State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-19
Relating to Certification of New Motor Vehicles

BAYERISCHE MOTOREN WERKE 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-45-3, and G-45-4;

IT IS ORDERED AND RESOLVED: That 1982 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars.

| Engine Family | Displacement Cubic Inches (Liters) | Exhaust Emission Control Systems (Special Features) |
|---|---|---|
| CBM1.8V5FAB2 | 107.8 (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 emission standards for this engine family to be listed on the window decal required by California Assembly-Line Test Procedures for 1982 model-year vehicles:

| Hydrocarbons Grams per Mile | Carbon Monoxide Grams per Mile | Nitrogen Oxides Grams per Mile |
|---|---|---|
| 0.41 | 7.0 | 0.7 |

The following are the certification emission values for this engine family:

| Hydrocarbons Grams per Mile | Carbon Monoxide Grams per Mile | Nitrogen Oxides Grams per Mile |
|---|---|---|
| 0.35 | 1.9 | 0.5 |

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 Executive Officer has been provided 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 20th day of October, 1981.

K. D. Drachand, Chief
Mobile Source Control Division

# 1982 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer BMW Executive Order No. A-8-19 Page 1

Engine Family CBM1.8V5FAB2 Evaporative Family EV 10

Engine CID (Liters) 110 (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

Fuel System
CFI, CL, DID, DIP, EFI, MFI
nV-nVenturi Carburetor
VV-Variable Venturi

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
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
MFI-Mechanical Fuel Injection
TC-Turbocharged

Vehicle Models

BMW 320i
320iA

DRIVE SYSTEM: Front Engine/Rear drive
Date of Issue: 10/07/81
Revisions:

012281

# 1982 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer BMW E.O. #A-8-19

Engine Family CBM1.8V5FAB2 CID (liter) - Type 110 (1.8) L4

ECS (Special Features) TWC-CL (MFI)

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. | Equiv. Test Weight | Ign. System CA,VA,EJ Part No. | Fuel System MFI Part No. | EGR Valve Part No. | Label Ident. Part No. |
|---|---|---|---|---|---|---|---|
| 18K M5<br>18K A3 | 320i<br>320iA | M5<br>A3 | 2750 | Distributor Bosch 0 237 002-049 | Bosch LCU 0 280 800-016<br>Bosch Mixture Control Unit 0 438 040-092<br>Bosch Fuel Injectors 0 437 502-006 | N/A | VECI 2 121 097-C<br>Vac. Hose 2 121 030-C |

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 - 10/7/81
Revisions: