

File

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-93  
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: SBM1.8VHGFEA Displacement: 1.8 Liters (109.6 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:

| <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                            | 1.5                    | 0.2                    |
| 100,000      | 0.12                            | 1.7                    | 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 NMOG fleet average 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 29<sup>th</sup> day of September, 1994.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division



# ENGINEERING EMISSION CONTROL

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## 1995 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES

Manufacturer : BMW Exh Engine Family : SBM1.8VHGFEA  
 Evap Std: 50K X Useful Life with R/L \_\_\_\_\_ Evap Engine Family : SBM1025BYP00  
 Exh Std: Tier-0 \_\_\_\_\_ Tier-1 X TLEV \_\_\_\_\_ LEV \_\_\_\_\_ ULEV \_\_\_\_\_ ZEV \_\_\_\_\_ ; EPA Tier-0 \_\_\_\_\_ Tier-1 X  
 Veh Class(es): PC X LDT1 \_\_\_\_\_ LDT2 \_\_\_\_\_ MDV1 \_\_\_\_\_ MDV2 \_\_\_\_\_ MDV3 \_\_\_\_\_ MDV4 \_\_\_\_\_ MDV5 \_\_\_\_\_  
 Single Cert Std for Multi - Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4 )  
 Exh Cert Fuel (s): Indo X Ph2 \_\_\_\_\_ Diesel: 13 CCR 2282 \_\_\_\_\_ or 40 CFR86.113-90 \_\_\_\_\_ or -94 \_\_\_\_\_  
 M85 \_\_\_\_\_ CNG \_\_\_\_\_ LPG \_\_\_\_\_ Other (specify) \_\_\_\_\_  
 Fuel Type (s): Dedicated \_\_\_\_\_ Flex-Fuel \_\_\_\_\_ Dual Fuel \_\_\_\_\_ Gasoline X Diesel \_\_\_\_\_ M85 \_\_\_\_\_  
 CNG \_\_\_\_\_ LNG \_\_\_\_\_ LPG \_\_\_\_\_ Other (specify) \_\_\_\_\_  
 Hybrid: Type A \_\_\_\_\_ B \_\_\_\_\_ C \_\_\_\_\_, APU Cycle (e.g., Otto, Diesel, Turbine) \_\_\_\_\_  
 Engine Configuration: I-4 Displacement: 1.8l Liters 109.6 Cubic Inches  
 Engine: Front X Mid \_\_\_\_\_ Rear \_\_\_\_\_ Drive: FWD \_\_\_\_\_ RWD \_\_\_\_\_ X 4WD-FT \_\_\_\_\_ 4WD-PT \_\_\_\_\_  
 Exhaust ECS: TWC, HO2S, MFI

*OBD2 Exempt*

| Engine Code (50 ST) | Vehicle Models | Trans. Type | ETW (lbs.) | DPA or RLHP (hp) | Ignition (ECM/PCM) Part No.           | EGR System Part No. | Catalytic Converter Part No. |
|---------------------|----------------|-------------|------------|------------------|---------------------------------------|---------------------|------------------------------|
| 1.8/T1 M5           | 318ti          | M5          | 3 000      | 6.8              | ECM<br>0 261 203 282<br>0 261 203 357 |                     | 1 737 153<br>1 728 588       |
| 1.8/T1 M5           | 318i,is        | M5          | 3 250      | 6.5              |                                       |                     |                              |
| 1.8/T1 A4           | 318tiA         | A4          | 3 125      | 6.8              |                                       |                     |                              |
| 1.8/T1 A4           | 318iA, isA     | A4          | 3 375      | 6.5              |                                       |                     |                              |
| 1.8/T1/C M5         | 318iC          | M5          | 3 375      | 6.6              |                                       |                     |                              |
| 1.8/T1/C A4         | 318iAC         | A4          | 3 500      | 6.6              |                                       |                     |                              |