State of California AIR RESOURCES BOARD

EXECUTIVE ORDER P-6-37 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 1990 model-year General Motors Corporation federally-certified emission control systems are certified for sale in California as described below for gasoline-powered passenger cars:

Engine Family: L1G5.7V8NTA2 Displacement: 5.7 Liters (350 Inches³)
5.0 Liters (305 Inches³)

Equipped with the following exhaust emission control systems:

Secondary Air Injection
Exhaust Gas Recirculation
Oxygen Sensor
Three-Way Catalyst + Oxidation Catalyst
Multipoint 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:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides		
(Grams per Mile)	(Grams per Mile)	(Grams per Mile)		
0.41	3.4	1.0		

The following are the certification emission values for this engine family:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides		
(Grams per Mile)	(Grams per Mile)	(Grams per Mile)		
0.26	1.2	n q		

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 Code of Regulations, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided evidence of federal certification of vehicle models listed in the attachments which are not available as California-certified models.

material required to demonstrate that the vehicle manufacturer has sufficient emissions credits for its estimated California sales of federally-certified 1990 model-year vehicles using the "Guidelines for Certification of 1983 and Subsequent Model-Year Federally Certified Light-Duty Motor Vehicles For Sale in California" (Title 13, California Code of Regulations, Section 1960.5).

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 Code of Regulations, Section 2035 and California Health and Safety Code Section 43205).

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 $\frac{26}{9}$ day of April, 1989.

K. D. Drachand, 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	Digit 2 - E	Body Designation
1-Chevrolet 2-Pontiac 3-Oldsmobile 4-Buick 6-Cadillac	Coachbuilder Wagon	om Cruiser, LeSabre/Electra Wagon, tra, DeVille, Fleetwood, Commercial , Reatta eSabre
Digit 3 Trim Level	Digits 4 &	5 - Body Style
B, C, D, E, F, H, J, K, M, N, L, P, R, S, T, U, V, W, X, Y, Z	07-2Dr Sport Coupe 08-2Dr Hatchback Coupe 19-4Dr Sedan 27-2Dr (Notchback) Coupe 35-4Dr Station Wagon 37-2Dr Hardtop Coupe	57-Dr Hardtop Coupe 67-2Dr Convertible Coupe 68-4Dr Hatchback Sedan 69-4Dr (Notchback) Sedan 87-2Dr Hatchback Coupe 90-Commercial Chassis

ISSUED: 02-21-89

REV. NO.:

47-2Dr Hardtop Coupe

97-2Dr Hardtop Coupe

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G5.7V8NTA2 PASSENGER CARS X LIGHT DUTY TRUCKS____ MEDIUM DUTY VEHICLES GAS X DIESEL ENGINE TYPE: V8 LITER (CID): 5.0L (305) EVAP FAMILY: LBO-1A EMISSION CONTROL SYSTEM: AIR/EGR/TWC+OC/02S (MPI) ENGINE: FRONT X MID REAR DRIVE: FWD___ RWD_X 4WD-FT___ 4WD-PT___ CERTIFICATION STANDARDS: 1.0 NOx DPA: SEE ATTACHMENT I TRANS TYPE: EOUIV IGN SYSTEM EGR ENG **VEH MODELS** A-AUTO TEST (ECU/PROM) SYSTEM CATALYST CODE (SEE PAGE 1A) M-MAN WEIGHT PART NO. PART NO. PART NO. 1 1FP87 A4 3750 16125151/ 17090106 25100541 1FP67 3875 **ANJB** 1A 16145581/ ATNY 3 2FS87 3750 16125121/ 2FW87 ANHY **3A** 16145581/ ATNY 5 1FP87 M5 3625 16125191/. 17090104 1FP67 3750 ANJH 5A 16145561/ ATNW 6 1FP67 16140521/ ASNH 7 1FP87 16125201/ 17090105 25103415 ANJJ 25103417 **7A** 16145571/

ATNX

ISSUED: 02-21-89

REV. NO.: 001

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G5.7V8NTA2

PASSENGER CARS X LIGHT DUTY TRUCKS MEDIUM DUTY VEHICLES GAS X DIESEL

ENGINE TYPE: V8 LITER (CID): 5.7L (350) EVAP FAMILY: LBO-1A

EMISSION CONTROL SYSTEM: AIR/EGR/TWC+OC/O2S (MPI)

ENGINE: FRONT X MID REAR DRIVE: FWD RWD X 4WD-FT 4WD-PT

CERTIFICATION STANDARDS: 1.0 NOX DPA: SEE ATTACHMENT I

ENG CODE	VEH MODELS (SEE PAGE 1A)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
8	1FP87 1FP67	M 5	3625 3750	16145561/ ATNW	17090104	25103415 25103417
9	2FS87 2FW87			16125241/ ANJR		25100541
9A •				16145561/ ATNW		
10	2FS87 2FW87					25103415 25103417
11	2FS87 2FW87			16125251/ ANJS	17090105	
11A	•			16145571/ ATNX		
12	1FP87					25100541
13	2FS87 2FW87					

