

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-93  
Relating to Certification of New Heavy-Duty Engines and Vehicles

DETROIT DIESEL CORPORATION

Pursuant to the authority vested in the Air Resources Board at Sections 43100, 43101, and 43102 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

Pursuant to the December 15, 1998 Settlement Agreement between the Air Resources Board and Detroit Diesel Corporation and any modifications to the Settlement Agreement;

IT IS ORDERED AND RESOLVED: That the following engines and emission control systems produced by the manufacturer are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Model Year: 2001

Fuel Type: Diesel

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
1DDXH12.7EGL	12.7	780	Turbocharger Charge Air Cooler Engine Control Module Direct Diesel Injection

Engine models and codes are listed on the attachments.

BE IT ORDERED AND RESOLVED: That the following are the certification exhaust emission standards (Title 13, California Code of Regulations, Section 1956.8) and certification emission levels for this engine family in grams per brake horsepower-hour (g/bhp-hr) under the Federal Test Procedure ("FTP"):

	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
Standards	1.3	15.5	4.0	0.10
Certification	0.3	1.2	3.9	0.10

BE IT FURTHER RESOLVED: That pursuant to the Settlement Agreement and any modifications thereof, the aforementioned engine family is also subject to emission standards under the EURO III tests in the Settlement Agreement, including a "Not-to-Exceed" nitrogen oxides emission standard of 7.0 g/bhp-hr. The following are the emission standards and certification levels, in g/bhp-hr, under the EURO III tests:

	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
Standards	1.3	15.5	6.0	0.10
Certification	0.04	0.3	5.8	0.03

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, Sections 2035 *et seq.*).

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

1. The Settlement Agreement is in effect.
2. The manufacturer is in compliance with all applicable certification requirements of the Settlement Agreement.

Engines certified under this Executive Order must conform to all applicable California emission regulations and to all applicable terms and conditions of the Settlement Agreement.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 16<sup>th</sup> day of January 2001.



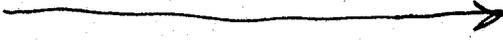
R. B. Summerfield, Chief  
Mobile Source Operations Division

# Engine Model Summary Form

**Manufacturer:** Detroit Diesel Corp.  
**Engine category:** On-highway HDDE  
**EPA Engine Family:** 1DDXH12.7EGL.  
**Mfr Family Name:** SERIES 60, 12.7L  
**Process Code:** New Sub - continued

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
1134	cruise power	330/350-2100			1250@1200			
1137	(low & standard)	330/350-2100			1350@1200			
1180		370/430-1800			1450@1200			
1181		370/430-2100			1450@1200			
1182		360/400-1800			1450@1200			
1183		360/430-1800			1450@1200			
1184		360/400-1800			1550@1200			
1185		360/430-1800			1550@1200			
1186		370/430-1800			1550@1200			
1187		370/430-2100			1550@1200			
1188		430/470-2100			1550@1200			
1189		430/470-1800			1550@1200			
1192		360/400-2100			1450@1200			
1193		360/430-2100			1450@1200			
1194		360/400-2100			1550@1200			
1195		360/430-2100			1550@1200			
1146		330/350-1800			1350@1200			

DD, ECM,TC,CAC



# Engine Model Summary Form

**Manufacturer:** Detroit Diesel Corp.  
**Engine category:** On-highway HDDE  
**EPA Engine Family:** 1DDXH12.7EGL.  
**Mr. Family Name:** SERIES 60, 12.7 L  
**Process Code:**

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 J1939
1157	(premium)	500@2100	250.6	175.0	1650@1200	302.2	120.6	DP, ECM, TC, CAC
1158		470@2100	232.2	162.2	1650@1200	302.2	120.6	
1159		430@2100	211.8	147.9	1650@1200	302.2	120.6	
1161		500@2100	250.6	175.0	1550@1200	283.9	113.3	
1160		470@2100	232.2	162.2	1550@1200	283.9	113.3	
1152		500@2100	250.6	175.0	1450@1200	261.6	104.4	
1163		470/500-2100			1550@1200			
1162		430/500-2100			1650@1200			