State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-365
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 1987 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacement Cubic Inches (Liters)		Exhaust Emission Control Systems (Special Features)
H1G2.5V5TPGO	151	(2.5)	Exhaust Gas Recirculation Three-Way Catalyst Oxygen Sensor (Central 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	7.0	0.7

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
0.29	3.1	0.6

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

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 Administrative Code, 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 1981 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) 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 regulations (Title 13, California Administrative Code, Section 2035 et seq.) ~~and Health and Safety Code Section 43204.~~ gcc

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 July, 1986.

K. D. Drachand, Chief
Mobile Source Division

17-H1G2.5V5TPGO-1A

(For CARB Use Only)

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation Executive Order No.: A-6-365 Form 1

Engine Family: H1G2.5V5TPGO Evaporative Family: 7AO-1C

Engine CID (Liters) - Type: 151 (2.5) - L4

ABBREVIATIONS

Ignition System
CA-Centrifugal Advance
EEC-Electronic Engine Control
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

Exhaust Emissions Control System
AIP-Air Injection-Pump
AIV-Air Injection-Valve
CL-Closed Loop
EGR-Exhaust Gas Recirculation
EM-Engine Modification
OC-Oxidation Catalyst System
TR-Thermal Reactor
TWC-Three Way Catalyst System

Headings
AIR COND-Air Conditioning
BB-Basic Body
BT-Body Type
DI-Diesel Injection
DIN-Diesel Injector Nozzles
DIV-Division
ECM-Electronic Control Module
ETW-Equivalent Test Weight
TLC-Tune-Up Label Code
TNS-Transmission
TM-Trim

Fuel System
CFI,CL,DID,DIP,EFI,MFI
nV-nVenturi Carburetor
VV-Variable Venturi

Special Features
CCV-Combustion Chamber Valve
CFI-Central Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EFI-Electronic Fuel Injection
IC-Intercooler/Aftercooler
MFI-Mechanical Fuel Injection
TC-Turbocharger

DIV	BB	TM	BT	MODEL NAME
1				CHEVROLET
	A	W	19	Celebrity 4 Door Sedan
			27	Celebrity 2 Door Coupe
			35	Celebrity 4 Door Station Wagon

DIV	BB	TM	BT	MODEL NAME
2				PONTIAC
	A	F	19	6000 Sedan
			27	6000 Coupe
			35	6000 Safari Wagon
		G	19	6000 LE Sedan
			35	6000 Safari LE Wagon
	N	E	27	Grand Am Coupe
			69	Grand Am Sedan
		V	27	Grand Am LE Coupe
			69	Grand Am LE Sedan
		W	27	Grand Am SE Coupe
			69	Grand Am SE Sedan
	P	E	37	Fiero Coupe
		F	37	Fiero SE Coupe
		M	37	Fiero Sport Coupe

ENGINE/DRIVE AXLE LOCATION: Front Engine/Front Wheel Drive for "A" and "N" basic body.
Mid-Engine/Rear Wheel Drive for "P" basic body.

ISSUED: 04-14-86 REV. NO.:

0549Q

17-H1G2.5V5TPGO-2A

(For CARB Use Only)

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation Executive Order No.: A-6-365 Form 1A

Engine Family: H1G2.5V5TPGO Evaporative Family: 7AO-1C

Engine CID (Liters) - Type: 151 (2.5) - L4

DIV	BB	TM	BT	MODEL NAME
3				OLDSMOBILE
	A	J	19	Cutlass Ciera Sedan
			35	Cutlass Cruiser
			37	Cutlass Ciera S Coupe
	A	M	19	Cutlass Ciera Brougham Sedan
			37	Cutlass Ciera SL Coupe
	N	F	27	Calais Coupe
			69	Calais Sedan
	N	T	27	Calais Supreme Coupe
			69	Calais Supreme Sedan

DIV	BB	TM	BT	MODEL NAME
4				BUICK
	A	H	19	Century Custom Sedan
			27	Century Custom Coupe
			35	Century Custom Wagon
		L	19	Century Limited Sedan
			27	Century Limited Coupe
			35	Century Estate Wagon
	N	C	69	Skylark Custom Sedan
		D	69	Skylark Limited Sedan
		J	27	Somerset Custom Coupe
		M	27	Somerset Limited Coupe

ENGINE/DRIVE AXLE LOCATION: Front Engine/Front Wheel Drive for "A" and "N" basic body.

