

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-22

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-45-3;

IT IS ORDERED AND RESOLVED: That the following Detroit Diesel Corporation 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
PDD11.1FZAX	11.1 (677)	Turbocharger Charge Air Cooler Powertrain Control Module

Engine models and codes are listed on attachments.

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

<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.25

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

<u>Engine Family</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PDD11.1FZAX	0.1	3.0	4.9	0.21

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 9th day of December, 1992.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

Executive Order No.: A-290-22

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer: Detroit Diesel Corporation

Engine Family: PDD11.1FZAX

Liter (CID): 11.1 (677)

Fuel Type: Diesel No. 2

Engine Type: I-6

Emission Control System and (Special Features): ECM/PCM, CAC, (TC)

ENGINE MODEL (ENG. CODE)	RATED HP AT RPM	FUEL RATE @ RATED HP mm ³ /STROKE (LBS/HR)	FUEL PUMP & INJECTOR P/N	ECM/PCM P/N	PART. TRAP/ CATALYST P/N
<u>11.1L</u>					
1C	350@1800	183.6 (109.9)	5234935	7570050	
1D	320@1800	166.7 (99.8)			
1E	325@1800	169.3 (101.4)			
2C	340@1650	194.6 (106.8)	5234935	7570050	
3C	320@2100	148.9 (104.0)	5234935	7570050	
4C	320@2100	148.9 (104.0)	5234935	7570050	
5C	320@1950	156.5 (101.5)	5234935	7570050	
6C	320@1800	166.7 (99.8)	5234935	7570050	
6D	285@1800	149.0 (89.2)			
7C	320@1800	166.7 (99.8)	5234935	7570050	
8C	300@1800	156.4 (93.6)	5234935	7570050	

Engine Family Continued on Page 1B

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REV. NO.:

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1992 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer: Detroit Diesel Corporation

Engine Family: PDD11.1FZAX

Liter (CID): 11.1 (677)

Fuel Type: Diesel No. 2

Engine Type: I-6

Emission Control System and (Special Features): ECM/PCM, CAC, (TC)

ENGINE MODEL (ENG. CODE)	RATED HP AT RPM	FUEL RATE @ RATED HP mm ³ /STROKE (LBS/HR)	FUEL PUMP & INJECTOR P/N	ECM/PCM P/N	PART. TRAP/ CATALYST P/N
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ENGINE FAMILY NDD11.1FZA1 - CONTINUED

<u>11.1L</u> 9C	285@2100	133.9 (93.5)	5234935	7570050	
10C	285@1800	149.0 (89.2)	5234935	7570050	
11C	275@1800	143.3 (85.8)	5234935	7570050	
12C	320@1700	177.3 (100.2)	5234935	7570050	
13C	325@2100	151.0 (105.4)	5234935	7570050	
14C	325@1800	169.3 (101.4)	5234935	7570050	
15C	325@1800	170.6 (102.1)	5234935	7570050	

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