

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-615
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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1994 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: R1G2.2V7G2EA Displacement: 2.2 Liters (134 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Exhaust Gas Recirculation
- Three Way Catalytic Converter
- Oxygen Sensor
- 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>
50,000	0.125	3.4	0.4	0.015
100,000	0.156	4.2	0.6	0.018

BE IT FURTHER RESOLVED: That on January 14, 1993, the Air Resources Board approved the adoption of a reactivity adjustment factor (RAF) of 0.98 for 1993 through 1997 model-year TLEVs operated on gasoline meeting the specifications of section 9.a.1.(ii) of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles." A 0.98 RAF shall be conditionally applied to the listed engine family for all purposes related to the engine family, based on the assumption that the adoption of the 0.98 RAF will become effective by December 31, 1993. If the adoption of the 0.98 RAF does not become effective by December 31, 1993, the RAF of the listed vehicle models shall be deemed to be 1.000 for all purposes relating to this engine family.

Reactivity Adjustment Factor 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 1994 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>
50,000	0.055	1.1	0.3	0.002
100,000	0.058	1.2	0.4	0.002

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 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 on January 14, 1993, the Air Resources Board approved the repeal of the currently-effective requirement that each manufacturer certify a minimum of 80 percent of its projected sales of 1994 model-year California-certified passenger cars and light-duty trucks to the phase-in standards for NMHC, or the more stringent standards in section 1960.1(g)(2) of Title 13, California Code of Regulations. If the repeal of such requirement does not become effective by December 31, 1993, the manufacturer shall submit a plan for compliance with the requirement; passenger cars and light-duty trucks not meeting such phase-in or more stringent standards shall be certified only to the extent allowed under the requirement.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "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 2290).

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 for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) 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 TLEV hydrocarbon exhaust emission standard to which the listed vehicles are certified is at least twice as stringent as otherwise applicable to gasoline vehicles of the same year and class, and the listed vehicles therefore meet the definition of "low-emission motor vehicle" set forth in Health and Safety Code Sections 39037.05 and 43800.

BE IT FURTHER RESOLVED: That the listed vehicle models shall be clearly labeled as "low-emission motor vehicles" as defined in Health and Safety Code Sections 39037.05 and 43800, and such labeling shall meet the requirements of Health and Safety Code Section 43802(a) at the time of sale.

BE IT FURTHER RESOLVED: That the listed vehicle models are certified as TLEVs at the request of General Motors Corporation based on the assumption that the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" will be amended to allow the certification of 1994 model TLEVs on a phase 2 certification gasoline having specifications substantially similar to the specifications of the gasoline used to certify the listed vehicle models. The Air Resources Board approved such amendments at a hearing conducted August 14, 1992. The certification of the listed vehicle models as TLEVs is CONDITIONAL on such amendments becoming effective by August 1, 1993. If such amendments do not become effective by August 1, 1993, the listed vehicle models shall be

deemed certified to the phase-in standards for passenger cars as set forth in section 1960.1 (f)(1) of Title 13, California Code of Regulations (For 50,000 miles: 0.25 g/mi non-methane hydrocarbons or NMHC, 3.4 g/mi carbon monoxide or CO, and 0.4 g/mi oxides of nitrogen. For 100,000 miles: 0.31 g/mi NMHC and 4.2 g/mi CO.)

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 4th day of May, 1993.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

(FOR CARB USE ONLY)

A-6-615

16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY R1G2.2V7G2EA

EVAPORATIVE FAMILY R1G1046AYMOF

CARLINES TO BE COVERED:

<u>CARLINE NAME</u>	<u>CARLINE CODE</u>
CORSICA	12010
BERETTA	12020
CAVALIER	12060
CAVALIER WAGON	12065

ISSUED: 03-04-93
(ML-RP181)

REVISED:

16-R1G2.2V7G2EA-2
(1994)

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, Custom Cruiser, Roadmaster Wagon, Coachbuilder Wagon, Roadmaster, Caprice Wagon
- C - Ninety-Eight, Park Avenue
- D - Fleetwood, Limousine, Funeral Coach/Hearse
- E - Toronado, Riviera, Eldorado, Trofeo
- F - Camaro, Firebird, Trans Am
- H - Bonneville, Eighty-Eight, LeSabre
- J - Cavalier, Sunbird, Cavalier Wagon
- K - Seville
- Ksp - Deville, Commercial Chassis, Coachbuilder Special
- L - Corsica, Beretta
- N - Grand Am, Achieva, Skylark
- W - Grand Prix, Regal, Cutlass Supreme, Lumina
- Y - Corvette
- Z - Saturn

