

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-9-28  
Relating to Certification of New Motor Vehicles

BAYERISCHE MOTOREN WERKE A.G.

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 1984 model-year Bayerische Motoren Werke A.G. exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
EBM2.7V5F308	164 (2.7)	Three-Way Catalyst with Closed Loop (Electronic Fuel Injection)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the certification emission standards for this engine family to be listed on the window decal required by "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles":

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.41	7.0	0.4

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

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.34	2.9	0.2

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 19<sup>th</sup> day of December, 1983.

  
K. D. Drachand, Chief  
Mobile Source Division

Manufacturer BMW Executive Order No. A-9-28  
 Engine Family EBM2.7V5F308 Evaporative Family EV 20  
 Engine CID (Liters) 164(2.7)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 EEC-Electronic Engine Control  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard  
 BMCU - Bosch Motronic Control Unit  
 EID - Electronic Ignition Distributor

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

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor  
 VV-Variable Venturi  
 FI - Fuel Injectors  
 BMCU - Bosch Motronic Control Unit  
 AFM - Air Flow Meter

Vehicle Models

BMW 325e

DRIVE SYSTEM: Front engine, rear wheel drive

ISSUE DATE:	REV.				SATISFACTORY	UNSATISFACTORY
7/13/83	DATE				DATE	NAME

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer BMW E.O. # A-9-28

Engine Family EBM2.7V5F308 CID (liter) - Type 164/2.7 inline six cyl.

ECS (Special Features) EFI, TWC, CL

.Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Ign. System	Fuel System	EGR Valve	Label Ident.
			Part No.	Part No.	Part No.	Part No.
2.7-30 M5	BMW 325e	M5	BMCU 0 261 200 021	<u>EFI</u>	n.a.	2 121 415
			EID 1 235 522 365	BMCU 0 261 200 021		2 121 411
2.7-30 A4		A4		AFM 0 280 202 029		2 121 290
				FI 0 280 150 126		1 874 981

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

ISSUE DATE 7/13/83	REV. DATE				SATISFACTORY	UNSATISFACTORY
					DATE	NAME



# ENGINEERING EMISSION CONTROL

## TEST VEHICLE REQUIREMENTS

Engine Family	Engine Code	Equiv. Test Weight	Actual Road Load Power*
EBM2.7V5F308	2.7-30 M5	3 000 lbs.	8.7 hp
	2.7-30 A4	3 000 lbs.	9.5 hp

\*coast down values

ISSUE DATE	REV				SATISFACTORY	UNSATISFACTORY
7/13/83	DATE				DATE	NAME