

EO 304

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-16
Relating to Certification of New Motor Vehicles

BAYERISCHE MOTOREN WERKE AG

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43100, 43102, 43103, and 43835; 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 Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for 1981 model-year gasoline-powered passenger cars.

| <u>Engine Family</u> | <u>Displacement Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems (Special Features)</u> |
|----------------------|---|--|
| BMW 18K | 107 (1.8) | Three Way Catalyst with Closed Loop (Mechanical Fuel Injection) |

Vehicle Models, Transmissions, Engine Codes and Evaporative Emission Control Families as listed on attachments.

The following are the certification emission values to be listed on the window decal required by California Assembly-Line Test Procedures for 1981 model-year vehicles:

| <u>Engine Family</u> | <u>Hydrocarbons Grams per Mile</u> | <u>Carbon Monoxide Grams per Mile</u> | <u>Nitrogen Oxides Grams per Mile</u> |
|----------------------|--|---|---|
| BMW 18K | 0.35 | 1.9 | 0.4 |

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 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That Bayerische Motoren Werke AG has provided to the Executive Officer all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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 17th day of October, 1980.



K. D. Drachand, Chief
Mobile Source Control Division

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer BMW Executive Order No. A-8-16 Page 1

Engine Family BMW 18K Evaporative Family EV10

ABBREVIATIONS Engine CID (Liters) 107.8 (1.8)

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
 TR-Thermal Reactor
 TWC-Three Way Catalyst System

Special Features

CCV-Combustion Chamber Valve
 CFI-Central Fuel Injection
 DI-Diesel Injection
 EFI-Electronic Fuel Injection
 MFI-Mechanical Fuel Injection
 TC-Turbocharged

Fuel System

CFI, DI, EFI, MFI
 nV-nVenturi Carburetor
 VV-Variable Venturi

Models

20

*~~302i~~
 *320iA

*Add 10% to dyno test Hp for air conditioning use

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Bayerische Motoren Werke AG Page 2

Engine Family BMW 18K Engine Code 18K M5/18K A3

ECS (Special Features) TWC, CL (FI) CID (Liter)-Type 107.8 (1.8) I4

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. | Equiv. Test Weight | Ign. System CA, VA, EI Distributor Part No. | Fuel System MFI Part No. | EGR Valve Part No. | Label Ident. Part No. |
|-------------|---|--------|--------------------|--|--|-----------------------|--------------------------|
| 18K M5 | 320 i | M5 | 2750 | Bosche 0 237 002 -049 | Bosche LCU 0 280 800 -016 Bosche MCU 0 438 040 -070 Bosche Injectors 0 437 502 -006 | | |
| | 320 iA | A3 | | | | | |

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.

*Add 10% to dyno test HP for air conditioning usage.

Date of Issue - 10-07-80