State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-336
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 1986 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)
G1G2.8W8XGZ4	173	(2.8)	Air Injection - Pump Exhaust Gas Recirculation Three-Way Catalyst with Closed Loop (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
0.39	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
0.34	2.5	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.)

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 22d day of July, 1985.

K. D. Drachand, Chief
Mobile Source Division

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 1

Engine Family G1G2.8W8XGZ4 Evaporative Family 6AO-1B, 6BO-1F

Engine CID (Liters) - Type 173 (2.8) - V6

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,TBI
nV-nVenturi Carburetor
VV-Variable Venturi

Special Features
CCV-Combustion Chamber Valve
CFI-Central Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
MFI-Mechanical Fuel Injection
TC-Turbocharged
TBI-Throttle Body Injection
EFI-Electronic Fuel Injection

DIV	BB	TM	BT	MODEL NAME
1				CHEVROLET
	A	W	19	Celebrity Sedan
			27	Celebrity Coupe
			35	Celebrity Station Wagon
	F	P	87	Camaro Sport Coupe
		S	87	Camaro Berlinetta Sport Coupe
	J	C	27	Cavalier Notchback Coupe
			35	Cavalier Station Wagon
			69	Cavalier Notchback Sedan
		D	35	Cavalier CS Station Wagon
			69	Cavalier CS Notchback Sedan
			77	Cavalier CS Hatchback Coupe
		E	27	Cavalier Eurosport Notchback Coupe
			35	Cavalier Eurosport Station Wagon
			67	Cavalier Convertible Coupe
			69	Cavalier Eurosport Notchback Sedan
			77	Cavalier Eurosport Hatchback Coupe
		F	27	Cavalier Z24 Notchback Coupe
			77	Cavalier Z24 Hatchback Coupe

DIV	BB	TM	BT	MODEL NAME
2				PONTIAC
	A	E	19	6000 SE Sedan
			35	6000 SE Wagon
		F	19	6000 Sedan
			27	6000 Coupe
			35	6000 Wagon
		G	19	6000 LE Sedan
			27	6000 LE Coupe
			35	6000 LE Wagon
		H	19	STE Sedan
	F	S	87	Firebird
		X	87	Firebird SE
	P	F	37	Fiero SE Coupe
		G	97	Fiero GT Coupe
		M	37	Fiero Sport Coupe

DRIVE AXLE: Front Wheel Drive for A & J basic body.
Rear Wheel Drive for F & P basic body.

ISSUED: REVISIONS:

0159N/

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 2

Engine Family G1G2.8W8XGZ4 Evaporative Family 6AO-1B, 6BO-1F

Engine CID (Liters) - Type 173 (2.8) - V6

DIV	BB	TM	BT	MODEL NAME	DIV	BB	TM	BT	MODEL NAME
3				OLDSMOBILE					
	A	J	19	Cutlass Ciera LS Sedan					
			27	Cutlass Ciera LS Coupe					
			35	Cutlass Cruiser					
			37	Cutlass Ciera S Coupe					
		M	19	Cutlass Ciera Brougham Sedan					
			27	Cutlass Ciera Brougham Coupe					
			37	Cutlass Ciera SL Coupe					
	J	C	27	Firenza Coupe					
			35	Firenza Cruiser					
			69	Firenza Sedan					
			77	Firenza S Hatchback					
		D	27	Firenza LC Coupe					
			35	Firenza LX Cruiser					
			69	Firenza LX Sedan					
			77	Firenza GT Hatchback					
6				CADILLAC					
	J	G	69	Cimarron Sedan					

ISSUED: 07-22-85

REVISIONS: Oldsmobile "A" models added by RC 61-068 on 08-09-85.

