State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-467
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 emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family: L1G3.1W8XGZX Displacement: 3.1 Liters (191 Inches^3)

Equipped with the following exhaust emission control systems:

Exhaust Gas Recirculation
Secondary Air Injection (Some Models)
Oxygen Sensor
Three-Way Catalyst
Throttle Body Electronic Fuel Injection
On-Board Diagnostics (Exempted)

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)
0.16	2.9	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 have been granted an exemption from compliance 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 (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 16th day of February, 1989.

K. D. Drachand, Chief
Mobile Source Division

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SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

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17-L1G3.1W8XGZX-6A	12-20-88	Certification Review Sheet
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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: 12-20-88 REV. NO.: 001
002 (RC L1-014)
003
004 (RC L1-049)

(FOR CARB USE ONLY)

E.O. # A-6-467

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
	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	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: 12-20-88 REV. NO.:

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E.O. # A-6-467

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G3.1W8XGZX

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

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

EMISSION CONTROL SYSTEM: EGR-TWC-02S (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.
51,51C	2AF69	A3	3250	16086811/ ALYK	17090077	25104584
51D				16146551/ ATSS		
51J				16148791/ AUAR		
53,53C	1AW35 2AF69 2AJ69 2AF35 2AJ35	A4	3500 3375 3500	16138591/ ASAJ		
53D				16146571/ ATSU		
53J				16148811/ AUAT		

ISSUED: 12-20-88 REV. NO.: 001, 002, 004, 007, 012

(FOR CARB USE ONLY)

E.O. # A-6-467

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G3.1W8XGZX

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

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

EMISSION CONTROL SYSTEM: EGR-TWC-02S (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.
64,64C	1WL27	A4		16120751/	17090077	25104596
	1WL69		3625	AMYL,		
	1WN27			16143861/		
	1WN69			ATFH		
	2WJ37		3500			
	2WP37		3625			
	2WJ19					
	2WT19		3750			
	3WH47		3500			
	3WS47					
	3WH69		3625			
	3WS69					
	3WR47					
	3WR69		3750			
	3WT67		3875			
	4WB57		3500			
	4WD57					
	4WD19		3625			
	4WB19					
64D				16146531/ ATSP		
64J				16151311/ AUMY		

ISSUED: 007 REV. NO.: 012

(FOR CARB USE ONLY)

E.O. # A-6-467

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G3.1W8XGZX

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

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

EMISSION CONTROL SYSTEM: EGR-TWC-02S (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.
68,68C	1WL27 1WL69 1WN27 1WN69	A3	3500 3625	16121911/ ANAT	17090077	25104596
68D				16146511/ ATSM		
68J				16148971/ AUBN		
72,72C	1LV37 1LW37 1LT68 1LT69 1LV69 1LV67		3125 3250 3125 3250 3375	16086061/ ALXC		25104588
72D				16146631/ ATTB		
72J				16148761/ AUAM		

ISSUED: 12-20-88 REV. NO.: 001, 002, 006, 007, 009, 011, 012

17-L1G3.1W8XGZX-3A
(1990)

17-XGZX

(FOR CARB USE ONLY)

E.O. # A-6-467

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: L1G3.1W8XGZX

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

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

EMISSION CONTROL SYSTEM: EGR-TWC-02S (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.
74,74C	1LV37 1LW37 1LT68 1LT69 1LZ69 1LV67	M5	3125 3250 3125 3375	16086081/ ALXF	17090077	25104588
74F				16143771/ ATDT		
74J				16148921/ AUBH		
81,81C	1JC37 1JC69 1JC35	A3	3125	16086131/ ALXM		25104590
81D				16146581/ ATSW		
81J				16148871/ AUBA		

ISSUED: 012 REV. NO.:

17-L1G3.1W8XGZX-3.1
(1990)

17-XGZX

(FOR CARB USE ONLY)

E.O. # A-6-467

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G3.1W8XGZX

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

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

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

ENGINE: FRONT X MID___ REAR___ DRIVE: FWD X RWD(*1) 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.
82,82C	1JF37 1JF67 1JC37 1JC69 1JC35	A3	3000 3125	16086151/ ALXP	17090077	25104592, 25104590
82D				16146601/ ATSY		
82J				16148891/ AUBC		
83,83C	1JC35 1JC69 1JC37	M5	3000	16086171/ ALXS		25104590
83F				16145171/ ATMH		
83J				16148861/ AUAZ		
84,84C	1JF37 1JF67			16086171/ ALXS		25104592, 25104590
84F				16145171/ ATMH		
84J				16148861/ AUAZ		
91,91C (*1)	1FP87 2FS87	A4	3500	16085832/ ALTD		25127587, 25104586
91D (*1)				16143901/ ATFN		
91E (*1)				16147681/ ATXH		

ISSUED: 12-20-88 REV. NO.: 001, 002, 003, 005, 007, 008, 009, 012, 013

(FOR CARB USE ONLY)

E.O. # A-6-467

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G3.1W8XGZX

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

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

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

ENGINE: FRONT X MID___ REAR___ DRIVE: FWD X RWD(*1) 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.
65,65C	2WJ19 2WT19 3WP37 2WJ37	M5	3625 3500	16120781/ AMYP, 16143871/ ATFJ	17090077	25104596
65F				16145201/ ATML		
65J				16148941/ AUBK		
93,93C (*1)	1FP87 2FS87			16085812/ ALTB		25127587, 25104586
95,95C (*1)	1FP87 2FS87	A4		16085832/ ALTD		
95D (*1)				16143901/ ATFN		
95E (*1)				16147681/ ATXH		
95H (*1)				16136651/ ARPN		

ISSUED: 12-20-88 REV. NO.: 001, 002, 004, 005, 006, 008, 009, 010, 012

17-L1G3.1W8XGZX-5A
(1990)

17-XGZX