

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-90
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 1995 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: SBM4.0VJGFEA Displacement: 4.0 Liters (242.9 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection
Dual Heated Oxygen Sensors
Dual Three-Way Catalytic Converters

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:

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> |
|--------------|---------------------------------|------------------------|------------------------|
| 50,000 | 0.25 | 3.4 | 0.4 |
| 100,000 | 0.31 | 4.2 | n/a |

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

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> |
|--------------|---------------------------------|------------------------|------------------------|
| 50,000 | 0.12 | 0.9 | 0.1 |
| 100,000 | 0.13 | 1.1 | n/a |

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth 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 under the submitted compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

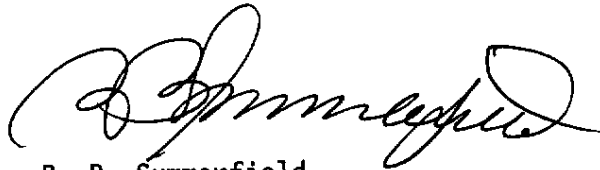
BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) 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 provisions (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 21st day of April, 1994.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division



ENGINEERING EMISSION CONTROL

1995 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O.# A-8-90

Manufacturer BMW Engine Family SBM4.0VJGFEA

Passenger car (PC) Light Duty Trucks (T1/T2) Medium Duty Vehicle (M1/M2/M3/M4/M5)

Stds Type: Tier 1 (Tier 0/1, AB965, TLEV, LEV, ULEV) Veh. Type (FFV, HEV(type A/B/C)) : ---

Fuel Type: Gas ^(Phase 2) Evap. Family SBM1025DYM00 (540i) / (740i,iL) SBM1035DYP00 (840Ci)

Engine Config. V - 8 Liter(CID) 4.0l (242.9 cu. in.)

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

Emission Control Systems & Special Features Dual TWC, HO2S, SFI

| Engine Code | Vehicle Model(s) | Trans. Type | Equivalent Test Weight (lbs.) | RLHP (hp) | Ignition System Part No. | Catalytic Converter Part No. |
|-------------|------------------|-------------|-------------------------------|-----------|-------------------------------------|----------------------------------|
| 4.0/5 M6 | 540i | M6 | 4 000 | 7.2 | ECM 1 740 171 | 1 741 431 |
| 4.0/5 A5 | 540iA | A5 | 4 000 | 7.2 | 1 429 257 (840Ci) | (left) 1 741 432 |
| 4.0/7 A5 | 740i,iL | A5 | 4 500 | 7.3 | 1 740 174 1 429 256 (540i) | (right) 1 741 497 (740i,iL |
| 4.0/8 A5 | 840CiA | A5 | 4 500 | 7.5 | 1 703 733 1 429 259 (740i,iL) | left/right) |