

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-716
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:

Fuel Type: Gasoline

Engine Family: TGM5.7V8GFEK Displacement: 5.7 Liters (350 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Secondary Air Injection
- Exhaust Gas Recirculation
- Dual Three Way Catalytic Converters
- Dual Heated Oxygen Sensors (Two)
- Sequential Multiport Fuel Injection

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

The certification exhaust emission standards (alternative in-use compliance standards in parentheses) for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.25 (0.32)	3.4 (5.2)	0.4 (n/a)	10.0 (n/a)
100,000	0.31 (n/a)	4.2 (n/a)	0.6 (n/a)	n/a

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

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.10	1.7	0.2	6.2
100,000	0.11	2.0	0.2	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, based on a separate compliance plan submitted by the vehicle manufacturer, the listed vehicle models are permitted alternative in-use compliance 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 the submitted alternative in-use compliance plan satisfies the requirement that a maximum of 20 percent of the manufacturer's projected sales of 1996 model-year California-certified passenger cars and light-duty trucks will be subject to alternative in-use compliance as stipulated in the above-referenced standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 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, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model 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" 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.).

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 5th day of May, 1995.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

VEHICLE MODELS: 1 J C 3 7 (EXAMPLE)

Digit 1 - Selling Division

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

Digit 2 - Body Designation

- A - Cutlass Ciera, Cutlass Cruiser, Century, Century Wagon
- B - Caprice, Custom Cruiser, Roadmaster Wagon, Coachbuilder Wagon, Roadmaster
- C - Ninety-Eight, Park Avenue
- D - Fleetwood, Limousine, Hearse/Coachbuilder
- E - Eldorado
- F - Camaro, Firebird, Trans Am
- G - Riviera, Aurora
- H - Bonneville, Eighty-Eight, LeSabre
- J - Cavalier, Sunfire
- K - Seville
- Ksp - Concours, Deville
- L - Corsica, Beretta
- N - Grand Am, Cutlass Calais, Skylark
- W - Grand Prix, Regal, Cutlass Supreme, Lumina, Monte Carlo
- Y - Corvette
- Z - Saturn Coupe/Sedan

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 | 57 - 2Dr Hardtop Coupe |
| 08 - 2Dr Hatchback Coupe | 67 - 2Dr Convertible Coupe |
| 19 - 4Dr Sedan | 68 - 4Dr Hatchback Sedan |
| 27 - 2Dr (Notchback) Coupe | 69 - 4Dr (Notchback) Sedan |
| 35 - 4Dr Station Wagon | 87 - 2Dr Hatchback Coupe |
| 37 - 2Dr Hardtop Coupe | 90 - Commercial Chassis |
| 47 - 2Dr Hardtop Coupe | 97 - 2Dr Hardtop Coupe |

ISSUED: ML-TP021

REVISED:

17-TGM5.7V8GFEK-1

17-57V8G

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM5.7V8GFEK
 EVAP STD: 50K_X USEFUL LIFE WITH R/L___ EVAPORATIVE FAMILY: TGM1070AYPAA
 EXH STD: TIER-0___ TIER-1_X TLEV___ LEV___ ULEV___ ZEV___; EPA TIER-0___ TIER-1_X
 VEH CLASS(ES): PC_X LDT1___ LDT2___ MDV1___ MDV2___ MDV3___ MDV4___ MDV5___
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA
 EXH CERT FUEL(S): INDO_X PH2___ DIESEL: 13 CCR 2282___ OR 40 CFR 86.113-90___
 OR -94___ M85___ CNG___ LPG___ OTHER (SPECIFY)_____
 FUEL TYPE(S): DEDICATED___ FLEX-FUEL___ DUAL-FUEL___ GASOLINE_X DIESEL___ M85___
 CNG___ LNG___ LPG___ OTHER (SPECIFY)_____
 HYBRID: TYPE A___ B___ C___ APU CYCLE: NA
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 5.7 LITERS 350 CUBIC INCHES
 ENGINE: FRONT_X MID___ REAR___ DRIVE: FWD___ RWD_X 4WD-FT___ 4WD-PT___
 EXHAUST EMISSION CONT SYS & COMPONENTS: AIR/2TWC/SFI/EGR/2H02S(2)