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 3

Engine Family G1G2.8W8XGZ4 Exhaust Emission Control System EGR-TWC-CL (EFI) / AIP-EGR-TWC-CL (EFI) (1)

ENG. CID	ENG. CODE	AIR COND	ECM PART NO.	RAIL & INJECTOR PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	TLC	REV. NOTES
173	51	Yes	16052941	17085038 17086160	17085913	3125	1	A		27	A3	YBU	A
						3250	123	A		19			A
							23	A		27			
							3	A		37			
	52	No	16053081			3125	1	A		19			A
							1 3	A		27			
							3	A		37			
						3250	23	A		19			A
							2	A		27			
	53	Yes	16053091			3125	1	A		27			A
						3250	1 3	A		19			A
							2	A	EFG	19			
							23	A		27			
							3	A		37			
						3375	2	A	H	19			
	54	No	16053101			3125	1	A		19			A
							1 3	A		27			
							3	A		37			
						3250	23	A		19			A
							2	A		27			
	55	Yes	16054971			3125	1	A		27			A
						3250	1	A		19			A
						3375	2	A		19			
	57	Yes	16053111			3250	123	A		19	A4		A
							123	A		27			
							3	A		37			

(1) Only for F cars with manual transmission.

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: 07-22-85

REVISIONS: A. Oldsmobile "A" models added and misc. ETW's changed by RC 61-068 on 08-09-85.

0159N/14N

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 4

Engine Family G1G2.8W8XGZ4 Exhaust Emission Control System EGR-TWC-CL (EFI) / AIP-EGR-TWC-CL (EFI) (1)

ENG. CID	ENG. CODE	AIR COND	ECM PART NO.	RAIL & INJECTOR PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	TLC	REV. NOTES
173	58	No	16053121	17085038 17086160	17085913	3125	1 3	A		27	A4	YBU	A
						3250	123	A		19			A
							2	A		27			
							3	A		37			
	59	Yes	16054861			3250	1 3	A		19			A
							1 3	A		27			
							3	A		37			
	60	No	16054871			3125	1 3	A		27			A
						3250	123	A		19			A
							2	A		27			
							3	A		37			
	61	Yes	16053131			3375	2	A		19	A3		A
							1 3	A		35			
						3500	2	A		35			A
	62	No	16053141			3375	123	A		35			A
	63	Yes	16053151			3375	2	A		19			A
							1 3	A		35			
						3500	2	A		35			A
	64	No	16053161			3375	123	A		35			A
	67	Yes	16053331			3375	2	A		19	A4		A
							2	A		27			
							1	A		35			
						3500	23	A		35			A

(1) Only for F cars with manual transmission.

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: 07-22-85 REVISIONS: A. Oldsmobile "A" models added and misc. ETW's changed by RC 61-068 on 08-09-85.

0159N/14N

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 5

Engine Family G1G2.8W8XGZ4 Exhaust Emission Control System EGR-TWC-CL (EFI) / AIP-EGR-TWC-CL (EFI) (1)

ENG. CID	ENG. CODE	AIR COND	ECM PART NO.	RAIL & INJECTOR PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	TLC	REV. NOTES
173	68	No	16053341	17085038 17086160	17085913	3375	1 3	A		35	A4	YBU	A
						3500	2	A		35			A
	69	Yes	16054941			3375	2	A		19			A
							2	A		27			
							1	A		35			
						3500	23	A		35			A
	70	No	16054951			3375	1 3	A		35			A
						3500	2	A		35			A
	75	Yes	16054901		17085914	3125	1	A		27	M5	YBM	
						3250	1	A		19			
							2	A	EFG	19			
							2	A		27			
						3375	2	A	H	19			
	76	No	16054911			3125	1	A		19			A
							1	A		27			
						3250	2	A		19			A
							2	A		27			
	77	Both	16055002	17085038	17085897	3125	2	P		37	A3	R8T	
							2	P		97			
	78	Both	16055022 16060052			3000	2	P		37	M4		B
						3125	2	P		97			
	79	Both	16055012 16060032			3000	2	P		37	M5		B
						3125	2	P		97			

(1) Only for F cars with manual transmission.

