State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-504
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 1991 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family: M1G2.5W5XGG2 Displacement: 2.5 Liters (151 Cu. In.)

Exhaust Emission Control Systems (Special Features):

Three-Way Catalyst
Oxygen Sensor
Exhaust Gas Recirculation
Throttle Body Electronic Fuel Injection

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)
0.41	7.0	0.4

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)
0.16	2.6	0.1

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 also comply 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 14th day of February, 1990.

K. D. Drachand, Chief
Mobile Source Division

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16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY..... M1G2.5W5XGG2

EVAPORATIVE FAMILY..... MBO-1B

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
LUMINA	12050

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

VEHICLE MODELS: 1 J C 3 7 (EXAMPLE)

Digit 1 Selling Division	Digit 2 - Body Designation
1-Chevrolet	A-Celebrity, 6000, Cutlass Ciera, Cutlass Cruiser, Century
2-Pontiac	B-Caprice, Safari Wagon, Custom Cruiser, LeSabre/Electra Wagon, Coachbuilder Wagon
3-Oldsmobile	C-Ninety-Eight, Touring, Electra, DeVille, Fleetwood, Commercial Chassis
4-Buick	D-Brougham
6-Cadillac	E-Toronado, Riviera, Eldorado, Reatta
8-Saturn	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-Saturn

Digit 3 Trim Level	Digits 4 & 5 - Body Style	
B, C, D, E, F,	07-2Dr Sport Coupe	57-Dr Hardtop Coupe
H, J, K, M, N,	08-2Dr Hatchback Coupe	67-2Dr Convertible Coupe
L, P, R, S, T,	19-4Dr Sedan	68-4Dr Hatchback Sedan
U, V, W, X, Y, Z	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: 02-02-90 REV. NO.:

(FOR CARB USE ONLY)

E.O. # A-6-504

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G2.5W5XGG2

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

ENGINE TYPE: I4 LITER (CID): 2.5 (151) EVAP FAMILY: MBO-1B

EMISSION CONTROL SYSTEM: EGR/TWC/02S (OBD, TBI)

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

CERTIFICATION STANDARDS: 0.41 HC, 7.0 CO, 0.4 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.
51,51A	1WL27 1WL69	A3	3375 3500	16140231*	17090078	25104596

* ECM P/N 16140231 recalibrated by RC M1-045 prior to start of production.

ISSUED: 02-02-90 REV. NO.: 001

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Dyno Hp	without.AC Coast Down Time	.with..AC. Dyno Hp	.with..AC. Coast Down Time	CD, CA or FA
***** W BODY (FWD) *****							
CHEVROLET LUMINA (1W_27)							
PONTIAC GRAND PRIX (2W_37)							
OLDSMOBILE CUTLASS SUPREME (3W_47)							
BUICK REGAL (4W_57)							
man. tran & (P195/75&P205/70)R14	3625 Only	10.84	5.1	20.58	5.6	19.67	CA
man. tran & (P195/75&P205/70)R14	0-3500	10.60	5.1	20.37	5.6	19.57	CA
auto tran & (P195/75&P205/70)R14	3625 Only	11.34	5.1	19.67	5.6	18.84	CA
auto tran & (P195/75&P205/70)R14	0-3500	11.10	5.1	19.45	5.6	18.64	CA
w/man. tran & P195/70R15 AL3	3625 Only	12.00	4.1	18.58	4.5	17.96	CA
w/man. tran & P195/70R15 AL3	0-3500	11.78	4.1	18.33	4.5	17.61	CA
w/auto tran & P195/70R15 AL3	3625 Only	12.50	4.1	17.84	4.5	17.26	CA
w/auto tran & P195/70R15 AL3	0-3500	12.28	4.1	17.58	4.5	16.89	CA
w/man. tran & P205/65R15 AL2	3625 Only	11.17	5.4	19.98	5.9	19.18	CA
w/man. tran & P205/65R15 AL2	0-3500	11.11	5.4	19.41	5.9	18.62	CA
w/auto tran & P205/65R15 AL2	3625 Only	11.67	5.4	19.13	5.9	18.39	CA
w/auto tran & P205/65R15 AL2	0-3500	11.61	5.4	18.57	5.9	17.84	CA
w/man. tran & P205/70R15 ALS	3625 Only	10.84	5.1	20.58	5.6	19.67	CA
w/man. tran & P205/70R15 ALS	0-3500	10.60	5.1	20.37	5.6	19.57	CA
w/auto tran & P205/70R15 ALS	3625 Only	11.34	5.1	19.67	5.6	18.84	CA
w/auto tran & P205/70R15 ALS	0-3500	11.10	5.1	19.45	5.6	18.64	CA
w/man. tran & P215/65R15 AL3	3625 Only	12.07	4.1	18.47	4.5	17.87	CA
w/man. tran & P215/65R15 AL3	0-3500	11.89	4.1	18.16	4.5	17.61	CA
w/auto tran & P215/65R15 AL3	3625 Only	12.57	4.1	17.74	4.5	17.18	CA
w/auto tran & P215/65R15 AL3	0-3500	12.39	4.1	17.43	4.5	16.92	CA
w/man. tran & P215/60R16 AL2	3625 Only	11.86	4.9	18.81	5.4	18.07	CA
w/man. tran & P215/60R16 AL2	0-3500	11.80	4.9	18.28	5.4	17.55	CA
w/auto tran & P215/60R16 AL2	3625 Only	12.36	4.9	18.05	5.4	17.37	CA
w/auto tran & P215/60R16 AL2	0-3500	12.30	4.9	17.53	5.4	16.86	CA
w/man. tran & P215/60R16 AL3	3625 Only	12.00	4.6	18.60	5.1	17.92	CA
w/man. tran & P215/60R16 AL3	0-3500	11.93	4.6	18.07	5.1	17.39	CA
w/auto tran & P215/60R16 AL3	3625 Only	12.50	4.6	17.86	5.1	17.23	CA
w/auto tran & P215/60R16 AL3	0-3500	12.43	4.6	17.35	5.1	16.72	CA

