

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-796-A
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 passenger cars:

Fuel Type: Gasoline

Engine Family: WGMXV03.8051 Displacement: 3.8 Liters (231 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

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

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:

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
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:

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.08	1.8	0.3	4.1
100,000	0.08	2.3	0.5	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 gas (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 vehicle manufacturer is certifying the listed vehicle models to the "California Refueling Emission Standards and Test Procedures for 1998 and Subsequent Model Motor Vehicles," Title 13, California Code of Regulations, Section 1978, 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).

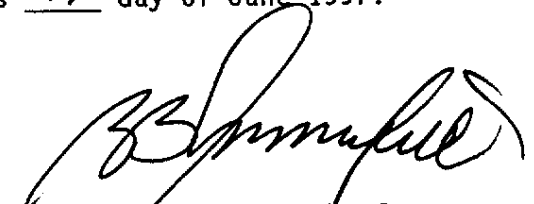
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned 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 17th day of June 1997.



R. B. Summerfield, Chief
Mobile Source operations Division

**AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS**

VEHICLE MODELS: 1 J C 3 7 (EXAMPLE)

Digit 1 - Selling Division

- 1 - Chevrolet
- 2 - Pontiac
- 3 - Oldsmobile
- 4 - Buick
- 6 - Cadillac
- 8 - Saturn

Digit 2 - Body Designation

- C - Park Avenue
- E - Eldorado
- F - Camaro, Firebird/Formula
- G - Riviera, Aurora
- H - Bonneville, Eighty-Eight/Regency, LeSabre
- J - Cavalier, Sunfire
- K - Seville
- Ksp - Deville, Limousine, Funeral Coach/Hearse
- N - Grand Am, Achieva, Skylark, Malibu, Cutlass
- V - Catera
- W - Grand Prix, Regal, Century, Lumina, Monte Carlo, Intrigue
- Y - Corvette
- Z - Saturn SC, SL, SW, EV1

Digit 3 - Trim Level (Examples)

B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, Y, Z

Digits 4 & 5 - Body Style (Examples)

- | | |
|----------------------------|----------------------------|
| 07 - 2Dr Sport Coupe | 37 - 2Dr Hardtop Coupe |
| 08 - 2Dr Hatchback Coupe | 47 - 2Dr Hardtop Coupe |
| 11 - 2Dr Notchback | 57 - 2Dr Hardtop Coupe |
| 15 - 2Dr Station Wagon | 67 - 2Dr Convertible Coupe |
| 19 - 4Dr Sedan | 68 - 4Dr Hatchback Sedan |
| 23 - 4Dr Aux. Seat Sedan | 69 - 4Dr (Notchback) Sedan |
| 27 - 2Dr (Notchback) Coupe | 77 - 2Dr Hatchback Coupe |
| 29 - 4Dr Sedan | 87 - 2Dr Hatchback Coupe |
| 35 - 4Dr Station Wagon | 90 - Commercial Chassis |

ISSUED: ML-WP125

REVISED:

17-WGMXV03.8051-1
(1998)

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXV03.8051 EVAP FAMILY: WGMXR0133910
 ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S () 50S () AB965 () ORVR: YES (X) NO ()
 EXH STD: CA TIER-1 (X) TLEV () LEV () ULEV () SULEV (); U.S. EPA TIER-1 ()
 VEH CLASS(ES): PC (X) LDT1 () 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): INDOLINE () CBG (X)
 EVAP EMIS TEST PROCEDURE: CALIF () FED (X)
 SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV ()
 R/L TEST PROCEDURE: PT SOURCE (X)
 ENGINE CONFIGURATION: I4 () V6 (X) V8 () DISPLACEMENT: 3.8 LITERS / 231 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 240 @ 5200 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD (X) RWD () 4WD-FT () 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: EGR-TWC-HO2S(2)-SFI-SC
 RLHP / DPA VALUES: SECTION 08.13.02.00

ENGINE CODE & LETTER DERIVATIVES*1	LOC (C/F/NW)	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	EQUIV. TEST WEIGHT	EGR SYSTEM PART NO.	CATALYTIC CONVERTER PART NO.
71	C	4CU69	A4	4250	17096199, 17125507	25165285
72		4GD07		4000		

*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.

CARLINE NAME	CARLINE CODE
BUICK RIVIERA	01045
BUICK PARK AVENUE	01040

(FOR CARB USE ONLY)

E.O. #A-6-796-A

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PCM AND CALIBRATION PART NUMBERS

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXV03.8051 EVAP FAMILY: WGMXR0133910

<u>ENGINE CODE</u>	<u>PCM/VCM PART NUMBER</u>	<u>ENGINE CALIB</u>	<u>OPER CALIB</u>	<u>TRANS CALIB</u>
71	16200870	16237044	NA	NA
71A		16266484		
71B		09352074		
71C		09353114		
71D		09357434		
71E		09365044		
72		16236984		
72A		16266494		
72B		09353124		
72C		09357444		
72D		09365054		

ISSUED: ML-WP125

REVISED: ML-WR015, ML-WR028, ML-WR046, ML-WR080, ML-WR095

17-WGMXV03.8051-5
(1998)

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

R: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXV03.8051 EVAP FAMILY: WGMXR0133918
 ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S () 50S () AB965 () ORVR: YES (X) NO ()
 EXH STD: CA TIER-1 (X) TLEV () LEV () ULEV () SULEV (); U.S. EPA TIER-1 ()
 VEH CLASS(ES): PC (X) LDT1 () 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): INDOLINE () CBG (X)
 EVAP EMIS TEST PROCEDURE: CALIF () FED (X)
 SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV ()
 R/L TEST PROCEDURE: PT SOURCE (X)
 ENGINE CONFIGURATION: I4 () V6 (X) V8 () DISPLACEMENT: 3.8 LITERS / 231 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 240 @ 5200 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD (X) RWD () 4WD-FT () 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: EGR-TWC-HO2S(2)-SFI-SC
 RLHP / DPA VALUES: SECTION 08.13.02.00

ENGINE CODE & LETTER DERIVATIVES*1	LOC (C/F/NW)	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4 ETC.)	EQUIV. TEST WEIGHT	EGR SYSTEM PART NO.	CATALYTIC CONVERTER PART NO.
75	C	4WF69	A4	3875	17096199, 17125507	24505514
76		2WP37 2WP69		3750 3875		

*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.

CARLINE NAME	CARLINE CODE
BUICK REGAL	01022
PONTIAC GRAND PRIX	07055

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PCM AND CALIBRATION PART NUMBERS

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXV03.8051 EVAP FAMILY: WGMXR0133918

<u>ENGINE CODE</u>	<u>PCM/VCM PART NUMBER</u>	<u>ENGINE CALIB</u>	<u>OPER CALIB</u>	<u>TRANS CALIB</u>
75	16200870	16237234	NA	NA
75A		16268414		
75B		09352984		
76		16237204		
76A		16266714		
76B		09353084		