

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-706-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 1996 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: TGM2.2V8G2EK Displacement: 2.2 Liters (134 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Exhaust Gas Recirculation
- Oxygen Sensor
- Heated Oxygen Sensor
- Three Way Catalytic Converter
- 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 Gas</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20⁰F)</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 gas (NMOG) reflect application of a 0.98 RAF for 1996 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 Gas</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20⁰F)</u>
50,000	0.111	2.4	0.2	0.002	4.4
100,000	0.114	2.6	0.3	0.002	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 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.).

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."

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 11th day of September 1995.



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

- A - Cutlass Ciera, Cutlass Cruiser, Century, Century Wagon
- B - Caprice, Caprice Wagon, Roadmaster Wagon, Coachbuilder Wagon, Roadmaster
- C - Ninety-Eight, Park Avenue
- D - Fleetwood, Limousine, Funeral Coach/Hearse
- E - Eldorado
- F - Camaro, Firebird/Formula
- G - Riviera, Aurora
- H - Bonneville, Eighty-Eight, LeSabre
- J - Cavalier, Sunfire
- K - Seville
- Ksp - Deville/Concours
- L - Corsica, Beretta
- N - Grand Am, Achieva, Skylark
- W - Grand Prix, Regal, Cutlass Supreme, 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 - Commerical Chassis |

ISSUED: ML-TP097

REVISED: ML-TR036A

17-TGM2.2V8G2EK-1

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: TGM2.2V8G2EK EVAP. FAMILY: TGM1089AYM1A
 ALL ENGINE CODES IN ENGINE FAMILY: CA X 49S___ 50S___ AB965___
 EXH STD: CA Tier-1___ TLEV X LEV___ ULEV___ ZEV___ ; U.S. EPA Tier-1 NA
 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 STD FOR MULTI-CLASS ENGINE FAMILY: NA
 FUEL TYPE(S): DEDICATED X GASOLINE X ; EMISS TEST FUEL(S): INDO___ PHASE 2 X
 SERVICE ACCUM: STD AMA___ MFR ADP X ; NMOG TEST PROC: ___ EQUIV X
 R/L TEST PROC: ___ PT SOURCE X ; HYBRID TYPE: NA APU CYCLE: NA
 ENGINE CONFIGURATION: I4 X V6___ V8___ DISPLACEMENT: 2.2 LITERS/ 134 CU. IN.
 VALVES/CYLINDER: 2 X 4___ RATED HP: 120 @ 5200 RPM
 ENGINE LOCATION: FRONT X DRIVE: FWD X RWD___ 4WD-FT___ 4WD-PT___
 EXHAUST EMISSION CONTROL SYSTEM: EGR, O2S, HO2S, TWC, SFI
 RLHP/DPA VALUES: SECTION 08.13.02.00

ENG CODE (LOC)	VEH MODELS (SEE PAGE 1)	TRANS. (M5, A4 ETC.)	EQUIV. TEST WEIGHT	IGNITION (ECM/PCM) PART NO./CALIB	EGR SYSTEM PART NO.	CATALYTIC CONVERTER PART NO.
61A	1JC37 1JF69 2JB37 2JB69 1JC69 1JF67 2JB67	A3	3000	16231851/16231513	17096100, 17096306	25163086
61B				16231851/16234163		
61C				16231851/16235133		
62A	1JC37 1JF69 2JB37 2JB69 1JC69 1JF67 2JB67		3000	16231851/16231513		
62B				16231851/16234163		
62C				16231851/16235133		

CARLINE NAME
 CHEVROLET CAVALIER
 PONTIAC SUNFIRE

CARLINE CODE
 12060
 33060

ISSUED: ML-TP097

REVISED: ML-TR036A, ML-TR049, ML-TP141, ML-TR056

17-TGM2.2V8G2EK-2

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: TGM2.2V8G2EK EVAP. FAMILY: TGM1089AYM1A

ENG CODE (LOC)	VEH MODELS (SEE PAGE 1)	TRANS. (M5, A4 ETC.)	EQUIV. TEST WEIGHT	IGNITION (ECM/PCM) PART NO./CALIB	EGR SYSTEM PART NO.	CATALYTIC CONVERTER PART NO.
63A	1JC37 1JC69 2JB37 2JB69 1JF69 1JF67 2JB67	A4	3000 3125 3250	16231851/16231533	17096100, 17096306	25163086
63B				16231851/16234143		
63C				16231851/16235153		
64A	1JC37 1JC69 2JB69 2JB37 1JF69 1JF67 2JB67		3000 3125 3250	16231851/16231533		
64B				16231851/16234143		
64C				16231851/16235153		

CARLINE NAME
CHEVROLET CAVALIER
PONTIAC SUNFIRE

CARLINE CODE
12060
33060

ISSUED: ML-TP097

REVISED: ML-TR036A, ML-TR049, ML-TP141, ML-TR056

17-TGM2.2V8G2EK-3