

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-766  
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:

Fuel Type: Gasoline

Engine Family: VGM5.0JPG1EK Displacement: 5.0 Liters (305 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

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

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

The certification exhaust emission standards (in-use compliance standards in parentheses) for this engine family in grams per mile are:

<u>Test Weight</u> <u>(lbs.)</u>	<u>Miles</u>	<u>Non-Methane</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Carbon</u> <u>Monoxide (20°F)</u>
5751-8500	50,000	0.39 (0.49)	5.0 (6.2)	1.1 (1.4)	12.5 (12.5)
	120,000	0.56 (n/a)	7.3 (n/a)	1.53 (n/a)	n/a

The certification exhaust emission values for this engine family in grams per mile are:

<u>Test Weight</u> <u>(lbs.)</u>	<u>Miles</u>	<u>Non-Methane</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Carbon</u> <u>Monoxide (20°F)</u>
5751-8500	50,000	0.25	1.8	0.4	5.0
	120,000	0.35	2.2	0.48	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 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, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

BE IT FURTHER RESOLVED: That, based on a separate compliance plan submitted by the vehicle manufacturer, the listed vehicle models are permitted alternative in-use compliance as set forth 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 submitted alternative in-use compliance plan satisfies the requirement that a maximum of 50 percent of the manufacturer's projected sales of 1997 model-year California-certified medium-duty vehicles will be subject to alternative in-use compliance as stipulated in the above-referenced standards and test procedures.

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 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.

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.).

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 20<sup>th</sup> day of May 1996.

  
R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

## LIGHT DUTY TRUCK MODEL NUMBER DEFINITION

(Includes California Medium Duty Trucks)

E.O. #A-6-766

Example, Pattern A: CC10703+E62

Example, Pattern B: 1UM05

### Digit 1 = Marketing Division

#### Pattern A

C = Chevrolet  
T = GMC  
H = Oldsmobile  
G = Isuzu

#### Pattern B

1 = Chevrolet  
2 = Pontiac  
3 = Oldsmobile

Note: Digit 1 is only used for Pattern A models on engine family pages or California Supplemental Data Sheets when necessary to discriminate by division model.

### Digit 2 = Chassis Type (all)

U = Conventional 4x2 Front Wheel Drive  
C, S, M = Conventional 4x2 Rear Wheel Drive  
G = Forward Control 4x2 Rear Wheel Drive  
K, T, L = Conventional 4x4 Four Wheel Drive, All Wheel Drive

### Digit 3 = Series/GVWR

#### Pattern A

1 = 11,15,1500/3500-7300  
2 = 21,25,2500/6400-8600  
3 = 31,35,3500/7100-14500

#### Pattern B

Letter code designates trim level rather than series/GVWR.

### Digits 4 & 5

#### Pattern A = Dimensional Grouping

05 = Utility: Tahoe (2Dr), Yukon (2Dr),  
Blazer, Jimmy, Bravada  
06 = S/T Short Box  
07 = C/K Short Box, Tahoe (4Dr), Yukon (4Dr)  
08 = S/T Long Box & Cab-Chassis  
09 = C/K Long Box, Suburban  
10 = M/L Long Body  
14 = G Short Wheelbase  
17 = G Long Wheelbase

#### Pattern B = Body Style

06 = Passenger (Venture, Trans Sport, Silhouette)  
16 = Passenger (Venture, Trans Sport, Silhouette)  
Dual Sliding Doors

### Digits 6 & 7 = Body/Cab Codes (Pattern A Only)

03 = Conventional Cab, Cab-Chassis  
05 = Cargo Van  
06 = Passenger Van, 4 Door Special Purpose Vehicle  
16 = 2 Door Special Purpose Vehicle  
43 = Crew Cab  
53 = Extended Cab

### Pickup Body Codes (Optional, Used with Pattern A Only)

+E62 = Stepside, Fenderside  
+E63 = Fleetside, Wideside

ISSUED: ML-VP080

REVISED:

