

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-3-97  
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

DAIMLER-BENZ AG

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following Daimler-Benz AG 1989 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
KDB 5.96 FAF X	5.96 (364)	Engine Modification Smoke Puff Limiter (Diesel Injection - Direct) (Turbocharger) (Intercooler)

Engine models and codes are listed on attachments.

The following are the certification emission values for this engine family:

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
KDB 5.96 FAF X	0.5	2.7	5.6	0.4

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

Engines 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 attachments.

Executed at El Monte, California this 16<sup>th</sup> day of December, 1988.



K. D. Drachand, Chief  
Mobile Source Division

Manufacturer Daimler-Benz Engine Family KDB5.96 FAF X  
 Evaporative Family N/A Engine Type L6  
 Liters (CID) 5.96 (364)

**ABBREVIATIONS**

Ignition System

CA-Centrifugal Advance  
 ECU-Electronic Control Unit  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 YA-Vacuum Advance  
 YR-Vacuum Retard

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Valve  
 DBC-Dual Bed Catalyst  
 EGR-Exhaust Gas Recirculation  
 EIC-Electronic Injection Control  
 EM-Engine Modification  
 OC-Oxidation Catalyst  
 OS-Oxygen Sensor  
 HOS-Heated Oxygen Sensor  
 SPL-Smoke Puff Limiter or Throttle Delay  
 TOC-Trap Oxidizer, Continual  
 TOP-Trap Oxidizer, Periodical  
 TWC-Three-Way Catalyst  
 WUOC-Warm-Up Oxidation Catalyst  
 WUTWC-Warm-Up Three-Way Catalyt

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection or Throttle Body Injection  
 DID-Diesel Injection-Direct  
 DIP-Diesel Injection-Prechamber  
 EFI-Electronic Fuel Injection  
 IC-Intercooler or Aftercooler  
 MFI-Mechanical Fuel Injection  
 OBD-On-Board Diagnostics  
 TC-Turbocharger

Fuel System

EFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor

VEHICLE MODELS:

CARRYOVER FROM  
MODEL YEAR 1988

Engine: Front \_\_\_\_\_ Mid. \_\_\_\_\_ Rear \_\_\_\_\_  
 Drive: FWD \_\_\_\_\_ RWD \_\_\_\_\_ 4WD Full Time \_\_\_\_\_ 4WD Part Time \_\_\_\_\_

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES

Manufacturer Daimler-Benz Engine Family KDB5.96 FAF X  
 Liter (CID) 5.96 (364) Eng. Type L6  
 Emission Control Sys. and (Special Features) EM, SPL (DID, TC, IC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)	Maximum Rated Torque at RPM (lbs.-ft.)	Fuel Rate mm <sup>3</sup> /stroke (lbs/Hr)
QM 366 LA (Code I)	Bosch PES 6 MW 100/ 720 RS 1120	DLLA 133 S 1103	190/2600	79 ... 83 66.7 ... 70.1	450/1400	84 .... 88 38.2 ... 40.0
QM 366 LA (Code II)	Bosch PES 6 MW 100/ 720 RS 1144	DLLA 133 S 1103	170/2600	72 ... 76 60.8 ... 64.2	413/1600	75.5 ... 79.5 39.2 ... 41.3

Date of Issue \_\_\_\_\_ Revisions: \_\_\_\_\_

CARRYOVER FROM  
MODEL YEAR 1988