State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-78
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 1993 model Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: PBM2.5V5FT1X Displacement: 2.5 Liters (152 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Three Way Catalytic Converter
Heated Oxygen Sensor
Multiport Fuel Injection

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

The certification exhaust emission standards for this engine family in grams per mile are:

| Miles | Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides |
|---|---|---|---|
| 50,000 | 0.39 | 7.0 | 0.4 |

The certification exhaust emission values for this engine family in grams per mile are:

| Miles | Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides |
|---|---|---|---|
| 50,000 | 0.14 | 1.0 | 0.2 |

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying to the 50,000-mile non-methane hydrocarbons and carbon monoxide standards based on its projected total sales of 1993 model California-certified passenger cars and light-duty trucks.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "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 Code of Regulations, 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, and with the California Inspection and Maintenance emission standards in place at the time of certification, 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 Emission Control Label Specifications" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Code of Regulations, 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 Code of Regulations, 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 29th day of September, 1992.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

## 1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. A-8-78

Manufacturer BMW Engine Family PBM2.5V5FT1X

Passenger car X (PC) Light Duty Trucks ____ (T1/T2)

Medium Duty Vehicle ____ (M1/M2/M3/M4/M5)

Stds Type: Tier 0 (Tier 0/1, AB965, TLEV, LEV, ULEV)

Veh. Type (FFV, HEV(type A/B/C)): ---

Fuel Type: Gas

Engine Config. I - 6 Liter(CID) 2.5 l (152.3 cu.in)

Evap. Family EV 70 (525i), EV 90 (325i)

Emission Control Systems & Special Features TWC, HO2S, MFI

Engine: Front X Mid. ___ Rear ___ Drive: FWD ___ RWD X 4WD-FT ___ 4WD-PT ___

| Engine Code | Vehicle Model(s) | Trans. Type | Equiv. Test Weight | RLHP | Ignition System Part No. | Catalytic Converter Part No. |
|---|---|---|---|---|---|---|
| 2.5/3 M5 | 325i,is | M5 | 3 375 | 7.0 | ECM 1 748 113 | 1 728 402<br>1 728 403 |
| 2.5/3 A4 | 325iA, isA | A4 | 3 500 | 7.0 | | |
| 2.5/5 M5 | 525i | M5 | 3 750 | 6.9 | 1 748 122 | 1728 421 |
| 2.5/5 A4 | 525iA | A4 | 3 875 | 7.2 | | |
| 2.5/5/TA4 | 525iAT | A4 | 4 000 | 7.4 | | |