17-VGM5.0JPG1EK-1  
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.0JPG1EK EVAP FAMILY: VGM1098AYMBA  
 ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S ( ) 50S ( ) AB965 ( )  
 EXH STD: CA TIER-1 (X) TLEV ( ) LEV ( ) ULEV ( ) ZEV ( ); U.S. EPA TIER-1 ( )  
 EVAP STD: 50K (X) USEFUL LIFE WITH R/L ( ); IN-USE EXH STD: FULL ( ) ALTERNATIVE (X)  
 VEH CLASS(ES): PC ( ) LDT1 ( ) LDT2 ( ) MDV1 ( ) MDV2 ( ) MDV3 (X) MDV4 ( ) MDV5 ( )  
 SINGLE CERT STANDARD FOR MULTI-CLASS ENGINE FAMILY: NA  
 FUEL TYPE(S): DEDICATED (X) GASOLINE (X); EMISSION TEST FUEL(S): INDOLINE ( ) PHASE 2 (X)  
 SERVICE ACCUMULATION: STD AMA ( ) MFR ADP (X); NMOG TEST PROCEDURE: NA (X) EQUIV ( )  
 R/L TEST PROCEDURE: NA (X) PT SOURCE ( ); HYBRID TYPE: NA APU CYCLE: NA  
 ENGINE CONFIGURATION: I4 ( ) V6 ( ) V8 (X) DISPLACEMENT: 5.0 LITERS / 305 CU. IN.  
 VALVES / CYLINDER: 2 (X) 4 ( ) RATED HP: 230 @ 4600 RPM  
 ENGINE LOCATION: FRONT (X) DRIVE: FWD ( ) RWD (X) 4WD-FT ( ) 4WD-PT (X)  
 EXHAUST EMISSION CONTROL SYSTEM: //EGR, TWC, 2HO2S-HO2S(2), SFI, ~~08B-H~~  
 RLHP / DPA VALUES: SECTION 08.13.02.00

ENG CODE (C)	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) 51,52	K10953+E63 C20753+E63 C20903+E63 K10753+E63 K10753+E62	A4	6000  5500	16213185/ 16204025ZR-OPER 16204183-ENG 16204058(3.42), 16243567(3.73)-TRANS	17096309	25163811, 25163841: MS 9571

CARLINE NAME	CARLINE CODE
K1500 FLEETSIDE PICKUP - EXTENDED CAB	55030
C2500 FLEETSIDE PICKUP - EXTENDED CAB	55020
C2500 FLEETSIDE PICKUP	55020
K1500 FLEETSIDE PICKUP - EXTENDED CAB	55030
K1500 SPORTSIDE PICKUP - EXTENDED CAB	55030
K1500 WIDESIDE SIERRA - CLUB COUPE	80020
C2500 WIDESIDE SIERRA - CLUB COUPE	80015
C2500 WIDESIDE SIERRA	80015
K1500 SPORTSIDE SIERRA - CLUB COUPE	80020
K1500 WIDESIDE SIERRA - CLUB COUPE	80020

ISSUED: ML-VP080

REVISED:

17-VGM5.0JPG1EK-2  
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

R: GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.0JPG1EK EVAP FAMILY: VGM1098AYMBA

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) 51B, 52B	C20753+E63 C20903+E63	A4	6000	16213185, 16253985/ 16243345PF-OPER 16243419-ENG 16243556(3.42), 16243557(3.73)-TRANS	17096309	25163811, 25163841, MS 9571
51C, 52C				16213185, 16253985/ 16256455PG-OPER 16256281-ENG 16243556(3.42), 16243557(3.73)-TRANS		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
C2500 FLEETSIDE PICKUP - EXTENDED CAB	55020
C2500 FLEETSIDE PICKUP	55020
C2500 WIDESIDE SIERRA - CLUB COUPE	80015
C2500 WIDESIDE SIERRA	80015

