State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-750-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 1997 model-year_General Motors Corporation exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: VGM3.1V8G1EK Displacement: 3.1 Liters (191 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Exhaust Gas Recirculation Three Way Catalytic Converter Heated Oxygen Sensors (Two) 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:

Miles_	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen Oxides	Carbon <u>Monoxide (20⁰F)</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:

Mile <u>s</u>	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen Oxides	Carbon <u>Monoxide (20⁰F)</u>
50,000	0.16	1.6	0.2	7.9
100,000	0.19	2.0	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 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 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.).

GENERAL MOTORS CORPORATION

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 May of June 1996.

Sammerfield,

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 Satum

Digit 2 - Body Designation

- Ninety-Eight, Park Avenue
- C Ninety-Eig 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, Cuttass Supreme
- 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
- 08 2Dr Hatchback Coupe
- 11 2Dr Notchback
- 15 2Dr Station Wagon
- 19 4Dr Sedan
- 23 4Dr Aux. Seat Sedan
- 27 2Dr (Notchback) Coupe
- 29 4Dr Sedan
- 35 4Dr Station Wagon

37 - 2Dr Hardtop Coupe
47 - 2Dr Hardtop Coupe
57 - 2Dr Hardtop Coupe
67 - 2Dr Convertible Coupe
68 - 4Dr Hatchback Sedan
69 - 4Dr (Notchback) Sedan
77 - 2Dr Hatchback Coupe
87 - 2Dr Hatchback Coupe
90 - Commercial Chassis

ISSUED: ML-VP016

REVISED:

17-VGM3.1V8G1EK-1 (1997)

17-31V8G

E.O. #A-6-750A

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP.

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ENGINE FAMILY: VGM3.1V8G1EK

EVAP FAMILY: VGM1095AYMEA

ENG CODE (LOC)	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	equiv. Test <u>Weight</u>	IGNITION (PCM/CALIB PART NO.)	EGR SYSTEM PART NO.	CATALYTIC CONVERTER <u>PART NO.</u>
1	1WL69 1WN69 1WW27	A4/A	3625	16218060, 16218070/ 16241544	17096154	24506359, 24504659, 24506982
1A				16218060, 16218070/ 16245154		
4	4WS69 4WY69	A4/A	3625	16218060, 16218070/ 16242904		24506359, 24504659, 24506980
4A				16218060, 16218070/ 16221474		
4B				16218060, 16218070/ 16254394		
11 U	1WL69		3750	16218060, 16218070/ 16245174		24506359, 24504659, 24506982

CARLINE NAME CHEVROLET LUMINA/MONTE CARLO BUICK CENTURY/REGAL CARLINE CODE 12050 08022

ISSUED: ML-VP016

REVISED: ML-VR025, ML-VP169, ML-VR078

17-VGM3.1V8G1EK-4 (1997)

17-31V8G

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

EVAP FAMILY: VGM1095AYMEA ENGINE FAMILY: VGM3.1V8G1EK MFR: GENERAL MOTORS CORP. AB965 () 49S() 50S() ALL ENGINE CODES IN ENGINE FAMILY: CA(X) U.S. EPA TIER-1 () EXH STD: CA TIER-1(X) TLEV() LEV() ULEV() ZEV(); IN-USE EXH STD: FULL (X) ALTERNATIVE () 50K () USEFUL LIFE WITH R/L (X); EVAP STD: PC(X) LDT1() LDT2() MDV1() MDV2() MDV3() MDV4() MDV5() VEH CLASS(ES): SINGLE CERT STANDARD FOR MULTI-CLASS ENGINE FAMILY: NA FUEL TYPE(S): DEDICATED (X) GASOLINE (X); EMISSION TEST FUEL(S): INDOLENE () PHASE 2 (X) SERVICE ACCUMULATION: STD AMA() MFR ADP(X); NMOG TEST PROCEDURE: NA(X) EQUIV() APU CYCLE: NA HYBRID TYPE: NA NA() PT SOURCE(X); R/L TEST PROCEDURE: ENGINE CONFIGURATION: 14 () V6 (X) V8 () DISPLACEMENT: 3.1 LITERS / 191 CU. IN. RATED HP: 155 @ 5200 RPM VALVES/CYLINDER: 2(X) 4() DRIVE: FWD(X) RWD() 4WD-FT() 4WD-PT() ENGINE LOCATION: FRONT (X) EXHAUST EMISSION CONTROL SYSTEM: EGR-TWC-HO2S(2)-SFI RLHP / DPA VALUES: SECTION 08.13.02.00

ENG CODE <u>OC)</u>	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	EQUIV. TEST <u>WEIGHT</u>	IGNITION (PCM/CALIB PART NO.)	EGR SYSTEM <u>PART NO.</u>	CATALYTIC CONVERTER <u>PART NO.</u>
5	2NE37 2NW37 2NE69 2NW69 3NL37 3NL69 4NJ37 4NJ69	A4/C	3250 3375 3250 3375 3250 3375	16218060, 16218070/ 16244744	17096154	24506041, 24507193
5A				16218060, 16218070/ 16254334		

CARLINE NAME PONTIAC GRAND AM OLDSMOBILE ACHIEVA BUICK SKYLARK CARLINE CODE 33025 29010 08055

'SSUED: ML-VP016

REVISED: ML-VP169, ML-VR078

17-VGM3.1V8G1EK-3 (1997)

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1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

EVAP FAMILY: VGM1095AYMEA WFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM3.1V8G1EK 49S() 50S() AB965() ALL ENGINE CODES IN ENGINE FAMILY: CA(X) EXH STD: CA TIER-1 (X) TLEV () LEV () ULEV () ZEV (); U.S. EPA TIER-1 () 50K () USEFUL LIFE WITH R/L (X); IN-USE EXH STD: FULL (X) ALTERNATIVE () EVAP STD: 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); EMISSION TEST FUEL(S): INDOLENE () PHASE 2 (X) SERVICE ACCUMULATION: STD AMA () MFR ADP (X); NMOG TEST PROCEDURE: NA (X) EQUIV () APU CYCLE: NA HYBRID TYPE: NA R/L TEST PROCEDURE: NA () PT SOURCE (X) ; ENGINE CONFIGURATION: 14 () V6 (X) V8 () DISPLACEMENT: 3.1 LITERS / 191 CU. IN. RATED HP: 160 @ 5200 RPM VALVES/CYLINDER: 2(X) 4() DRIVE: FWD(X) RWD() 4WD-FT() 4WD-PT() ENGINE LOCATION: FRONT (X) EXHAUST EMISSION CONTROL SYSTEM: EGR-TWC-HO2S(2)-SFI RLHP / DPA VALUES: SECTION 08.13.02.00

ENG CODE <u>()</u>	VEH MODELS (SEE PAGE 1)	TRANS (M5,A4,ETC.)	EQUIV. TEST <u>WEIGHT</u>	IGNITION (PCM/CALIB PART NO.)	EGR SYSTEM <u>PART NO.</u>	CATALYTIC CONVERTER <u>PART NO.</u>
6	1ND69 1NE69 3NB69 3NG69	A4/D		16218060, 16218070/ 16228004	17096154	24504674, 24507193
6A				16218060, 16218070/ 16254354		

CARLINE NAME OLDSMOBILE CUTLASS CHEVROLET MALIBU CARLINE CODE 29030 12030

"SUED: ML-VP169

REVISED: ML-VR078

17-VGM3.1V8G1EK-3.1 (1997)