

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-999

Relating to Certification of New Medium-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 medium-duty vehicles with a manufacturer's gross vehicle weight rating (GVWR) between 8,501 to 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>
1GMXH06.0583	6.0 (364)	Dual Three Way Catalytic Converters Sequential Multiport Fuel Injection Exhaust Gas Recirculation Dual Heated Oxygen Sensors (two)

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>Non-Methane Hydrocarbons + Nitrogen Oxides</u>	<u>Carbon Monoxide</u>
3.9	14.4

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

<u>Non-Methane Hydrocarbons + Nitrogen Oxides</u>	<u>Carbon Monoxide</u>
1.7	3.1

BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional standards and test procedures applicable to incomplete and diesel medium-duty vehicles of 8,501 to 14,000 pounds GVWR pursuant to Title 13, California Code of Regulations, Section 1956.8(g).

BE IT FURTHER RESOLVED: That the listed engine models shall be subject to the in-use compliance provisions applicable to 1995 and subsequent model-year medium-duty vehicle engines set forth in Title 13, California Code of Regulations, Section 2139(c).

BE IT FURTHER RESOLVED: That the listed engine models complies with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1 for the aforementioned model year.

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 and vehicles 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 23rd day of February 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

(EO.#: A-6-999)

Manufacturer: General Motors Corporation
Engine category: On-highway HDGE
EPA Engine Family: 1GMXH06.0583
Mfr Family Name:
Process Code: New Submission

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
Federal Codes								
1	LQ4	325@5000*	NA	NA	370@4000*	NA	NA	Z,TWC, SFI, EGR,HO2S(z) GL,PCM
2	LQ4	325@5000*	NA	NA	370@4000*	NA	NA	Z,TWC, SFI, EGR,HO2S(z) GL,PCM
21	LQ4	325@5000*	NA	NA	370@4000*	NA	NA	Z,TWC, SFI, EGR,HO2S(z) GL,PCM
Calif Codes								
51	LQ4	325@5000*	NA	* NA	370@4000*	NA	NA	Z,TWC, SFI, EGR,HO2S(z) GL,PCM
52	LQ4	325@5000*	NA	NA	370@4000*	NA	NA	Z,TWC, SFI, EGR,HO2S(z) GL,PCM
71	LQ4	325@5000*	NA	NA	370@4000*	NA	NA	Z,TWC, SFI, EGR,HO2S(z) GL,PCM
* SAE NET								