State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-53
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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1989 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacement Liters (Cubic Inches)	Exhaust Emission Control Systems (Special Features)
KBM2.3V5FMS7	2.3 (140.5)	Dual Three-Way Catalysts Heated Oxygen Sensor No On-Board Diagnostics (Exempted) (Electronic Port 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 (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)
0.26	1.2	0.2

BE IT FURTHER RESOLVED: That the listed models are 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 vehicle manufacturer is certifying to the optional NOx standard by providing evidence that there are sufficient projected sales of vehicles certifying to the primary NOx emission standard, or is allowed a delay in implementation under small volume manufacturer provisions, or is allowed a delay in implementation under the "in lieu" standards, or is certifying passenger cars weighing more than 5250 lbs. loaded vehicle weight.

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 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 "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, Section 1968) 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 25th day of July, 1988.

K. D. Drachand, Chief
Mobile Source Division

ED # A-8-53

Section 17.03.00 ARB SUPPLEMENTAL DATA SHEET

Manufacturer BMW

Evaporative Family EV 40

Engine Family KBM2.3V5FMS7

Engine Type 4 cycle, inline

Liters (CID) 2.3 l (140.5 cu. in.)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
ECU-Electronic Control Unit
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

Special Features

CFI-Central Fuel Injection or Throttle Body Injection
EPFI-Electronic Port Fuel Injection
MPFI-Mechanical Port Fuel Injection
SFI-Sequential Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
TC-Turbocharger
SC-Supercharger
IC-Intercooler or Aftercooler
CCV-Combustion Chamber Valve
OBD-On-Board Diagnostics

Exhaust Emissions Control System

AIP-Air Injection - Pump
AIV-Air Injection - Valve
EGR-Exhaust Gas Recirculation
EIC-Electronic Injection Control (Diesel Only)
EM-Engine Modification
SPL-Smoke Puff Limiter or Throttle Delay
TOC-Trap Oxidizer, Continual
TOP-Trap Oxidizer, Periodical
DBC-Dual Bed Catalyst
OC-Oxidation Catalyst
TWC-Three-Way Catalyst
WUOC-Warm-Up Oxidation Catalyst
WUTWC-Warm-Up Three-Way Catalyst
OS-Oxygen Sensor
HOS-Heated Oxygen Sensor

Fuel System

CFI, EPFI, MPFI, SFI,
DID, DIP, HOS, OS
nV-nVenturi Carburetor
VV-Variable Venturi Carburetor

Vehicle Model(s): M 3

DRIVE SYSTEM: Front engine, rear wheel drive

ISSUE DATE	REV.				SATISFACTORY	UNSATISFACTORY
05/09/88	DATE				DATE	NAME

ENGINEERING EMISSION CONTROL

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

X Passengers Cars ___ Light-Duty Trucks ___ Medium-Duty Vehicles

X Gas ___ Diesel

E. O. A-8-53

Manufacturer BMW

Engine Type inline four cyl.

Engine Family KBM2.3V5FMS7

Displacemet 2.3 l (140.5 cu.in.)

ECS (Special Features) EIC, dual TWC, HOS (EPFI, OBD exempt)

Engine Code	Vehicle Model(s)	Trans. Type	Equiv. Test Weight	Ign.System Part No.	Fuel System Part No.	Catalyst Part No.
2.3 MS	M 3	M5	3125	BMCU 0 261 200 071 EID 1 235 522 406	EFI BMCU 261 200 071 AFM 0 280 203 028 FI 0 280 150 201	1 308 716

Comments: See page 17-29 for abbreviations and evaporative emission family identification

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