ISSUED: 04-14-86 REV. NO.:

05490

17-H1G2.5V5TPGO-3A

(For CARB Use Only)

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-365 Form 2

Engine Family: H1G2.5V5TPGO Exhaust Emission Control System: EGR, TWC, CL (CFI)

Liter (CID): 2.5 (151) Engine Type: L4

ENG CID	ENG CODE	AIR COND	ECM PART NO.	TBI ASM PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	REV. NOTES
151	1	W	16066592	17087250	17084743	3125	1234	A		19	A-3	2
			16066622				2	A	F	19		2
	1A		16070912	17087280			12 4	A		27		3
			16070922				3	A		37		
						3250	2	A	G	19		2
	2		16066602	17087250		3125	1234	A		19		2
			16066632				2	A	F	19		2
	2A		16069512	17087280			12 4	A		27		3
			16069522				3	A		37		
	2B		16072772									5
			16072782			3250	2	A	G	19		2
							1	A		35		
						3375	234	A		35		
	3	WO	16066592	17087250	17084743	3000	1 4	A		27		4
			16066622									
	3A		16070912	17087280		3125	1234	A		19		3
			16070922				12	A		27		
							3	A		37		

Comments: See page one for abbreviations and evaporative emission family identification Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment.

ISSUED: 04-14-86

REV. NO.: 002 - Added A/C only engine codes and corrected various ETW. 003 - Added engine codes 1A, 2A and 3A. 004 - Corrected ETW for 1AW27 from 3125 to 3000. 005 - Added engine code 2B.

0549Q

17-H1G2.5V5TPGO-4A

(For CARB Use Only)

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-365 Form 2

Engine Family: H1G2.5V5TPGO Exhaust Emission Control System: EGR, TWC, CL (CFI)

Liter (CID): 2.5 (151) Engine Type: L4

ENG CID	ENG CODE	AIR COND	ECM PART NO.	TBI ASM PART NO.	EGR VALVE PART NO.	ETW	DIV	BB	TM	BT	TNS	REV. NOTES
151	4	WO	16066602	17087250	17084743	3000	1 4	A		27	A-3	4
			16066632									
	4A		16069512	17087280		3125	1234	A		19		3
			16069522				2	A		27		
	4B		16072772				3	A		37		5
			16072782									
						3250	1 4	A		35		
							2	A	F	35		
						3375	3	A		35		
							2	A	G	35		
	6		16066662	17087062		3000	2	P		37		
	6A		16069552	17087279								3
	6B		16072792									5
	7		16066642	17087250		2875	34	N		27		
	7A		16069532	17087280			2	N	E	27		23
						3000	2	N	V	27		2
							234	N		69		
	8		16066662	17087062		3000	2	P		37		
	8A		16069552	17087279								3
	8B		16072792									5
	9		16066642	17087250		2875	234	N		27		
	9A		16069532	17087280								3
						3000	234	N		69		

Comments: See page one for abbreviations and evaporative emission family identification Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment.

ISSUED: 04-14-86

REV. NO.: 002 - Added A/C only engine codes. 003 - Added engine codes 4A, 6A, 7A, 8A and 9A. 004 - Corrected ETW for 1AW27 from 3125 to 3000. 005 - Added engine codes 4B, 6B and 8B.

0549Q

17-H1G2.5V5TPGO-5A

(For CARB Use Only)

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-365 Form 2

Engine Family: H1G2.5V5TPGO Exhaust Emission Control System: EGR, TWC, CL (CFI)

Liter (CID): 2.5 (151) Engine Type: L4

ENG CID	ENG CODE	AIR COND	ECM PART NO.	TBI ASM PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	I M	BT	TNS	REV. NOTES
151	12	W & WO	16066612	17087060	17084743	3000	1	A		27	M-4	
						3125	1	A		19		
						3250	1	A		35		
	17	W	16066652			2875	2	N	EV	27	M-5	2
	17A		16069542	17087269			34	N		27		3
							3	N		69		
						3000	2	N	W	27		
							2 4	N		69		
	18		16066672	17087062		3000	2	P		37		
	18A		16069562	17087279								3

Comments: See page one for abbreviations and evaporative emission family identification
Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment.

ISSUED: 002 REV. NO.: 003 - Added engine codes 17A and 18A.

0549Q

17-H1G2.5V5TPGO-6A

(For CARB Use Only)

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-365 Form 2

Engine Family: H1G2.5V5TPGO Exhaust Emission Control System: EGR, TWC, CL (CFI)

Liter (CID): 2.5 (151) Engine Type: L4

ENG CID	ENG CODE	AIR COND	ECM PART NO.	TBI ASM PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	REV. NOTES
151	19-	WO	16066652	17087060	17084743	2875	2	N	EV	27	M-5	2
	19A		16069542	17087269			34	N		27		3
							3	N		69		
							2	N	EV	69		
						3000	2	N	W	27		
							4	N		69		
							2	N	W	69		
	~~20-~~		~~16066672~~	~~17087062~~		~~3000~~	~~2~~	~~P~~		~~37~~		
	20A		16069562	17087279								3

Comments: See page one for abbreviations and evaporative emission family identification
Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment.

ISSUED: 002 REV. NO.: 003 - Added engine codes 19A and 20A.

0549Q

17-H1G2.5V5TPGO-5A
(For CARB Use Only)

1987 MODEL YEAR CERTIFICATION REVIEW SHEET
EXHAUST/EVAPORATIVE SYSTEM & FILL PIPE SPECIFICATION COMPLIANCE

Manufacturer: General Motors Engine Family: H1G2.5V5TPGO E.O. No.: A-~~3~~6-365

PC X LDT___ MDV___ Gas X Diesel___ LPG___ Engine Code - CA 54.055___ 49S___ 50S X

CID: 151 Liters: 2.5 Rated HP: 100 @ 4800 RPM Rated Torque: 136 @ 3200 RPM

Type Cert - 50K X 100K___ Evaporative Family: 7A0-1C Engine Type: L-4

Exhaust Control System and (Special Features): EGR, TWC, CL (CFI)

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1. Authorized Representative:	01	10. Projected Sales:	ML-7P135	
2. Fuel, Test Equipment, Procedures & Route:	03,04,05	11. Vehicle Description:	20	
3. Warr Statement & Parts List:	16,17	12. Test Veh Info:	Dura/	Emis
4. Maint: Cert/Req'd/Recm'd:	06	C/O MY or C/A EF:	C/O 82	NA
5. Tune-Up Lab/Vac Hose Diag:	07	Zero Mile Books:	20	20
6. Evap Control System:	19	Vehicle Logs:	12	12
7. Engine Parameters:	20	Maint Logs & Engrg Eval:	NA	NA
8. Fuel/Ignition Systems:	20	13. Evap Bench Test Procedure:	13	13
9. Exhaust Control System:	20			

STATEMENTS:

1. Gen Std, Increase Emis, Safety, Mtg all Req'ments:	16	1. Fill Pipe Specs:	17
2. Prod Veh Same as Test Veh:	16	2. Altitude A/F Req'ment:	ML-7P135
3. Label Durability:	SM-1144	3. Carb Tamperproof Req'ment:	08.16.00.00
4. Driveability:	ML-7P135	4. Ck for DF, Outlier, Line Crossing:	12
5. Fill Pipe Access Zone:	17	5. EPA Certificate:	GM-LDV-16
6. Fill Pipe Performance:	17	6 Two Year/24K Warranty:	No
		7. Alcohol Compatible:	Owner's Manual
		8. Cert Preview Program:	TBD

Veh ID	Code (Displ)	Trans	Final Drive Ratio	ETW	RLHP	MPG City/Hwy	Test Loc	PROJECTED EMISSIONS(1) THC	CO	NOx	Hwy NOx	50K Evap	50K Part
P26N250	7 (151)	A-3	2.84	3000	6.3*	24.3/38.6	GM	.16	1.8	.09	.03	--	--
C16A214	12 (151)	M-4	3.65	3250	8.7	23.8/35.8	EPA	.29	3.1	.62	.43	--	--
P26A602**	2 (151)	A-3	2.84	3375	8.4	22.0/33.1	GM	~~.12~~	~~2.7~~	~~.24~~	~~.11~~	.61	--
								.41	7.0	0.7	0.9	2.0	--
								1.100	1.551	1.045	1.045	0.0	--

(1) The emission data vehicle/s above comply with stds of
and include deterioration factors of
Evaporative DF is the average of Vehicle DF 0.0 and Bench DF 0.0.

* Substitute DPA HP approved by K. Ewing of the CARB on 03-04-86. (should be 6.2)
** Vehicle selected as the worst case of the evap family and shown here to demonstrate evap compliance.

Application Processed by Kenneth Ewing Date 6/17/86 Reviewed by R J Kenny Date 6/20/86

ISSUED: 04-14-86 REV. NO.: 001

0549Q