Digit 3 - Trim Level

B, C, D, E, F, G, H, J, K, M, N, L, P, R, S, T, U, V, W, X, Y, Z

Digits 4 & 5 - Body Style

- | | |
|----------------------------|----------------------------|
| 07 - 2Dr Sport Coupe | 57 - 2Dr Hardtop Coupe |
| 08 - 2Dr Hatchback Coupe | 67 - 2Dr Convertible Coupe |
| 19 - 4Dr Sedan | 68 - 4Dr Hatchback Sedan |
| 27 - 2Dr (Notchback Coupe) | 69 - 4Dr (Notchback) Sedan |
| 35 - 4Dr Station Wagon | 87 - 2Dr Hatchback Coupe |
| 37 - 2Dr Hardtop Coupe | 90 - Commercial Chassis |
| 47 - 2Dr Hardtop Coupe | 97 - 2Dr Hardtop Coupe |

ISSUED: 03-04-93
(ML-RP181)

REVISED:

17-R1G2.2V7G2EA-1
(1994)

(1994)

CHEVROLET LIGHT DUTY VEHICLE MODEL IDENTIFICATION

<u>MODEL</u>	<u>NAME</u>	<u>CAR LINE</u>	<u>CODE</u>
1BL19	CAPRICE CLASSIC SEDAN	CAPRICE	12040
1BN19	CAPRICE CLASSIC LS SEDAN		12040
1BL35	CAPRICE CLASSIC STATION WAGON	CAPRICE WAGON	12045
1FP87	CAMARO COUPE	CAMARO	12025
1FP67	CAMARO CONVERTIBLE		12025
1JC37	CAVALIER RS COUPE	CAVALIER	12060
1JC69	CAVALIER RS SEDAN		12060
1JF37	CAVALIER Z24 COUPE		12060
1JC35	CAVALIER STATION WAGON	CAVALIER WAGON	12065
1JC67	CAVALIER RS CONVERTIBLE	CAVALIER	12060
1JF67	CAVALIER Z24 CONVERTIBLE		12060
1LT69	CORSICA SEDAN	CORSICA	12010
1LV37	BERETTA COUPE	BERETTA	12020
1LW37	BERETTA Z26 COUPE		12020
1WL27	LUMINA COUPE	LUMINA	12050
1WL69	LUMINA SEDAN		12050
1WN27	LUMINA EURO COUPE		12050
1WN69	LUMINA EURO SEDAN		12050
1WP27	LUMINA Z34 COUPE		12050
1YY07	CORVETTE HATCHBACK COUPE	CORVETTE	12055
1YY67	CORVETTE CONVERTIBLE		12055

ISSUED: 12-18-92
(ML-RP071)

08.13.03.00-2
(1994)

1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: R1G2.2V7G2EA

PASSENGER CARS X LIGHT DUTY TRUCKS MEDIUM DUTY VEHICLES

FUEL TYPE: PHASE 2 GAS STANDARDS TYPE: TLEV VEHICLE TYPE: NA

ENGINE CONFIG: I4 LITER (CID): 2.2 (134) EVAP FAMILY: R1G1046AYMOF

ENGINE: FRONT X MID REAR DRIVE: FWD X RWD 4WD-FT 4WD-PT

EMISSION CONTROL SYSTEM & SPECIAL FEATURES: EGR, TWC, O2S, MFI, ~~MS~~

DPA: SECTION 08.13.02.00

ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECM/PCM) PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
61 (A/C)	1JC35 1JC37 1JC69 1JC67	A3	3000 2875 3000 3125	16179433	17090076	25146834
62	1JC35 1JC37 1JC69 1JC67		3000 2875 3000			
63 (A/C)	1LT69 1LV37 1LW37 1LD69		3125	16192793		25145314
64	1LT69 1LV37 1LW37 1LD69					

ISSUED: 03-04-93
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REVISED:

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(1994)