State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-463 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 39518 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1990 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family		splacement (Cubic inches)	Exhaust Emission Control Systems (Special Features)
L1G2.5V5TPG8	2.5	(151)	Exhaust Gas Recirculation Oxygen Sensor Three-way Catalyst (Central Fuel Injection) (On-Board Diagnostics)

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 Hile)	(Grams per Mile)	(Grams per Mile)	
0.41	7.0	0.4	

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)	
0.27	2.8	0.3	

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Liotor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, Section 1968) 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 regulations (Title 13, California Administrative Code, 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 $\underline{\mathcal{S}}$

_ day of August, 1988

K. D. Drachand, Chief Mobile Source Division

(1990)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation

Executive Order No.: A-6-463

Engine Family: L1G2.5V5TPG6

Evaporative Family: LAO-1C, LBO-1E

Engine Displacement Liters (Cubic Inches) - Type: 2.5 (151)

Exhaust Emission Control System (Special Features): EGR, TWC, OS (CFI, OBD)

ABBREVIATIONS:

Ignition System
CA-Centrifugal Advance
ECU-Electronic Control Unit
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

Fuel System
CFI,DID,DIP,EPFI,HOS,MPFI,OS,SFI
nV-nVenturi Carburetor
Variable Venturi

Other Abbreviations
A/C-Air Conditioning
CID Cubic Inch Displacement
ETW-Equivalent Test Weight
FC-Forward Control
HD-Heavy Duty
RI-Rail & Injector
RWD-Rear Wheel Drive
FWD-Front Wheel Drive
4WD-Four Wheel Drive
TBI-Throttle Body Injection
4x2-Two Wheel Drive
4x4-Four Wheel Drive
6x4-Four Wheel Drive

Exhaust Emission Control System AIP-Air Injection Pump AIV-Air Injection Valve EGR-Exhaust Gas Recirculation EIC-Electronic Injection Control (Diesel Only) EM-Engine Modification DBC-Dual Bed Catalyst HOS-Heated Oxygen Sensor OC-Oxidation Catalyst OS-Oxygen Sensor SPL-Smoke Puff Limiter or Throttle Delay TOC-Trap Oxidizer, Continual TOP-Trap Oxidizer, Periodical TWC-Three-Way Catalyst WUOC-Warm-up Oxidation Catalyst WUTWC-Warm-up Three-Way Catalyst

Special Features
CCV-Combustion Chamber Valve
CFI-Central Fuel Injection or Throttle
Body Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EPFI-Electronic Port Fuel Injection
IC-Intercooler/Aftercooler
MPFI-Mechanical Port Fuel Injection
OBD-On-Board Diagnostics
SC-Supercharger
SFI-Sequential Fuel Injection
TC-Turbocharger

ISSUED: 06-15-88

REV. NO.:

0403R

(1990)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET GASOLINE-FUELED PASSENGER CARS

Executive Order No. A-6-463

VEHICLE MODELS:

1 J U 2 7 (EXAMPLE)

Digit 1 Selling Division

Digit 2 - Body Designation

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

A-Celebrity, 6000, Cutlass Ciera, Cutlass Cruiser, Century B-Caprice, Safari Magon, Custom Cruiser, LeSabre/Electra Magon C-Ninety-Eight, Touring, Electra, DeVille, Fleetwood, Limousine D-Brougham

E-Toronado, Riviera, Eldorado, Reatta

F-Camaro, Firebird, Trans Am

H-Bonneville, Eighty-Eight, LeSabre

J-Cavalier, Sunbird, Skyhawk

K-Seville

L-Corsica, Beretta

N-Grand Am, Cutlass Calais, Skylark

T-Lemans V-Allante

W-Grand Prix, Regal, Cutlass Supreme, Lumina

Y-Corvette

Z-Commercial Chassis

Digit 3 ⊸rim Level

<u>Digits 4 & 5 - Body Style</u>

07-2Dr	Sport Coupe	47-2Dr	Hardtop Coupe
08-2Dr	Hatchback Coupe	57-2Dr	Hardtop Coupe
11-2Dr	Notchback Coupe/Sedan	67-2Dr	Convertible Coupe
19-4Dr	Sedan	68-4Dr	Hatchback Sedan
23-4Dr	Auxiliary Seat Sedan	69-4Dr	(Notchback) Sedan
27-2Dr	(Notchback) Coupe	77-2Dr	Hatchback Coupe
33-4Dr	Auxiliary Seat Sedan		Sedan Pickup
35-4Dr	Station Hagon		Hatchback Coupe
37-2Dr	Hardtop Coupe	90-Com	mercial Chassis
			Hardtop Coupe

Engine: Front

Drive: FWD

ISSUED: 06-15-88

REV. NO.:

17-L1G2.5V5TPG6-2A

(1990)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Liters (CID): 2.5 (151)

Type: I4 Executive Order No. A-6-463

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
	2AF69 3AJ69 3AJ37 3AM37 3AM69 4AH37 4AH69 4AL37 4AL69 1AW35 2AF35 3AJ35 3AJ35 3AJ35	A3	3125 3250 3375	16081961	17088083	17084743	25102754
3	3NF27 2NE69 2NE27 3NT27 3NF69 3NT69 4NM27 4NJ27 4NJ27 4ND69		2875 3000	16082011			25101504

ISSUED: 06-15-88

REV. NO.:

17-L1G2.5V5TPG6-3A

(1990)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Liters (CID): 2.5 (151)

Type: I4

Executive Order No. A-6-463

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
5	1WM27 1WM69	А3	3375 3500	16056502	17089073	17084743	25102755
10	3NF27 3NT27 3NF69 2NE69 2NE27 3NT69	М5	2875 3000	16082021	17088083		25101504

ISSUED: 06-15-88

REV. NO.: