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:

	Non-Methane	Carbon	Nitrogen	Carbon
<u>Miles</u>	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	Monoxide (20 ⁰ F)
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:

	Non-Methane	Carbon	Nitrogen	Carbon
<u>Miles</u>	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	Monoxide (20 ⁰ F)
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 _____ 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

- Cutlass Ciera, Cutlass Cruiser, Century, Century Wagon

- Caprice, Custom Cruiser, Roadmaster Wagon, Coachbuilder Wagon, В

Roadmaster

- Ninety-Eight, Park Avenue

- Fleetwood. Limousine, Hearse/Coachbuilder

- Eldorado

- Camaro, Firebird, Trans Am

G

- Riviera, Aurora - Bonneville, Eighty-Eight, LeSabre - Cavalier, Sunfire

- Seville

Ksp - Concours, Deville L - Corsica, Beretta

- Grand Am, Cutlass Calais, Skylark

- Grand Prix, Regal, Cutlass Supreme, Lumina, Monte Carlo

- Corvette

- 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
	68 - 4Dr Hatchback Sedan
19 - 4Dr Sedan	69 - 4Dr (Notchback) Sedan
27 - 2Dr (Notchback) Coupe	
35 - 4Dr Station Wagon	87 - 2Dr Hatchback Coupe
37 - 2Dr Hardtop Coupe	90 - Commercial Chassis
47 - 2Dr Hardtop Coupe	97 - 2Dr Hardtop Coupe
4/ - 2Di Hardtop Coupe	3. 22. tian and property

ISSUED: ML-TP021 REVISED:

17-TGM5.7V8GFEK-1

17-57V8G

MANUFAC	CTURER: GENERAL MOTORS CORPORATION			ENGINE FAMILY: TGM5.7V8GFEK		
EVAP ST	D: 50K <u>X</u> USEFL	L LIFE WITH R	/L	EVAPORAT	IVE FAMILY: TGN	11070AYPAA
EXH STD:	: TIER-O TIEF	R-1 <u>X</u> TLEV	_ LEV	ULEVZEV	: EPA TIER-0	TIER-1 <u>X</u>
WEH CLAS	SS(ES): PC <u>X</u> LO	T1 LDT2_	MDV1	MDV2	MDV3 MDV4	1 MDV5
SINGLE (CERT STD FOR MULTI	-CLASS ENGINE	FAMILY:	NA		
EXH CERT	T FUEL(S): INDO <u>)</u>	(PH2	DIESEL: 1	13 CCR 2282	OR 40 CFR 86.1	113-90
	OR -94	M85	CNG	LPG OTH	ER (SPECIFY)	
FUEL TYP	PE(S): DEDICATED_	FLEX-FUEL	DUAL	FUEL G.	ASOLINE <u>X</u> DIES	SEL M85
HYBRID:	TYPE A B (
	CONFIGURATION: VE				350 CUBIC I	NCHES
ENGINE:	FRONT_X_ MID_	REAR	DRIV	/E: FWD R	WD_X_ 4WD-FT	4WD-PT
	EMISSION CONT SYS					
רו זוט / טע	A. CECTION OO 13	02.00				
	A: SECTION 08.13.	02.00				
(LOC)	VEH MODELS	TRANS TYPE:	EQUIV.	IGN SYSTEM	EGR	CATALYST
		M-MAN			0. <u>PART NO.</u>	
4			4750	1621/201/1622	3391. 17092172	25153052.
4	ODWOS	A4	4/30		3391, 17092172 3391	
4A				16228301/1623		
4A				16228391/1623		
24	4BL19	A4	4500	16229921/1623	2201	
2 4	4BT69	A4	4500	16230451/1623		
	1BL35 4BR35		4750			
	4DR33					
5	1BL19+WX3(1)		4500		3391,	25153052.
				16214461/1623	3391	25153057, 25165373
5A				16228331/1623		
(1) Imp	oala SS			16228361/1623	3391	
·		CADL THE	CODE			
<u>CARI</u> CAPRICE	LINE NAME	<u>CARLINE</u> 1204				
CAPRICE		1204	5			
ROADMAS	ILDER WAGON TER	5501 0806				
	TER WAGON	0806				
LIMOUSII	ILDER WAGON NE	0803 1001				
FLEETWO	OD	1002	5			
-	COACH HEARSE	1003				
CHED	ME TOOGS	DEUTCED MI	TDOOD L	AL TRACK METR	000 ML TD166	

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

17-57V8G

(Importass is a uppgraded model of Coprice;)
differs in tire size, axel ratio, trim