ISSUED: ML-VR041

REVISED: ML-VR106, ML-VR102

17-VGM5.0JPG1EK-2.1  
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.0JPG1EK EVAP FAMILY: VGM1098AYMBA  
 ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S ( ) 50S ( ) AB965 ( )  
 EXH STD: CA TIER-1 (X) TLEV ( ) LEV ( ) ULEV ( ) ZEV ( ); U.S. EPA TIER-1 ( )  
 EVAP STD: 50K (X) USEFUL LIFE WITH R/L ( ); IN-USE EXH STD: FULL ( ) ALTERNATIVE (X)  
 VEH CLASS(ES): PC ( ) LDT1 ( ) LDT2 ( ) MDV1 ( ) MDV2 ( ) MDV3 (X) MDV4 ( ) MDV5 ( )  
 SINGLE CERT STANDARD FOR MULTI-CLASS ENGINE FAMILY: NA  
 FUEL TYPE(S): DEDICATED ( ) GASOLINE ( ); EMISSION TEST FUEL(S): INDOLINE ( ) PHASE 2 (X)  
 SERVICE ACCUMULATION: STD AMA ( ) MFR ADP (X); NMOG TEST PROCEDURE: NA (X) EQUIV ( )  
 R/L TEST PROCEDURE: NA (X) PT SOURCE ( ); HYBRID TYPE: NA APU CYCLE: NA  
 ENGINE CONFIGURATION: I4 ( ) V6 ( ) V8 (X) DISPLACEMENT: 5.0 LITERS / 305 CU. IN.  
 VALVES / CYLINDER: 2 (X) 4 ( ) RATED HP: 230 @ 4600 RPM  
 ENGINE LOCATION: FRONT (X) DRIVE: FWD ( ) RWD (X) 4WD-FT ( ) 4WD-PT (X)  
 EXHAUST EMISSION CONTROL SYSTEM: LEGR, TWC, 2HO2S-HO2S(2), SFI, OBD II  
 RLHP / DPA VALUES: SECTION 08.13.02.00

ENG ODE (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) 51,52	K10753+E62 K10753+E63 K10953+E63	A4	5500  6000	16213185/ 16204025ZR-OPER 16204183-ENG 16204058(3.42), 16243567(3.73)-TRANS	17096309	25163811, 25163841: MS 9571
51A, 52A				16213185/ 16243345PC-OPER 16243419-ENG 16243557-TRANS		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
K1500 FLEETSIDE PICKUP - EXTENDED CAB	55030
K1500 FLEETSIDE PICKUP - EXTENDED CAB	55030
K1500 SPORTSIDE PICKUP - EXTENDED CAB	55030
K1500 WIDESIDE SIERRA - CLUB COUPE	80020
K1500 SPORTSIDE SIERRA - CLUB COUPE	80020
K1500 WIDESIDE SIERRA - CLUB COUPE	80020

SUED: ML-VR023

REVISED:

17-VGM5.0JPG1EK-3  
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

R: GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.0JPG1EK EVAP FAMILY: VGM1098AYMBA

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)						
51B,	K10753+E62	A4	5500	16213185, 16253985/	17096309	25163811,
52B	K10753+E63			16243345PF-OPER		25163841:
	K10953+E63		6000	16243419-ENG		MS 9571
				16243557-TRANS		
51C,				16213185, 16253985/		
52C				16256455PG-OPER		
				16256281-ENG		
				16243557-TRANS		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
K1500 FLEETSIDE PICKUP - EXTENDED CAB	55030
K1500 FLEETSIDE PICKUP - EXTENDED CAB	55030
K1500 SPORTSIDE PICKUP - EXTENDED CAB	55030
K1500 WIDESIDE SIERRA - CLUB COUPE	80020
K1500 SPORTSIDE SIERRA - CLUB COUPE	80020
K1500 WIDESIDE SIERRA - CLUB COUPE	80020

