State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-815 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 1998 model-year General Motors Corporation exhaust emission control systems are certified as described below for medium-duty vehicles:

Fuel Type: Gasoline

Engine Family: WGMXA05.7187 <u>Displacement</u>: 5.7 Liters (350 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

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

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

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

Test Weight (lbs.)	<u>Miles</u>	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>
5751-8500	50,000 120,000	0.39 0.56	5.0 7.3	1.1

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

Test Weight	Miles	Non-Methane	Carbon	Nitrogen
(lbs.)		<u>Hydrocarbons</u>	<u>Monoxide</u>	Oxides
5751-8500	50,000 120,000	0.25 0.27	2.6 3.2	0.5

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the medium-duty vehicle phase-in requirements 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" (Title 13, California Code of Regulations, Section 1960.1(h)(2)).

BE IT FURTHER RESOLVED: That under the submitted medium-duty vehicle phase-in compliance plan, if the manufacturer incurs "Vehicle Equivalent Debits" for the aforementioned model year due to the manufacturer's failure to produce and deliver for sale in California the equivalent quantity of medium-duty vehicles certified to low-emission vehicle and/or ultra-low-emission vehicle exhaust emission standards required by the above-referenced standards and test procedures, all "Vehicle Equivalent Debits" incurred by the manufacturer shall be equalized as required by the standards and test procedures.

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 and Smog Index 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 29th

day of April 1997.

R. B. Summerfield, Chief

Mobile Source Operations Division

LICHT DUTY TRUCK MODEL NUMBER DEFINITION

(Includes California Medium Duty Trucks)

E.O. #A-6-815

Example, Pattern A: CC10703+E62 Example, Pattern B: 1UM05

Digit 1 = Marketing Division

Pattern A

C = Chevrolet

T = GMC

H = Oldsmobile

J = 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-WP076

REVISED:

17-WGMXA05.7187-1 (1998)

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXA05.7187 EVAP FAMILY: WGMXE0111909 ALL ENGINE CODES IN ENGINE FAMILY: CA(X) 49S() 50S() AB965() ORVR: YES() NO(X) EXH STD: CA TIER-1 (X) TLEV() LEV() ULEV() SULEV(); U.S. EPA TIER-1 () PC() LDT1() LDT2() MDV1() MDV2() MDV3(X) MDV4() MDV5() VEH CLASS(ES): SINGLE CERT STANDARD FOR MULTI-CLASS ENGINE FAMILY. NA FUEL TYPE(S): DEDICATED (X) GASOLINE (X); EXH EMIS TEST FUEL(S): INDOLENE () CBG (X) EVAP EMIS TEST PROCEDURE: CALIF () FED (X) SERVICE ACCUMULATION: STD AMA() MFR ADP(X); NMOG TEST PROCEDURE: NA(X) EQUIV() R/L TEST PROCEDURE: PT SOURCE (X) ENGINE CONFIGURATION: 14 () V6 () V8 (X) DISPLACEMENT: 5.7 LITERS / 350 CU. IN. VALVES/CYLINDER: 2(X) 4() RATED HP: *2 @ *2 RPM ENGINE LOCATION: FRONT (X) DRIVE: FWD() RWD(X) 4WD-FT() 4WD-PT() EXHAUST EMISSION CONTROL SYSTEM: EGR, 2HO2S(2), 2TWC, SFI RLHP / DPA VALUES: SECTION 08.13.02.00

ENGINE CODE & LETTER RIVATIVES*1	LOC (C/F/NW)	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	EQUIV. TEST <u>WEIGHT</u>	EGR SYSTEM PART NO.	CATALYTIC CONVERTER PART NO.
51	С	C20903 C20953 C30903 *3 C30903 *4	A4	6500 7000 7500	17096309, 25312788	25160620
		C30943 *3 C30943 *5 C30943 *4 C30953 *3 C30953 *4		8000 7000 8000		

^{*1} Base engine codes are the same as letter derivatives unless otherwise noted. Refer to PCM/VCM part number page for additional engine code letter derivative information.

^{*5 9600} GVWR

CARLINE NAME	CARLINE CODE
C2500 PICKUP 2WD	03020
C3500 PICKUP 2WD	03021
C2500 SIERRA 2WD	04015
C3500 SIERRA 2WD	04016
	04010

SGUED: ML-WP076

^{*2 255} HP @ 4600 rpm - C/K models; 250 HP @ 4600 rpm - G-Van models

^{*3 9000} GVWR

^{*4 10000} GVWR

MFR: GENERAL MOTORS CORP.

