State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-509
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: M2G2.3W8XEW7 Displacement: 2.3 Liters (139 Cu. In.)

Exhaust Emission Control Systems (Special Features):

Three-Way Catalyst
Oxygen Sensor
Multi-point 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)
0.39	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)
0.11	1.4	0.2

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 20th day of February, 1990.

K. D. Drachand, Chief
Mobile Source Division

(FOR CARB USE ONLY)

16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY..... M2G2.3W8XEW7

EVAPORATIVE FAMILY..... MAO-2G

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
SKYLARK	08055
BERETTA COUPE	12020
CALAIS	29010
GRAND AM	33025

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E.O. # A-6-509

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, Estate 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: 02-07-90 REV. NO.:

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E.O. # A-6-509

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M2G2.3W8XEW7

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

ENGINE TYPE: I4 LITER (CID): 2.3 (139) EVAP FAMILY: MAO-2G

EMISSION CONTROL SYSTEM: O2S, TWC (MPI)

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

CERTIFICATION STANDARDS: .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.
1,1A, 1B,1C	2NE27	A3	3000	16155623/ AWJC	NA	25100635
	3NF27					
	4NJ27					
	2NE69		3125			
	3NF69					
	4NC69					
	4ND69					
	3NT69					
	4NM69					
	4NM27					
	3NT27					
	2NW27					
	3NK27					
	2NW69		3250			
	3NK69					
1D				16164663/ AYDY		
2,2A, 2B	2NE27	M5	3000	16139413/ ASDJ		
	2NE69					
	3NF27					
	2NW27		3125			
	2NW69					
	3NK27					
	3NK69		3250			

ISSUED: 02-07-90 REV. NO.: 001, 002, 003, 004, 005

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E.O. # A-6-509

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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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.
3,3A, 3B	1LZ37	M5	3125	16139281/ ASCY	NA	25128724
11,11A, 11B	2NE27 3NF27 3NL27 2NG27 4NV27 4NJ27 2NE69 3NF69 3NL69 2NG69 4NV69 4NC69 4ND69 3NT69 4NM69 4NM27 3NT27	A3	3000 3125	16139393/ ASDF		25100635
11C				16164643/ AYDW		

ISSUED: 02-07-90 REV. NO.: 001, 002, 003, 004, 005

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
***** L BODY (FWD) *****							
CHEVROLET BERETTA/BERETTA GT (1LV37/1LW37)							
w/man. trans & P195/70R14 AL2	0-3125	10.12	5.3	18.96	5.9	17.99	CA
w/auto trans & P195/70R14 AL2	0-3125	10.62	5.3	18.07	5.9	17.19	CA
w/man. trans & P205/60R15 AL3	0-3125	10.94	4.2	17.65	4.7	16.99	CA
w/auto trans & P205/60R15 AL3	0-3125	11.44	4.2	16.88	4.7	16.28	CA
w/man. trans & P205/55R16 AL3	0-3125	11.18	4.4	17.26	4.8	16.61	CA
w/auto trans & P205/55R16 AL3	0-3125	11.68	4.4	16.52	4.8	15.93	CA
CHEVROLET BERETTA GTZ (1LZ37)							
w/man. trans & P205/55VR16 HW4	0-3125	11.07	5.0	17.45	5.6	16.68	CA
w/auto trans & P205/55VR16 HW4	0-3125	11.57	5.0	16.69	5.6	15.99	CA
CHEVROLET BERETTA (1LW67) - CONVERTIBLE							
w/man. trans & P205/60R15 AL3	0-3375	12.00	4.9	17.35	5.4	16.66	CA
w/auto trans & P205/60R15 AL3	0-3375	12.50	4.9	16.65	5.4	16.02	CA
w/man. trans & P205/55R16 AL3	0-3375	11.85	5.4	17.58	6.0	16.81	CA
w/auto trans & P205/55R16 AL3	0-3375	12.35	5.4	16.86	6.0	16.16	CA
w/man. trans & P215/60R16 AL3	0-3375	11.90	5.1	17.49	5.7	16.77	CA
w/auto trans & P215/60R16 AL3	0-3375	12.40	5.1	16.79	5.7	16.12	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
***** N BODY (FWD) *****							
PONTIAC GRAND AM (2N_27,2N_69)							
OLDSMOBILE CUTLASS CALAIS (3N_27,3N_69)							
BUICK SKYLARK (4N_27,4N_69)							
w/man. trans & P185/80R13 ALS	3125 Only	10.29	5.8	18.80	6.3	17.87	CA
w/man. trans & P185/80R13 ALS	0-3000	10.29	5.8	17.96	6.3	17.11	CA
w/auto trans & P185/80R13 ALS	0-3125	10.79	5.8	17.93	6.3	17.08	CA
w/man. trans & P205/70R13 ALS	3125 Only	10.57	5.8	18.30	6.3	17.40	CA
w/man. trans & P205/70R13 ALS	0-3000	10.57	5.8	17.59	6.3	16.76	CA
w/auto trans & P205/70R13 ALS	0-3125	11.07	5.8	17.48	6.3	16.65	CA
w/man. trans & P185/75R14 ALS	0-3125	10.32	5.2	18.64	5.8	17.74	CA
w/auto trans & P185/75R14 ALS	0-3125	10.82	5.2	17.78	5.8	16.96	CA
w/man. trans & P195/70R14 ALS	3125 Only	10.76	5.8	18.00	6.3	17.06	CA
w/man. trans & P195/70R14 ALS	0-3000	10.76	5.8	17.27	6.3	16.42	CA
w/auto trans & P195/70R14 ALS	0-3125	11.26	5.8	17.18	6.3	16.37	CA
w/man. trans & P195/70R14 AL2	0-3125	10.90	5.6	17.62	6.1	16.78	CA
w/auto trans & P195/70R14 AL2	0-3125	11.40	5.6	16.85	6.1	16.08	CA
w/man. trans & P215/60R14 AL3	3250 Only	11.84	5.5	16.85	6.0	16.23	CA
w/man. trans & P215/60R14 AL3	0-3125	11.77	5.5	16.44	6.0	15.80	CA
w/auto trans & P215/60R14 AL3	3250 Only	12.34	5.5	16.17	6.0	15.60	CA
w/auto trans & P215/60R14 AL3	0-3125	12.27	5.5	15.77	6.0	15.18	CA
w/man. trans & P205/55R16 AL3	0-3250	11.66	5.2	17.11	5.7	16.39	CA
w/auto trans & P205/55R16 AL3	0-3250	12.16	5.2	16.41	5.7	15.74	CA