

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-29

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 1984 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for diesel-powered passenger cars:

| <u>Engine Family</u> | <u>Displacement Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems (Special Features)</u> |
|----------------------|---|--|
| EBM2.4D6JAB5 | 149 (2.4) | Engine Modifications Exhaust Gas Recirculation (Diesel Injection - Prechamber) |

Vehicle models, transmissions and engine codes are 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 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> |
|--|---|---|
| 0.46 | 8.4 | 1.0 |

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

| <u>Hydrocarbons Grams per Mile</u> | <u>Carbon Monoxide Grams per Mile</u> | <u>Nitrogen Oxides Grams per Mile</u> |
|--|---|---|
| 0.20 | 1.9 | 0.8 |

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's 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 27th day of March, 1984.



K. D. Drachand, Chief
Mobile Source Division

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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Manufacturer BMW Executive Order No. A-9-29
 Engine Family EBM2.4D6JAB5 Evaporative Family n/a
 Engine CID (Liters) 149 (2.4)

ABBREVIATIONS

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

Fuel System

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

VEHICLE MODELS:

| | <u>ETW</u> | <u>FRONTAL AREA HP</u> | <u>COAST DOWN HP</u> |
|------------|------------|------------------------|----------------------|
| BMW 524td | 3500 lbs. | 10.5 | 9.5 |
| BMW 524tdA | | | |

Issue Date: 03/27/84

DRIVE SYSTEM: Front Engine/ Rear -Wheel Drive

122182

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Bayerische Motoren Werke AG E.O. #A-8-29

Engine Family EBM2.4D6JAB5 CID (liter) - Type 2.4-inline six cyl.

ECS (Special Features) EGR, DIP, TC

| 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. |
| 2.4DA4C 2.4DM5C | BMW 524td | A4 M5 | not appl. | <u>DIP</u> Injection pump: 1 285 522 Fuel injection nozzle: 1 279 105 | 1 285 112 | 2 121 459 2 121 463 2 121 465 |

Issue Date: 03/27/84
Revised: ..

| | | | | | | |
|-------------------------------|--------------|--|--|--|--------------|----------------|
| ISSUE DATE <u>03/27/84</u> | REV. DATE | | | | SATISFACTORY | UNSATISFACTORY |
| | | | | | DATE | NAME |