

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-503  
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: M1G2.5W5TPG1 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:

<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>
0.41	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>
0.27	2.7	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 13<sup>th</sup> day of February, 1990.



K. D. Drachand, Chief  
Mobile Source Division

(FOR CARB USE ONLY)

16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY..... M1G2.5W5TPG1

EVAPORATIVE FAMILY..... MAOP-1A

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
CENTURY	08020
CENTURY WAGON	08025
SKYLARK	08055
CELEBRITY WAGON	12035
CALAIS	29010
CUTLASS CIERA	29015
CUTLASS CRUISER	29020
6000	33010
GRAND AM	33025
6000 WAGON	33050

(FOR CARB USE ONLY)

E.O. # A-6-503

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  
2-Pontiac  
3-Oldsmobile  
4-Buick  
6-Cadillac  
8-Saturn

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-Saturn

Digit 3  
Trim Level

Digits 4 & 5 - Body Style

B, C, D, E, F,  
H, J, K, M, N,  
L, P, R, S, T,  
U, V, W, X, Y, Z

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: 01-31-90

REV. NO.:

17-MIG2.5W5TPG1-1  
(1991)

(FOR CARB USE ONLY)

E.O. # A-6-503

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G2.5W5TPG1  
 PASSENGER CARS X LIGHT DUTY TRUCKS\_\_\_ MEDIUM DUTY VEHICLES\_\_\_ GAS X DIESEL\_\_\_  
 ENGINE TYPE: I4 LITER (CID): 2.5 (151) EVAP FAMILY: MAOP-1A  
 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, 2.0 Evap 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.
50,50A	3NF27 3NL27 3NT27 3NF69 3NL69 2NE69 2NE27 3NT69 2NG27 2NG69	M5	3000	16138831*, 16158381	17090078	25127550
51,51A	2AF69 3AL37 3AM37 3AM69 4AL37 4AH37 4AL69 3AJ37 4AH69 3AJ69 3AL69 1AW35 2AF35 3AJ35 3AM35 4AH35 4AL35	A3	3125             3250       3375	16138791*		25102754

\* ECM P/N's 16138831 and 16138791 recalibrated by RC M1-045 prior to start of production.

ISSUED: 01-31-90

REV. NO.: 001, 002, 003

17-M1G2.5W5TPG1-2  
(1991)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G2.5W5TPG1  
 PASSENGER CARS X LIGHT DUTY TRUCKS\_\_\_ MEDIUM DUTY VEHICLES\_\_\_ GAS X DIESEL\_\_\_  
 ENGINE TYPE: I4 LITER (CID): 2.5 (151) EVAP FAMILY: MAOP-1A  
 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, 2.0 Evap  
 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>
53,53A	3NF27	A3	3000	16138811*	17090078	25127550
	3NL27					
	2NE69					
	2NE27					
	3NT27					
	3NF69					
	3NL69					
	3NT69					
	4NM27					
	4ND69		3125			
	4NC69					
	4NJ27					
	4NV27		3000			
	4NV69					

\* ECM P/N 16138811 recalibrated by RC M1-045 prior to start of production.

ISSUED: 01-31-90

REV. NO.: 001

17-M1G2.5W5TPG1-3  
(1991)