ISSUED: ML-VR041

REVISED: ML-VR106, ML-VR102

17-VGM5.0JPG1EK-3.1  
(1997)



1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.0JPG1EK EVAP FAMILY: VGM1111AYMBA  
 ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S ( ) 50S ( ) AB965 ( )  
 EXH STD: CA TIER-1 (X) TLEV ( ) LEV ( ) ULEV ( ) ZEV ( ); U.S. EPA TIER-1 ( )  
 EVAP STD: 50K (X) USEFUL LIFE WITH R/L ( ); IN-USE EXH STD: FULL ( ) ALTERNATIVE (X)  
 VEH CLASS(ES): PC ( ) LDT1 ( ) LDT2 ( ) MDV1 ( ) MDV2 ( ) MDV3 (X) MDV4 ( ) MDV5 ( )  
 SINGLE CERT STANDARD FOR MULTI-CLASS ENGINE FAMILY: NA  
 FUEL TYPE(S): DEDICATED ( ) GASOLINE ( ); EMISSION TEST FUEL(S): INDOLINE ( ) PHASE 2 (X)  
 SERVICE ACCUMULATION: STD AMA ( ) MFR ADP (X); NMOG TEST PROCEDURE: NA (X) EQUIV ( )  
 R/L TEST PROCEDURE: NA (X) PT SOURCE ( ); HYBRID TYPE: NA APU CYCLE: NA  
 ENGINE CONFIGURATION: I4 ( ) V6 ( ) V8 (X) DISPLACEMENT: 5.0 LITERS / 305 CU. IN.  
 VALVES / CYLINDER: 2 (X) 4 ( ) RATED HP: 220 @ 4600 RPM  
 ENGINE LOCATION: FRONT (X) DRIVE: FWD ( ) RWD (X) 4WD-FT ( ) 4WD-PT ( )  
 EXHAUST EMISSION CONTROL SYSTEM: LEGR, TWC, 2HO2S-HO2S(2), SFI, OBD II  
 RLHP / DPA VALUES: SECTION 08.13.02.00

ENG ODE 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) 53,54	G11405 G11406 G21405 G21705	A4	6000  6500	16213185/ 16204025ZR-OPER 16204127-ENG 16204058-TRANS	17096309	25163811: MS 9571
53A, 54A				16213185/ 16243345PC-OPER 16243423-ENG 16243557-TRANS		

CARLINE NAME	CARLINE CODE
G1500 CHEVROLET VAN - CARGO	55050
G1500 CHEVROLET EXPRESS - PASSENGER	55040
G2500 CHEVROLET VAN - CARGO	55050
G1500 SAVANA - CARGO VAN	80040
G1500 SAVANA - PASSENGER VAN	80030
G2500 SAVANA - CARGO VAN	80040

SUED: ML-VP080

REVISED: ML-VR023

17-VGM5.0JPG1EK-4  
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

R. GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.0JPG1EK EVAP FAMILY: VGM1111AYMBA

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)						
53B,	G11405	A4	6000	16213185, 16253985/	17096309	25163811:
54B	G11406			16243345PF-OPER		MS 9571
	G21405			16243423-ENG		
	G21705		6500	16243557-TRANS		
53C,				16213185, 16253985/		
54C				16256455PG-OPER		
				16256288-ENG		
				16243557-TRANS		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
G1500 CHEVROLET VAN - CARGO	55050
G1500 CHEVROLET EXPRESS - PASSENGER	55040
G2500 CHEVROLET VAN - CARGO	55050
G1500 SAVANA - CARGO VAN	80040
G1500 SAVANA - PASSENGER VAN	80030
G2500 SAVANA - CARGO VAN	80040

ISSUED: ML-VR041

REVISED: ML-VR106, ML-VR102

17-VGM5.0JPG1EK-4.1  
(1997)