

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-99
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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1997 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: VBM4.4VJGKEK Displacement: 4.4 Liters (268.4 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Dual Three Way Catalytic Converters
Dual Heated Oxygen Sensors (two)
Sequential 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>	<u>Carbon Monoxide (20°F)</u>
50,000	0.25	3.4	0.4	10.0
100,000	0.31	4.2	0.6	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>	<u>Carbon Monoxide (20°F)</u>
50,000	0.14	1.1	0.2	7.0
100,000	0.16	1.3	0.2	n/a

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 "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 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 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".

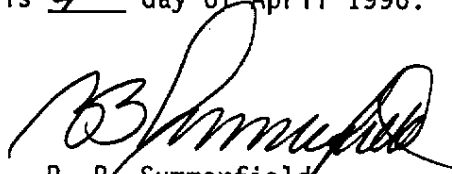
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned 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 4th day of April 1996.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

**1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES**

Manufacturer : BMW Exh Engine Family : VBM4.4VJGKEK Evap. Fam: VBM1045CYMA0⁽¹⁵⁰⁰⁾
VBM1035DYPA0⁽⁸⁻⁵⁰⁰⁾
VBM1045CYP00⁽⁵⁻⁵⁰⁰⁾

All Eng Codes in Eng Fam: CA 49S 50S X AB965
 Exh Std: CA Tier-1 X TLEV LEV ULEV ZEV ; US EPA Tier-1 X
 Evap Std: 50K X Useful Life with R/L In-Use Exh Std: Full In Use X Alt In Use
 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)
 Fuel Type (s): Dedicated X Flex-Fuel Dual Fuel Bi - Fuel Gasoline X Diesel
CNG LNG LPG M85 Other (specify)
 Emiss Test Fuel (s): Indo Ph2 X CNG LPG M85 Other (specify)
Diesel: 13 CCR 2282 40 CFR86.113-90 40 CFR86.113-94
 Service Accum: Std AMA Mod AMA Mfr ADP X Other (specify)
 NMOG Test Procedure: N/A X Std Equip R/L Test Proc: SHED Pt Source
 Hybrid: Type A B C , APU Cycle (e.g., Otto, Diesel, Turbine)
 Engine Configuration: V - 8 Displacement: 4.4 Liters 268.4 Cubic Inches
 Valves per Cylinder: 4 Rated HP: 282 @ 5 700 RPM
 Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT
 Exhaust ECS: 2TWC,2 HO2S-2, SFI

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.
4.4/7 A5	740i, iL	L5	4 500	7.3	1 472 350		1 745 243 1 745 244
4 4/8 A5	840Ci	L5/MS	4 500	7.5	1 427 348		
4.4/5 A5	540iA	L5	4 000	7.6	1 429 360		
4.4/5 M6	540i	M6	4 000	8.1	1 429 359		

**1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES**

6.571

Manufacturer: BMW Exh Engine Family: VBM4.4VJGKEK Evap. Fam: VBM1045CYMA0 (7-sec)
VBM1035DYPA0 (8-sec)
VBM1045CYPA0 (5-sec)

All Eng Codes in Eng Fam: CA 49S 50S X AB965
 Exh Std: CA Tier-1 X TLEV LEV ULEV ZEV ; US EPA Tier-1 X
 Evap Std: 50K X Useful Life with R/L In-Use Exh Std: Full In Use X Alt In Use
 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)
 Fuel Type (s): Dedicated X Flex-Fuel Dual Fuel Bi - Fuel Gasoline X Diesel
CNG LNG LPG M85 Other (specify)
 Emiss Test Fuel (s): Indo Ph2 X CNG LPG M85 Other (specify)
 Diesel: 13 CCR 2282 40 CFR86.113-90 40 CFR86.113-94
 Service Accum: Std AMA Mod AMA Mfr ADP X Other (specify)
 NMOG Test Procedure: N/A Std Equiv R/L Test Proc: SHED Pt Source
 Hybrid: Type A B C, APU Cycle (e.g., Otto, Diesel, Turbine)
 Engine Configuration: V-8 Displacement: 4.4 Liters 268.4 Cubic Inches
 Valves per Cylinder: 4 Rated HP: 282 @ 5 700 RPM
 Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT
 Exhaust ECS: 2TWC, 2HO2S-2, SFI

Section		Section
1	Authorized Representative	01.00.00
2	Fuel Specifications	03.00.00
3	Test Equipment	04.00.00
4	Test Procedure	05.00.00
5	Mileage Accumulation Route	05.00.00
6	Emiss.Warranty Statement(St.)	17.01.00
7	Maint: Cert/Req'd/Recm'd	06.00.00
8	Emiss.Label/Vac. Hose Diag.	07.00.00
9	Evap. Control System	08.11.00
10	Engine Parameters	20.01.00
11	Fuel System	08.01.00
12	Ignition System	08.02.00
13	Exhaust Control Systems	08.10.00
14	Projected Sales (LDT/MDV Split)	17.01.00
15	Vehicle Description	22.00.00
16	Evap. Bench Test Procedure	17.01.00
17	R/L Temp & Press Profiles	n/a
18	EDV Selection	17.01.00
19	Prod.Veh.same as Test Veh.St.	17.01.00
20	Test Veh. Information	
21	Gen Std, Increase in Emissions	
22	Safety, Meets all Requirements	20.10.00
23	Emiss. Label Durability St.	17.01.00
24	Driveability Statement	17.01.00
25	Adjustable Parameters	n/a
26	Tamper Resistance Method(s)	none
27	Fill Pipe Specifications	17.01.00
28	High Altitude Compliance	17.04.00
29	OBD Sys.incl.Marked Revisions	17.05.00
30	I&M Test Procedure & Data	17.01.00
31	50 Degree F Compliance	n/a
32	Manufacturer's RAF	n/a
33	Phase In Plans: Exh Cert Stds	see
	Exh In-Use Stds	Cert.
	Evap Cert Stds	Plan
34	NMOG Fleet Average Calculation	MY96
35	AB965 Credits/Withdrawals	n/a
36	EPA Certificate	BMW-LDV-97-02 BMW-LDV-97-03 BMW-LDV-97-04

20 Test Veh. Information	Emission Data			
	Durability Data Vehicle	Emission Data Vehicle	Emission Data Vehicle	Emission Data Vehicle
C/O or C/A	C/O 96	C/O 96	C/O 96	C/O 96
MY & ID	96 C C61 000	96 D G42 901	97 B R90 002	
Vehicle Log Page(s)	22.01.00	22.02.00	22.03.00	
Zero Mile Books	---	---	---	
Maint. Logs & Engr. Eval.	22.01.00	22.02.00	22.03.00	