

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-193  
Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43100, 43102, 43103, and 43835; 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 General Motors Corporation exhaust emission control systems are certified as described below for 1981 model-year gasoline-powered passenger cars.

| <u>Engine Family</u> | <u>Displacement<br/>Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems<br/>(Special Features)</u>                                     |
|----------------------|---|--|
| 12S4AB               | 301 (4.9)                                     | Air Injection - Pump<br>Exhaust Gas Recirculation<br>Three Way Catalyst System<br>with Closed Loop |

Vehicle Models, Transmissions, Engine Codes and Evaporative Emission Control Families as listed on attachments.

The following are the certification emission values to be listed on the window decal required by California Assembly-Line Test Procedures for 1981 model-year vehicles:

| <u>Engine Family</u> | <u>Hydrocarbons<br/>Grams per Mile</u> | <u>Carbon Monoxide<br/>Grams per Mile</u> | <u>Nitrogen Oxides<br/>Grams per Mile</u> |
|----------------------|--|---|---|
| 12S4AB               | 0.17                                   | 3.0                                       | 0.6                                       |

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 except Motorcycles".

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.

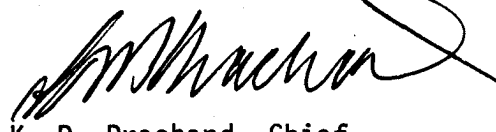
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That General Motors Corporation has provided to the Executive Officer all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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 10<sup>th</sup> day of August, 1980.

  
K. D. Drachand, Chief  
Mobile Source Control Division

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer General Motors Corp. Executive Order No. A-6-193 Page 1

Engine Family 12S4AB Evaporative Family 1B4S-2

ABBREVIATIONS Engine CID (Liters) 301 (4.9)

Ignition System

CA-Centrifugal Advance  
 EEC-Electronic Engine Control  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Valve  
 CL-Closed Loop  
 EGR-Exhaust Gas Recirculation  
 EM-Engine Modification  
 OC-Oxidation Catalyst System  
 TR-Thermal Reactor  
 TWC-Three Way Catalyst System

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection  
 DI-Diesel Injection  
 EFI-Electronic Fuel Injection  
 MFI-Mechanical Fuel Injection  
 TC-Turbocharged

Fuel System

CFI, DI, EFI, MFI  
 nV-nVenturi Carburetor  
 VV-Variable Venturi

Division  
 Basic Body  
 Trim  
 Body Type

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2 Pontiac  
 F S 87 Firebird  
 T 87 Firebird Esprit  
 V 87 Firebird Formula  
 W 87 Firebird Trans Am

Division  
 Basic Body  
 Trim  
 Body Type

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2 Pontiac  
 A D 35 LeMans Safari Station Wagon  
 F 35 Grand LeMans Safari Station Wagon

AIR RESOURCES BOARD 1981 SUPPLEMENTAL DATA SHEET - GM FORMAT  
Gasoline-fueled Passenger Car

Manufacturer: GENERAL MOTORS CORPORATION Executive Order No. A-6-193

Engine Family 12S4AB Engine CID 301 Transm. \_\_\_\_\_

Exhaust Emission Control System AIP, EGR, TWC, CL

| Eng. Code | Air Cond. | Electron. Control Module Part No.  | Fuel System 2V Carb. Part No. | EGR Valve Part No. | Test Wt. Class | Divisions | Basic Body | Trim | Body Type | Trans-mission | Tune-up Label Code | Rev. Notes |
|-----------|-----------|------------------------------------|-------------------------------|--------------------|----------------|-----------|------------|------|-----------|---------------|--------------------|------------|
| 1         | W         | Delco Electronics<br>16012801      | Rochester<br>17081272         | 17075584           | 4000           | 2         | A          |      | 35        | A3            | PAS                | A          |
| 3         |           | 16012852<br>and<br>16013302<br>(1) | 17081270                      | 17075504           | 4000           | 2         | F          |      | 87        |               | PAT                |            |

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP lists for correct dyno test HP settings based on model, equipment and frontal area. (1) 2852 for C4 System, 3302 for Electronic Spark Control System.

Date of Issue: 081880. Revisions: A. ECM column was Ign. Syst. Column (format updated) 041081.