State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-505
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: M1G3.1W8XGZ0 Displacement: 3.1 Liters (191 Cu. In.)

Exhaust Emission Control Systems (Special Features):

Three-Way Catalyst
Oxygen Sensor
Secondary Air Injection
Exhaust Gas Recirculation
Multipoint Electronic Fuel Injection
On-Board Diagnostics

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)
0.20	4.5	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 7th day of December, 1989.

for K. D. Drachand, Chief
Mobile Source Division

(FOR CARB USE ONLY)

E.O. # A-6-505

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, LeSabre/Electra 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: 11-03-89 REV. NO.:

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16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY..... M1G3.1W8XGZO SYSTEM #1 (AIR/EGR/ORC)

EVAPORATIVE FAMILY..... MBO-1L

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
CAMARO	12025
LUMINA	12050
FIREBIRD/TRANS AM	33020

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16.03.00.00

EXECUTIVE ORDER INFORMATION

ENGINE FAMILY..... M1G3.1W8XGZO SYSTEM #2 (EGR/ORC)

EVAPORATIVE FAMILY..... MBO-1L

CARLINES TO BE COVERED:

CARLINE NAME	CARLINE CODE
REGAL	08022
CORSICA	12010
BERETTA COUPE	12020
LUMINA	12050
CAVALIER	12060
CAVALIER WAGON	12065
CUTLASS SUPREME	29055
6000	33010
6000 WAGON	33050
GRAND PRIX	33055
SUNBIRD	33060
SUNBIRD CONVERTIBLE	33070

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G3.1W8XGZ0

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

ENGINE TYPE: V6 (RPO: LHO) LITER (CID): 3.1 (191) EVAP FAMILY: MBO-1L

EMISSION CONTROL SYSTEM: EGR-TWC-O2S (MPI)

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.
51	2AF69	A3	3250	16137171/ ARRZ	17090077, 17091144, 17091147	25104584
53	2AF69 2AJ69 2AF35 2AJ35	A4	3375 3500	16160281/ AXFH		

ISSUED: 002 REV. NO.: 007, 008

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G3.1W8XGZ0

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

ENGINE TYPE: V6 (RPO: LHO) LITER (CID): 3.1 (191) EVAP FAMILY: MB0-1L

EMISSION CONTROL SYSTEM: EGR-TWC-O2S (MPI)

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.
64	1WL27	A4	3500	16151311/	17090077,	25104596,
	1WL69		3625	AUMY,	17091144,	10137357
	1WN27			16137371/	17091147	
	1WN69			ARSZ,		
	2WJ37			16152491/		
	2WP37			AUSK,		
	2WJ19			16161591/		
	2WH19			AXNP		
	2WT19		3750			
	3WH47		3500			
	3WS47		3625			
	3WH69					
	3WS69		3750			
	3WR47		3625			
	3WR69		3750			
	3WT67		3875			
	4WB57		3500			
	4WD57		3625			
	4WD19					
	4WB19					

ISSUED: 002 REV. NO.: 003, 004, 005, 007, 010

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G3.1W8XGZ0

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

ENGINE TYPE: V6 (RPO: LHO) LITER (CID): 3.1 (191) EVAP FAMILY: MB0-1L

EMISSION CONTROL SYSTEM: EGR-TWC-O2S (MPI)

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.
68	1WL27	A3	3500	16137331/	17090077,	25104596
	1WL69		3625	ARSU,	17091144,	
	1WN27		3500	16152471/	17091147	
	1WN69		3625	AUSH		
72	1LV37	A3	3125	16137271/		25104588,
	1LW37			ARSM,		25128819
	1LZ37			16153791/		
	1LT68		3250	AUXX		
	1LT69		3125			
	1LZ69		3250			
	1LV67		3375			

ISSUED: 002 REV. NO.: 003, 006, 007

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G3.1W8XGZ0

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

ENGINE TYPE: V6 (RPO: LHO) LITER (CID): 3.1 (191) EVAP FAMILY: MBO-1L

EMISSION CONTROL SYSTEM: EGR-TWC-O2S (MPI)

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.
74	1LV37	M5	3125	16137291/	17090077,	25104588,
	1LW37			ARSP,	17091144,	25128819
	1LZ37			16153811/	17091147	
	1LT68		3250	AUXZ		
	1LT69		3125			
	1LZ69					
	1LV67		3375			
81	1JC37	A3	3125	16137641/		25104590
	1JC69		3000	ARUU		
	1JC35		3125			
	1JF37					
	2JB37		3000			
	1JC67		3250			
	2JB67					
	2JB69		3125			
	2JD37		3000			
	2JU37		3125			

ISSUED: 002 REV. NO.: 003, 007, 008

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MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G3.1W8XGZ0

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

ENGINE TYPE: V6 (RPO: LHO) LITER (CID): 3.1 (191) EVAP FAMILY: MB0-1L

EMISSION CONTROL SYSTEM: EGR-TWC-O2S (MPI)

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.
82	1JC37	A3	3125	16137601/ ARUP	17090077, 17091144, 17091147	25104590, 25104592
	1JC69		3000			
	1JC35		3125			
	1JF37					
	2JB37		3000			
	2JB67		3250			
	1JC67					
	2JB69		3125			
	2JD37		3000			
	2JU37		3125			
83	1JC35	M5	3000	16137621/ ARUS		25104590
	1JC69					
	1JC37					
	1JF37					
	2JB37					
	2JB67		3250			
	1JC67					
	2JB69		3000			
	2JD37					
	2JU37		3125			

ISSUED: 002 REV. NO.: 007, 008

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MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: M1G3.1W8XGZ0

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

ENGINE TYPE: V6 (RPO: LHO) LITER (CID): 3.1 (191) EVAP FAMILY: MB0-1L

EMISSION CONTROL SYSTEM: EGR-TWC-O2S-AIR (MPI)

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.
65	2WJ19 2WT19 2WP37 2WJ37	M5	3625	16148941/ AUBK	17090077, 17091144, 17091147	25104596

ISSUED: 002 REV. NO.: 007

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

ENGINE TYPE: V6 (RPO: LHO) LITER (CID): 3.1 (191) EVAP FAMILY: MB0-1L

EMISSION CONTROL SYSTEM: EGR-TWC-O2S-AIR (MPI)

ENGINE: FRONT X MID___ REAR___ DRIVE: FWD___ RWD X 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.
95	1FP87 2FS87 1FP67 2FS67 2FW67	A4	3500 3625	16136651/ ARPN	17090077, 17091144, 17091147	25127587, 25104586
95A				16150731/ AUJX		
95B				16164251/ AYCF		

ISSUED: 11-03-89 REV. NO.: 001, 002, 007, 009, 010

ATTACHMENT I

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
***** F BODY (RWD) *****							
CHEVROLET CAMARO (1FP67) - CONVERTIBLE							
w/P215/65R15 AL2	0-3875	12.01	6.9	19.89	7.6	18.81	CA
w/P215/65R15 HWY	0-3875	12.57	7.3	19.07	8.1	18.04	CA
w/P245/50ZR16 HW4	0-3875	13.37	7.4	17.98	8.2	17.04	CA
CHEVROLET CAMARO (1FP87) PONTIAC FIREBIRD/TRANS AM (2FS87/2FW87)							
w/P215/65R15 AL2	3875 Only	11.57	6.6	20.64	7.2	19.54	CA
w/P215/65R15 AL2	3625-3750	11.39	6.6	20.30	7.2	19.19	CA
w/P215/65R15 AL2	0-3500	11.10	6.6	19.47	7.2	18.40	CA
w/P215/65R15 HWY	3875 Only	12.13	6.9	19.76	7.6	18.69	CA
w/P215/65R15 HWY	0-3750	11.88	6.9	19.54	7.6	18.48	CD
w/P245/50ZR16 HW4	3875 Only	12.93	7.0	18.59	7.7	17.64	CA
w/P245/50ZR16 HW4	0-3750	12.87	7.0	18.09	7.7	17.17	CA