

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290-23

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>
PDD12.7FZA7	12.7 (775)	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:

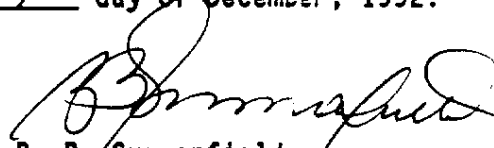
<u>Engine Family</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PDD12.7FZA7	0.1	2.3	4.8	0.23

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

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

Manufacturer: Detroit Diesel Corporation Engine Family: PDD12.7FZA7
 Liter (CID): 12.7 (775) Fuel Type: Diesel No. 2 Engine Config.: 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>12.7L</u>					
1A	450@2100	212.0 (148.1)	5234970	7570050	
2A	450@1800	236.8 (141.8)	5234970	7570050	
3A	425@2100	197.8 (138.1)	5234970	7570050	
4A	400@2100	185.0 (129.2)	5234940	7570050	
5A	425@1800	221.5 (132.6)	5234940	7570050	
5B	365@1800	189.6 (113.5)			
5C	355@1800	184.4 (110.4)			
6A	400@2100	185.0 (129.2)	5234940	7570050	
7A	400@1800	207.8 (124.4)	5234940	7570050	
7B	365@1800	189.6 (113.5)			
7C	355@1800	184.4 (110.4)			

(1) Diesel Technology Corporation

ISSUED: 09-15-92

REV. NO.:

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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>12.7L</u>					
8A	365@2100	168.8 (117.9)	5234940	7570050	
9A	365@1800	189.6 (113.5)	5234940	7570050	
10A	355@2100	164.3 (114.7)	5234940	7570050	
11A	355@1800	184.4 (110.4)	5234940	7570050	
12A	400@1950	195.6 (126.8)	5234940	7570050	
13A	375@1800	194.8 (116.6)	5234940	7570050	
13B	350@1800	181.8 (108.8)			

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<u>12.7L</u>					
1A	450@2100	212.0 (148.1)	5234970 5235695(1)	7570050	
2A	450@1800	236.8 (141.8)	5234970 5235695(1)	7570050	
3A	425@2100	197.8 (138.1)	5234970 5235695(1)	7570050	
4A	400@2100	185.0 (129.2)	5234940 5235600(1)	7570050	
5A	425@1800	221.5 (132.6)	5234940 5235600(1)	7570050	
5B	365@1800	189.6 (113.5)			
5C	355@1800	184.4 (110.4)			
6A	400@2100	185.0 (129.2)	5234940 5235600(1)	7570050	
7A	400@1800	207.8 (124.4)	5234940 5235600(1)	7570050	
7B	365@1800	189.6 (113.5)			
7C	355@1800	184.4 (110.4)			

(1) Effective with implementation of Running Change No. 30.

Executive Order No.: A-290-23

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<u>12.7L</u>					
8A	365@2100	168.8 (117.9)	5234940 5235600(1)	7570050	
9A	365@1800	189.6 (113.5)	5234940 5235600(1)	7570050	
10A	355@2100	164.3 (114.7)	5234940 5235600(1)	7570050	
11A	355@1800	184.4 (110.4)	5234940 5235600(1)	7570050	
12A	400@1950	195.6 (126.8)	5234940 5235600(1)	7570050	
13A	375@1800	194.8 (116.6)	5234940 5235600(1)	7570050	
13B	350@1800	181.8 (108.8)			
14A	430@2100	200.8 (140.2)	5234970 5235695(1)	7570050	
15A	430@1800	224.9 (134.6)	5234940 5235600(1)	7570050	
15B	365@1800	189.6 (113.5)			
15C	355@1800	184.4 (110.4)			

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ISSUED: 09-15-92

REV. NO.: 001 018