

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-290
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 1988 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
JDD0426FWF7	7.0	(426)	Smoke Puff Limiter (Turbocharger) (Intercooler) (Diesel Injection - Direct)
JDD0552FZG8	9.0	(552)	Electronic Injection Control (Turbocharger) (Intercooler) (Diesel Injection - Direct)
JDD0736FZH5	12.0	(736)	Electronic Injection Control (Turbocharger) (Intercooler) (Diesel Injection - Direct)
JDD12.7FZA2	12.7/11.1 (775/677)		Electronic Injection Control (Turbocharger) (Intercooler) (Diesel Injection - Direct)

Engine models and codes are listed on attachments.

The following are the emission standards for these engine families:

<u>Hydrocarbons</u> <u>gm/bhp-hr</u>	<u>Carbon</u> <u>Monoxide</u> <u>gm/bhp-hr</u>	<u>Nitrogen Oxides</u> <u>gm/bhp-hr</u>	<u>Particulates</u> <u>gm/bhp-hr</u>
1.3	15.5	6.0	0.60

The following are the certification emission values for these engine families:

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
JDD0426FWF7	0.7	4.2	5.5	0.59
JDD0552FZG8	0.8	1.3	5.8	0.41
JDD0736FZH5	0.5	2.6	5.9	0.54
JDD12.7FZA2	0.1	3.1	4.9	0.53

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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 attachment.

Executed at El Monte, California this 25th day of January, 1988.



K. D. Drachand, Chief
Mobile Source Division

17-JDD0552FZG8-1A

(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer: Detroit Diesel Corporation

Executive Order No.: A-290

Engine Family: JDD0552FZG8

Liter (CID): 9 (552)

Emission Control System and (Special Features): EIC, (IC), (TC), (DID)

ENGINE MODEL	FUEL INJECTION PUMP MFR PART NO.	ENGINE CODE INJECTOR MFR PART NO.	MAXIMUM RATED HP AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)	MAXIMUM RATED TORQUE AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)
6V-92TA DDEC	NA	1C General Motors 5234915	277@2100	76.0 (106.1)	880@1200	87.6 (69.9)
6V-92TA DDEC	NA	2C General Motors 5234915	253@2100	70.6 (98.6)	775@1200	77.4 (61.8)
6V-92TA DDEC	NA	3C General Motors 5234915	300@2100	84.0 (117.3)	975@1200	99.5 (79.4)
6V-92TA DDEC	NA	4C General Motors 5234915	300@2100	83.8 (117.0)	820@1200	83.2 (66.4)

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(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer: Detroit Diesel Corporation

Executive Order No.: A-290

Engine Family: JDD12.7FZA2

Exhaust Emission Control System: EIC, (DID),
(TC, (IC)

Liter (CID): 12.7L/11.1 (775/677)

ENG MODEL	FUEL INJECTION PUMP MFR PART NO.	INJECTOR MFR PART NO.	MAXIMUM RATED HP AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)	MAXIMUM RATED TORQUE AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)
12.7L	NA	1B GMC 5234795	400 @ 2100	189.6 (132.4)	1400 @ 1200	255.9 (102.1)
		2B GMC 5234785	400 @ 1800	211.2 (126.4)	1400 @ 1200	255.9 (102.1)
		3B GMC 5234785	350 @ 2100	166.0 (115.9)	1400 @ 1200	258.1 (103.0)
		4B GMC 5234785	350 @ 1800	184.8 (110.6)	1400 @ 1200	258.1 (103.0)

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer: Detroit Diesel Corporation

Executive Order No.: A-290

Engine Family: JDD12.7FZA2 Exhaust Emission Control System: EIC, (DID)
(TC), (IC)

Liter (CID): 12.7/11.1 (775/677)

ENG MODEL	FUEL INJECTION PUMP MFR PART NO.	INJECTOR MFR PART NO.	MAXIMUM RATED HP AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)	MAXIMUM RATED TORQUE AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)
11.1L	NA	1D GMC 5234795	350 @ 1800	183.6 (109.9)	1250 @ 1200	234.3 (93.5)
		2D GMC 523485	320 @ 2100	148.9 (104.0)	1200 @ 1200	221.1 (88.2)
		3D GMC 523485	320 @ 1800	166.7 (99.8)	1150 @ 1200	212.3 (84.7)
		4D GMC 523485	285 @ 2100	133.9 (93.5)	1100 @ 1200	201.3 (80.3)
		5D GMC 5234870	285 @ 1800	149.0 (89.2)	1100 @ 1200	201.3 (80.3)
		6D GMC 5234870	250 @ 2100	119.3 (83.3)	970 @ 1200	179.2 (71.5)
		7D GMC 5234870	250 @ 1800	132.5 (79.3)	1100 @ 1200	201.3 (80.3)
		8D GMC 5234870	320 @ 1800	166.7 (104.0)	1200 @ 1200	211.1 (88.2)

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Detroit Diesel Corporation

Executive Order No.: A-290

Engine Family: JDD0736FZH5

Evaporative Family: EIC, (IC), (TC), (DID)

Liter (CID): 12.0 (736)

ENG MODEL	FUEL INJECTION PUMP MFR PART NO.	INJECTOR MFR PART NO.	MAXIMUM RATED HP AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)	MAXIMUM RATED TORQUE AT RPM	FUEL RATE mm ³ /STROKE (LBS/HR)
8V-92TA DDEC II	NA	General Motors 1B 5234775	450@2100	93.0 (173.2)	1425@1200	109.4 (116.4)
8V-92TA DDEC II	NA	General Motors 2B 5234915	400@1800	89.7 (143.2)	1315@1200	97.5 (103.7)
8V-92TA DDEC II	NA	General Motors 3B 5234915	400@2100	81.6 (152.0)	1150@1200	85.8 (91.3)

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(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer: Detroit Deisel Corporation

Executive Order No.: A-290

Engine Family: JDD0426FWF7

Liter (CID): 7.0 (426)

Exhaust Emission Control System: Throttle Delay, (IC),(TC),(DID)

ENG MODEL	FUEL INJECTION PUMP MFR PART NO.	INJECTOR MFR PART NO.	MAXIMUM RATED HP AT RPM	FUEL RATE mm3/STROKE (LBS/HR)	MAXIMUM RATED TORQUE AT RPM	FUEL RATE mm3/STROKE (LBS/HR)
6L-71TA-JWAC	NA	7G70 5229900	250@2100	74.6 (104.2)	730@1200	86.0 (68.6)
		7G75 5229905	270@2100	80.0 (111.7)	788@1200	91.6 (73.1)
		7G75 5229905	285@2100	81.0 (113.1)	850@1200	91.4 (72.9)
		7G75 5229905	264@1800	84.0 (100.6)	850@1200	91.4 (72.9)
		7G70 5229900	265@2100	74.9 (104.7)	792@1200	85.2 (68.0)
		7G70 5229900	245@1800	78.1 (93.5)	792@1200	85.2 (68.0)
		7G75CP 5229905	230@1950 Min.	69.0 (89.5)	850@1200	91.4 (72.9)

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