State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-67-2

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-45-9;

IT IS ORDERED AND RESOLVED: That the following Detroit Diesel Corporation 1998 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)

| Engine Family | Liters | (Cubic Inches) | Exhaust Emission Control Systems and Special Features |
|---|---|---|---|
| WDDXH08.5FJF (Series 50G bus) | 8.5 | (518) | Charge Air Cooler<br>Turbocharger<br>Engine Control Module<br>Oxygen Sensor |

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:

| Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides | Particulates |
|---|---|---|---|
| 1.2 | 15.5 | 2.5 | 0.05 |

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

| Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides | Particulates |
|---|---|---|---|
| 0.6 | 3.2 | 2.2 | 0.01 |

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 models are certified to the optional lower-emission NOx standards pursuant to the California Code of Regulations, Title 13, Section 1956.8(a)(1) and the incorporated "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles", adopted April 8, 1985, as last amended June 29, 1995.

BE IT FURTHER RESLOVED: That the listed engine models are 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 1st day of September 1998.

R. B. Summerfield, Chief
Mobile Source Operations Division

# LARGE ENGINE MODEL SUMMARY

10/29/97

Manufacturer: **Detroit Diesel Corporation**

Process Code: **New Submission**

EPA Engine Family: **WDDXH08.5FJF**

Manufacturer Family Name: **Series 50G**

| 1.Engine Code | 2.Engine Model | 3.BHP@RPM (SAE Gross) | 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) | 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) | 6.Torque @ RPM (SEA Gross) | 7.Fuel Rate: mm/stroke@peak torque | 8.Fuel Rate: (lbs/hr)@peak torque | 9.Emission Control Device Per SAE J1930 |
|---|---|---|---|---|---|---|---|---|
| * 919 | Series 50G | 275@2100 | | 94.0 | 890@1200 | | 66.5 | CAC, ECM, TC, QS |
| 920 | | 275@2100 | | 94.0 | 890@1200 | | 66.5 | |

* 49 state only

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