State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-60

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 1997 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	Engine Displacement Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
VDD3.8C8DABA	3.8	(232)	Turbocharger Charge Air Cooler Powertrain Control Module Oxidation Catalytic Converter

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 Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
1.3	15.5	5.0	0.10

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

Total Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
0.1	0.4	3.7	0.09

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.).

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 19th day of February 1997.

R. B. Summerfield, Chief
Mobile Source Operations Division

E.O. No.
A-290-60

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer: Detroit Diesel Corporation Engine Family: VDD3.8C8DABA
Displacement: 3.8 Liters 232 Cubic Inches
Maximum Rated Power: 160 HP @ 3500 RPM Engine Configuration: I-6
Ignition: Compression _X_ Compression with Glow Plug ___ Spark ___
Fuel Type(s): Dedicated _X_ Flex-Fuel ___ Dual-Fuel ___ Diesel _X_ M100 ___ M85 ___
CNG ___ 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 _X__ MHD ___ HHD ___ Urban Bus ___
Exhaust ECS (include. MFI, TC, CAC): ECM/PCM, CAC, (TC),OC

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.
	SERIES VM 638					
1V	160@3500	64.0 (74.6)	15062018F 15062019F C5020046A	A281010892		25143901

Date Issued: 01-03-97 Rev.: