

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-368
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:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
H2G3.8V8XEB7	181/231 (3.0/3.8)	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:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per mile</u>
0.41	7.0	0.7

The following are the certification emission values for this engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.20	2.2	0.5

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 16th day of May, 1986.


K. D. Drachand, Chief
Mobile Source Division

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer General Motors Corporation Executive Order No. A-6-368 Page 1

Engine Family H2G3.8V8XEB7 Evaporative Family 7B0-2D

Engine CID (Liters) - Type 231 (3.8) - V6 181 (3.0) - 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
 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
 MFI-Mechanical Fuel Injection
 TC-Turbocharger

<u>DIV</u>	<u>BB</u>	<u>TM</u>	<u>BT</u>	<u>MODEL NAME</u>	<u>DIV</u>	<u>BB</u>	<u>TM</u>	<u>BT</u>	<u>MODEL NAME</u>
2				PONTIAC	3				OLDSMOBILE
	H	X	69	Bonneville Sedan		C	W	11	Ninety-Eight Regency Brougham Coupe
		Z	69	Bonneville LE Sedan				69	Ninety-Eight Regency Brougham Sedan
	N	E	27	Grand Am Coupe			X	69	Ninety-Eight Rengency Sedan
		V	27	Grand Am LE Coupe		E	Z	57	Toronado Brougham Coupe
			69	Grand Am LE Sedan		H	N	37	Delta 88 Royale Coupe
	W		27	Grand Am SE Coupe				69	Delta 88 Royale Sedan
			69	Grand Am SE Sedan			Y	37	Delta 88 Royale Brougham Coupe
3				OLDSMOBILE				69	Delta 88 Royale Brougham Sedan
	A	J	19	Cutlass Ciera Sedan				27	Calais Coupe
			35	Cutlass Cruiser		N	F	69	Calais Sedan
			37	Cutlass Ciera S Coupe				27	Calais Supreme Coupe
	M		19	Cutlass Ciera Brougham Sedan			T	27	Calais Supreme Sedan
			35	Cutlass Brougham Cruiser				69	Calais Supreme Sedan
			37	Cutlass Ciera SL Coupe					

DRIVE AXLE: Front Wheel Drive

ISSUED:

REVISIONS:

0523Q

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer General Motors Corporation Executive Order No. A-6-368 Page 2Engine Family H2G3.8V8XEB7 Evaporative Family 7B0-2DEngine CID (Liters) - Type 231 (3.8) - V6

<u>DIV</u>	<u>BB</u>	<u>TM</u>	<u>BT</u>	<u>MODEL NAME</u>	<u>DIV</u>	<u>BB</u>	<u>TM</u>	<u>BT</u>	<u>MODEL NAME</u>
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					
	C	F	69	Electra T Type 4 Dr Sedan					
		W	11	Electra Park Avenue 2 Dr Sedan					
			69	Electra Park Avenue 4 Dr Sedan					
		X	69	Electra Limited 4 Dr Sedan					
	E	Z	57	Riviera Coupe					
	H	H	37	LeSabre Coupe					
			69	LeSabre Sedan					
		P	37	LeSabre Custom Coupe					
			69	LeSabre Custom Sedan					
		R	37	LeSabre Limited Coupe					
			69	LeSabre Limited Sedan					
	N	C	69	Skylark Custom Sedan					
		D	69	Skylark Limited Sedan					
		J	27	Somerset Custom Coupe					
		M	27	Somerset Limited Coupe					

DRIVE AXLE: Front Wheel Drive

ISSUED:

REVISIONS: Model 4CF69 added by RC 72-011 on 05-19-86.

0523Q/53Q

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

Manufacturer General Motors Corporation Executive Order No. A-6-368 Page 2

Engine Family H2G3.8V8XEB7 Exhaust Emission Control System CL (EFI) EGR-TWC

ENG. CID	ENG. CODE	AIR COND	ECM PART NO.	RAIL & INJECTOR		EGR VALVE PART NO.	ETW	DIV	B T		BT	TNS	TLC	REV. NOTES			
				PART NO.	PART NO.				B	M							
181	7	W & WO	16053664	25525040 25526958	17085910	3000	234 3	N N	27 69	A-3	NGK						
												3125	2 4	N	69		
231	1	W & WO	16053694	25525639 25526959	17086704	3250	4	A	27	A-4	NGI						
												3375	34 3	A A	19 37		
												3500	34	A	35		
												3625	34 34	C C	11 69	NGJ,	A
												3500	3 3	H H N	37 69		A
												3625	34 4 34 2 4 3	C H C H H Y	11 37 69 69 69		
												3500	3 3	H H N	37 69		A
												3625	34 4 34 2 4 3	C H C H H Y	11 37 69 69 69		
												3500	3 3	H H N	37 69		A
												3625	34 4 34 2 4 3	C H C H H Y	11 37 69 69 69		
5			16053724			3625	34	E	57		NGK						
6			16061494			3625	34	E	57								

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.

