State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-756 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: VGM5.7V8G1EK <u>Displacement</u>: 5.7 Liters (350 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Secondary Air Injection
Exhaust Gas Recirculation
Dual Three Way Catalytic Converters
Dual 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 <u>Oxides</u>	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:

Miles_	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	Carbon <u>Monoxide (20⁰F)</u>	
50,000	0.15	2.6	0.2	6.8	
100,000	0.16	3.1	0.2	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 🔟

_ day of May 1996.

R. B. Summer field Assistant Division Chief Mobile Source Division

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET GASOLINE-FUELED PASSENGER CARS

VEHICLE MODELS:

1 J Q 3 7 (EXAMPLE)

Digit 1 - Selling Division

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

Digit 2 - Body Designation

- Ninety-Eight, Park Avenue С
- Eldorado
- Camaro, Firebird/Formula
- Riviera, Aurora
- Bonneville, Eighty-Eight, LeSabre
- Cavalier, Sunfire
- Seville Κ
- Deville/Concours Ksp
- Grand Am, Achieva, Skylark, Malibu, Cutlass Supreme N
- Grand Prix, Regal, Century, Lumina, Monte Carlo W
- Corvette
- Saturn SC, SL, SW Z

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	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
29 - 4Dr Sedan 35 - 4Dr Station Wagon	90 - Commercial Chassis

ISSUED: ML-VP069

REVISED:

17-VGM5.7V8G1EK-1 (1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.7V8G1EK EVAP FAMILY: VGM1070AYMAA 49S() 50S() AB965() CA(X) ALL ENGINE CODES IN ENGINE FAMILY: EXH STD: CA TIER-1 (X) TLEV() LEV() ULEV() ZEV(); U.S. EPA TIER-1() 50K(X) USEFUL LIFE WITH R/L(); 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 (X) PHASE 2 () SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV () APU CYCLE: NA HYBRID TYPE: NA R/L TEST PROCEDURE: NA(X) PT SOURCE(); ENGINE CONFIGURATION: 14() V6() V8(X) DISPLACEMENT: 5.7 LITERS / 350 CU. IN. RATED HP: 275 @ 5000 RPM (EC 11-15) VALVES/CYLINDER: 2(X) 4()

RATED HP: 295 @ 5200 RPM (EC 30-31)

DRIVE: FWD() RWD(X) 4WD-FT() 4WD-PT() ENGINE LOCATION: FRONT (X)

EXHAUST EMISSION CONTROL SYSTEM: AIR, EGR, 2TWC, SFI, 2HO2S+(2)

RLHP / DPA VALUES: SECTION 08.13.02.00

NG JOE (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.
(C) 11	1FP87 2FV87 1FP67	A4	3875	16233391/16230101, 16233391/16230111	17097172	12551250, 12551249, 25153083, 25153080
11A	2FV67			16239920/16236251, 16239920/16236261		
11B				16239920/16257671, 16239920/16257681		
12	1FP87 2FV87 1FP67			16233391/16230121		
12A	2FV67			16239920/16236271		
12B				16239920/16257691		
CHEVE	CARLINE I ROLET CAMARO AC FIREBIRD/FOF			<u>CARLINE CODE</u> 12045 33020		

JUED: ML-VP069

REVISED: ML-VR016, ML-VR111

17-VGM5.7V8G1EK-2 (1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: VGM5.7V8G1EK EVAP FAMILY: VGM1070AYMAA

ENG CODE (LOC) (C) 15	VEH MODELS (SEE PAGE 1) 1FP87 2FV87 1FP67 2FV87	TRANS (M5.A4.ETC.) M6	EQUIV. TEST WEIGHT 3750 3875	IGNITION (PCM/CALIB PART NO.) 16233391/16230131, 16233391/16233391	EGR SYSTEM PART NO. 17097172	CATALYTIC CONVERTER PART NO. 12551250, 12551249, 25153083, 25153080
15A				16239920/1623 6281, 16239920/16236291		
15 B				16239920/16257721, 16239920/16257731		
30	2FV87 2FV67		3500	16233391/16230181		
30 A	2. Vo.			16239920/16236333, 16250501		
٦Β				16239920/16257701, 16257711		
31	2FV87 2FV67		3875	16233391/16230171		
31A				16239920/16236321, 16250511		
31B				16239920/16257741, 16257751		

CARLINE NAME
PONTIAC FIREBIRD/FORMULA
CORVETTE

33020 12055

ISSUED: ML-VP069

REVISED: ML-VR016, ML-VR052, ML-VR111

17-VGM5.7V8G1EK-3 (1997)

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

ENGINE FAMILY: VGM5.7V8G1EK EVAP FAMILY: VGM1095AYPAA MFR: GENERAL MOTORS CORP. 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() 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 (X) GASOLINE (X); EMISSION TEST FUEL(S): INDOLENE (X) PHASE 2 () SERVICE ACCUMULATION: STD AMA (X) MFR ADP (); NMOG TEST PROCEDURE: NA (X) EQUIV () HYBRID TYPE: NA R/L TEST PROCEDURE: NA(X) PT SOURCE(); ENGINE CONFIGURATION: 14() V6() V8(X) DISPLACEMENT: 5.7 LITERS / 350 CU. IN. RATED HP: 340 @ 5600 RPM (EC 1-5) VALVES/CYLINDER: 2(X) 4() DRIVE: FWD() RWD(X) 4WD-FT() 4WD-PT() ENGINE LOCATION: FRONT (X) EXHAUST EMISSION CONTROL SYSTEM: AIR, 2TWC, SFI, 2HO2S+(2) RLHP / DPA VALUES: SECTION 08.13.02.00

ENG 'ODE	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.
<u>OC)</u> (C)	14407	A4	3500	16194100/16244391	NA	25160429
1A	• •		3625	16194100/16255861		
1B				16194100/16257901		
2	1YY07		3500	16194100/16244331		
2A			3625	16194100/16255811		
2B				16194100/16257941		
5	1YY07	M6	3500	16194100/16244351		
5A	,,,,,,			16194100/16255831		
5B				16194100/16257921		
	CARLINE	NAME		CARLINE CODE 12055		
CORV	ETTE			12000		

JUED: ML-VR068

REVISED: ML-VR083, ML-VR111

17-VGM5.7V8G1EK-3.1 (1997)