State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-494-B
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 1990 model-year General Motors Corporation emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family: L2G4.5W8X5G2 Displacement: 4.5 Liters (273 Inches^3)

Equipped with the following exhaust emission control systems:

Exhaust Gas Recirculation
Oxygen Sensor
Three-Way Catalyst
Sequential Multipoint Electronic Fuel Injection
On-Board Diagnostic System (Exempted)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.39	7.0	0.7

The following are the certification emission values for this engine family:

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.20	2.5	0.4

BE IT FURTHER RESOLVED: That the listed models are certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Code of Regulations which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying to the optional NOx standard based on actual sales of 1989 model-year California-certified passenger cars.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered 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" (Title 13, California Code of Regulations, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards 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" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Code of Regulations, Section 1968) 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 (California Health and Safety Code Section 43205).

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 6th day of July, 1989.

K. D. Drachand, Chief
Mobile Source Division

(FOR CARB USE ONLY)

SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

Section and Page No.	Rev. No. or Date	Item
17-L2G4.5W8X5G2-Index 1	06-19-89	Table of Contents
17-L2G4.5W8X5G2-1	06-19-89	Supplemental Data Sheet
17-L2G4.5W8X5G2-2	06-19-89	Supplemental Data Sheet
17-L2G4.5W8X5G2-3	06-19-89	Supplemental Data Sheet
17-L2G4.5W8X5G2-4	06-19-89	Certification Review Sheet
17-L2G4.5W8X5G2-5	06-19-89	Certification Review Sheet

NOTES:

(1) Please refer to manufacturer's HP lists (Attachment I) for correct dyno test HP settings based on model and equipment.

(2) If two test weights are listed, the lower weight will be used for testing.

(3) Letter derivative codes are the same as corresponding numeric codes except as indicated.

ISSUED: 06-19-89 REV. NO.:

(FOR CARB USE ONLY)

E.O. # A-6-494 - B

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

Digit 2 - Body Designation

A-Celebrity, 6000, Cutlass Ciera, Cutlass Cruiser, Century
B-Caprice, Safari Wagon, Custom Cruiser, LeSabre/Electra Wagon, Coachbuilder Wagon
C-Ninety-Eight, Touring, Electra, DeVille, Fleetwood, Commercial Chassis
D-Brougham
E-Toronado, Riviera, Eldorado, Reatta
F-Camaro, Firebird, Trans Am
H-Bonneville, Eighty-Eight, LeSabre
J-Cavalier, Sunbird, Skyhawk
K-Seville
L-Corsica, Beretta
N-Grand Am, Cutlass Calais, Skylark
T-Lemans
V-Allante
W-Grand Prix, Regal, Cutlass Supreme, Lumina
Y-Corvette
Z-Commercial Chassis

Digit 3
Trim Level

B, C, D, E, F,
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
08-2Dr Hatchback Coupe
19-4Dr Sedan
27-2Dr (Notchback) Coupe
35-4Dr Station Wagon
37-2Dr Hardtop Coupe
47-2Dr Hardtop Coupe
57-Dr Hardtop Coupe
67-2Dr Convertible Coupe
68-4Dr Hatchback Sedan
69-4Dr (Notchback) Sedan
87-2Dr Hatchback Coupe
90-Commercial Chassis
97-2Dr Hardtop Coupe

ISSUED: 06-19-89 REV. NO.:

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E.O. # A-6-494 - B

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L2G4.5W8X5G2

PASSENGER CARS X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___ GAS X DIESEL___

ENGINE TYPE: V8 LITER (CID): 4.5 (273) EVAP FAMILY: LBO-2H

EMISSION CONTROL SYSTEM: EGR-TWC-O2S (SMPI)

ENGINE: FRONT X MID___ REAR___ DRIVE: FWD X RWD___ 4WD-FT___ 4WD-PT___

CERTIFICATION STANDARDS: 0.7 NOx DPA: SEE ATTACHMENT I

ENG CODE	VEH MODELS (SEE PAGE 1A)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.	TLC*
2	6CS69	A4	4000	16130926/ 351	17090058	25129433	KCL
4	6KS69 6EL57		3875 3750	16130876/ 1011	17090069	25129429	KCN

* Tune-up label codes are found in the upper left hand corner of the tune-up label. Vehicles with "KCL" and "KCN" on label conform to 0.39 g/mi NMHC, 7.0 g/mi CO and 0.7 g/mi NOx.

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2	6CS69	A4	4000	16130926/ 351	17090058	25129433	KCL
2A				16130926/ ATNM			
2B				16146846/ ATTP			
4	6KS69 6EL57		3875 3750	16130876/ 1011	17090069	25129429	KCN
4A				16130876/ ATNK			
4B				16146826/ ATTM			

* Tune-up label codes are found in the upper left hand corner of the tune-up label. Vehicles with "KCL" and "KCN" on label conform to 0.39 g/mi NMHC, 7.0 g/mi CO and 0.7 g/mi NOx.

ISSUED: 06-19-89 REV. NO.: 001, 004, 005