

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-67

Relating to Certification of New Heavy-Duty Engines and Vehicles

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 1998 model-year Detroit Diesel Corporation diesel-cycle 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)

<u>Engine Family</u>	<u>Engine Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
WDDXH08.5FJF (Series-50 bus)	8.5 (518)	Turbocharger Charge Air Cooler 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>
1.3	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>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
0.7	2.4	2.6	0.02

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 for used in urban bus.

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

1. Any engine which employs a defeat device shall not be covered by this Executive Order.
2. Within 90 days following the issuance of this Executive Order, the manufacturer must show cause, to the satisfaction of the Executive Officer or his designee, that the strategy for fuel injection timing, including timing during the fuel economy mode, is not a defeat device.

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 24<sup>th</sup> day of February 1998.



R. B. Summerfield, Chief  
Mobile Source Operations Division

# LARGE ENGINE MOD - SUMMAR

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

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	TC, PCM, CAC
920		275@2100		94.0	890@1200		66.5	

\* 49 state only

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