

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-770
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: VGM7.4J8G1EK Displacement: 7.4 Liters (454 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Secondary Air Injection
- Exhaust Gas Recirculation
- Dual Three Way Catalytic Converters
- Dual 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>
5751-8500	50,000	0.39 (0.49)	5.0 (6.2)	1.1 (1.4)
	120,000	0.56 (n/a)	7.3 (n/a)	1.53 (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>
5751-8500	50,000	0.20	0.9	0.48
	120,000	0.21	1.1	0.48

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).

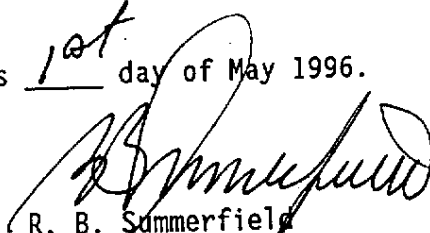
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned 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 1st 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-6-770

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-VP065

REVISED:

17-VGM7.4J8G1EK-1
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM7.4J8G1EK 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): 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 () V8 (X) DISPLACEMENT: 7.4 LITERS / 454 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 290 @ 4200 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD () RWD (X) 4WD-FT () 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: AIR, EGR, 2HO2S(2), 2TWC, 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) 51	C20906	A4	7000	16213215 (BNHS)/ 16204025ZR-OPER 16232512-ENG 16204074-TRANS	17096200	25160620
	C20903+E63					
	C20953+E63					
	C30903+E63(1)					
	C30903+E63(3)		7500			
	C30943+E63(1)					
	C30943+E63(2)					
	C30943+E63(3)		8000			
51A	C30953+E63(1)		7000	16213215 (BNHS)/ 16243345PC-OPER 16243443-ENG 16243564-TRANS		
	C30953+E63(3)		8000			
51B				16213215 (BNHS)/ 16243345PF-OPER 16243443-ENG 16243564-TRANS		
51C				16213215 (BNHS)/ 16243345PF-OPER 16243454-ENG 16243564-TRANS		

- (1) 9000 GVWR
- (2) 9600 GVWR
- (3) 10000 GVWR

ISSUED: ML-VP065

REVISED: ML-VR028, ML-VR034, ML-VR035, ML-VR088

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORP. ENGINE FAMILY: VGM7.4J8G1EK 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) 51D	C20906	A4	7000	16213215 (BNHS)/ 16256455PG-OPER	17096200	25160620
	C20903+E63			16256328-ENG		
	C20953+E63			16243564-TRANS		
	C30903+E63(1)					
	C30903+E63(3)		7500			
	C30943+E63(1)					
	C30943+E63(2)					
	C30943+E63(3)		8000			
	C30953+E63(1)		7000			
	C30953+E63(3)		8000			

- (1) 9000 GVWR
- (2) 9600 GVWR
- (3) 10000 GVWR

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
C2500 SUBURBAN 2WD	55066
C2500 SUBURBAN 2WD	80056
C2500 PICKUP 2WD	55020
C2500 SIERRA 2WD	80015
C3500 PICKUP 2WD	55021
C3500 SIERRA 2WD	80016

ISSUED: ML-VR112

REVISED: ML-VR112A

17-VGM7.4J8G1EK-2.1
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

FR: GENERAL MOTORS CORP.

ENGINE FAMILY: VGM7.4J8G1EK

EVAP FAMILY: VGM1098AYMBA

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.
52	C20906 C20903+E63 C20953+E63 C30903+E63(1) C20903+E63(3) C30943+E63(1) C30943+E63(2) C30943+E63(3) C30953+E63(1) C30953+E63(3)	A4	7000 8000 7500 8000 7500 8000	16213215 (BNHS)/ 16204025ZR-OPER 16232512-ENG 16204074-TRANS	17096200	25160620
52A				16213215 (BNHS)/ 16243345PC-OPER 16243443-ENG 16243564-TRANS		
52B				16213215 (BNHS)/ 16243345PF-OPER 16243443-ENG 16243564-TRANS		
52C				16213215 (BNHS)/ 16243345PF-OPER 16243454-ENG 16243564-TRANS		
52D				16213215 (BNHS)/ 16256455PG-OPER 16256328-ENG 16243564-TRANS		

- (1) 9000 GVWR
(2) 9600 GVWR
(3) 10000 GVWR

CARLINE NAME	CARLINE CODE
C2500 SUBURBAN 2WD	55066
C2500 SUBURBAN 2WD	80056
C2500 PICKUP 2WD	55020
C2500 SIERRA 2WD	80015
C3500 PICKUP 2WD	55021
C3500 SIERRA 2WD	80016

