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State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-1003

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-45-9;

IT IS ORDERED AND RESOLVED: That the following 2001 model-year General Motors Corporation Otto-cycle engines are certified for use in heavy-duty vehicles with a manufacturer's gross vehicle weight rating (GVWR) greater than 14,000 pounds:

Fuel Type: Gasoline

<u>Engine Family</u>	<u>Engine Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
1GMXH08.1512	8.1 (496)	Three Way Catalytic Converter Sequential Multiport Fuel Injection Exhaust Gas Recirculation Dual Heated Oxygen Sensors

Engine models and codes are listed on attachments.

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

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
1.9	37.1	4.0

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

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
0.8	7.6	1.7

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.).

BE IT FURTHER RESOLVED: That the listed engine models comply with the "California Motor Vehicle Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

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 3<sup>RD</sup> day of November 2000.



R. B. Summerfield, Chief  
Mobile Source Operations Division

# Engine Model Summary Form

Manufacturer: General Motors Corporation

Engine category: On-highway HDGE

EPA Engine Family: 1GMXH08.1512

Mfr Family Name:

Process Code: New Submission

9. Emission Control Device Per SAE J1930  
 8. Fuel Rate: (lbs/hr)@peak torque Device Per SAE J1930  
 7. Fuel Rate: mm<sup>3</sup>/stroke@peak torque  
 6. Torque @ RPM (SEA Gross)  
 5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)  
 4. Fuel Rate: mm<sup>3</sup>/stroke @ peak HP (for diesels only)  
 3. BHP@RPM (SAE Gross)  
 2. Engine Model

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm <sup>3</sup> /stroke @ peak HP (for diesels only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm <sup>3</sup> /stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque Device Per SAE J1930	9. Emission Control Device Per SAE J1930
10	L13	210@3600*	NA	NA	325@1600*	NA	NA	TWC, SFI, EGR, 2HO2S, -GLPGM-
20	L13	270@3600*	NA	NA	400@2000*	NA	NA	-GLPGM-
					*SAE NET			
					*SAE NET			

EO# = A-6-1003  
(Attachment)

# Part Number Supplementary Form

Manufacturer: General Motors Corporation

Engine category: On-highway HDGE

EPA Engine Family: 1GMXH08.1512

Mfr Family Name:

Process Code: New Submission

Engine Code	Engine Model	Injection Pump	Injector	Turbo Charge	Electronic Control Module	After Treatment Device (Specify)	Smoke Puff Limiter	Description	Sensor Assemblies Part Number
10	L18	NA	Fuel Rail 17200041	NA	12208511 09357657 09357658 09357659	Catalyst 12570477	NA	IAT ECT HO2S Knock Cr/Shft Posn MAP MAF IAT ECT	part of MAF 12554944 12565414 10456500 12556427 09359409 25168491 part of MAF 12554944
20	L18	NA	Fuel Rail 17200041	NA	12208511 09357660	Catalyst 12570477	NA	HO2S Knock Cr/Shft Posn MAP MAF	12565414 10456500 12556427 09359409 25168491

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(Attachment)

Part Number Summary Form

Manufacturer: General Motors Corporation

Engine category: On-highway HDGE

EPA Engine Family: 1GMXH08.1512

Mfr Family Name:

Process Code: New Submission

Engine Code	Engine Model	Ign module	Intake Manifold	EGR	Throttle body	Throt Actr Mod
10	L18	12558948 8 used	12558144	17200259 12567727	25317950	25311785 12569707
20	L18	12558948 8 used	12558144	17200259 12567727	25317950	25311785 12569707

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(Attachment)