

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-366  
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>
HIG2.8W8XRZ9	173 (2.8)	Air Injection - Pump Exhaust Gas Recirculation Three-Way Catalyst Oxygen Sensor (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>
0.39	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>
0.31	2.9	0.5

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 18 day of August, 1986.



K. D. Drachand, Chief  
Mobile Source Division

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation Executive Order No.: A-6-366 Form 1

Engine Family: H1G2.8W8XRZ9 Evaporative Family: 7B0-1L, 7A0-1B

Engine Liters (CID) - 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  
 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	DIV	BB	TM	BT	MODEL NAME
1				CHEVROLET	2				PONTIAC
	A	W	19	Celebrity Sedan		A	E	19	6000 SE Sedan
			27	Celebrity Coupe				35	6000 SE Wagon
			35	Celebrity Station Wagon			F	19	6000 Sedan
	F	P	87	Camaro Sport Coupe				27	6000 Coupe
	J	C	35	Cavalier Station Wagon				35	6000 Wagon
		D	35	Cavalier CS Station Wagon			G	19	6000 LE Sedan
		E	35	Cavalier RS Station Wagon				35	6000 LE Wagon
			67	Cavalier Convertible Coupe			H	19	STE Sedan
		F	27	Cavalier Z24 Notchback Coupe		F	S	87	Firebird
			77	Cavalier Z24 Hatchback Coupe		P	F	37	Fiero Se Coupe
	L	V	37	Beretta Specialty Coupe			G	97	Fiero GT Coupe
	T		69	Corsica Sedan					

ENGINE/DRIVE AXLE LOCATION: Front Engine/Front Wheel Drive for A & J Basic Body  
 Front Engine/Rear Wheel Drive for F Basic Body  
 Rear Engine/Rear Wheel Drive for P Basic Body

ISSUED: 07-04-86

REV. NO.: 006  
 007

0103S/10S

17-H1G2.8W8XRZ9-2A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation      Executive Order No.: A-6-366      Form 1A  
Engine Family: H1G2.8W8XRZ9      Evaporative Family: 7B0-1L, 7A0-1B  
Engine CID (Liters) - Type: 173 (2.8) - 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>
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					
			35	Cutlass Brougham Cruiser					
			37	Cutlass Ciera SL Coupe					
	J	D	77	Firenza GT Hatchback					
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					
6				CADILLAC					
	J	G	69	Cimarron Sedan					

ENGINE/DRIVE AXLE LOCATION: Front Engine/Front Wheel Drive

ISSUED: 07-04-86

REV. NO.:

0103S

17-H1G2.8W8XRZ9-3A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-366 Form 2

Engine Family: H1G2.8W8XRZ9 Exhaust Emission Control System: EGR-TWC-CL (EFI)  
AIP-EGR-TWC-CL (EFI)(1)

Liter (CID): 2.8 (173)

Engine Type: 60° V-6

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	REV. NOTES	
173	51	W & WO	16065011*	17087154,	17087106	3125	4	A	G	19	A-3		
			16065021**	17087247				1	A				W
	51A		16070971*				4	A	H	27		1	
			16070981**										
	51B		16072761*			3250	123	A			19		4
			16072771**					4	A	H	19		
								4	A	L	19		
								23	A		27		
								4	A	L	27		
								3	A		37		
53		16065051*			3125	4	A	G	19				
		16065061**				1	A	W	27				
53A		16071001*				4	A	H	27		1		
53B		16071011**											
		16072801*			3250	123	A			19		4	
		16072811**					4	A	H	19			
							4	A	L	19			
							4	A	E	19			
							23	A		27			
						4	A	L	27				
						3	A		37				

\* C-P-C

\*\* B-O-C

(1) Only A and 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: 07-04-86

REV. NO.: 001 - ECM P/N changed and "A" suffix  
engine codes added. 004 - ECM P/N changed and "B"  
suffix engine codes added.

