

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-382  
Relating to Certification of New Motor Vehicle Heavy-Duty 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 1987 model-year heavy-duty gasoline engines have shown compliance with the steady-state test procedure and standards and are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating greater than 8500 pounds:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
HGM05.7AGB4	350 (5.7)	Air Injection-Pump Exhaust Gas Recirculation
HGM07.4AGB4	366,454 (6.0, 7.4)	

Engine models and codes are listed on attachments.

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>Hydrocarbons + Nitrogen Oxides gm/bhp-hr</u>
HGM05.7AGB4	0.4	21	3.5
HGM07.4AGB4	0.2	23	3.6

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.

GENERAL MOTORS CORPORATION

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The Bureau of Automotive Repair will be notified by copy of this order.

Executed at El Monte, California this 4<sup>th</sup> day of September, 1986.



K. D. Drachand, Chief  
Mobile Source Division

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

GASOLINE HEAVY DUTY ENGINES

Manufacturer: General Motors Corporation

Executive Order No.: A-6-382

Engine Families: HGMO5.7AGA4  
HGMO7.4AGB4

Engine CID (Liters) - Type: 350 (5.7), 454 (7.4) and 366 (6.0)

ABBREVIATIONS:

Ignition System

CA-Centrifugal Advance  
EEC-Electronic Engine Control  
EI-Electronic Ignition  
ESAC-Electronic Spark Advance Control  
VA-Vacuum Advance  
VR-Vacuum Retard  
ECU-Electronic Control Unit

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
nV-nVenturi Carburetor

GM Abbreviations

A/C-Air Conditioning  
FC-Forward Control  
HD-Heavy Duty  
CID-Cubic Inch Displacement  
TBI-Throttle Body Injection  
RWD-Rear Wheel Drive  
4x2-Two Wheel Drive  
4x4-Four Wheel Drive  
6x4-Four Wheel Drive

Exhaust Emission Cont System

AIP-Air Injection Pump  
AIV-Air Injection Valve  
CL-Closed Loop  
EGR-Exhaust Gas Recirculation  
EM-Engine Modification  
OC-Oxidation Catalyst System  
SPL-Smoke Puff Limiter or Throttle Delay  
TOC-Trap Oxidizer, Continual  
TOP-Trap Oxidizer, Periodical  
TR-Thermal Reactor  
TWC-Three-Way Catalyst System

Special Features

CCV-Combustion Chamber Valve  
CFI-Central Fuel Injection  
DID-Diesel Injection-Direct  
DIP-Diesel Injection-Prechamber  
EFI-Electronic Fuel Injection  
IC-Intercooler/Aftercooler  
MFI-Mechanical Fuel Injection  
TC-Turbocharger

Engine: Front (all Vehicles)

Drive: See Chassis Type (Page 2), all 4x2 vehicles are RWD.

ISSUED: 08-13-86

REV. NO.: 001

0607Q

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(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY GASOLINE ENGINES

Manufacturer: General Motors Corporation

Executive Order No.: A-6-382

Engine Family: HGMO7.4AGB4

Exhaust Emission Control System: AIP/EGR

Liter (CID): 7.4L (454), 6.0L (366)

ENG MODEL (ENG CODE)	MAXIMUM RATED HP AT RPM	RATED TORQUE AT RPM	IGNITION SYS (DISTRIBUTOR) MFR PART NO.	FUEL SYSTEM (CARBURETOR) MFR PART NO.	EGR VALVE MFR PART NO.	CATALYST MFR PART NO.
L86 (1) 366 CID	197 @ 4000	303 @ 2800	Delco Remy 1103377	Rochester 15501849, 2078345, 2078344 (Holley)	17085936	NA
LE8 (2) 454 CID	195 @ 4000	310 @ 2400	Delco Remy 1103376	Rochester 17085000	17084725	NA

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY GASOLINE ENGINES

Manufacturer: General Motors Corporation

Executive Order No.: A-6-382

Engine Family: HGM05.7AGB4

Exhaust Emission Control System: AIP/EGR

Liter (CID): 5.7 (350)

ENG MODEL (ENG CODE)	MAXIMUM RATED HP AT RPM	RATED TORQUE AT RPM	IGNITION SYS (DISTRIBUTOR) MFR PART NO.	FUEL SYSTEM (CARBURETOR) MFR PART NO.	EGR VALVE MFR PART NO.	CATALYST MFR PART NO.
LT9 (1)	155 @ 4000	240 @ 2800	Delco Remy 1103726	Rochester 17085001	17084724	NA
LF5 (2)	160 @ 3600	275 @ 2400	Delco Remy 1103601	Rochester 17085464	17084837	NA
LF5 (3)	160 @ 3800	270 @ 2000	Delco Remy 1103601	Rochester 17085465	17084837	NA