State of California AIR RESOURCES BOARD.

EXECUTIVE ORDER A-8-37 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 1986 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacer Cubic Inches		Exhaust Emission Control Systems (Special Features)
GBM3.4V5F570	209	(3.4)	Three-Way Catalyst with Closed Loop (Electronic Fuel Injection)

Vehicle model's, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

Hydrocarbons Grams per Mile	Carbon Monoxide <u>Grams per Mile</u>	Nitrogen Oxides Grams per Mile
0.41	7.0	0.7
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The following are the certification emission values for this engine family:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides
Grams per Mile	Grams per Mile	Grams per Mile
0.24	2.4	0.2

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "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 Administrative Code, 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 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 listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) 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 Administrative Code, 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 day of August, 1985.

K. D. Drachand, Chief Mobile Source Division

Section 17.03.00 ARB Supplemental Data Sheets

Manufacturer BMW Executive Order No. $\triangle - 8 - 37$ Engine Family GBM3.4V5F570 Evaporative Family EV 30

Engine CID (Liters) 3.4 1

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
EEC-Electronic Engine Control
EI-Electronic Ignition
ESAC-Electronic Spark Advance
Control
VA-Vacuum Advance
VR-Vacuum Retard
BMCU-Bosch Motronic Control Unit
EID-Electronic Ignition Distributor

Special Features

CCV-Combustion Chamber Valve CFI-Central Fuel Injection DID-Diesel Injection-Direct DIP-Diesel Injection-Prechamber MFI-Mechanical Fuel Injection TC-Turbocharged

Exhaust Emission 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

Fuel System

CFI, CL, DID, DIP, EFI, MFI nV-nVenturi Caburetor VV-Variable Venturi FI-Fuel Injection Valves BMCU-Bosch Motronic Control Unit AFM-Air Flow Meter

Vehicle Models: 535i, 635 CSi, 735i

DRIVE SYSTEM: Front engine, rear wheel drive

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

	Diesel			·	
anu factur	er BMW		E.O. <u>A-8</u>	-37	
ngine Fam	ily <u>GBM3.4V5F570</u>		CID (liter)-Ty	/pe <u>3.4 - inli</u>	ne six cy
ECS	(Special Featur	es) <u>EFI</u>	, TWC, CL		<u> </u>
	•				
Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Ign.System Part No.	Fuel System Part No.	Label Ident. Part No
			BMCU	<u>EFI</u>	2 121 558
			0 261 200 059	BMCU	2 121 556
	!	M5	E10	0 261 200 059	
3.4 M5	5351 635CSi				
ı		A4	1 235 522 365	AFM 0 280 203 027	
3.4 M5 .4 A4/EH	635CSi	A4	1 235 522 365		

Comments: See page 17-28 for abbreviations and evaporative emission family identification -

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17 - 30 E.O. No. A-8-31

TEST VEHICLE REDUIREMENTS

ENGINEERING EMISSION CONTROL

7-212-240712 1-04201-			

Engine Family	Model Type	Equiv. Test Weight (1bs.)	Actual Road Load Power (hp)
GBM3.4V5F570	5351	3 500	9.6
	5351A	3 625	9.6
	635 CS1	3 625	10.0
	635 CSIA	3 750	10.0
	7351	3 875	11.4
	7351A	3 875	11.4

(automatic transmission: Economy Position)

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