0103S/10S

(For CARB Use Only)  
(1987)AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-366 Form 2

Engine Family: H1G2.8W8XRZ9 Exhaust Emission Control System: EGR-TWC-CL (EFI)  
AIP-EGR-TWC-CL (EFI)(1)

Liter (CID): 2.8 (173)

Engine Type: 60° V-6

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	REV. NOTES
173	55	W & WO	16065091* 16065101**	17087154, 17087247	17087106	3125	1	A	W	27	A-4	
	55A		16071041* 16071051**			3250	1 34	A	W	19		1,2,4
	55B		16072841* 16072851**				234 3	A		27 37		4
	57		16065121*		17087105	3125	1	A		27	M-5	
	57A		16071071									1,4
	57B		16072871			3250	12 2	A A		19 27		5
	63		16065391* 16065401**		17087106	3375	2 1	A A	H W	19 35	A-3	
	63A		16071081* 16071091**				3 4	A A	M	35 35		1,3
	63B		16072901* 16072911**									4 3
	65		16065431* 16065441**			3375	1 2	A A		35 19	A-4	3
	65A		16071221*									
	65A		16071131**			3500	234	A	W	35		1,3
	65B		16072941* 16072951**									4

\* C-P-C \*\* B-O-C

(1) Only A and 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: 07-04-86

REV. NO.: 001 - ECM P/N changed and "A" suffix engine codes added. 002 - Moves Pontiac sedans from engine codes 55 and 55A to a higher test weight class in engine codes 65 and 65A. 003 - Updates ETW for 2AF35 (EC 63) and 1AW35 (EC 65). 004 - ECM P/N changed and "B" suffix engine codes added. 005 - ECM P/N changed and "B" suffix engine code added.

0103S/10S

(For CARB Use Only)  
(1987)AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-366 Form 2

Engine Family: H1G2.8W8XRZ9 Exhaust Emission Control System: EGR-TWC-CL (EFI)

AIP-EGR-TWC-CL (EFI)(1)

Liter (CID): 2.8 (173)

Engine Type: 60° V-6

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	REV. NOTES
173	67	W &	16065461*	17087154,	17087105	3375	2	A		19	M-5	
	67A	WO	16071151*	17087247			12	A		35		1
	67B		16072971									5
	69		16067671*		17087106	3000	1	L		37	A-3	
	69A		16071171*									1
	69B		16072991*									4
	71		16065501*			3000	1	L		37	A-3	
	71A		16071191*				1	L		69		1
	71B		16073011*									4
	77		16065231*		17087105	3000	1	L		37	M-5	
	77A		16071211*				1	L		69		1
	77B		16073031									5
	79		16065251*			3000	1	L		37		
	79A		16071231*									1
	79B		16073051									5
	81		16065271*		17087106	3000	1	J		27	A-3	
	81A		16071251*				1	J		35		6
	81B		16073071*				1	J		67		1
								6	J	69		4
							1	3	J	77		
	83		16065291*			3000	1	J		27		
	83A		16071271*				1	J		77		1
	83B		16073091*									4

\* C-P-C

(1) Only A and 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: 07-04-86

REV. NO.: 001 - ECM P/N changed and "A" suffix  
engine codes added. 004 - ECM P/N changed and "B"  
suffix engine codes added. 005 - ECM P/N changed and  
"B" suffix engine codes added. 006 - Added 1JE35  
model to engine code 81.

0103S/10S

17-H1G2.8W8XRZ9-6A

(For CARB Use Only)  
(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
GASOLINE-FUELED PASSENGER CARS

Manufacturer: General Motors Corporation Executive Order No.: A-6-366 Form 2

Engine Family: H1G2.8W8XRZ9 Exhaust Emission Control System: EGR-TWC-CL (EFI)

AIP-EGR-TWC-CL (EFI)(1)

Liter (CID): 2.8 (173)

Engine Type: 60° V-6

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	REV. NOTES
173	85	W & WO	16065311*	17087154,	17087105	2875	3	J	D	77	M-5	
	85A		16071291*	17087247								
	85B	16073111				3000	1	J		27		5
							1	J		35		6
							1	J		67		
								6	J	69		
							1	J	F	77		
	87		16065331*			3000	1	J		27		
	87A		16071311*				1	J		77		1
	87B		16073131									5
	89		16044322*	17085038	17085897	3125	2	P		37	A-3	
							2	P		97		
	91		16052991*	17085039	17085913	3375	1	F		87	A-4	
	91A		16079901									8
	93		16053401*			3500	2	F		87		
	93A		16079911									8
	95		16053011*		17085914	3375	1	F		87	M-5	
	97		16053431*			3375	2	F		87		
	99		16060032*	17085038	17085897	3000	2	P		37		
						3125	2	P		97		1

\* C-P-C

(1) Only A and 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: 07-04-86

REV. NO.: 001 - ECM P/N changed and "A" suffix engine codes added and ETW corrected in engine code 99. 005 - ECM P/N changed and "B" suffix engine codes added. 006 - Added 1JE35 model to engine code 85. 008 - Added engine codes 91A and 93A.

0103S/10S