

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-282
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 1984 model-year General Motors Corporation exhaust emission control systems are certified as described below for diesel-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
E3G4.3E7ZZK2	263 (4.3)	Exhaust Gas Recirculation (Diesel Injection - Prechamber)

Vehicle models, transmissions and engine codes are listed on attachments.

The following are the emission standards for this engine family to be listed on the window decal required by "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles".

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.41	7.0	1.0

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>
0.26	1.1	0.8

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's 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 Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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 1st day of July, 1983.



K. D. Drachand, Chief
Mobile Source Control Division

AIR RESOURCES BOARD
HAAGEN-SMIT LABORATORY
9528 TELSTAR AVENUE
MONTPELIER, CALIFORNIA 91731
PHONE: (213) 575-6800



Reference No. C-83-065

JUL 1 1983

Attached → EO 6-282

Mr. T. M. Fisher, Director
Automotive Emission Control
Environmental Activities Staff
General Motors Corporation
GM Technical Center
Warren, Michigan 48090

Dear Mr. Fisher:

Our Executive Order (E.O.) A-6-282 certifies GM diesel engine family E3G4.3E7ZZK2 for California sale in model-year 1984. However, in our technical judgment, there is still a problem in the combustion timing system of the engine which needs attention.

We are issuing the E.O. so as not to unreasonably curtail GM's California sales of diesel-fueled cars. We request that, during the next six months, GM take corrective action and/or provide information as follows:

1. Revise design of injection pump adapter installation so as to eliminate the possibility of up to 2.2° of adapter rotation relative to the engine block, as described in GM letter ML-4E048, dated April 6, 1983.
2. Provide sufficient details about the redesign of the tachometer probe holder and the related improved manufacturing process, as described in GM letter ML-4E025, dated February 15, 1983, to demonstrate resolution of the problems of loosening and cracking.
3. Provide results of bench and vehicle testing of the Diesel Electronic Controller (DEC) performed since GM letter ML-4E051, of April 11, 1983.

If the above items are not resolved to our satisfaction within six months of the E.O. approval date, we may decertify this engine family halfway through the model-year.

Sincerely,

A handwritten signature in cursive script, appearing to read "K. D. Drachand".

K. D. Drachand, Chief
Mobile Source Control Division

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer General Motors Corporation Executive Order No. A-6-282 Page 1
 Engine Family E3G4.3E7ZZK2 Evaporative Family NA
 Engine CID (Liters) 263 (4.3)

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, 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

DIV	BB	TM	BT	MODEL NAME	DIV	BB	TM	BT	MODEL NAME
1				CHEVROLET	3				OLDSMOBILE
	A	W	19	Celebrity Sedan	A	J	19		Cutlass Ciera LS Sedan
			27	Celebrity Notchback Coupe			27		Cutlass Ciera LS Coupe
			35	Celebrity Wagon			35		Cutlass Cruiser Wagon
						M	19		Cutlass Ciera Brougham Sedan
							27		Cutlass Ciera Brougham Coupe
2				PONTIAC					
	A	F	19	6000 Sedan	C	W	11		Ninety-Eight Regency Coupe
			27	6000 Coupe			69		Ninety-Eight Regency Sedan
			35	6000 Wagon		X	11		Ninety-Eight Regency Brougham Coupe
		G	19	6000 LE Sedan			69		Ninety-Eight Regency Brougham Sedan
			27	6000 LE Coupe					
			35	6000 LE Wagon					
	H		19	6000 STE Sedan					

DRIVE AXLE: Front Wheel - A and C Body
 Rear Wheel - G Body

ISSUED:

REVISIONS:

0156W

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer General Motors Corporation Executive Order No. A-6-282 Page 2
 Engine Family E3G4.3E7ZZK2 Evaporative Family NA
 Engine CID (Liters) 263 (4.3)

DIV	BB	TM	BT	MODEL NAME	DIV	BB	TM	BT	MODEL NAME		
3	G	K	47	Cutlass Supreme Calais Coupe	6	C	B	69	CADILLAC Fleetwood Sedan		
			M	47				Cutlass Supreme Brougham Coupe	D	47	Coupe deVille
			69	Cutlass Supreme Brougham Sedan				69	Sedan deVille		
	R		47	Cutlass Supreme Coupe							
			69	Cutlass Supreme LS Sedan							
	4	A	H	19		BUICK Century Custom Sedan					
				27		Century Custom Coupe					
35				Century Custom Wagon							
L			19	Century Limited Sedan							
			27	Century Limited Coupe							
			35	Century Limited Wagon							
C		W	11	Electra Park Avenue Coupe							
			69	Electra Park Avenue Sedan							
X			11	Electra "300" "380" "430" Coupe							
			69	Electra "300" "380" "430" Sedan							
G		J		47	Regal Coupe						
				69	Regal Sedan						
		M		47	Regal Limited Coupe						
				69	Regal Limited Sedan						

ISSUED:

0156W

REVISIONS:

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
DIESEL-FUELED PASSENGER CARS

Manufacturer General Motors Corporation Executive Order No. A-6-282 Page 3

Engine Family E3G4.3E7ZZK2 Exhaust Emission Control System EGR (DIP)

ENG. CID	ENG. CODE	AIR COND	DI PUMP PART NO.	DIN PART NO.	EGR VALVE PART NO.	ETW	DIV	B	T	BT	TNS	TLC	REV. NOTES
263	2	W/WO	22519882	22520376	17083702	3250	3	A		27	A-4	HAC	
						3375	1 34	A		19			A
							2	A	FG	19			
							12 4	A		27			
						3500	2	A	H	19			
							1 3	A		35			
						3625	2	A		35			
							4	A	H	35			
						3750	4	A	L	35			
	3					3625	34	C		11			
							6	C		47			
							3	C		69			
						3750	46	C		69			
	4		22519881			3750	4	G	J	47			HAI
						3875	3	G		47			
							4	G	M	47			
							34	G		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, equipment and frontal area.

ISSUED: REVISIONS: A. ETW of model 4AL19 revised from 3500 lbs. to 3375 lbs. on 062283.