State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-449
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

GENERAL MOTORS 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 Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED. That the following General Motors 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:

Engine Family	Displacement Liters (Cubic Inches)	Exhaust Emission Control Systems (Special Features)
JGM12.7FZA7	12.7/11.1 (775/677)	Electronic Injection Control (Diesel Injection - Direct) (Turbocharger) (Intercooler)

Engine models and codes are listed on attachments.

The following are emission standards for this engine family:

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

The following are the certification emission values for this engine family:

Hydrocarbons gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr	Particulates gm/bhp-hr
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.

Executed at El Monte, California this 4th day of December, 1987.

K. D. Drachand, Chief
Mobile Source Division

17-JGM12.7FZA7-9A

(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer: General Motors Corporation Executive Order No.: A-6-449

Engine Family: JGM12.7FZA7 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 mm3/STROKE (LBS/HR)	MAXIMUM RATED TORQUE AT RPM	FUEL RATE mm3/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)

ISSUED: 003 REV. NO.:

0313T

17-JGM12.7FZA7-11A

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(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer: General Motors Corporation Executive Order No.: A-6-449

Engine Family: JGM12.7FZA7 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 mm3/STROKE (LBS/HR)	MAXIMUM RATED TORQUE AT RPM	FUEL RATE mm3/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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