ISSUED: 02-21-89

REV. NO.: 001

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G5.7V8NTA2

PASSENGER CARS_X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES__ GAS_X DIESEL__

ENGINE TYPE: V8 LITER (CID): 5.7L (350)

EVAP FAMILY: LB0-1A

EMISSION CONTROL SYSTEM: AIR/EGR/TWC+OC/O2S (MPI)

ENGINE: FRONT X MID REAR DRIVE: FWD RWD X 4WD-FT 4WD-PT

DPA: SEE ATTACHMENT I CERTIFICATION STANDARDS: 1.0 NOx

ENG CODE	VEH MODELS (SEE PAGE 1A)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM <u>Part no.</u>	CATALYST PART NO.
21	1FP87	A4	3750	16125171/ ANJD	17090107	25100541
22	1FP87					25103415 25103417
23	1FP87			16125181/ ANJF		25100541
24	1FP87			·		25103415 25103417
27	2FW87 2FS87			16082112/ AKJH		25100541
28	2FW87 2FS87					25103415 25103417
29	2FS87 2FW87			16125141/ ANJA		25100541
30	2FS87 2FW87					25103415 25103417
31	2FS87 2FW87			16125181/ ANJF		25100541
32	2FS87 2FW87					25103415 25103417

ISSUED: 001

REV. NO.:

17-L1G5.7V8NTA2-3.1 (1990)

17-NTA2

ATTACHMENT I

TEST HORSEPOWER VALUES

Body Style	Test Weight Classes	50mph Road Load Hp	without.AC Coast Dyno Down Hp Time	.withAC. Coast Dyno Down Hp Time	CD, CA or FA
***** F BODY (RWD) *****					
CHEVROLET CAMARO (1F_67)	- CONVERTIBLE				ı
W/P215/65R15 AL2 W/P215/65R15 HWY W/P245/50ZR16 HW4	0-3875 0-3875 0-3875	12.63 12.57 13.37	7.5 18.91 7.3 19.07 7.4 17.98	8.3 17.85 8.1 18.04 8.2 17.04	CA CA CA
CHEVROLET CAMARO (1F_87) PONTIAC FIREBIRD (2FS87)	TRANS AM (2FW87	· ')			·
W/P215/65R15 AL2 W/P215/65R15 AL2 W/P215/65R15 AL2 W/P215/65R15 HWY W/P215/65R15 HWY W/P245/50ZR16 HW4 W/P245/50ZR16 HW4 ***** H BODY (FWD) *****	3875 Only 3625-3750 0-3500 3875 Only 0-3750 3875 Only 0-3750	12.13 11.88		7.7 17.64	CA CA CA CD CA CA
OLDSMOBILE DELTA 88 (3H_3 BUICK LESABRE (4H_37,4H_6			•		• • •
W/P205/75R14 ALS W/P215/65R15 AL2 W/P215/65R15 AL3	0-3625 0-3625 0-3625	12.58 13.02 14.04	6.6 17.75 5.8 17.13 6.4 15.96	7.3 16.89 6.4 16.40 7.0 15.27	CA CA CA
PONTIAC BONNEVILLE (2HX69	,2HZ69)	-			
W/P205/75R14 ALS W/P215/65R15 AL2 W/P215/65R15 AL2 W/P215/65R15 AL3	0-3625 3750 Only 0-3625 0-3625	12.74 13.31 13.18 14.04	7.1 17.52 6.3 17.33 6.3 16.93 6.4 15.95	7.8 16.62 6.9 16.55 6.9 16.15 7.0 15.27	CA CA CA

CERTIFICATION REVIEW SHEET EXHAUST/EVAPORATIVE SYSTEM & FILL PIPE SPECIFICATION COMPLIANCE

			Final					****	PROJEC	TED EN	115510	VS(1)
Veh ID	Code (Displ)	<u>Trans</u>	Drive <u>Ratio</u>	ETW	DPA	MPG <u>City/Hwy</u>	Test <u>Loc</u>		<u></u>	N0x	Hwy NOx	50K Evap or Part(2)
C19F013	6 (305)	M5	3.08	3750	8.2	16.0/30.6	VEL	.26	.88	. 68	.81	.44
C19F013	6 (305)	M5	3.08	3750	8.2	17.6/30.3	EPA	.26	1.1	.67	.77	.22
C91F015	1 (305)	A4	2.73	3875	8.2	17.4/29.3	VEL	.25	1.2	.86	1.1	• •
								•				
(1) The	emis data					with stds on factors		.41 1.000	3.4 1.000		NA	2.0

⁽²⁾ Evaporative DF is the average of Vehicle DF 0.00 and Bench DF 0.01

Velilal K3.			· · · · · · · · · · · · · · · · · · ·
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Application Processed by	KarlSime	Date 3. 10.89 Reviewed by	Date

ISSUED: 02-21-89

REV. NO.