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: 07-22-85

REVISIONS: A. Oldsmobile "A" models added and misc. ETW's changed by RC 61-068 on
B. Alternate ECM part numbers added by RC 61-126 on 01-22-86

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 6

Engine Family G1G2.8W8XGZ4 Exhaust Emission Control System EGR-TWC-CL (EFI) / AIP-EGR-TWC-CL (EFI) (1)

ENG. CID	ENG. CODE	AIR COND	ECM PART NO.	RAIL & INJECTOR PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	TLC	REV. NOTES
173	80	Both	16064322	17085038	17085897	3125	2	P		37	A3	R8T	AB
							2	P		97			
	81	Yes	16052451	17085038	17085734	2875	1 3	J		27		YBX	
				17086160			1	J		69			
							3	J	C	69			
							1	J	DE	77			
							3	J	C	77			
						3000	1 3	J		35			
							1	J		67			
							3	J	D	69			
							6	J		69			
							1	J	F	77			
							3	J	D	77			
	82	No	16052471			2750	1	J	CE	27			
						2875	1	J	F	27			
							3	J		27			
							1	J		35			
							1	J		67			
							1 3	J		69			
							1 3	J		77			
						3000	3	J		35			
	83	Yes	16052461		17085735	2875	1 3	J		27	M4	YBW	
							1	J		35			
							3	J	C	35			
							1 3	J		69			
							1 3	J		77			
						3000	3	J	D	35			
							1	J		67			
							6	J		69			

(1) Only for F cars with manual transmission.

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: 07-22-85

REVISIONS: A. Engine code 80 added by RC 61-129 on 07-17-86.
B. Body type 37 added by RC 61-149 on 02-26-86.

0159N/14N

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 7

Engine Family G1G2.8W8XGZ4 Exhaust Emission Control System EGR-TWC-CL (EFI) / AIP-EGR-TWC-CL (EFI) (1)

ENG. CID	ENG. CODE	AIR COND	ECM PART NO.	RAIL & INJECTOR PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	TLC	REV. NOTES
173	84	No	16052481	17085038	17085735	2750	1 3	J		27	A4	YBW	
				17086160			1	J		69			
						2875	1 3	J		35			
							1	J		67			
							3	J		69			
							1 3	J		77			
	85	Yes	16048861			2875	1 3	J		27	M5		
							1	J		35			
							1 3	J		69			
							1 3	J	C	77			A
						3000	3	J		35			
							1	J		67			
							6	J		69			
							3	J	D	77			A
	86	No	16048871			2750	1	J		27			
							3	J	C	27			
							1	J	C	69			
						2875	3	J	D	27			
							1 3	J		35			
							1	J		67			
							1	J	DE	69			
							3	J		69			
							1 3	J		77			

(1) Only for F cars with manual transmission.

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: 07-22-85

REVISIONS: A. Model 3JD77 ETW changed to 3000 by RC 61-068 on 08-09-85.

0159N/14N

FILE

Form 2

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-336 Page 8

Engine Family G1G2.8W8XGZ4 Exhaust Emission Control System EGR-TWC-CL (EFI) / AIP-EGR-TWC-CL (EFI) (1)

ENG. CID	ENG. CODE	AIR COND	ECM PART NO.	RAIL & INJECTOR PART NO.	EGR VALVE PART NO.	ETW	DIV	B B	T M	BT	TNS	TLC	REV. NOTES
173	91	Yes	16052991	17085039	17085913	3375	1	F		87	A4	YCF	
	92	No	16053391			3375	1	F		87			
	93	Yes	16053401			3375	2	F		87		YCH	
	94	No	16053411			3375	2	F		87			
	95	Yes	16053011		17085914	3375	1	F	S	87	M5	YCC	
						3500	1	F	P	87			A
	96	No	16053421			3375	1	F	S	87			
						3500	1	F	P	87			A
	97	Yes	16053431			3375	2	F		87		YCD	
	98	No	16053441			3375	2	F		87			

(1) Only for F cars with manual transmission.

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: 07-22-85

REVISIONS: A. Test weight for model 1FP87 increased to 3500 by RC 61-093 on 10-07-85.

0159N/14N