ENGINE FAMILY: WGMXA05.7187 EVAP FAMILY: WGMXE0111909

ENGINE CODE & LETTER DERIVATIVES*1	LOC (C/F/NW)	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	EQUIV. TEST <u>WEIGHT</u>	EGR SYSTEM PART NO.	CATALYTIC CONVERTER PART NO.
52	С	C20903 C20953 C30903 *2 C30903 *3 C30943 *2 C30943 *4 C30943 *3 C30953 *2 C30953 *3	A4	6500 7000 7500 8000 7000	17096309, 25132788	25160620
53,54		G21405 G21406 G21705 G21706 G31405 G31406 G31705 G31706		8000 7000 7500 7000 7500 8000 7500 8000	-	

^{*1} Base engine codes are the same as letter derivatives unless otherwise noted. Refer to PCM/VCM part number page for additional engine code letter derivative information.

^{*4 9600} GVWR

CARLINE NAME	CARLINE CODE
C2500 PICKUP 2WD	03020
C3500 PICKUP 2WD	-
C2500 SIERRA 2WD	03021
C3500 SIERRA 2WD	04015
G1500/G2500 CHEVROLET EXPRESS 2WD	04016
G1500/G2500 CHEVROLET EXPRESS 2WD	03040
G1500/G2500 CHEVROLET VAN 2WD	03050
G3500 CHEVROLET EXPRESS 2WD	03052
G3500 CHEVROLET VAN 2WD	03056
G1500/G2500 SAVANA 2WD PASSENGER	04030
G1500/G2500 SAVANA 2WD CARGO	04040
G3500 SAVANA 2WD CARGO	04042
G3500 SAVANA 2WD PASSENGER	
	04046

SUED: ML-WP076

^{*2 9000} GVWR

^{*3 10000} GVWR

WIFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXA05.7187 **EVAP FAMILY: WGMXE0111909** ALL ENGINE CODES IN ENGINE FAMILY: CA(X) 49S() 50S() AB965() ORVR: YES() NO(X) EXH STD: CA TIER-1 (X) TLEV() LEV() ULEV() SULEV(); U.S. EPA TIER-1() 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); EXH EMIS TEST FUEL(S): INDOLENE () CBG (X) EVAP EMIS TEST PROCEDURE: CALIF () FED(X) SERVICE ACCUMULATION: STD AMA() MFR ADP(X); NMOG TEST PROCEDURE: NA(X) EQUIV() R/L TEST PROCEDURE: PT SOURCE (X) ENGINE CONFIGURATION: I4 () V6 () V8 (X) DISPLACEMENT: 5.7 LITERS / 350 CU. IN. VALVES/CYLINDER: 2(X) 4() RATED HP: *2 @ *2 RPM ENGINE LOCATION: FRONT (X) DRIVE: FWD() RWD() 4WD-FT() 4WD-PT(X) EXHAUST EMISSION CONTROL SYSTEM: EGR, 2HO2S(2), 2TWC, SFI RLHP / DPA VALUES: SECTION 08.13.02.00

ENGINE CODE & LETTER 	LOC (C/F/NW)	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	EQUIV. TEST <u>WEIGHT</u>	EGR SYSTEM PART NO.	CATALYTIC CONVERTER <u>PART NO.</u>
51,52	С	K20753 K20903 K20953 K30903 *3 K30903 *4 K30943 *3 K30943 *4 K30953	A4	7000 7500 8000 7500 8000	17096309, 25312788	25160620

¹ Base engine codes are the same as letter derivatives unless otherwise noted. Refer to PCM/VCM part number page for additional engine code letter derivative information.

^{*4 10000} GVWR

CARLINE NAME	_ CARLINE CODE
K2500 PICKUP 4WD	03035
K3500 PICKUP 4WD	03036
K2500 SIERRA 4WD	04025
K3500 SIERRA 4WD	04026

SSUED: ML-WP076

REVISED:

17-WGMXA05.7187-4 (1998)

^{*2 255} HP @ 4600 rpm - C/K models; 250 HP @ 4600 rpm - G-Van models

^{*3 9200} GVWR

MFR: GENERAL	MOTORS COR	P. ENGINE FAN	MILY: WGMXA05.71	87 FVA	P FAMILY: MA	AYE0122014
ALL ENGINE COL	DES IN ENGINE	FAMILY: CA(X)	495() 505()	AB965 ()	OBVE: VEC	/) NO / Y)
EXH STD: CA T	TER-1(X) TL	EV() LEV()	ULEV() SULE	() 2000 () () () ()	S EDATIED 1	() NO(X)
VEH CLASS(ES):	PC() L	OT1() LDT2()	MDV1() MDV2	.V (), U	.S. EFA HER-I	()
SINGLE CERT ST	ANDARD FOR	MULTI-CLASS ENG	INF FAMILY: NA	.() NIDVS	(A) MDV4() MDV5()
) GASOLINE(X)		T FUEL/OV	NOOLENE	
EVAP EMIS TEST	PROCEDURE	CALIF() FE	, EXHICIVIIS TES	I FUEL(S): I	NDOLENE ()	CBG (X)
		DAMA() MFRA		TEAT 2222		
R/L TEST PROCE	DURF PT SC	DURCE (Y)	DP(X), NMOG	TEST PROCE	DURE: NA (X) EQUIV()
		• •	Y)			
) V6() V8()				
ENGINE LOCATIO	YAL	VES / CYLINDER:	2(X) 4()	RAT	ED HP: 255 @	4600 RPM
EVILABLE THESE	DN: FRONT (X)	DRIVE: FWD()	RWD(X)	4WD-FT()	4WD-PT()
		SYSTEM: EGR, 2H	102S(2), 2TWC, SFI			
RLHP / DPA VALU	ES: SECTION	08.13.02.00				
ENGINE CODE						
% LETTER	LOC	VEH MODELS	TRANS	EQUIV. TEST	EGR SYSTEM	CATALYTIC CONVERTER
RIVATIVES*1	(C/F/NW)	(SEE PAGE 1)	(M5,A4,ETC.)	WEIGHT	PART NO.	PART NO.
51,52	С	C20906	A4	7000	17096309,	25160620
				7 000	25312788	25160620

