

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-794-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:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: WGMXV03.8048 Displacement: 3.8 Liters (231 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

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

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

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

<u>Miles</u>	<u>Non-Methane Organic Gases</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.125	3.4	0.4	0.015	10.0
100,000	0.156	4.2	0.6	0.018	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for non-methane organic gases (NMOG) reflect application of a 0.98 RAF for 1998 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Organic Gases</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.073	1.0	0.2	0.001	2.0
100,000	0.087	1.2	0.3	0.001	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 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.

E 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 vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit 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).

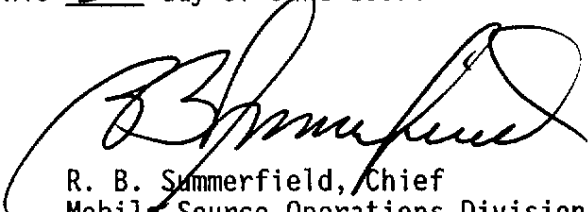
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned 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 30th day of June 1997.


R. B. Summerfield, Chief
Mobile Source Operations Division

(FOR CARB USE ONLY)

E.O. #A-6-794A

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXV03.8048 EVAP FAMILY: WGMXR0133910
ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S () 50S () AB965 () ORVR: YES
EXH STD: CA TIER-1 () TLEV (X) LEV () ULEV () ZEV (); U.S. EPA TIER-1 ()
EVAP STD: 50K () USEFUL LIFE WITH R/L (X); IN-USE EXH STD: FULL (X) ALTERNATIVE ()
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 () GASOLINE (X); EMISSION TEST FUEL(S): INDOLINE () PHASE 2 (X)
EVAP EMISSION TEST PROCEDURE: CALIF () FED (X)
SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA () EQUIV (X)
R/L TEST PROCEDURE: NA () PT SOURCE (X); HYBRID TYPE: NA APU CYCLE: NA
ENGINE CONFIGURATION: I4 () V6 (X) V8 () DISPLACEMENT: 3.8 LITERS / 231 CU. IN.
VALVES / CYLINDER: 2 (X) 4 () RATED HP: 205 @ 5200 RPM
ENGINE LOCATION: FRONT (X) DRIVE: FWD (X) RWD () 4WD-FT () 4WD-PT ()
EXHAUST EMISSION CONTROL SYSTEM: EGR-TWC-HO2S(2)-SFI
RLHP / DPA VALUES: SECTION 08.13.02.00

<u>ENGINE CODE & LETTER DERIVATIVES *1</u>	<u>LOC (C/F/NW)</u>	<u>VEH MODELS (SEE PAGE 1)</u>	<u>TRANS (M5,A4,ETC.)</u>	<u>EQUIV. TEST WEIGHT</u>	<u>EGR SYSTEM PART NO.</u>	<u>CATALYTIC CONVERTER PART NO.</u>
53	C	4CW69	A4/23	4000	17125507, 17096199	25174346

*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
BUICK PARK AVENUE

CARLINE CODE
01040

ISSUED: ML-WR006

REVISED:

17-WGMXV03.8048-2.1
(1998)

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXV03.8048 EVAP FAMILY: WGMXR0133918
 ALL ENGINE CODES IN ENGINE FAMILY: CA (X) 49S () 50S () AB965 () ORVR: YES
 EXH STD: CA TIER-1 () TLEV (X) LEV () ULEV () ZEV (); U.S. EPA TIER-1 ()
 EVAP STD: 50K () USEFUL LIFE WITH R/L (X); IN-USE EXH STD: FULL (X) ALTERNATIVE ()
 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 () GASOLINE (X); EMISSION TEST FUEL(S): INDOLINE () PHASE 2 (X)
 EVAP EMISSION TEST PROCEDURE: CALIF () FED (X)
 SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA () EQUIV (X)
 R/L TEST PROCEDURE: NA () PT SOURCE (X); HYBRID TYPE: NA APU CYCLE: NA
 ENGINE CONFIGURATION: I4 () V6 (X) V8 () DISPLACEMENT: 3.8 LITERS / 231 CU. IN.
 VALVES / CYLINDER: 2 (X) 4 () RATED HP: 195 @ 5200 RPM
 ENGINE LOCATION: FRONT (X) DRIVE: FWD (X) RWD () 4WD-FT () 4WD-PT ()
 EXHAUST EMISSION CONTROL SYSTEM: EGR-TWC-HO2S(2)-SFI
 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.
54B	C	3WH69 3WS69	A4/24	3750	17096199	24506936, 24507888
55B		3WH69 3WS69				
56A		4WB69				
59B		2WP37 2WJ69 2WP69	A4/25			

*1 All engine code derivatives following engine codes 54B, 55B, 56A and 59B are the same unless otherwise noted. Refer to PCM/VCM part number page for additional engine code letter derivative information.

CARLINE NAME	CARLINE CODE
OLDSMOBILE INTRIGUE	06055
BUICK REGAL	01022
PONTIAC GRAND PRIX	07055

ISSUED: ML-WR006

REVISED:

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PCM AND CALIBRATION PART NUMBERS

MFR: GENERAL MOTORS CORP.

ENGINE FAMILY: WGMXV03.8048

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>
53	16200870	16236594	NA	NA
53A		16266384		
53B		09351434		
53C		09352964		
53D		09357124		
53E		09361294		

1998 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PCM AND CALIBRATION PART NUMBERS

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: WGMXV03.8048 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>
54B	16200870	16267214	NA	NA
54C		09351284		
54D		09352784		
55B		16267234		
55C		09351304		
55D		09352804		
56A		16237184		
56B		09351344		
56C		09353364		
59B		16266354		
59C		09351314		
59D		09353004		