17-TGM5.7V8GFEK-4

12

	EVAP STD: EXH STD: VEH CLASS SINGLE CI EXH CERT FUEL TYP HYBRID: ENGINE CI ENGINE:	: 50K_X USEF TIER-0 TIE S(ES): PC_X LI ERT STD FOR MULT FUEL(S): INDO_ OR -9 E(S): DEDICATED CNG L TYPE A B ONFIGURATION: VI FRONT_X MID_	UL LIFE WITH R/ R-1_X	LEVMDV1 FAMILY: DIESEL: 1 CNG DUAL OTHER (SCYCLE: N ACEMENT: DRIV	13 CCR 2282 OR LPG OTHER (FUEL GASOL SPECIFY)	FAMILY: TGM: EPA TIER-0_ V3 MDV4 40 CFR 86.1 SPECIFY) INE_X DIES 350 CUBIC INC 4WD-FT	1070AYPAATIER-1_XMDV5 13-90 ELM85 CHES
	RLHP/DPA	: SECTION 08.13	.02.00				
	(LOC) ENG CODE	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV. TEST <u>WEIGHT</u>	IGN SYSTEM (PCME/PROM) CALIB/PART NO.	SYSTEM	CATALYST PART NO.
	3	6DW69 6DW69+V4U 6DW69+B9Q	A4	4750 6000	16214391/16233391	17092172	25153052.
	7 3A				16228311/16233391	-	
	3B				16229931/16233391	-	
	23	1BL19 4BR35+B9Q 4BB90 1BL35 4BR35 4BN69		4500 4750 4500	16214391/16233391		
		4BT69					
	CAPRICE CAPRICE COACHBUI ROADMAST ROADMAST COACHBUI LIMOUSIN FLEETWOO	LDER WAGON ER ER WAGON LDER WAGON E	CARLINE 12040 12040 55010 08060 08030 10010 10020 10030	0 0 0 0 0 5 5			
à.	⊸SSUED:	ML-TP021	REVISED: ML	-TR003,	ML-TR006, ML-TR032	, ML-TP166	
						17TCM57	NGCEEK 3

17-57V8G

17-TGM5.7V8GFEK-3

MANUFACT	ΓURER: GENERAL Μ	IOTORS CORPORAT	ION	ENGINE FAM	MILY: TGM5.7V8	GFEK
∠VAP STE): 50K <u>X</u> USEF	UL LIFE WITH R	/L	EVAPORATIN	/E FAMILY: TGM	1070AYPAA
EXH STD:	TIER-O TIE	R-1_XTLEV	LEV	ULEV ZEV_	; EPA TIER-O_	TIER-1 <u>X</u>
VEH CLAS	SS(ES): PC <u>X</u> L	.DT1 LDT2_	MDV1	MDV2	MDV3MDV4	MDV5
SINGLE (CERT STD FOR MULT	I-CLASS ENGINE	FAMILY:	NA		
EXH CERT	FUEL(S): INDO_	<u>Χ</u> PH2 (DIESEL: 1	3 CCR 2282	OR 40 CFR 86.1	13-90
	OR -9	4 M85	CNG	LPGOTHER	R (SPECIFY)	
FUEL TYP	PE(S): DEDICATED	FLEX-FUEL	DUAL	-FUEL GAS	SOLINE <u>X</u> DIES	EL M85
	CNGL	.NG LPG	OTHER (S	PECIFY)		
HYBRID:	TYPE A B	C APU (CYCLE: N	A		
ENGINE (CONFIGURATION: V	78 DISP	_ACEMENT:	5.7 LITERS	350 CUBIC IN	CHES
	FRONT X MID					4WD-PT
EXHAUST	EMISSION CONT SY	S & COMPONENTS	: AIR/2T	WC/SFI/EGR/2H02S	5(2)	
RLHP/DPA	A: SECTION 08.13	.02.00				
(LOC)		TRANS TYPE:	EQUIV.	IGN SYSTEM	EGR	0.71.007
	VEH MODELS (SEE PAGE 1)			(PCME/PROM) CALIB/PART_NO		
1	6DW69	A4	4750	16214471/16233	3391 17092172	25153052. 25153057
1A				16228371/16233	3391	
1B				16229991/16233	3391	
	40,400		4500	102233317 10200	1071	
21	4BN69 4BT69		4500			
	1BL35 4BR35		4750			
	,					
	INE NAME	CARLINE	CODE			
CAPRICE CAPRICE	MAGON	1204 1204				
COACHBUI	LDER WAGON	55010)			
ROADMAST ROADMAST	ER ER WAGON	08060 08060				
COACHBUI	LDER WAGON	0803	5			
LIMOUSIN FLEETWOO		10015 10025				
	COACH HEARSE	1003				