RLHP/DPA: SECTION 08.13.02.00

(LOC) ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV. TEST WEIGHT	IGN SYSTEM (PCME/PROM) CALIB/PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
4	6DW69	A4	4750	16214381/16233391, 16214491/16233391	17092172	25153052, 25153057
4A				16228301/16233391, 16228391/16233391		
24	4BL19 4BT69 1BL35 4BR35	A4	4500	16229921/16233391, 16230451/16233391		
5	1BL19+WX3(1)		4500	16214421/16233391, 16214461/16233391		25153052, 25153057, 25165373
5A				16228331/16233391, 16228361/16233391		

(1) Impala SS

CARLINE NAME	CARLINE CODE
CAPRICE	12040
CAPRICE WAGON	12045
COACHBUILDER WAGON	55010
ROADMASTER	08060
ROADMASTER WAGON	08060
COACHBUILDER WAGON	08035
LIMOUSINE	10015
FLEETWOOD	10025
FUNERAL COACH HEARSE	10035

ISSUED: ML-TP021

REVISED: ML-TR003, ML-TR006, ML-TR032, ML-TP166

17-57V8G

17-TGM5.7V8GFEK-4

*(Impala SS is a upgraded model of Caprice;
differs in tire size, axel ratio, trim)*

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM5.7V8GFEK
 EVAP STD: 50K_X USEFUL LIFE WITH R/L___ EVAPORATIVE FAMILY: TGM1070AYPAA
 EXH STD: TIER-0___ TIER-1_X TLEV___ LEV___ ULEV___ ZEV___; EPA TIER-0___ TIER-1_X
 VEH CLASS(ES): PC_X LDT1___ LDT2___ MDV1___ MDV2___ MDV3___ MDV4___ MDV5___
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA
 EXH CERT FUEL(S): INDO_X PH2___ DIESEL: 13 CCR 2282___ OR 40 CFR 86.113-90___
 OR -94___ M85___ CNG___ LPG___ OTHER (SPECIFY)_____
 FUEL TYPE(S): DEDICATED___ FLEX-FUEL___ DUAL-FUEL___ GASOLINE_X DIESEL___ M85___
 CNG___ LNG___ LPG___ OTHER (SPECIFY)_____
 HYBRID: TYPE A___ B___ C___ APU CYCLE: NA
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 5.7 LITERS 350 CUBIC INCHES
 ENGINE: FRONT_X MID___ REAR___ DRIVE: FWD___ RWD_X 4WD-FT___ 4WD-PT___
 EXHAUST EMISSION CONT SYS & COMPONENTS: AIR/2TWC/SFI/EGR/2H02S(2)
 RLHP/DPA: SECTION 08.13.02.00

(LOC) ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV. TEST WEIGHT	IGN SYSTEM (PCME/PROM) CALIB/PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
3	6DW69 6DW69+V4U 6DW69+B9Q	A4	4750 6000	16214391/16233391	17092172	25153052.
3A				16228311/16233391		
3B				16229931/16233391		
23	1BL19 4BR35+B9Q 4BB90 1BL35 4BR35 4BN69 4BT69		4500 4750 4500	16214391/16233391		

CARLINE NAME	CARLINE CODE
CAPRICE	12040
CAPRICE WAGON	12045
COACHBUILDER WAGON	55010
ROADMASTER	08060
ROADMASTER WAGON	08060
COACHBUILDER WAGON	08035
LIMOUSINE	10015
FLEETWOOD	10025
FUNERAL COACH HEARSE	10035