 CARLINE NAME
 CARLINE CODE

 C2500 SUBURBAN 2WD
 03066

 C2500 SUBURBAN 2WD
 04056

SUED: ML-WP076

^{*1} Base engine codes are the same as letter derivatives unless otherwise noted. Refer to PCM/VCM part number page for additional engine code letter derivative information.

MFR: GENERAL MOT ALL ENGINE CODES I EXH STD: CA TIER-1 VEH CLASS(ES): F SINGLE CERT STAND	N ENGINE F I (X) TLE PC () LDT ARD FOR M	FAMILY: CA(X) FV() LEV() F1() LDT2() FULTI-CLASS ENG	49S() 50S() ULEV() SULE\ MDV1() MDV2 INE FAMILY: NA	AB965() /(); U () MDV3	ORVR: YES .S. EPA TIER-1 (X) MDV4 (() NO(X) ()) MDV5()
FUEL TYPE(S): DEDI	CATED (X)	GASOLINE (X)	; EXH EMIS TEST	FUEL(S):	NDOLENE()	CBG(X)
EVAP EMIS TEST PRO						
SERVICE ACCUMULA	TION: STD	AMA() MFRA	DP(X); NMOG T	EST PROCE	DURE: NA (X) EQUIV()
R/L TEST PROCEDUR	E: PT SOL	JRCE(X)				. ,
ENGINE CONFIGURAT					5.7 LITERS / 350	0 CU. IN.
	VALV	ES / CYLINDER:	2(X) 4()	RAT	ED HP: 255 @	4600 RPM
ENGINE LOCATION:	FRONT(X)		DRIVE: FWD()	RWD()	4WD-FT()	4WD-PT (X)
EXHAUST EMISSION C	CONTROL S'	YSTEM: EGR. 2H	IO2S(2), 2TWC, SEL	, ,	,	
RLHP / DPA VALUES:			(-),			
ENGINE CODE				EQUIV	EGR	CATALIVEIO
> === 11	LOC	VEH MODELS	TRANS	TEST	SYSTEM	CATALYTIC CONVERTER
`TRIVATIVES*1 (C/	<u>(F/NW)</u>	(SEE PAGE 1)	(M5,A4,ETC.)	WEIGHT	PART NO.	PART NO.
51,52	С	K20906	A4	7500	17096309, 25312788	25160620

CARLINE NAME
K2500 SUBURBAN 4WD
K2500 SUBURBAN 4WD

CARLINE CODE 03081 04071

SUED: ML-WP076

^{*1} Base engine codes are the same as letter derivatives unless otherwise noted. Refer to PCM/VCM part number page for additional engine code letter derivative information.

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PCM AND CALIBRATION PART NUMBERS

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXA05.7187 EVAP FAMILY: WGMXE0111909

WGMXE0133914

				VVGIVIAEU 1339 14
ENGINE CODE	PCM/VCM <u>PART NUMBER</u>	ENGINE CALIB	ODER CALIR	TD 1110 - 1111
=		THE OF ILE	OPER CALIB	TRANS CALIB
51,52	16214835/BNSA	16232618	16215972PB	16216110
51A,52A	16258835/CCSF, 16266655/CFFR	16267640	16263425PD	
51B,52B		16249520		
51C,52C	09355655/CLNR	09364770	09365095PE	
53,54	16214835/BNSA	16215998	16215972PB	
53A,54A	16258835/CCSF, 16266655/CFFR	16267597	16263425PD	
53B,54B		16249488		
53C,54C	09355655/CLNR	09360075	09365095PE	
55,56	16258835/CCSF, 16266655/CFFR	16267641	16263425PD	
55A,56A		16249521		
55B,56B	09355655/CLNR	09364771	09365095PE	

ISSUED: ML-WP076

REVISED: ML-WR003, ML-WR061, ML-WR093, ML-WR102