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State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-490 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 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 General Motors Corporation 1990 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		splacement (Cubic Inches)	Exhaust Emission Control Systems
LGM06.2DAB3	6.2	(379)	Engine Modification Indirect Diesel Injection
LGM08.2EAB7	8.2	(500)	Engine Modification Diesel Injection - Direct Turbocharger
LGM08.2DAB4	8.2	(500)	Engine Modification Diesel Injection - Direct

Engine models and codes are listed on attachments.

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

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 these engine families:

Engine Family	Hydrocarbons _gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr	Particulates gm/bhp-hr
LGM06.2DAB3	0.4	1.7	3.6	0.45
LGM08,2EAB7	0.5	2.2	5.6	0.45
LGMO8.2DAB4	0.9	2.9	5.3	0.52

GENERAL MOTORS CORPORATION

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BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the provisions of the Board's emission control system warranty regulations (California Health and Safety Code, Section 43205.5).

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 $\underline{\mu}$ day of June, 1989.

K.D. Drachand, Chief Mobile Source Division

17.00.00.00-Index 1A (For CARB Use Only) _(1990)

SECTION 17.00.00.00

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ISSUED: 04-27-89

REV. NO.:

17-LGM06.2DAB3-1A

(For CARB Use Only)

(1990)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

LHOD

HEAVY-DUTY DIESEL ENGINES

Manufacturer: General Motors Corporation Executive Order No.: A-6-490 Engine Family: LGM06.2DAB3 Exhaust Emission Control System: EM (DIP) Liter (CI): 6.2L (379)

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)
6.2L	NA	1,1A,1B General Motors 0430211054 14045223	165 @ 3600	50.5 (82.0) ,	275 @ 21	60 54.0 (47.8)
6.2L	NA	2,2A,2B General Motors 0430211054 14045223	155 @ 3600	45.5 (74.0)	255 @ 21	60 49.0 (43.5)
6.2L	NA	3,3A,3B General Motors 0430211054 14045223	150 @ 3600	47.0 (76.1)	275 @ 21	60 54.0 (47.8)

ISSUED: 04-27-89

REV. NO.: 001, 002

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17-LGM08.2EAB7-3A

(For CARB Use Only)

.(1990)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MHOD

Executive Order No.: A-6-490

HEAVY-DUTY DIESEL ENGINES

Manufacturer: General Motors Corporation Exhaust Emission Control System: EM (TC) (DID) Engine Family: LGM08.2EAB7 Liter (CI): 8.2 (500)

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 FUEL RATE TORQUE mm3/STROKE AT RPM (LBS/HR)
V8.8.2T	NA	4775 General Motors 5226960	225 @ 2800	77.1 (95.7)	495 @ 1700 80.8 (60.9)
V8.8.2T	NA	4C59 General Motors 5226880	180 @ 2800	58.9 (73.1)	406 @ 1500 62.6 (41.6)
8.8.2T	NA	4T70 General Motors 5226965	210 @ 2800	71.9 (89.3)	468 @ 1700 74.5 (56.2)

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17-LGM08.2DAB4-5A

(For CARB Use Only)

(1990),

MHOD

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer: General Motors Corporation

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Executive Order No.: A-6-490

Engine Family: LGM08.2DAB4 Exhaust Emission Control System: EM (DID)

Liter (CI): 8.2 (500)

ENG MODEL	FUEL INJECTION PUMP MFR PART NO.	INJECTOR MFR PART NO.	MAXIMUM RATED HP AT RPM	FUEL RATE mm3/STROKE (LBS/HR)	TORQUE mm3	EL RATE B/STROKE _BS/HR)
V8-8.2	NA	4C59 General Motors 5226880	175 @ 2800	57.8 (71.8)	390 @ 1200	62.7 (33.4)
V8-8.2	NA	4C59 General Motors 5226880	170 @ 2600	59.0 (68.0)	390 @ 1200	62.7 (33.4)
`'8-8.2	NA	4C45 General Motors 5226055 5226685	150 @ 2800	47.1 (58.5)	316 @ 1600	47.4 (36.6)
V8-8.2	NA	4C45 General Motors 5226685 5226055	145 @ 2600	47.4 (54.6)	316 @ 1600	47.4 (33.6)

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