ISSUED: ML-TP021 REVISED: ML-TR003, ML-TR006, ML-TR032, ML-TP166

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM5.7V8GF EK
 EVAP STD: 50K X USEFUL LIFE WITH R/L___ EVAPORATIVE FAMILY: TGM1070AYPAA
 EXH STD: TIER-0___ TIER-1 X TLEV___ LEV___ ULEV___ ZEV___; EPA TIER-0___ TIER-1 X
 VEH CLASS(ES): PC X LDT1___ LDT2___ MDV1___ MDV2___ MDV3___ MDV4___ MDV5___
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA
 EXH CERT FUEL(S): INDO X PH2___ DIESEL: 13 CCR 2282___ OR 40 CFR 86.113-90___
 OR -94___ M85___ CNG___ LPG___ OTHER (SPECIFY)_____
 FUEL TYPE(S): DEDICATED___ FLEX-FUEL___ DUAL-FUEL___ GASOLINE X DIESEL___ M85___
 CNG___ LNG___ LPG___ OTHER (SPECIFY)_____
 HYBRID: TYPE A___ B___ C___ APU CYCLE: NA
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 5.7 LITERS 350 CUBIC INCHES
 ENGINE: FRONT X MID___ REAR___ DRIVE: FWD___ RWD X 4WD-FT___ 4WD-PT___
 EXHAUST EMISSION CONT SYS & COMPONENTS: AIR/2TWC/SFI/EGR/2H02S(2)
 RLHP/DPA: SECTION 08.13.02.00

(LOC) ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV. TEST WEIGHT	IGN SYSTEM (PCME/PROM) CALIB/PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
1	6DW69	A4	4750	16214471/16233391	17092172	25153052, 25153057
1A				16228371/16233391		
1B				16229991/16233391		
21	4BN69 4BT69 1BL35 4BR35		4500 4750			

CARLINE NAME	CARLINE CODE
CAPRICE	12040
CAPRICE WAGON	12045
COACHBUILDER WAGON	55010
ROADMASTER	08060
ROADMASTER WAGON	08060
COACHBUILDER WAGON	08035
LIMOUSINE	10015
FLEETWOOD	10025
FUNERAL COACH HEARSE	10035

ISSUED: ML-TP021 REVISED: ML-TR003, ML-TR006, ML-TP166

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM5.7V8GFEK
 EVAP STD: 50K X USEFUL LIFE WITH R/L___ EVAPORATIVE FAMILY: TGM1070AYPAA
 EXH STD: TIER-0___ TIER-1 X TLEV___ LEV___ ULEV___ ZEV___; EPA TIER-0___ TIER-1 X
 VEH CLASS(ES): PC X LDT1___ LDT2___ MDV1___ MDV2___ MDV3___ MDV4___ MDV5___
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA
 EXH CERT FUEL(S): INDO X PH2___ DIESEL: 13 CCR 2282___ OR 40 CFR 86.113-90___
 OR -94___ M85___ CNG___ LPG___ OTHER (SPECIFY)_____
 FUEL TYPE(S): DEDICATED___ FLEX-FUEL___ DUAL-FUEL___ GASOLINE X DIESEL___ M85___
 CNG___ LNG___ LPG___ OTHER (SPECIFY)_____
 HYBRID: TYPE A___ B___ C___ APU CYCLE: NA
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 5.7 LITERS 350 CUBIC INCHES
 ENGINE: FRONT X MID___ REAR___ DRIVE: FWD___ RWD X 4WD-FT___ 4WD-PT___
 EXHAUST EMISSION CONT SYS & COMPONENTS: AIR/2TWC/SFI/EGR/2H02S(2)
 RLHP/DPA: SECTION 08.13.02.00

(LOC) ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV. TEST WEIGHT	IGN SYSTEM (PCME/PROM) CALIB/PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
4B	6DW69	A4	4750	16229921/16233391, 16230451/16233391	17092172	25153052, 25153057
5B	1BL19+WX3(1)		4500	16229951/16233391, 16229981/16233391		25153052, 25153057,
(1)	Impala SS					25165373

CARLINE NAME	CARLINE CODE
CAPRICE	12040
CAPRICE WAGON	12045
COACHBUILDER WAGON	55010
ROADMASTER	08060
ROADMASTER WAGON	08060
COACHBUILDER WAGON	08035
LIMOUSINE	10015
FLEETWOOD	10025
FUNERAL COACH HEARSE	10035

