

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-50

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

DETROIT DIESEL CORPORATION

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 Detroit Diesel Corporation 1996 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas (CNG only)

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
TDD8.5FZKORB (S50-CNG)	8.5	518	Charge Air Cooler Turbocharger Powertrain Control Module

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake-horsepower-hour:

<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.2	15.5	4.0	0.05

The following are the certification exhaust emission values for this engine family in grams per brake-horsepower-hour:

<u>Engine Family</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
TDD8.5FZKORB (S50-CNG)	0.7	2.5	2.7	0.05

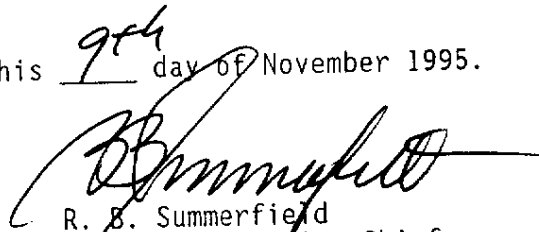
BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed engine family is certified for use in urban buses.

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 9<sup>th</sup> day of November 1995.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer: Detroit Diesel Corporation Engine Family: TDD8.5FZK0RB  
 Displacement: 8.5 Liters 518 Cubic Inches  
 Maximum Rated Power: 275 HP @ 2100 RPM Engine Configuration: I-4  
 Ignition: Compression \_\_\_\_\_ Compression with Glow Plug \_\_\_\_\_ Spark X  
 Fuel Type(s): Dedicated X Flex-Fuel \_\_\_\_\_ Dual-Fuel \_\_\_\_\_ Diesel \_\_\_\_\_ M100 \_\_\_\_\_ M85 \_\_\_\_\_  
 CNG X LNG \_\_\_\_\_ LPG \_\_\_\_\_ Other (specify) \_\_\_\_\_  
 Diesel Cert Fuel: 13 CCR 2282 \_\_\_\_\_ 40 CFR 86.1313-90 \_\_\_\_\_ 40 CFR 86.1313-94 X  
 Primary Intended Service Class: LHD \_\_\_\_\_ MHD \_\_\_\_\_ HHD \_\_\_\_\_ Urban Bus X  
 Exhaust ECS (include. MFI, TC, CAC): ECM/PCM, CAC, (TC)

Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @Rated HP mm3/Stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX/ Catalytic Converter Part No.
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SERIES 50G BUS

1G	275@2100	NA (95.4)	23517613	23518269(1)(2)		
2G	260@2100	NA (91.0)	23517613	23518269(1)(2)		

NA: Data not applicable to gaseous fueled engine.