State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-64

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: Diesel

Engine Family		Displacement (Cubic_Inches)	Exhaust Emission Control Systems and Special Features
WDDXH12.7EGD (Series-60)	12.7	(775)	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:

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	Oxides	
1.3	15.5	4.0	0.10

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

Total	Carbon	Nitrogen	<u>Particulates</u>
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
0.2	1.5	3.9	0.10

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.).

DETROIT DIESEL CORPORATION

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 17^{+h} day of February 1998.

R. B. Summerfield, Chief Mobile Source Operations Division

RY
MMA
SUI
L L
MO
GINE
ENC
KGE
AF

Manufacturer: Detroit Diesel Corporation

Process Code: New Submission

H-240-64 TC, PCM, CAC (lbs/hr)@peak torque Device Per SAE J1930 9.Emission Control = | ų. 8.Fuel Rate: 100.3 107.0 107.0 107.0 100.3 100.3 100.3 100.3 100.3 107.0 107.0 107.0 107.0 107.0 107.0 00.3 109.0 109.0 116.1 116.1 116.1 116.1 Series 60, 12.7 L mm/stroke@peak 7.Fuel Rate: 251.4 251.4 251.4 251.4 251.4 268.2 268.2 268.2 268.2 268.2 268.2 268.2 268.2 268.2 291.0 291.0 291.0 torque 251.4 291.0 273.2 251.4 273.2 6.Torque @ RPM (SEA Gross) 450@1200 450@1200 450@1200 550@1200 550@1200 550@1200 550@1200 550@1200 550@1200 550@1200 550@1200 450@1200 450@1200 450@1200 550@1200 550@1200 650@1200 550@1200 550@1200 Manufacturer Family Name: 450@1200 450@1200 450@1200 450@1200 550@1200 550@1200 550@1200 550@1200 650@1200 650@1200 650@1200 650@1200 550@1200 (lbs/hr) @ peak HP (for diesels only) 5.Fuel Rate: 135.3 125.5 112.5 146.2 135.5 148.6 135.3 125.5 112.5 160.3 146.2 135.5 169.5 158.4 143.6 135.9 158.4 169.5 115.7 125.1 115.7 125.1 mm/stroke @ peak HP (for diesel only) 4.Fuel Rate: 187.9 187.9 226.0 193.3 209.4 194.0 248.2 226.0 209.7 193.3 229.6 194.0 226.8 205.6 227.0 226.8 209.7 179.1 209.4 179.1 242.7 242.7 3.BHP@RPM (SAE Gross) 400@1800 370/430-1800 360/430-1800 360/430-1800 130/470-2100 430/470-1800 430/500-2100 470/500-2100 430@1800 400@1800 370@1800 360@1800 430@2100 400@2100 370@2100 470@1800 430@1800 370@1800 360@1800 470@2100 430@2100 400@2100 370@2100 370/430-2100 370/430-1800 370/430-2100 500@2100 470@2100 430@2100 430@1800 470@2100 500@2100 EPA Engine Family: WDDXH12.7EGD 2.Engine Model Series 60 PREMIUM RATINGS 1.Engine Code 878 870 874 876 868 871 873 875 893 892 890 889 885 884 880 882 872 877 894 891 887 888 863 864 865 866 868 886 883 867 881

-

9/22/97

```**`**