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Dyno Hp	without.AC Coast Down Time	.with..AC. Dyno Hp	.with..AC. Coast Down Time	CD, CA or FA
***** W BODY (FWD) (continued) *****							
CHEVROLET LUMINA (1W_69)							
PONTIAC GRAND PRIX (2W_19)							
OLDSMOBILE CUTLASS SUPREME (3W_69)							
BUICK REGAL (4W_19)							
w/auto tran & P195/75R14 ALS	0-3625	11.57	5.5	19.28	6.0	18.41	CA
w/man. tran & P195/75R14 ALS	0-3625	11.07	5.5	20.15	6.0	19.20	CA
w/auto tran & P205/70R14 ALS	0-3625	11.91	5.5	18.74	6.0	17.91	CA
w/man. tran & P205/70R14 ALS	0-3625	11.41	5.5	19.56	6.0	18.65	CA
w/auto tran & P195/70R15 AL3	0-3625	12.62	4.5	17.68	5.0	17.07	CA
w/man. tran & P195/70R15 AL3	0-3625	12.12	4.5	18.41	5.0	17.75	CA
w/auto tran & P205/65R15 AL2	3625-3750	12.12	5.9	19.03	6.4	18.25	CA
w/auto tran & P205/65R15 AL2	0-3500	11.90	5.7	18.11	6.2	17.29	CA
w/man. tran & P205/65R15 AL2	3625-3750	11.62	5.9	19.85	6.4	18.90	CA
w/man. tran & P205/65R15 AL2	0-3500	11.40	5.7	18.90	6.2	18.01	CA
w/auto tran & P205/70R15 ALS	3625-3750	11.52	6.0	20.03	6.7	19.03	CA
w/auto tran & P205/70R15 ALS	0-3500	11.34	5.9	19.01	6.5	18.07	CA
w/man. tran & P205/70R15 ALS	3625-3750	11.02	6.0	20.94	6.7	19.85	CA
w/man. tran & P205/70R15 ALS	0-3500	10.84	5.9	19.89	6.5	18.86	CA
w/auto tran & P215/65R15 AL3	3625-3750	12.96	4.5	17.80	5.0	17.20	CA
w/auto tran & P215/65R15 AL3	0-3500	12.72	4.3	16.95	4.7	16.40	CA
w/man. tran & P215/65R15 AL3	3625-3750	12.46	4.5	18.51	5.0	17.87	CA
w/man. tran & P215/65R15 AL3	0-3500	12.22	4.3	17.65	4.7	17.04	CA
w/auto tran & P215/60R16 AL2	3625-3750	12.84	5.4	17.98	5.9	17.25	CA
w/auto tran & P215/60R16 AL2	0-3500	12.59	5.2	17.12	5.7	16.44	CA
w/man. tran & P215/60R16 AL2	3625-3750	12.34	5.4	18.70	5.9	17.92	CA
w/man. tran & P215/60R16 AL2	0-3500	12.09	5.2	17.83	5.7	17.09	CA
w/auto tran & P215/60R16 AL3	3625-3750	12.97	4.8	17.79	5.2	17.16	CA
w/auto tran & P215/60R16 AL3	0-3500	12.73	4.5	16.94	5.0	16.35	CA
w/man. tran & P215/60R16 AL3	3625-3750	12.47	4.8	18.51	5.2	17.83	CA
w/man. tran & P215/60R16 AL3	0-3500	12.23	4.5	17.63	5.0	17.00	CA