

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-754
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 passenger cars:

Fuel Type: Gasoline

Engine Family: VGM3.8V8G1FK 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	0.2	3.2
100,000	0.08	2.2	0.3	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 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 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 18th day of April 1996.



R. B. Summerfield
Assistant Division Chief
Mobile Source 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 - Ninety-Eight, Park Avenue
- E - Eldorado
- F - Camaro, Firebird/Formula
- G - Riviera, Aurora
- H - Bonneville, Eighty-Eight, LeSabre
- J - Cavalier, Sunfire
- K - Seville
- Ksp - Deville/Concours
- N - Grand Am, Achieva, Skylark, Malibu, Cutlass Supreme
- V - Catera
- W - Grand Prix, Regal, Century, Lumina, Monte Carlo
- Y - Corvette
- Z - Saturn SC, SL, SW

Digit 3 - Trim Level

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

- | | |
|----------------------------|----------------------------|
| 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 |

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM3.8V8G1FK EVAP FAMILY: VGM1058AYMAA
 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 (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)
 SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV ()
 R/L TEST PROCEDURE: NA (X) PT SOURCE (); 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: 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 (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.
15	4WF69	A4/42A	3750	16218060/16224094	17096199	25162269
16	2WP37 2WP69		3875	16218060/16224104 *1		
16A				16218060/16243754 *1		
16B				16218060/16253194 *1		

*1 Two transmission shifting options with one speed restriction.

CARLINE NAME	CARLINE CODE
BUICK REGAL/CENTURY	08022
PONTIAC GRAND PRIX	33055

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM3.8V8G1FK EVAP FAMILY: VGM1095AYMAA
 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 (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): INDOLENE () PHASE 2 (X)
 SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV ()
 R/L TEST PROCEDURE: NA (X) PT SOURCE (); 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: 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

<u>ENG</u> <u>CODE</u> <u>(LOC)</u>	<u>VEH MODELS</u> <u>(SEE PAGE 1)</u>	<u>TRANS</u> <u>(M5,A4,ETC.)</u>	<u>EQUIV.</u> <u>TEST</u> <u>WEIGHT</u>	<u>IGNITION</u> <u>(PCM/CALIB PART NO.)</u>	<u>EGR</u> <u>SYSTEM</u> <u>PART NO.</u>	<u>CATALYTIC</u> <u>CONVERTER</u> <u>PART NO.</u>
15A	4WF69	A4/42A	3875	16218060/16224094 *1	17096199	25162269
15B				16218060/16253124 *1		
15C				16218060/16255254 *1		

* Two transmission shifting options with one speed restriction.

CARLINE NAME
BUICK REGAL/CENTURY

CARLINE CODE
08022

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM3.8V8G1FK EVAP FAMILY: VGM1070AYMAA
 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 (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)
 SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV ()
 R/L TEST PROCEDURE: NA (X) PT SOURCE (); 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: 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

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.
13	3HY69	A4/41	3875	16218060/16231214	17096199	25165292
13A				16218060/16243884		
13B				16218060/16253174		
14	2HX69	A4/41A		16218060/16231224, 16231234 *1		
	2HZ69		4000			
14A				16218060/16243864, 16243884 *1		
14B				16218060/16253154, 16253174 *1		

*1 Two transmission shifting options with two speed restrictions.

CARLINE NAME	CARLINE CODE
BUICK BONNEVILLE	33045
OLDSMOBILE EIGHTY EIGHT/REGENCY	29025

ISSUED: ML-VP092 REVISED: ML-VR012, ML-VR049, ML-VR090

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM3.8V8G1FK EVAP FAMILY: VGM1070AYPAA
 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 (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)
 SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV ()
 R/L TEST PROCEDURE: NA (X) PT SOURCE (); 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: 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

<u>ENG CODE (LOC)</u>	<u>VEH MODELS (SEE PAGE 1)</u>	<u>TRANS (M5,A4,ETC.)</u>	<u>EQUIV. TEST WEIGHT</u>	<u>IGNITION (PCM/CALIB PART NO.)</u>	<u>EGR SYSTEM PART NO.</u>	<u>CATALYTIC CONVERTER PART NO.</u>
11	4CU69	A4/41	4250	16218060/16237414	17096199	25165285
11A				16218060/16245264		
11B				16218060/16251464		
11C				16218060/16254094		
11D				16218060/16254724		
12	4GD07		4000	16218060/16231244		
12A				16218060/16243844		
12B				16218060/16253134		

CARLINE NAME
 BUICK PARK AVENUE
 BUICK RIVIERA

CARLINE CODE
 08040
 08045