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

17-TGM5.7V8GFEK-2

MANUFACTURER: GENERAL MOTORS CORPORATION	ENGINE FAMILY: TGM5.7V8GFEK			
✓VAP STD: 50K <u>X</u> USEFUL LIFE WITH R/	L	EVAPORATIVE FAMILY: TGM1070AYPAA		
EXH STD: TIER-0 TIER-1_X TLEV	LEV	ULEV ; EPA TIER-0 TIER-1_X_		
VEH CLASS(ES): PC_X LDT1 LDT2	_ MDV1	1 MDV2 MDV3 MDV4 MDV5		
SINGLE CERT STD FOR MULTI-CLASS ENGINE	FAMILY:	NA		
EXH CERT FUEL(S): INDO X PH2_ D	IESEL: 1	13 CCR 2282 OR 40 CFR 86.113-90		
OR -94 M85	CNG	LPG OTHER (SPECIFY)		
FUEL TYPE(S): DEDICATED FLEX-FUEL_	DUAL	L-FUEL GASOLINE_X_ DIESEL M85		
CNG LNG LPG	OTHER (S	SPECIFY)		
HYBRID: TYPE A B C APU C	YCLE: N	NA		
ENGINE CONFIGURATION: V8 DISPLA	ACEMENT:	: 5.7 LITERS 350 CUBIC INCHES		
		VE: FWD RWD_X_ 4WD-FT 4WD-PT		
EXHAUST EMISSION CONT SYS & COMPONENTS:	AIR/2T	TWC/SFI/EGR/2H02S(2)		
RLHP/DPA: SECTION 08.13.02.00				
(LOC) TRANS TYPE:	EQUIV.	IGN SYSTEM EGR (PCME/PROM) SYSTEM CATALYST		
ENG VEH MODELS A-AUTO CODE (SEE PAGE 1) M-MAN	TEST WEIGHT	(PCME/PROM) SYSTEM CATALYST CALIB/PART NO. PART NO. PART NO.		
4B 6DW69 A4	4750	16229921/16233391, 17092172 25153052, 16230451/16233391 25153057		
5B 1BL19+WX3(1)	4500	16229951/16233391. 25153052.		
		16229951/16233391.25153052.16229981/1623339125153057.		
(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				
10000				

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

17-TGM5.7V8GFEK-4.1

17-57V8G

ENGINE FAMILY: TGM5.7V8GFEK 'NUFACTURER: GENERAL MOTORS CORPORATION 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 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___ CNG___ LPG___ OTHER (SPECIFY)__ OR -94___ M85____ GASOLINE X. DIESEL___ M85__ FUEL TYPE(S): DEDICATED___ FLEX-FUEL__ DUAL-FUEL__ CNG LNG LPG OTHER (SPECIFY) HYBRID: TYPE A___ B___ C___ APU CYCLE: NA 350 CUBIC INCHES DISPLACEMENT: 5.7 LITERS ENGINE CONFIGURATION: V8 4WD-FT____ 4WD-PT _ DRIVE: FWD____ RWD_X_ ENGINE: FRONT_X MID___ REAR___ EXHAUST EMISSION CONT SYS & COMPONENTS: AIR/2TWC/SFI/EGR/2H02S(2) RLHP/DPA: SECTION 08.13.02.00 EGR IGN SYSTEM TRANS TYPE: EQUIV. (LOC) SYSTEM CATALYST A-AUTO TEST (PCME/PROM) VEH MODELS ENG PART_NO. CALIB/PART NO. PART_NO. M-MAN WEIGHT CODE (SEE_PAGE 1) 12551250. 17092172 3750 16214501/16233391. A4 1FP87 . 1 12551249. 16214511/16233391 3875 2FV87 25153083. 1FP67 25153080 2FV67 16228111/16233391. 11A 16228121/16233391 16230101/16233391. 118 16230111/16233391 16242271/16233391. 11C 16242261/16233391 16214551/16233391 3750 12 1FP87 3875 2FV87 1FP67 2FV67 16228131/16233391 12A 16230121/16233391 12B 16242281/16233391 120 CARLINE CODE CARLINE NAME 12045 CAMARO TREBIRD/FORMULA 33020 ISSUED: ML-TP021 REVISED: ML-TR003, ML-TR006, ML-TP166, ML-TR095

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM5.7V8GFEK EVAP STD: 50K X USEFUL LIFE WITH R/L EVAPORATIVE FAMILY: TGM1070AYMAA ≠ZXH STD: TIER-0___ TIER-1_X_ TLEV___ LEV___ ULEV___ ZEV__; EPA TIER-0___ TIER-1_X_ 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 TRANS TYPE: (LOC) EQUIV. IGN SYSTEM EGR VEH MODELS SYSTEM CATALYST ENG A-AUTO TEST (PCME/PROM) CODE (SEE PAGE 1) M-MAN <u>WEIGHT</u> CALIB/PART NO. PART NO. PART NO. 15 1FP87 MA 3750 16214561/16233391. 17092172 12551250. 2FV87 3875 16214771/16233391 12551249. 1FP67 25153083. 2FV67 25153080 15A 16228141/16233391 15B 16230131/162333391. 16230141/16233391 30 2FV87 16214531/16233391 Α4 30A 16228211/16233391 30B 16230181/162333391 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

`SSUED: ML-TP021 REVISED: ML-TR003, ML-TR006, ML-TP166, ML-TR095, ML-TR103