

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-502
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: M1G2.2W5JFG8 Displacement: 2.2 Liters (134 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:

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.39	7.0	0.4

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

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.15	3.4	0.3

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 13th day of February, 1990.


K. D. Drachand, Chief
Mobile Source Division

(FOR CARB USE ONLY)

16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY..... M1G2.2W5JFG8

EVAPORATIVE FAMILY..... MAOP-1G

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
CORSICA	12010
BERETTA COUPE	12020
CAVALIER	12060
CAVALIER WAGON	12065

ISSUED: 01-25-90

16-M1G2.2W5JFG8- 3

(FOR CARB USE ONLY)

E.O. # A-6-502

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-Celebrity, 6000, Cutlass Ciera, Cutlass Cruiser, Century
B-Caprice, Safari Wagon, Custom Cruiser, Estate 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-Saturn

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	57-Dr 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: 01-25-90

REV. NO.:

17-M1G2.2W5JFG8-1
(1991)

(FOR CARB USE ONLY)

E.O. # A-6-502

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: M1G2.2W5JFG8

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

ENGINE TYPE: L4 (RPO: LM3) LITER (CID): 2.2 (134) EVAP FAMILY: MAOP-1G

EMISSION CONTROL SYSTEM: EGR-TWC-02S (TBI)

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

CERTIFICATION STANDARDS: 0.4 NOx

DPA: SEE ATTACHMENT I

<u>ENG CODE</u>	<u>VEH MODELS (SEE PAGE 1A)</u>	<u>TRANS TYPE: A-AUTO M-MAN</u>	<u>EQUIV TEST WEIGHT</u>	<u>IGN SYSTEM (ECU/PROM) PART NO.</u>	<u>EGR SYSTEM PART NO.</u>	<u>CATALYST PART NO.</u>
51	1JC37 1JC69 1JC35	M5	2875 3000	16147621/ ATXD	17090076	25127553
52	1JC37 1JC69 1JC35		2750 2875			
53	1LT69 1LT68 1LV37 1LW67		3000 3125 3000 3250	16147411/ ATWT		25103078
54	1LT69 1LT68 1LV37 1LW67		3000 3250			
51A				16162871/ AXWK		
52A						
53A				16162851/ AXWH		
54A						

ISSUED: 01-25-90

REV. NO.: 001, 002, 003

17-M1G2.2W5JFG8-2
(1991)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: M1G2.2W5JFG8

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

ENGINE TYPE: L4 (RPO: LM3) LITER (CID): 2.2 (134) EVAP FAMILY: MAOP-1G

EMISSION CONTROL SYSTEM: EGR-TWC-02S (TBI)

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

CERTIFICATION STANDARDS: 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.
61	1JC35 1JC37 1JC69	A3	3000 2875	16150591/ AUJS	17090076	25127553
61A				16158331/ AWWN		
62	1JC35 1JC37 1JC69		2875	16150591/ AUJS		
62A				16158351/ AWWN		
63	1LT69 1LT68 1LV37 1LW67		3000 3125 3000 3250	16150611/ AUJU		25103078
63A				16158351/ AWWR		
64	1LT69 1LT68 1LV37 1LW67		3000 3250	16150611/ AUJU		
64A				16158351/ AWWR		

ISSUED: 01-25-90

REV. NO.: 001, 002

ATTACHMENT I

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without AC Coast Dyno Down Time	.with..AC. Coast Dyno Down Time	CD, CA or FA
***** J BODY (FWD) *****					
CHEVROLET CAVALIER (1J_37)					
PONTIAC SUNBIRD (2J_37)					
w/man. trans & P185/80R13 ALS	3125 Only	9.90	5.6 19.39	6.2 18.33	CA
w/man. trans & P185/80R13 ALS	0-3000	9.80	5.6 18.81	6.2 17.86	CA
w/auto trans & P185/80R13 ALS	3125 Only	10.40	5.6 18.46	6.2 17.50	CA
w/auto trans & P185/80R13 ALS	0-3000	10.30	5.6 17.90	6.2 17.02	CA
w/man. trans & P185/75R14 ALS	3125 Only	10.01	5.1 19.17	5.6 18.29	CA
w/man. trans & P185/75R14 ALS	0-3000	9.93	5.1 18.57	5.6 17.67	CA
w/auto trans & P185/75R14 ALS	3125 Only	10.51	5.1 18.26	5.6 17.46	CA
w/auto trans & P185/75R14 ALS	0-3000	10.43	5.1 17.68	5.6 16.86	CA
w/man. trans & P195/70R14 ALS	0-3000	9.90	5.6 18.62	6.2 17.68	CA
w/auto trans & P195/70R14 ALS	0-3000	10.40	5.6 17.73	6.2 16.86	CA
w/man. trans & P195/70R14 AL2	3125 Only	10.40	5.1 18.46	5.6 17.61	CA
w/man. trans & P195/70R14 AL2	0-3000	10.13	5.1 18.20	5.6 17.33	CA
w/auto trans & P195/70R14 AL2	3125 Only	10.90	5.1 17.61	5.6 16.84	CA
w/auto trans & P195/70R14 AL2	0-3000	10.63	5.1 17.34	5.6 16.55	CA
w/man. trans & P215/60R14 AL3	3125 Only	11.16	4.6 17.20	5.1 16.52	CA
w/man. trans & P215/60R14 AL3	0-3000	11.00	4.6 16.81	5.1 16.19	CA
w/auto trans & P215/60R14 AL3	3125 Only	11.66	4.6 16.46	5.1 15.83	CA
w/auto trans & P215/60R14 AL3	0-3000	11.50	4.6 16.08	5.1 15.46	CA

