State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-800 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 light-duty trucks:

Fuel Type: Gasoline

Engine Family: WGMXT02.2122 Displacement: 2.2 Liters (134 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converter Heated Oxygen Sensor Oxygen Sensor Exhaust Gas Recirculation Sequential Multiport Fuel Injection

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:

Loaded Vehicle		Non-Methane	Carbon	Nitrogen	Carbon
<u>Weight (lbs.)</u>	Miles	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	Monoxide (20°F)
0-3750	50,000	0.25	3.4	0.4	10.0
	100,000	0.31	4.2	0.6	n/a

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

Loaded Vehicle	Miles	Non-Methane	Carbon	Nitrogen	Carbon
Weight (lbs.)		Hydrocarbons	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20°F)</u>
0-3750	50,000	0.10	2.1	0.2	4.9
	100,000	0.10	2.3	0.4	n/a

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 fleet average non-methane organic gases (NMOG) exhaust mass emission 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."

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits 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

R. B. Summerfield, Chief Mobile Source Operations Division

LIGHT DUTY TRUCK MODEL NUMBER DEFINITION

(Includes California Medium Duty Trucks)

E.O. #A-6-800

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-WP117

REVISED:

17-WGMXT02.2122-1 (1998)

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXT02.2122 EVAP FAMILY: WGMXE0095904 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(X) LDT2() MDV1() MDV2() MDV3() 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: 14 (X) V6 () V8 () DISPLACEMENT: 2.2 LITERS / 134 CU, IN. VALVES / CYLINDER: 2(X) 4() RATED HP: 118 @ 5200 RPM ENGINE LOCATION: FRONT (X) DRIVE: FWD() RWD(X) 4WD-FT() 4WD-PT() EXHAUST EMISSION CONTROL SYSTEM: TWC, EGR, O2S, HO2S, SFI RLHP / DPA VALUES: SECTION 08.13.02.00 **ENGINE CODE** EQUIV. EGR CATALYTIC & LETTER LOC VEH MODELS **TRANS** TEST SYSTEM CONVERTER **DERIVATIVES*1** (C/F/NW) (SEE PAGE 1) (M5,A4,ETC.) WEIGHT PART NO. PART NO. 11,12 C S10603 A4 3375 17096100 25163564 JS10603 3500 S10803 S10653 3625 JS10653 13 S10603 M5 3375 JS10603 S10803 3500 14 S10603 3375 JS10603 3500 S10803 13B,14B S10603 3375 S10803 3500 15.16 S10653 3625 JS10653

3500

CARLINE NAME	CARLINE CODE
CHEVROLET \$10 PICKUP 2WD	03082
GMC SONOMA 2WD	04072
ISUZU HOMBRE PU 2WD	01520

S10803

ISSUED: ML-WP117

REVISED: ML-WR055, ML-WR103

^{*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: WGMXT02.2122 EVAP FAMILY: WGMXE0095904

ENGINE CODE	PCM/VCM PART NUMBER	ENGINE CALIB	OPER CALIB	TRANS CALIB
11, 12	16204850	16252743	NA	NA
11A, 12A	16204850	16267153, 16267563 *1		
13, 14	16204850	16252683		
13A, 14A	16204850	16267093, 16267503 *1		
15, 16	16204850	16252713		
15A, 16A	16204850	16267123, 16267533 *1		

*1 Optional

ISSUED: ML-WP117 REVISED: ML-WR022

EMISSION DATA RATIOS TO BE USED FOR ASSEMBLY LINE TESTING

	341VU15898 (Config 000)	34T7U988 (Config 000)
NMHC* (G/MI)	0.0649	0.0645
NMOG (G/MI)	0.0666	0.0671
HCHO (G/MI)	0.0009	0.0014
NMOG:NMHC	1.0262	1.0403
HCHO:NMHC	0.0139	0.0217

Average NMOG:NMHC = 1.033

Average HCHO:NMHC = 0.018

Ratio established using Phase 2 emission certification fuel.

ISSUED: ML-WP135 REVISED: ML-WP176

^{*} NMHC includes methane response factor.