

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-422  
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 1987 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
H2G2.3V8XEW6	138 (2.3)	Three-Way Catalyst Oxygen Sensor (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:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.39	7.0	0.7

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>
0.25	1.1	0.1

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

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 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 Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 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 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 23<sup>rd</sup> day of March, 1987.

  
K. D. Drachand, Chief  
Mobile Source Division

17-H2G2.3V8XEW6-1A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation                      Executive Order No.: A-6-422  
Engine Family: H2G2.3V8XEW6                                      Evaporative Family: 7B0-2G  
Engine Displacement Liters (Cubic Inches) - Type: 2.3 (138) I4  
Exhaust Emission Control System (Special Features): OS/TWC (EFI)

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  
nV-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

ISSUED: 03-13-87

REV. NO.:

0137S

17-H2G2.3V8XEW6-2A

(For CARB Use Only)  
(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
GASOLINE-FUELED PASSENGER CARS

Executive Order No. A-6-422

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  
F-Camaro, Firebird, Trans Am, Formula  
G-Monte Carlo, El Camino, Caballero  
H-Bonneville, Delta 88 Royale, LeSabre  
J-Cavalier, Sunbird, Firenza, 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  
08-2Dr Hatchback Coupe  
11-2Dr Notchback Coupe/Sedan  
19-4Dr Sedan  
23-4Dr Auxiliary Seat Sedan  
27-2Dr (Notchback) Coupe  
33-4Dr Auxiliary Seat Sedan  
35-4Dr Station Wagon  
37-2Dr Hardtop Coupe

47-2Dr Hardtop Coupe  
57-2Dr Hardtop Coupe  
67-2Dr Convertible Coupe  
68-4Dr Hatchback Sedan  
69-4Dr (Notchback) Sedan  
77-2Dr Hatchback Coupe  
80-2Dr Sedan Pickup  
87-2Dr Hatchback Coupe  
90-Commercial Chassis  
97-2Dr Hardtop Coupe

Engine: Front

Drive: FWD

ISS : 03-13-87

REV. NO.:

0137S

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(1987)

## AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Liters (CID): 2.3 (138)

Type: I4

Executive Order No. A-6-422

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (EFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
1	3NF27	A3	3000	16059103	17087066, 17087296	NA	25100635, 25100948
1A,1B				16079953			
1C				16084343			
1D				16085993			
1E				16088433			

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: 03-13-87

 REV. NO.: 001  
 002  
 003  
 004  
 005

J137S/17S