State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER P-6-32
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 1990 model-year General Motors Corporation federally-certified emission control systems are certified for sale in California as described below for gasoline-powered passenger cars:

Engine Family: L2G4.5V8NKA1 Displacement: 4.5 Liters (273 Inches^3)

Equipped with the following exhaust emission control systems:

Secondary Air Injection
Exhaust Gas Recirculation
Oxygen Sensor
Three-Way Catalyst + Oxidation Catalyst
Sequential Multipoint 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	3.4	1.0

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)
0.18	1.3	0.7

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 "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided evidence of federal certification of vehicle models listed in the attachments which are not available as California-certified models.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate that the vehicle manufacturer has sufficient emissions credits for its estimated California sales of federally-certified 1990 model-year vehicles using the "Guidelines for Certification of 1983 and Subsequent Model-Year Federally Certified Light-Duty Motor Vehicles For Sale in California" (Title 13, California Code of Regulations, Section 1960.5).

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 regulations (Title 13, California Code of Regulations, Section 2035 and 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 30th day of May, 1989.

K. D. Drachand, Chief
Mobile Source Division

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SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

Section and Page No.	Rev. No. or Date	Item
17-L2G4.5V8NKA1-Index 1	002	Table of Contents
17-L2G4.5V8NKA1-1	04-26-89	Supplemental Data Sheet
17-L2G4.5V8NKA1-2	002	Supplemental Data Sheet
17-L2G4.5V8NKA1-3	04-26-89	Certification Review Sheet

NOTES:

(1) Please refer to manufacturer's HP lists (Attachment I) for correct dyno test HP settings based on model and equipment.

(2) If two test weights are listed, the lower weight will be used for testing.

(3) Letter derivative codes are the same as corresponding numeric codes except as indicated.

ISSUED: 04-26-89 REV. NO.: 001 (RC L2-034)
002 (RC L2-038)

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E.O. # P-6-32

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

Digit 2 - Body Designation

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-Commercial Chassis

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
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: 04-26-89 REV. NO.:

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E.O. # ~~A~~-6-32
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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L2G4.5V8NKA1

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

ENGINE TYPE: V8 LITER (CID): 4.5 (273) EVAP FAMILY: LBO-2B

EMISSION CONTROL SYSTEM: AIR-EGR-TWC+OC-02S (SMPI)

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

CERTIFICATION STANDARDS: 1.0 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,1C	6CB47 6CB69 6CD47 6CD69	A4	3875	16131356/ ATNR	17090058	25128263
3,3A	6CZ90 6CS69		4250 4000	16130946/ ATNN	17090058	25128263
4,4A	6KS69 6EL57		3875 3750	16131346/ ATNP	17090069	25128120
5,5A	6KY69 6KS69 6EL57		3875 3750	16130856/ ATNH	17090069	25128120
10	6CD69+R1P		4000	16146186/ ATRL	17090058	25128263

