

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-708-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: TGM2.4VJG2EK Displacement: 2.4 Liters (145 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	0.073	1.5	0.1	0.001	5.5
100,000	0.088	2.2	0.2	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.

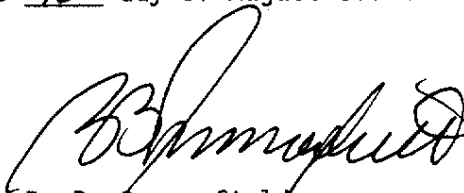
BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et 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 10th day of August 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 |

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORP. ENGINE FAMILY: TGM2.4VJG2EK 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: NA EQUIV X
 R/L TEST PROC: PT SOURCE X; HYBRID TYPE: NA APU CYCLE: NA
 ENGINE CONFIGURATION: I4 X V6 V8 DISPLACEMENT: 2.4 LITERS/ 145 CU. IN.
 VALVES/CYLINDER: 2 4 X RATED HP: 150 @ 6000 RPM
 ENGINE LOCATION: FRONT X DRIVE: FWD X RWD 4WD-FT 4WD-PT
 EXHAUST EMISSION CONTROL SYSTEM: EGR, O2S, HO2S, SFI, TWC, KS
 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.
31,31A	2NE37 2NE69 3NL37 3NL69 2NW37 2NW69	A4/CUW	3250 3375	16231851/16231613	17096100, 17096306	25160529
31B				16231851/16234273		
31C				16231851/16235243		

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

ISSUED: ML-TP095

REVISED: ML-TR024, ML-TR041, ML-TR054, ML-TP157

17-TGM2.4VJG2EK-2

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

FR: GENERAL MOTORS CORP.ENGINE FAMILY: TGM2.4VJG2EKEVAP. 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.
32.32A	1JF37 2JB37 1JF69 2JB69 2JD37 2JB67 1JF67	A4/WPR	3125 3250 3375 3250	16231851/16231403	17096100, 17096306	25160527
32B				16231851/16234223		
32C				16231851/16235203		
33.33A	1JF67 2JB67		3250 3375	16231851/16207973		
34.34A	4NJ37 4NJ69		3250 3375	16231851/16231613		25160529
3				16231851/16234273		
34C				16231851/16235243		

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
CHEVROLET CAVALIER	12060
PONTIAC SUNFIRE	33060

ISSUED: ML-TP095

REVISED: ML-TR024, ML-TR041, ML-TR054, ML-TP157, ML-TR109