State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-648

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 1994 model-year General Motors Corporation Otto-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GYWR) of 8,500 to 14,000 pounds:

Fuel Type: Gasoline

<u>Engine Family</u>	Engine i Liters	Displacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features
+ RGM4.3C5GAAA	4.3	(262)	Oxidation Catalytic converter Heated Oxygen Sensor Exhaust Gas Recirculation Throttle Body Fuel Injection
RGM5.7C5GAAA	5.7	(350)	Oxidation Catalytic Converter Oxygen Sensor Exhaust Gas Recirculation Throttle Body Fuel Injection
RGM7.4C5GAEA	7.4	(454)	Three-Way Catalytic Converter Oxygen Sensor Exhaust Gas Recirculation Throttle Body Fuel Injection

Engine models and codes are listed on attachments.

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

Total	Carbon	Nitrogen	
<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
1.1	14.4	5.0	

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

Engine Family	Total	Carbon	Nitrogen	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
RGM4.3C5GAAA	0.5	6.1	4.3	
RGM5.7C5GAAA	0. 9	10.7	3.9	
RGM7.4C5GAEA	0.5	11.5	3.5	

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.).

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 207 day of May, 1993.

R. B. (Summerfield

Assistant Division Chief Mobile Source Division

(FOR CARB USE ONLY)

17.00.00.00-14 (1994)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY GASOLINE ENGINES

LESS THAN 14.000 GVWR

Manufacturer:General Motors CorporationExecutive Order No.:A-6-648Engine Family:RGM7.4C5GAEAExhaust Emission Control System:EGR/TWC/02S/TBILiter (CID):7.4 (454)Engine Config:V8

ENG MODEL (ENG CODE)	MAXIMUM RATED HP AT RPM	RATED TORQUE AT RPM	IGNITION SYS (PCM) MFR PART NO.	FUEL SYSTEM (TBI) MFR PART NO	EGR VALVE MFR PART NO.	CATALYST MFR PART NO.
L19 (1) 7.4L	230 @ 3600	385 @ 2200	16194675 16194685 16194705 16194725 16194735 16198045 16198075	Rochester 17094020 17094060 17094071	17094028	25143848 25130005 25131392 25130892 25130001 25128940

ED: 02-09-93

REV. NO.: 005, 006

HDG-SDS