

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-501
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: M1G2.0W5JFH8 Displacement: 1.6 Liters (98 Cu. In.)
2.0 Liters (122 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	2.0	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 26th day of February, 1990.


K. D. Drachand, Chief
Mobile Source Division

(FOR CARB USE ONLY)

16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY..... M1G2.0W5JFH8

EVAPORATIVE FAMILY..... MAOP-1H

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
LEMANS	33005
SUNBIRD	33060
SUNBIRD CONVERTIBLE	33070

ISSUED: 02-14-90

16-M1G2.0W5JFH8-2

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-6000, Cutlass Ciera, Cutlass Cruiser, Century
- B-Caprice, Custom Cruiser, Roadmaster Wagon, Coachbuilder Wagon
- C-Ninety-Eight, Touring, Park Avenue, DeVille, Fleetwood, Commerical Chassis
- D-Brougham
- E-Toronado, Riviera, Eldorado, Reatta, Trofeo
- F-Camaro, Firebird, Trans Am
- H-Bonneville, Eighty-Eight, LeSabre
- J-Cavalier, Sunbird
- 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 Coupe/Sedan

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
- 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: 02-14-90

REV. NO.:

17-M1G2.0W5JFH8-1
(1991)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: M1G2.0W5JFH8

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

ENGINE TYPE: I4 LITER (CID): 1.6 (98) / 2.0 (122) EVAP FAMILY: MAOP-1H

EMISSION CONTROL SYSTEM: EGR, TWC, O2S (TBI)

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 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
51	2JB37	A3	2875	16147311/ ATWA	17089050	25127553
	2JC37					
	2JD37					
	2JB69					
	2JC69					
	2JU37					
	2JB67					
52	2JB37	M5	2875	16147331/ ATWC	17089051	
	2JC37					
	2JD37					
	2JC69					
	2JB69					
	2JU37					
	2JB67					
53	2JD37	A3	2875 2875	16147311/ ATWA	17089050	
	2JC37					
	2JB37					
	2JC69					
	2JB69					
	2JU37					
	2JB67					

ISSUED: 02-14-90

REV. NO.: 002

17-M1G2.0W5JFH8-2
(1991)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G2.0W5JFH8
 PASSENGER CARS X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___ GAS X DIESEL___
 ENGINE TYPE: I4 LITER (CID): 1.6 (98) / 2.0 (122) EVAP FAMILY: MAOP-1H
 EMISSION CONTROL SYSTEM: EGR, TWC, O2S (TBI)
 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 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
54	2JB37 2JC37 2JD37 2JC69 2JB69 2JU37 2JB67	M5	2750 2875 2750 3000	16147331/ ATWC	17089051	25127553
61	2TN08 2TN19	A3	2625	16139559/ ASFM	17087248	25127798
61A				16160739/ AXJL		
62	2TN08 2TN19		2500 2625	16139559/ ASFM		
62A				16160739/ AXJL		
63	2TX08 2TN08 2NT19	M4 M5	2500 2625	16134189/ ARAW	17087249	
63A				16159519/ AXCD		
64	2TX08 2TN08 2TN19	M4 M5	2500	16134189/ ARAW		
64A				16159519/ AXCD		

ISSUED: 02-14-90

REV. NO.: 001, 002, 003

(FOR CARB USE ONLY)

E.O. # A-6-501

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: M1G2.0W5JFH8

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

ENGINE TYPE: 14 LITER (CID): 1.6 (98) / 2.0 (122) EVAP FAMILY: MAOP-1H

EMISSION CONTROL SYSTEM: EGR, TWC, O2S (TBI)

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

CERTIFICATION STANDARDS: .4 NOx

DPA: SEE ATTACHMENT I

<u>ENG CODE</u>	<u>VEH MODELS (SEE PAGE 1)</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>
66	2TS08 2TN19	A3	2750	16139589/ ASFR	17089050	25127798
67	2TS08 2TN19		2625 2750			
68	2TS08 2TN19	M5	2625 2750	16139559/ ASFS	17089051	
69	2TS08 2TN19		2625			

ISSUED: 02-14-90

REV. NO.: 001

17-M1G2.0W5JFH8-4
(1991)

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
***** J BODY (FWD) (continued) *****					
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

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

***** T BODY (FWD) *****

PONTIAC LEMANS (2T_08,2T_19)

w/man. trans & P175/70R13 ALS	2625 Only	9.37	5.8 17.25	6.4 16.27	CA
w/man. trans & P175/70R13 ALS	0-2500	9.26	5.8 16.71	6.4 15.83	CA
w/auto trans & P175/70R13 ALS	0-2625	9.95	6.0 16.36	6.6 15.44	CD
w/man. trans & P185/60HR14 HWY	2750 Only	10.89	6.1 15.56	6.7 14.74	CA
w/man. trans & P185/60HR14 HWY	2625 Only	10.80	6.1 14.98	6.7 14.18	CA
w/auto trans & P185/60HR14 HWY	2750 Only	11.59	6.1 14.62	6.7 13.89	CA
w/auto trans & P185/60HR14 HWY	2625 Only	11.50	6.1 14.07	6.7 13.36	CA