ISSUED: 04-26-89 REV. NO.: 001, 002, 003, 004, 005, 006, 007

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
***** B BODY (RWD) (continued) *****							
CHEVROLET CAPRICE WAGON (1B_35) without SEO 9C1 (police package)							
PONTIAC SAFARI WAGON (2B_35) without SEO 9C1 (police package)							
w/GDY (SEO R4Y) & P225/70HR15 AL3	0-4500	15.93	8.0	17.41	8.8	16.57	CA
OLDSMOBILE CUSTOM CRUISER WAGON (3BP35)							
BUICK LESABRE/ELECTRA ESTATE WAGON (4BR35/4BV35)							
BUICK COACHBUILDER WAGON (4BB90)							
w/P225/75R15 ALS	0-4500	15.46	9.9	17.92	10.8	16.96	CA
***** C BODY (FWD) *****							
OLDSMOBILE NINETY-EIGHT/TOURING (3C_69)							
BUICK ELECTRA (4C_69)							
w/P205/75R14 ALS	0-3750	13.07	7.2	17.77	7.9	16.87	CD
w/P205/70R15 ALS	0-3750	13.34	6.8	17.41	7.4	16.53	CA
w/P215/65R15 AL3	0-3750	14.69	5.7	15.81	6.3	15.22	CA
w/P215/60R16 AL3	0-3750	14.74	5.7	15.67	6.3	15.08	CA
OLDSMOBILE NINETY-EIGHT/TOURING (3C_69)							
w/P215/60R16 AL2	0-3750	13.40	6.2	17.24	7.0	16.47	CA
w/P215/60R16 AL3	3875 Only	14.89	5.7	16.02	6.3	15.43	CA
CADILLAC DEVILLE (6CD47,6CD69)							
CADILLAC FLEETWOOD (6CB47,6CB69)							
CADILLAC FLEETWOOD SIXTY SPECIAL (6CS69)							
w/P205/70R15 ALS	3875 Only	12.69	7.2	18.72	8.0	17.71	CA
w/P205/70R15 ALS	0-3750	12.59	7.1	18.27	7.8	17.30	CA
CADILLAC FLEETWOOD SIXTY SPECIAL (6CS69)							
w/P205/70R15 ALS	4000 Only	12.97	7.2	18.96	7.9	17.96	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
***** C BODY (FWD) (continued) *****							
CADILLAC COMMERCIAL CHASSIS (6CZ90)							
w/P205/70R15 ALS	0-4250	13.14	6.9	19.81	7.6	18.83	CA
***** D BODY (RWD) *****							
CADILLAC BROUGHAM (6DW69)							
w/P215/75R15 ALS	4500-4750	15.07	10.3	19.48	11.3	18.26	CD
w/P215/75R15 ALS	0-4250	14.84	10.0	17.71	11.0	16.59	CD
w/P225/75R15 ALS	4500 Only	15.14	10.0	18.36	11.0	17.22	CA
w/P225/75R15 ALS	0-4250	14.97	10.0	17.56	11.0	16.46	CA
***** E BODY (FWD) *****							
OLDSMOBILE TROFEO/TORONADO (3EV57,3EZ57) BUICK RIVIERA (4EZ57)							
w/P205/70R15 ALS	0-3750	12.53	6.5	18.50	7.1	17.59	CA
w/P215/65R15 AL3	0-3750	13.62	5.0	17.02	5.5	16.42	CA
OLDSMOBILE TROFEO (3EV57)							
w/P215/60R16 AL3	0-3750	13.85	5.0	16.68	5.6	16.09	CA
BUICK REATTA CONVERTIBLE (4EC67)							
w/P215/65R15 AL3	3875 Only	13.95	5.3	17.15	5.9	16.53	CA
w/P215/65R15 AL3	0-3750	13.57	5.3	17.07	5.9	16.42	CA
BUICK REATTA (4EC97)							
w/P215/65R15 AL3	0-3750	13.14	4.4	17.62	4.8	17.06	CA
CADILLAC ELDORADO (6EL57)							
w/P205/70R15 ALS	0-3750	11.70	6.2	19.85	6.8	18.86	CA
w/P215/65R15 AL3	0-3875	14.49	5.7	16.46	6.2	15.84	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
***** J BODY (FWD) (continued) *****							
CHEVROLET CAVALIER (1J_35,1J_67,1J_69) PONTIAC SUNBIRD (2J_35,2J_67,2J_69) BUICK SKYHAWK WAGON/SKYHAWK (3JS35/3J_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 & 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
CHEVROLET CAVALIER (1J_35,1J_67,1J_69) PONTIAC SUNBIRD (2J_35,2J_67,2J_69) BUICK SKYHAWK WAGON/SKYHAWK (3JS35/3J_69)							
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
***** K BODY (FWD) *****							
CADILLAC SEVILLE TOURING SEDAN (STS)/SEVILLE (6KY69/6KS69)							
w/P205/70R15 ALS	3875 Only	11.77	6.2	20.32	6.8	19.37	CA
w/P205/70R15 ALS	0-3750	11.70	6.2	19.85	6.8	18.86	CA
w/P215/65R15 AL3	0-3875	14.41	5.6	16.56	6.2	15.94	CA
***** L BODY (FWD) *****							
CHEVROLET BERETTA (1LV37)							
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