SUED:

REVISIONS: A. Engine codes 2A, 3A and 4A added by RC 72-003
on 04-09-86.

0523Q/53Q

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

Manufacturer General Motors Corporation Executive Order No. A-6-368 Page 3

Engine Family H2G3.8V8XEB7 Exhaust Emission Control System CL (EFI) EGR-TWC

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
181	7	W & WO	16053664	25525040 25526958 25529475	17085910	3000	234 3	N N		27 69	A-3	NGK	B
						3125	2 4	N		69			
231	1	W & WO	16053694	25525639	17086704	3250	4	A		27			C
	1A		16067004	25526959									D
	1B		16063504	25529476		3375	34	A		19			E
	1C		16078954				3	A		37			G
	1D		16081254			3500	34	A		35			
	2, 2A	W	16053704			3625	34	C		11		NGJ,	A
	2B		16067014				34	C		69		NGK	C
	2C		16073494										D
	2D		16078964										E
	2E		16081264										G
	3, 3A		16061504			3500	3	H		37			A
	3B		16067024										C
	3C		16073084										D
	3D		16078974			3625	34	C		11			E
	3E		16081274				4	H		37			G
							34	C		69			
							234	H		69			F

Comments: See page one for abbreviations and evaporative emission family identification
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based on model and equipment.

ISSUED: 05-16-86

REVISIONS: A. Engine codes 2A, 3A and 4A added by RC 72-003 on 04-07-86. B. Optional rail & injector P/N added by RC 72-004 on 04-15-86. C. Engine codes 1A, 2B, 3B, 4B, 5A and 6A added by RC 72-012 on 05-21-86. D. Engine codes 1B, 2C, 3C, 4C, 5B and 6B added by RC 72-082 on 10-07-86. E. Engine codes 1C, 2D and 3D added by RC 72-117 on 01-13-87. F. Model 3HN69 increased ETW to 3625 by RC 72-141 on 03-20-87. G. Engine codes 1D, 2E and 3E added by RC 72-149.

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GASOLINE-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-368 Page 4

Engine Family H2G3.8V8XEB7 Exhaust Emission Control System CL (EFI) EGR-TWC

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	
231	4.4A		<u>16053684</u>	<u>25525639</u>	<u>17086704</u>	<u>3500</u>	<u>3</u>	<u>H</u>		<u>37</u>	<u>A-3</u>	<u>NGJ,</u>	<u>A</u>	
	4B		<u>16067034</u>	<u>25526959</u>								<u>NGK</u>	<u>C</u>	
	4C		<u>16071694</u>	<u>25529476</u>									<u>D</u>	
	4D		<u>16078984</u>			<u>3625</u>	<u>34</u>	<u>C</u>		<u>11</u>			<u>E</u>	
	4E		<u>16081284</u>				<u>4</u>	<u>H</u>		<u>37</u>			<u>G</u>	
							<u>34</u>	<u>C</u>		<u>69</u>				
							<u>234</u>	<u>H</u>		<u>69</u>				<u>F</u>
		<u>5</u>		<u>16053724</u>			<u>3625</u>	<u>34</u>	<u>E</u>		<u>57</u>		<u>NGK</u>	
		<u>5A</u>		<u>16067044</u>										<u>C</u>
		<u>5B</u>		<u>16074444</u>										<u>D</u>
		<u>5C</u>		<u>16078994</u>										<u>E</u>
		<u>6</u>		<u>16061494</u>			<u>3625</u>	<u>34</u>	<u>E</u>		<u>57</u>			
		<u>6A</u>		<u>16067054</u>										<u>C</u>
		<u>6B</u>		<u>16074454</u>										<u>D</u>
		<u>6C</u>		<u>16079004</u>										<u>E</u>

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based on model and equipment.

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