-96 Relating to Certification of New Motor Vehicles

#### VOLKSWAGENWERK 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 1986 model-year Volkswagenwerk AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

| Engine Family | Displacement<br>ine Family Cubic Inches (Liters) |       | Exhaust Emission Control Systems (Special Features)             |  |  |  |  |  |
|---------------|--|-------|---|--|--|--|--|--|
| GVW1.8V6FAC4  | 109  | (1.8) | Three-Way Catalyst with Closed Loop (Mechanical 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:

| Hydrocarbons                  | Carbon Monoxide                   | Nitrogen Oxides             |  |  |
|-------------------------------|-----------------------------------|-----------------------------|--|--|
| Grams per Mile                | Grams per Mile                    | Grams per mile              |  |  |
| 0.41<br>The following are the | 7.0 certification emission values | 0.7 for this engine family: |  |  |
| Hydrocarbons                  | Carbon Monoxide .                 | Nitrogen Oxides             |  |  |
| Grams per Mile                | Grams per Mile                    | Grams per Mile              |  |  |
| 0.37                          | 2.2                               | 0.3                         |  |  |

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.).

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

\_ day of July, 1985.

K. D. Drachand, Chief Mobile Source Division

#### 1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manu facturer

W AG

Executive Order No.

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Engine Family

GW 1.8 V6FAC4

Evaporative Family

**GWAI** 

Engine CID (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

## Echaust Emissions Control System

AIP - Air Injection-Pump

AIV - Air Injection-Valve

CL - Closed Loop

ESR - Exhaust Gas Recirculation

BM - Engine Modification

OC - Oxidation Catalyst System

TOC - Trap Oxidizer Continual

TOP - Trap Oxidizer Periodical

TR - Thermal Reactor

TMC - Three-Way Catalyst System

## 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

TC - Turbocharged

# Fuel System

CFI, CL, DID, DIP, EFI, MFI

nV - nVenturi Carburetor

W - Variable Venturi

# VEHICLE MODELS:

Golf Jetta

DRIVE SYSTEM: Front

Engine/ Front

Wheel Orive

08.00.00.00 GENERAL TECHNICAL DESCRIPTION PAGE NO: 08.13. -01

ENGINE FAM.: GVW 1.8 A F, C ENGINE CODE: all

ISSUE DATE: 06-07-85

R.Ch.-No.:

REVISION DATE:

EO. # A-7-96

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08.13.00.00 General Specifications

.01.00 / Frontal Areas

| Vehicle Model | Frontal Area         |
|---------------|----------------------|
| Golf          | 20.4 ft:             |
| Jetta         | 20.4 ft <sup>2</sup> |

.02.00 Test Horespower

- .01 Exhaust Emission Test Conditions
  - a) Frontal Area HP

    11.2 HP, A/C factor added.
  - b) Coast Cown HP

| Model | DPA<br>value | DPA+10%<br>value | ETW   | corr.track<br>c.d.t. | c.d.t. for<br>DPA+10% |
|-------|--------------|------------------|-------|----------------------|-----------------------|
|       | (HP)         | (HP)             | (1bs) | (sec.)               | (sec.)                |
| Golf  | 5.4          | 7.0              | 2500  | 14.15                | 13.40                 |
|       | 6.4          | 7.0              | 2625  | 14.94                | 14.17                 |
| jetta | 6.4          | 7.0              | 2500  | 14.15                | 13.40                 |
|       | 6.4          | 7.0              | 2625  | 14.94                | 14.17                 |

## 1986 AUR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

| X Pesse         | engjer Cars                          | _ light-but       | ty Trucks  |                      | Hadium        | -Duty Welst | clas                            | <u> </u> | <b>4</b> es  | _ Diesel                 |
|-----------------|--------------------------------------|-------------------|------------|----------------------|---------------|-------------|---------------------------------|----------|--|--------------------------|
| Manufactu       | a'wr                                 | WA                |            |                      | Nige          |             |                                 | 3        |  |                          |
| Englas Fo       | My                                   | ON 1.5 1          | ISFACE -   |                      | Bylne         | Code        | eligi ki <b>k</b> aj eliziria k | W +202   | THE SECTION SE |                          |
| ECS (Spec       | cial Festures)                       | WI, C.,           | <b>T</b> C |                      | CID (L        | iter)- Ty   | e 1,6                           | ) Otte   |  |                          |
|                 | Vehicle Models                       |                   |            |                      |               |             |                                 |          |  |                          |
| Engline<br>Code | (If coded see<br>attachment)<br>(MP) | Trare-<br>staston |            | ignition<br>Part Ib, |               |             | System<br>No.                   |          | BSR Walve<br>Part No.  | Label Stort.<br>Part No. |
| 1.8 1650        | Golf, Jutta                          | AS                | 2525       | ÉI<br>02/ 505        | <b>33</b> 5 F | 9F1<br>096  | 133 363                         |          | -  | 782 0TO 80T C            |
| 1.8 VEXO        | edif, Jutta                          | 16                | 25         | 61<br>027 906        | 205 F         | (F1<br>025  | 133 353                         |          |  | 265 010 001 (            |
| 1.8 W20         | <b>W</b> If, Jetta                   | <b>#6</b>         | 2525       | EI<br>027 906        | 205 F         | 9F]<br>049  | 133 353                         | S        |  | 165 010 001 0            |
| 1.8 H050        | wif, Jetta                           | <b>A3</b>         |            | 51<br>027 905        | <b>205</b> F  | NFI<br>OG   | 133 353                         | S        |  | 762 OTO OOT (            |

She page one for abbreviations and supportative unisation family identification family identification. Please refer to secufacturer's 19 list for correct time test IP settings based on social and equipment. If two test multiples are listed, the luner subject of like small for testing.

<sup>\*</sup> Add 10% to dyno test IP for eir conditioning weege.