

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER P-6-24
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 1988 model-year General Motors Corporation federally-certified emission control systems are certified for sale in California as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
J1G2.8V8XRZ8	3.1 (191)	Exhaust Gas Recirculation Three-Way Catalyst Oxygen Sensor (Electronic Port 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:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.41	3.4	1.0

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

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.33	3.0	0.8

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 Administrative Code, 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 Administrative Code, 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.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate that the vehicle manufacturer has sufficient emissions credits for its estimated California sales of federally-certified 1988 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 Administrative Code, 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 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 5th day of January, 1988.


K. D. Drachand, Chief
Mobile Source Division

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation Executive Order No.: P-6-24
Engine Family: J1G2.8V8XRZ8 Evaporative Family: JBO-1K
Engine Displacement Liters (Cubic Inches) - Type: 3.1 (191) - V6
Exhaust Emission Control System (Special Features): EGR, TWC, OS (EPFI)

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, CL, DID, DIP, EFI, MFI
nVenturi Carburetor
VV-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
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
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
TR-Thermal Reactor
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
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EFI-Electronic Fuel Injection
IC-Intercooler/Aftercooler
MFI-Mechanical Fuel Injection
OBD-On Board Diagnostics
TC-Turbocharger

(For CARB Use Only)
(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Executive Order No. P-6-24

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 Wagon, Custom Cruiser, LeSabre/Electra Wagon
- C-Ninety-Eight Regency, Electra, DeVille, Fleetwood, Limousine
- D-Brougham
- E-Toronado, Riviera, Eldorado, Reatta
- F-Camaro, Firebird, Trans Am, Formula
- G-Monte Carlo, El Camino, Caballero
- H-Bonneville, Delta 88 Royale, LeSabre
- J-Cavalier, Sunbird, Firenze, Skyhawk, Cimarron
- K-Seville
- L-Corsica, Beretta
- N-Grand Am, Calais, Somerset/Skylark
- P-Fiero
- T-Lemans
- V-Allante
- W-Grand Prix, Regal, Cutlass Supreme
- Y-Corvette
- Z-Commercial Chassis

Digit 3
Trim Level

Digits 4 & 5 - Body Style

- | | |
|------------------------------|--------------------------|
| 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 | 80-2Dr Sedan Pickup |
| 35-4Dr Station Wagon | 87-2Dr Hatchback Coupe |
| 37-2Dr Hardtop Coupe | 90-Commercial Chassis |
| | 97-2Dr Hardtop Coupe |

Engine: Front X Mid _____ Rear _____

Drive: FWD _____ RWD _____ 4WD Full Time X 4WD Part Time _____

ISSUED: 01-15-88

REV. NO.:

17-J1G2.8V8XRZ8-3A

(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Liters (CID): 3.1 (191)

Type: V6

Executive Order No. P-6-24

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM () PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
10	2AH19	A3	3625	16082151	17087247	17087106	25104021

Comments: See page one for abbreviations and family information. Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

ISSUED: 01-15-88

REV. NO.:

0324T/