ATTACHMENT I

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Coast Dyno Hp	Time	.with..AC. Coast Dyno Hp	Time	CD, CA or FA
***** A BODY (FWD & AWD) *****							
PONTIAC 6000 STE (2AJ69 w/RPO F73) - ALL WHEEL DRIVE							
OLDSMOBILE CIERA SL (3AM69 w/RPO F73) - ALL WHEEL DRIVE							
w/P195/70R15 AL3	0-3625	14.62	7.2	15.24	7.9	14.52	CA
PONTIAC 6000 (2AF69,2AJ69 w/o RPO F73) - FWD							
OLDSMOBILE CUTLASS CIERA (3A_37,3A_69) - FWD							
BUICK CENTURY (4A_37,4A_69) - FWD							
w/auto trans & (P185&P195)/75R14	3375-3500	11.23	6.2	19.24	6.8	18.24	CA
w/auto trans & (P185&P195)/75R14	0-3250	11.04	6.2	18.19	6.8	17.22	CA
w/man. trans & (P185&P195)/75R14	3375-3500	10.73	6.2	20.13	6.8	19.04	CA
w/man. trans & (P185&P195)/75R14	0-3250	10.54	6.2	19.05	6.8	18.00	CA
w/auto trans & P195/70R14 ALS	3375-3500	11.73	6.1	18.42	6.7	17.51	CA
w/auto trans & P195/70R14 ALS	0-3250	11.52	6.1	17.44	6.7	16.56	CA
w/man. trans & P195/70R14 ALS	3375-3500	11.23	6.1	19.24	6.7	18.24	CA
w/man. trans & P195/70R14 ALS	0-3250	11.02	6.1	18.23	6.7	17.27	CA
w/auto trans & P195/70R14 AL2	3375-3500	11.80	5.4	18.23	6.0	17.43	CA
w/auto trans & P195/70R14 AL2	0-3250	11.39	5.4	17.55	6.0	16.75	CA
w/man. trans & P195/70R14 AL2	3375-3500	11.30	5.4	19.04	6.0	18.16	CA
w/man. trans & P195/70R14 AL2	0-3250	10.89	5.4	18.36	6.0	17.48	CA
w/auto trans & P195/70R14 AL3	3375-3500	12.66	4.9	17.06	5.4	16.42	CA
w/auto trans & P195/70R14 AL3	0-3250	12.41	4.9	16.19	5.4	15.56	CA
w/man. trans & P195/70R14 AL3	3375-3500	12.16	4.9	17.77	5.4	17.07	CA
w/man. trans & P195/70R14 AL3	0-3250	11.91	4.9	16.87	5.4	16.19	CA
w/auto trans & P215/60R14 AL3	3375-3500	12.66	4.9	17.06	5.4	16.42	CA
w/auto trans & P215/60R14 AL3	0-3250	12.41	4.9	16.19	5.4	15.56	CA
w/man. trans & P215/60R14 AL3	3375-3500	12.16	4.9	17.77	5.4	17.07	CA
w/man. trans & P215/60R14 AL3	0-3250	11.91	4.9	16.87	5.4	16.19	CA
w/auto trans & P195/70R15 AL3	3375-3500	12.37	5.2	17.46	5.7	16.76	CA
w/auto trans & P195/70R15 AL3	0-3250	12.13	5.2	16.56	5.7	15.87	CA
w/man. trans & P195/70R15 AL3	3375-3500	11.87	5.2	18.20	5.7	17.44	CA
w/man. trans & P195/70R15 AL3	0-3250	11.63	5.2	17.27	5.7	16.52	CA

ATTACHMENT I

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Coast Dyno Hp	.with..AC. Coast Dyno Hp	CD, CA or FA
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\*\*\*\*\* A BODY (FWD & AWD) (continued) \*\*\*\*\*

CHEVROLET CELEBRITY WAGON (1AW35) with RPO C51 (rear air deflector)  
 PONTIAC 6000 WAGON (2A\_35) with RPO C51 (rear air deflector)  
 OLDSMOBILE CUTLASS CRUISER (3A\_35) with RPO C51 (rear air deflector)  
 BUICK CENTURY WAGON (4A\_35) with RPO C51 (rear air deflector)

w/auto trans & (P185&P195)/75R14	3375-3500	12.53	7.5 17.24	8.3 16.26	CA
w/auto trans & (P185&P195)/75R14	0-3250	12.30	7.5 16.33	8.3 15.40	CA
w/man. trans & (P185&P195)/75R14	3375-3500	12.03	7.5 17.96	8.3 16.90	CA
w/man. trans & (P185&P195)/75R14	0-3250	11.80	7.5 17.02	8.3 16.01	CA
w/auto trans & P195/70R14 ALS	3375-3500	13.04	7.4 16.57	8.2 15.67	CA
w/auto trans & P195/70R14 ALS	0-3250	12.78	7.4 15.72	8.2 14.86	CA
w/man. trans & P195/70R14 ALS	3375-3500	12.54	7.4 17.24	8.2 16.26	CA
w/man. trans & P195/70R14 ALS	0-3250	12.28	7.4 16.36	8.2 15.43	CA
w/auto trans & P195/70R14 AL2	3375-3500	13.11	6.8 16.40	7.5 15.59	CA
w/auto trans & P195/70R14 AL2	0-3250	12.85	6.8 15.63	7.5 14.85	CA
w/man. trans & P195/70R14 AL2	3375-3500	12.61	6.8 17.13	7.5 16.25	CA
w/man. trans & P195/70R14 AL2	0-3250	12.35	6.8 16.27	7.5 15.42	CA
w/auto trans & P195/70R14 AL3	3375-3500	13.98	6.4 15.46	7.0 14.78	CA
w/auto trans & P195/70R14 AL3	0-3250	13.67	6.4 14.70	7.0 14.05	CA
w/man. trans & P195/70R14 AL3	3375-3500	13.48	6.4 16.03	7.0 15.31	CA
w/man. trans & P195/70R14 AL3	0-3250	13.17	6.4 15.26	7.0 14.56	CA
w/auto trans & P215/60R14 AL3	3375-3500	13.98	6.4 15.46	7.0 14.78	CA
w/auto trans & P215/60R14 AL3	0-3250	13.67	6.4 14.70	7.0 14.05	CA
w/man. trans & P215/60R14 AL3	3375-3500	13.48	6.4 16.03	7.0 15.31	CA
w/man. trans & P215/60R14 AL3	0-3250	13.17	6.4 15.26	7.0 14.56	CA
w/auto trans & P195/70R15 AL3	3375-3500	13.99	6.9 15.45	7.5 14.72	CA
w/auto trans & P195/70R15 AL3	0-3250	13.68	6.9 14.69	7.5 14.00	CA
w/man. trans & P195/70R15 AL3	3375-3500	13.49	6.9 16.02	7.5 15.24	CA
w/man. trans & P195/70R15 AL3	0-3250	13.18	6.9 15.25	7.5 14.50	CA