ISSUED: ML-TR006

REVISED: ML-TR032, ML-TP166

17-57V8G

17-TGM5.7V8GFEK-4.1

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM5.7V8GFEK
 EVAP STD: 50K_X USEFUL LIFE WITH R/L___ EVAPORATIVE FAMILY: TGM1070AYMAA
 EXH STD: TIER-0___ TIER-1_X TLEV___ LEV___ ULEV___ ZEV___; EPA TIER-0___ TIER-1_X
 VEH CLASS(ES): PC_X LDT1___ LDT2___ MDV1___ MDV2___ MDV3___ MDV4___ MDV5___
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA
 EXH CERT FUEL(S): INDO_X PH2___ DIESEL: 13 CCR 2282___ OR 40 CFR 86.113-90___
 OR -94___ M85___ CNG___ LPG___ OTHER (SPECIFY)_____
 FUEL TYPE(S): DEDICATED___ FLEX-FUEL___ DUAL-FUEL___ GASOLINE_X DIESEL___ M85___
 CNG___ LNG___ LPG___ OTHER (SPECIFY)_____
 HYBRID: TYPE A___ B___ C___ APU CYCLE: NA
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 5.7 LITERS 350 CUBIC INCHES
 ENGINE: FRONT_X MID___ REAR___ DRIVE: FWD___ RWD_X 4WD-FT___ 4WD-PT___
 EXHAUST EMISSION CONT SYS & COMPONENTS: AIR/2TWC/SFI/EGR/2HO2S(2)

RLHP/DPA: SECTION 08.13.02.00

(LOC) ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV. TEST WEIGHT	IGN SYSTEM (PCME/PROM) CALIB/PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
1	1FP87 2FV87 1FP67 2FV67	A4	3750 3875	16214501/16233391, 16214511/16233391	17092172	12551250, 12551249, 25153083, 25153080
11A				16228111/16233391, 16228121/16233391		
11B				16230101/16233391, 16230111/16233391		
11C				16242271/16233391, 16242261/16233391		
12	1FP87 2FV87 1FP67 2FV67		3750 3875	16214551/16233391		
12A				16228131/16233391		
12B				16230121/16233391		
12C				16242281/16233391		

CARLINE NAME CARLINE CODE
 CAMARO 12045
 FIREBIRD/FORMULA 33020

ISSUED: ML-TP021 REVISED: ML-TR003, ML-TR006, ML-TP166, ML-TR095

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM5.7V8GFEK
 EVAP STD: 50K_X USEFUL LIFE WITH R/L___ EVAPORATIVE FAMILY: TGM1070AYMAA
 LHX STD: TIER-0___ TIER-1_X TLEV___ LEV___ ULEV___ ZEV___; EPA TIER-0___ TIER-1_X
 VEH CLASS(ES): PC_X LDT1___ LDT2___ MDV1___ MDV2___ MDV3___ MDV4___ MDV5___
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA
 EXH CERT FUEL(S): INDO_X PH2___ DIESEL: 13 CCR 2282___ OR 40 CFR 86.113-90___
 OR -94___ M85___ CNG___ LPG___ OTHER (SPECIFY)_____
 FUEL TYPE(S): DEDICATED___ FLEX-FUEL___ DUAL-FUEL___ GASOLINE_X DIESEL___ M85___
 CNG___ LNG___ LPG___ OTHER (SPECIFY)_____
 HYBRID: TYPE A___ B___ C___ APU CYCLE: NA
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 5.7 LITERS 350 CUBIC INCHES
 ENGINE: FRONT_X MID___ REAR___ DRIVE: FWD___ RWD_X 4WD-FT___ 4WD-PT___
 EXHAUST EMISSION CONT SYS & COMPONENTS: AIR/2TWC/SFI/EGR/2H02S(2)
 RLHP/DPA: SECTION 08.13.02.00

(LOC) ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV. TEST WEIGHT	IGN SYSTEM (PCME/PROM) CALIB/PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
15	1FP87 2FV87 1FP67 2FV67	M6	3750 3875	16214561/16233391. 16214771/16233391	17092172	12551250. 12551249. 25153083. 25153080
15A				16228141/16233391		
15B				16230131/16233391. 16230141/16233391		
30	2FV87	A4		16214531/16233391		
30A				16228211/16233391		
30B				16230181/16233391		
30C				16242321/16233391		
30D				16246601/16233391		
31	2FV87	M6		16214541/16233391		
31A				16228201/16233391		
31B				16230171/16233391		

CARLINE NAME	CARLINE CODE
CAMARO	12045
FIREBIRD/FORMULA	33020

ISSUED: ML-TP021

REVISED: ML-TR003, ML-TR006, ML-TP166, ML-TR095, ML-TR103