

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-762-A
Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1997 model-year General Motors Corporation exhaust emission control systems are certified as described below for medium-duty vehicles:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: VGM4.3HPG3EK Displacement: 4.3 Liters (262 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Three Way Catalytic Converter
- Dual Heated Oxygen Sensors
- Heated Oxygen Sensors (two)
- Exhaust Gas Recirculation
- Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) LEV certification exhaust emission standards for this engine family in grams per mile are:

<u>Test Weight</u> <u>(lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
3751-5750	50,000	0.160	4.4	0.7	0.018	12.5
	120,000	0.230	6.4	1.0	0.027	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for NMOG reflect application of a 0.94 RAF for 1997 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

<u>Test Weight</u> <u>(lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
3751-5750	50,000	0.126	1.7	0.3	0.002	3.8
	120,000	0.172	2.2	0.4	0.003	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

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

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

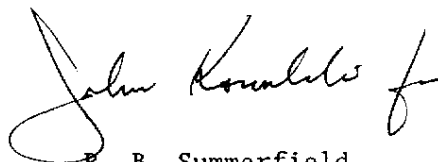
BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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

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 attachment.

Executed at El Monte, California this 12th day of August 1996.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORP. ENGINE FAMILY: VGM4.3HPG3EK EVAP FAMILY: VGM1111AYMFA
 ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S () 50S () AB965 ()
 EXH STD: CA TIER-1 () TLEV () LEV (X) ULEV () ZEV (); U.S. EPA TIER-1 ()
 EVAP STD: 50K () USEFUL LIFE WITH R/L (X); IN-USE EXH STD: FULL () ALTERNATIVE (X)
 VEH CLASS(ES): PC () LDT1 () LDT2 () MDV1 () MDV2 (X) MDV3 () MDV4 () MDV5 ()
 SINGLE CERT STANDARD FOR MULTI-CLASS ENGINE FAMILY: NA
 FUEL TYPE(S): DEDICATED () GASOLINE (X); EMISSION TEST FUEL(S): INDOLINE () PHASE 2 (X)
 SERVICE ACCUMULATION: STD AMA () MFR ADP (X); NMOG TEST PROCEDURE: NA () EQUIV (X)
 R/L TEST PROCEDURE: NA () PT SOURCE (X); HYBRID TYPE: NA APU CYCLE: NA
 ENGINE CONFIGURATION: I4 () V6 (X) V8 () DISPLACEMENT: 4.3 LITERS / 262 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 190 @ 4400 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD () RWD () 4WD-FT (X) 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: LEGR, TWC, 2HO2S-HO2S(2), SFI
 RLHP / DPA VALUES: SECTION 08.13.02.00

ENG CODE (LOC)	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	EQUIV. TEST WEIGHT	IGNITION (PCM/CALIB PART NO.)	EGR SYSTEM PART NO.	CATALYTIC CONVERTER PART NO.
(C) 2	L11005 L11006	A4	4500 5000	16213175-PCM 16204025PB-OPER 16237503-ENG 16204042, 16215610-TRANS	17096188, 17096309	25161908
2A				16213175-PCM 16243345PF-OPER 16243462-ENG 16243551, 16243552-TRANS		
2B				16243345PF-OPER 16243496-ENG		
2C				16243345PF-OPER 16243520-ENG		
2D				16256455PG-OPER 16256256-ENG		

CARLINE NAME	CARLINE CODE
CHEVROLET ASTRO CARGO VAN AWD	55047
CHEVROLET ASTRO PASSENGER VAN AWD	55062
GMC SAFARI CARGO VAN AWD	80037
GMC SAFARI PASSENGER VAN AWD	80052

ISSUED: ML-VR040

REVISED: ML-VR065, ML-VP178, ML-VP188, ML-VR103