CHEVROLET CAVALIER (1J_35,1J_67,1J_69)

PONTIAC SUNBIRD (2J_35,2J_67,2J_69)

w/man. trans & P185/80R13 ALS	0-3125	10.70	6.4 17.94	7.0 16.98	CA
w/auto trans & P185/80R13 ALS	0-3125	11.20	6.4 17.14	7.0 16.29	CA
w/man. trans & P185/75R14 ALS	0-3125	10.85	6.1 17.70	6.7 16.76	CA
w/auto trans & P185/75R14 ALS	0-3125	11.35	6.1 16.92	6.7 16.06	CA
w/man. trans & P195/70R14 ALS	0-3125	10.80	6.4 17.77	7.0 16.82	CA
w/auto trans & P195/70R14 ALS	0-3125	11.30	6.4 17.00	7.0 16.16	CA
w/man. trans & P195/70R14 AL2	0-3125	11.06	6.0 17.36	6.6 16.47	CA
w/auto trans & P195/70R14 AL2	0-3125	11.56	6.0 16.61	6.6 15.79	CA
w/man. trans & P215/60R14 AL3	0-3125	11.90	5.4 16.17	5.9 15.48	CA
w/auto trans & P215/60R14 AL3	0-3125	12.40	5.4 15.52	5.9 14.88	CA

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Coast Dyno Down Hp Time	.with..AC. Coast Dyno Down Hp Time	CD, CA or FA
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***** 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

CHEVROLET CORSICA (1LT68) - HATCHBACK

w/man. trans & P185/75R14 ALS	3250 Only	9.96	5.4 20.12	6.0 19.08	CA
w/man. trans & P185/75R14 ALS	0-3125	9.82	5.4 19.54	6.0 18.52	CA
w/auto trans & P185/75R14 ALS	3250 Only	10.46	5.4 19.16	6.0 18.21	CA
w/auto trans & P185/75R14 ALS	0-3125	10.32	5.4 18.59	6.0 17.67	CA
w/man. trans & P195/70R14 AL2	3250 Only	10.28	5.3 19.50	5.9 18.54	CA
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	3250 Only	10.78	5.3 18.59	5.9 17.72	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	3250 Only	11.09	4.3 18.09	4.8 17.41	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	3250 Only	11.59	4.3 17.31	4.8 16.68	CA
w/auto trans & P205/60R15 AL3	0-3125	11.44	4.2 16.88	4.7 16.28	CA

CHEVROLET CORSICA (1LT69) - SEDAN

w/man. trans & P185/75R14 ALS	0-3125	10.05	5.6 19.09	6.2 18.08	CA
w/auto trans & P185/75R14 ALS	0-3125	10.55	5.6 18.19	6.2 17.27	CA
w/man. trans & P195/70R14 AL2	0-3125	10.36	5.5 18.53	6.1 17.59	CA
w/auto trans & P195/70R14 AL2	0-3125	10.86	5.5 17.67	6.1 16.82	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

CHEVROLET CORSICA LTZ (1LZ69) - SEDAN

w/man. trans & P205/60R15 AL3	3250 Only	11.09	4.3 18.09	4.8 17.41	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	3250 Only	11.59	4.3 17.31	4.8 16.68	CA
w/auto trans & P205/60R15 AL3	0-3125	11.44	4.2 16.88	4.7 16.28	CA