ATTACHMENT I

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Coast Dyno Hp	.with..AC. Coast Dyno Hp	CD, CA or FA
***** A BODY (FWD & AWD) (continued) *****					
CHEVROLET CELEBRITY WAGON (1AW35) without RPO C51 (rear air deflector)					
PONTIAC 6000 WAGON (2A_35) without RPO C51 (rear air deflector)					
OLDSMOBILE CUTLASS CRUISER (3A_35) without RPO C51 (rear air deflector)					
BUICK CENTURY WAGON (4A_35) without RPO C51 (rear air deflector)					
w/auto trans & (P185&P195)/75R14	3375-3500	11.82	6.8 18.29	7.5 17.29	CA
w/auto trans & (P185&P195)/75R14	0-3250	11.59	6.8 17.34	7.5 16.39	CA
w/man. trans & (P185&P195)/75R14	3375-3500	11.32	6.8 19.10	7.5 18.01	CA
w/man. trans & (P185&P195)/75R14	0-3250	11.09	6.8 18.12	7.5 17.08	CA
w/auto trans & P195/70R14 ALS	3375-3500	12.32	6.7 17.54	7.4 16.62	CA
w/auto trans & P195/70R14 ALS	0-3250	12.06	6.7 16.66	7.4 15.78	CA
w/man. trans & P195/70R14 ALS	3375-3500	11.82	6.7 18.28	7.4 17.29	CA
w/man. trans & P195/70R14 ALS	0-3250	11.56	6.7 17.38	7.4 16.42	CA
w/auto trans & P195/70R14 AL2	3375-3500	12.40	6.1 17.43	6.7 16.61	CA
w/auto trans & P195/70R14 AL2	0-3250	12.13	6.1 16.56	6.7 15.77	CA
w/man. trans & P195/70R14 AL2	3375-3500	11.90	6.1 18.17	6.7 17.28	CA
w/man. trans & P195/70R14 AL2	0-3250	11.63	6.1 17.27	6.7 16.41	CA
w/auto trans & P195/70R14 AL3	3375-3500	13.26	5.6 16.29	6.1 15.63	CA
w/auto trans & P195/70R14 AL3	0-3250	12.95	5.6 15.51	6.1 14.87	CA
w/man. trans & P195/70R14 AL3	3375-3500	12.76	5.6 16.93	6.1 16.21	CA
w/man. trans & P195/70R14 AL3	0-3250	12.45	5.6 16.14	6.1 15.45	CA
w/auto trans & P215/60R14 AL3	3375-3500	13.26	5.6 16.29	6.1 15.63	CA
w/auto trans & P215/60R14 AL3	0-3250	12.95	5.6 15.51	6.1 14.87	CA
w/man. trans & P215/60R14 AL3	3375-3500	12.76	5.6 16.93	6.1 16.21	CA
w/man. trans & P215/60R14 AL3	0-3250	12.45	5.6 16.14	6.1 15.45	CA
w/auto trans & P195/70R15 AL3	3375-3500	13.27	6.1 16.28	6.8 15.56	CA
w/auto trans & P195/70R15 AL3	0-3250	12.96	6.1 15.51	6.8 14.81	CA
w/man. trans & P195/70R15 AL3	3375-3500	12.77	6.1 16.92	6.8 16.14	CA
w/man. trans & P195/70R15 AL3	0-3250	12.46	6.1 16.13	6.8 15.38	CA

ATTACHMENT I

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Coast Dyno Hp	Time	.with..AC. Coast Dyno Hp	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