

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-763
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: VGM4.3HPG1EK Displacement: 4.3 Liters (262 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>
3751-5750	50,000	0.32 (0.40)	4.4 (5.5)	0.7 (0.9)	12.5 (12.5)
	120,000	0.46 (n/a)	6.4 (n/a)	0.98 (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>
3751-5750	50,000	0.21	2.0	0.4	5.5
	120,000	0.29	3.0	0.57	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 20th day of May 1996.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

FR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM4.3HPG1EK 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 (X) MDV3 () MDV4 () MDV5 ()
 SINGLE CERT STANDARD FOR MULTI-CLASS ENGINE FAMILY: NA
 FUEL TYPE(S): DEDICATED () GASOLINE (); EMISSION TEST FUEL(S): INDOLENE () 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 (X) V8 () DISPLACEMENT: 4.3 LITERS / 252 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 200 @ 4400 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD () RWD (X) 4WD-FT () 4WD-PT (X)
 EXHAUST EMISSION CONTROL SYSTEM: EGR, TWC, 2HO2S-HO2S(2), SFI
 RLHP / DPA VALUES: SECTION 08.13.02.00

ENG CODE (OC)	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) 3,4	C10703+E62 C10703+E63 C10753+E62 C10753+E63 K10703+E62 K10703+E63	A4	5000 5250	16213175/ 16204025ZR-OPER 16204217-ENG 16204054(3.08), 16204055(3.42), 16204026(3.73)-TRANS	17096309	25152823, 25160245: MS 9571
5,6	C10903+E63 K10903+E63		5000 5250	16232491-ENG 16204054(3.08), 16204055(3.73)-TRANS		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
C1500 SPORTSIDE PICKUP	55015
C1500 FLEETSIDE PICKUP	55015
C1500 SPORTSIDE PICKUP (EXTENDED CAB)	55015
C1500 FLEETWIDE PICKUP (EXTENDED CAB)	55015
K1500 SPORTSIDE PICKUP	55030
K15090 FLEETSIDE PICKUP	55030

ISSUED: ML-VP078

REVISED:

17-VGM4.3HPG1EK-2
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM4.3HPG1EK EVAP FAMILY: VGM1111AYMBA

ENG. CODE (LOC) (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.
3A,4A	C10703+E62 C10703+E63 K10703+E62 K10703+E63	A4	5000 5250	16213175/ 16243345PC-OPER 16243412-ENG 16243540(3.08), 16243542(3.42)(3.73)-TRANS	17096309	25152823, 25160245: MS 9571
5A,6A	C10903+E63 K10903+E63		5000 5250	16243414-ENG 16243540(3.08), 16243542(3.42)(3.73)-TRANS		
25.26	C10703+E62 C10703+E63 C10753+E62 C10753+E63 K10703+E62 K10703+E63	M5	5000 5250	16213175/ 16204025ZR-OPER 16204185-ENG 16204115-TRANS		
27.28	C10903+E63 K10903+E63 C10903+E63 K10903+E63		5000 5250 5500	16232497-ENG		
25A,26A				16213175/ 16243345PC-OPER 16243415-ENG 16243566-TRANS		
27A,28A				16243416-ENG		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
C1500 SPORTSIDE SIERRA	80010
C1500 WIDESIDE SIERRA	80010
C1500 SPORTSIDE SIERRA (CLUB COUPE)	80010
C1500 WIDESIDE SIERRA (CLUB COUPE)	80010
K1500 SPORTSIDE SIERRA	80020
K15090 WIDESIDE SIERRA	80020

ISSUED: ML-VP078

REVISED: ML-VR027

17-VGM4.3HPG1EK-3
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP.

ENGINE FAMILY: VGM4.3HPG1EK

EVAP FAMILY: VGM1111AYMBA

ENG CODE (LOC) (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.
3B,4B	C10703+E62 C10703+E63 K10703+E62 K10703+E63	A4	5000 5250	16213175/ 16243345PF-OPER 16243491-ENG 16243540(3.08), 16243542(3.42)(3.73)-TRANS	17096309	25152823, 25160245: MS 9571
5B,6B	C10903+E63 K10903+E63		5000 5250	16243485-ENG 16243540(3.08), 16243542(3.42)(3.73)-TRANS		
25B,26B			5500	16243487-ENG 16243566-TRANS		
27B,28B				16243489-ENG		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
C1500 SPORTSIDE SIERRA	80010
C1500 WIDESIDE SIERRA	80010
C1500 SPORTSIDE SIERRA (CLUB COUPE)	80010
C1500 WIDESIDE SIERRA (CLUB COUPE)	80010
K1500 SPORTSIDE SIERRA	80020
K15090 WIDESIDE SIERRA	80020

ISSUED: ML-VR043

REVISED:

17-VGM4.3HPG1EK-3.1
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM4.3HPG1EK 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 (X) MDV3 () 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 (X) V8 () DISPLACEMENT: 4.3 LITERS / 252 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 200 @ 4400 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD () RWD (X) 4WD-FT () 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: EGR, 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) 7,8	C10753+E62 C10753+E63	A4	5250	16213175/ 16243345PC-OPER 16243413-ENG 16243542(3.42)(3.73)-TRANS	17096309	25152823, 25160245: MS 9571
7A,8A				16243345PF-OPER 16243483-ENG		

CARLINE NAME	CARLINE CODE
C1500 SPORTSIDE PICKUP	55015
C1500 FLEETSIDE PICKUP	55015
C1500 SPORTSIDE PICKUP (EXTENDED CAB)	55015
C1500 FLEETWIDE PICKUP (EXTENDED CAB)	55015
K1500 SPORTSIDE PICKUP	55030
K15090 FLEETSIDE PICKUP	55030
C1500 SPORTSIDE SIERRA (CLUB COUPE)	80010
C1500 WIDESIDE SIERRA (CLUB COUPE)	80010

ISSUED: ML-VR027

REVISED: ML-VR043

17-VGM4.3HPG1EK-4
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

R: GENERAL MOTORS CORP. ENGINE FAMILY: VGM4.3HPG1EK 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 (X) MDV3 () 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 (X) V8 () DISPLACEMENT: 4.3 LITERS / 252 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 200 @ 4400 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD () RWD (X) 4WD-FT () 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: LEGR, TWC, 2HO2S-HO2S(2), SFI
 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.
11.12	G11405	A4	5500	16213175/ 16204025ZR-OPER 16204126-ENG 16204055-TRANS	17096309	25152823, 25160245, MS 9571
11A,12A				16243345PC-OPER 16243417-ENG 16243542-TRANS		
11B,12B				16243345PF-OPER		
11C,12C				16256455PG-OPER 16256276-ENG		

CARLINE NAME	CARLINE CODE
G1500/G2500 CHEVROLET VAN 2WD	55050
G1500/G2500 SAVANA 2WD CAR	80040

ISSUED: ML-VP078 REVISED: ML-VR027, ML-VR043, ML-VR100

17-VGM4.3HPG1EK-5
(1997)