ISSUED: ML-VP065

REVISED: ML-VR028, ML-VR034, ML-VR035, ML-VR088, ML-VR112, ML-VR112A

17-VGM7.4J8G1EK-3
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORP. ENGINE FAMILY: VGM7.4J8G1EK 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: 7.4 LITERS / 454 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 290 @ 4200 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD () RWD () 4WD-FT () 4WD-PT (X)
 EXHAUST EMISSION CONTROL SYSTEM: AIR, EGR, 2HO2S(2), 2TWC, 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.
51	K20906 K20903+E63 K20753+E63 K20953+E63 K30903+E63(1) K30903+E63(2) K30943+E63(1) K30943+E63(2) K30953+E63	A4	7500 7000 8000 7500 8000	16213215 (BNHS)/ 16204025ZR-OPER 16232512-ENG 16204074-TRANS	17096200	25160620
51A				16213215 (BNHS)/ 16243345PC-OPER 16243443-ENG 16243564-TRANS		
51B				16213215 (BNHS)/ 16243345PF-OPER 16243443-ENG 16243564-TRANS		
51C				16213215 (BNHS)/ 16243345PF-OPER 16243454-ENG 16243564-TRANS		

(1) 9200 GVWR
 (2) 10000 GVWR

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP.

ENGINE FAMILY: VGM7.4J8G1EK

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) 51D	K20906	A4	7500	16213215 (BNHS)/	17096200	25160620
	K20903+E63		7000	16256455PG-OPER		
	K20753+E63			16256328-ENG		
	K20953+E63			16243564-TRANS		
	K30903+E63(1)					
	K30903+E63(2)		8000			
	K30943+E63(1)		7500			
	K30943+E63(2)		8000			
	K30953+E63					

- (1) 9200 GVWR
- (2) 10000 GVWR

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
K2500 SUBURBAN 4WD	55081
K2500 SUBURBAN 4WD	80071
K2500 PICKUP 4WD	55035
K2500 SIERRA 4WD	80025
K3500 PICKUP 4WD	55036
K3500 SIERRA 4WD	80026

ISSUED: ML-VR112

REVISED: ML-VR112A

17-VGM7.4J8G1EK-4.1
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM7.4J8G1EK 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) 52	K20906 K20903+E63 K20753+E63 K20953+E63 K30903+E63(1) K30903+E63(2) K30943+E63(1) K30943+E63(2) K30953+E63	A4	7500 7000 7500 8000 8500 8000	16213215 (BNHS)/ 16204025ZR-OPER 16232512-ENG 16204074-TRANS	17096200	25160620
52A				16213215 (BNHS)/ 16243345PC-OPER 16243443-ENG 16243564-TRANS		
52B				16213215 (BNHS)/ 16243345PF-OPER 16243443-ENG 16243564-TRANS		
52C				16213215 (BNHS)/ 16243345PF-OPER 16243454-ENG 16243564-TRANS		
52D				16213215 (BNHS)/ 16256455PG-OPER 16256328-ENG 16243564-TRANS		

- (1) 9200 GVWR
- (2) 10000 GVWR

CARLINE NAME	CARLINE CODE
K2500 SUBURBAN 4WD	55081
K2500 SUBURBAN 4WD	80071
K2500 PICKUP 4WD	55035
K2500 SIERRA 4WD	80025
K3500 PICKUP 4WD	55036
K3500 SIERRA 4WD	80026

ISSUED: ML-VP065

REVISED: ML-VR028, ML-VR034, ML-VR035, ML-VR088, ML-VR112, ML-VR112A

17-VGM7.4J8G1EK-5
(1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

FR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM7.4J8G1EK 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 (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: 7.4 LITERS / 454 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 290 @ 4200 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD () RWD (X) 4WD-FT () 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: AIR, EGR, 2HO2S(2), 2TWC, 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.
52, 54	G31405	A4	7500	16213215 (BNHS)/	17096200	25160620
	G31406		8000	16204025ZR-OPER		
	G31705		7500	16204144-ENG		
	G31706		8000	16204074-TRANS		
53A, 54A				16213215 (BNHS) 16243345PC-OPER 16243439-ENG 16243564-TRANS		
53B, 54B				16213215 (BNHS) 16243345PF-OPER 16243439-ENG 16243564-TRANS		
53C, 54C				16213215 (BNHS)/ 16243345PF-OPER 16243451-ENG 16243564-TRANS		

CARLINE NAME	CARLINE CODE
G3500 CHEVROLET EXPRESS 2WD	55052
G3500 SAVANA 2WD	80042
G3500 CHEBROLET VAN 2WD	55056
G3500 SAVANA 2WD	80046

ISSUED: ML-VP065

REVISED: ML-VR028, ML-VR034, ML-VR035

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

R: GENERAL MOTORS CORP.

ENGINE FAMILY: VGM7.4J8G1EK

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.
53D,	G31405	A4	7500	16213215 (BNHS)/	17096200	25160620
54D	G31406		8000	16256455PG-OPER		
	G31705		7500	16256325-ENG		
	G31706		8000	16243564-TRANS		

CARLINE NAME
G3500 CHEVROLET EXPRESS 2WD
G3500 SAVANA 2WD
G3500 CHEVROLET VAN 2WD
G3500 SAVANA 2WD

CARLINE CODE
55052
80042
55056
80046

ISSUED: ML-VR112

REVISED:

17-VGM7.4J8G1EK-6.1
(1997)