State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-707-A 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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year General Motors Corporation exhaust emission control systems are certified as described below for passenger cars:

<u>Fuel Type</u>: Gasoline

Engine Family: TGM2.4VJGKEK <u>Displacement</u>: 2.4 Liters (145 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Exhaust Gas Recirculation Three Way Catalytic Converter Oxygen Sensor Heated Oxygen Sensor Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane	Carbon	Nitrogen	Carbon
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20⁰F)</u>
50,000	0.25	3.4	0.4	10.0
100,000	0.31	4.2	0.6	n/a

The certification exhaust emission values for this engine family in grams per mile are:

Miles	Non-Methane <u>Hydrocarbons</u>	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	Carbon <u>Monoxi</u> de (20 ⁰ F)
50,000	0.08	2.6	0.3	7.5
100,000	0.10	3.3	0.4	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 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 Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) 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 provisions (Title 13, California Code of Regulations, Section 2035 et seq.). GENERAL MOTORS CORPORATION

EXECUTIVE ORDER A-6-707-A (Page 3 of 3)

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.

xh

Executed at El Monte, California this $\frac{1}{2}$ day of September 1995.

R. B. /Summerfield Assistant Division Chief Mobile Source Division

(FOR CARB USE ONLY)

E.O.-#A-6-707-#A-6-707A

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET GASOLINE-FUELED PASSENGER CARS

VEHICLE MODELS:

<u>1 J C 3 7</u> (EXAMPLE)

<u>Digit 1 - Selling Division</u>

- 1 Chevrolet
- 2 Pontiac
- 3 Oldsmobile
- 4 Buick
- 6 Cadillac
- 8 Saturn

Digit 2 - Body Designation

- Cutlass Ciera, Cutlass Cruiser, Century, Century Wagon A
- Caprice, Caprice Wagon, Roadmaster Wagon, Coachbuilder Wagon, В Roadmaster С
 - Ninety-Eight, Park Avenue
 - Fleetwood, Limousine, Funeral Coach/Hearse
 - Eldorado

DEFG

Н

- Camaro, Firebird/Formula
- Riviera, Aurora
- Bonneville, Eighty-Eight, LeSabre Cavalier, Sunfire
- J
- Seville Κ
- Ksp Deville/Concours
- Corsica, Beretta L
- Grand Am. Achieva, Skylark N
- Grand Prix, Regal, Cutlass Supreme, Lumina, Monte Carlo W
- Y - Corvette
- Saturn SC, SL, SW Ζ

Digit 3 - Trim Level

B. C. D. E. F. G. H. J. K. L. M. N. P. R. S. T. U. V. W. X. Y. Z

Digits 4 & 5 - Body Style

07	-	2Dr	Sport Coupe	37	_	2Dr Hardtop Coupe
80	-	2Dr	Hatchback Coupe	47	-	2Dr Hardtop Coupe
11	-	2Dr	Notchback	57	-	2Dr Hardtop Coupe
15	-	2Dr	Station Wagon	67	-	2Dr Convertible Coupe
19	-	4Dr	Sedan	68	-	4Dr Hatchback Sedan
23	-	4Dr	Aux. Seat Sedan	69	-	4Dr (Notchback) Sedan
27	-	2Dr	(NOTCHDack) Coupe	77	-	2Dr Hatchback Coupe
29	-	4Dr	Sedan	87	-	2Dr Hatchback Coupe
35	-	4Dr	Station Wagon	90	-	Commerical Chassis

ISSUED: ML-TP093 REVISED: ML-TR024

17-TGM2.4VJGKEK-1

E.O. # A-6-<u>707-A</u>

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

•

.

R: GENERAL MOTORS CORP.	ENGINE FAMILY	TGM2, 4VJGKEK	Ενάρ ελώτιν.	
ALL ENGINE CODES IN ENGINE FAMILY:		49S 50S_X		
EXH STD: CA Tier-1 <u>X</u> TLEV				
	WITH R/L <u>X</u> ;		FULL <u>X</u> ALTE	
		MDV2 MDV		
SINGLE CERT STD FOR MULTI-CLASS ENGIN	E FAMILY: NA	<u> </u>		1040
FUEL TYPE(S): DEDICATED <u>X</u> GASOLIN		EMISS TEST FUE	L(S) INDO	ρμαςε ο γ
SERVICE ACCUM: STD AMA MFR			ROC: <u>NA</u>	
R/L TEST PROC: PT SOURCE_X			<u>NA</u> APU (
ENGINE CONFIGURATION: I4 X V6			T: <u>2.4</u> LITERS/	
VALVES/CYLINDE	R: 2 4 <u>_X</u>		DHP: <u>150</u> @	
ENGINE LOCATION: FRONT X	DRIV	/E: FWD <u>X</u> RWD		
EXHAUST EMISSION CONTROL SYSTEM: <u>EG</u>	<u>R. 02S, H02S, SFI,</u>			·····
RLHP/DPA VALUES: _SECTION_08.13.02.0			······································	· · · · · · · · · · · · · · · · · · ·
510				
ENG TRANS CODE VEH MODELS (M5, A		IGNITION (ECM/PCM)	EGR	CATALYTIC
(LOC) (SEE PAGE 1) ETC.		PART_NO./CALIB	SYSTEM <u>PART_NO.</u>	CONVERTER <u>PART_NO.</u>
• .21A 2NE37 M5 2NE69 2NW37 3NL37	3250 1	16231851/16231373	17096100, 17096306	
3NL 69 2NW69				
21B		16231851/16234243		
21C		16231851/16235223		
22.22A 1JF37 . 2JB37	3125	16231851/16231553		25160527
2JD37 1JF67	3250			
2JB67	5250			
22B		16231851/16234193		
22C		16231851/16235173		
CARLINE NAMECARLINE COPONTIAC GRAND AM33025OLDSMOBILE ACHIEVA29010CHEVROLET CAVALIER12060PONTIAC SUNFIRE33060	<u>DE</u>			
ISSUED: ML-TP093 REVISED:	ML-TR024. ML-TRO	41, ML-TR054, ML-TR10	9	

17-TGM2.4VJGKEK-2

EMISSION DATA RATIOS

TO BE USED FOR ASSEMBLY LINE TESTING

	2426NLSOM (Config_000)	2426NLSOM <u>(Config 001)</u>
NMHC* (G/MI)	0.0613	0.0633
NMOG (G/MI)	0.0629	0.0653
HCHO (G/MI)	0.0009	0.0011
NMOG : NMHC	1.0261	1.0316
HCHO: NMHC	0.0147	0.0174

* NMHC includes methane response factor.

Average NMOG:NMHC = 1.029 Average HCHO:NMHC = 0.016

Ratio established using Phase 2 emission certification fuel.

ISSUED: ML-TP095 REVISED: ML-TP187

17-TGM2.4VJG2EK-6