

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-400  
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 exhaust 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>
J1G2.5V5TPG4	2.5 (151)	Exhaust Gas Recirculation Three-Way Catalyst Oxygen Sensor (Central 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	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>
0.18	2.1	0.2

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 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 "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 listed vehicle models have been granted an exemption from compliance with the requirements of 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 18<sup>th</sup> day of February, 1987.

  
K. D. Drachand, Chief  
Mobile Source Division

17-J1G2.5V5TPG4-1A

(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation

Executive Order No.: A-6-400

Engine Family: J1G2.5V5TPG4

Evaporative Family: JA0-1C

Engine Displacement Liters (Cubic Inches) - Type: 2.5 (151) - I4

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, CL, DID, DIP, EFI, MFI  
V-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: 01-15-87

REV. NO.:

J239T

(For CARB Use Only)  
(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
GASOLINE-FUELED PASSENGER CARS

Executive Order No. A-6-400

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, 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 (Rear for P Car)

Drive: FWD (RWD for P Car)

ISSUED: 01-15-87

REV. NO.:

(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): 2.5 (151)

Type: I4

Executive Order No. A-6-400

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
2	1AW19, 1AW27 3AJ19 3AJ37, 3AM37 3AM19, 4AH19 2AG19, 4AH27 4AL27, 4AL19	A3	3125	16066372, 16072782, 16072772	17087280	17084743	25102754
	1AW35, 2AF19		3250				
	2AF35, 2AG35 3AJ35, 3AM35 4AH35, 4AL35		3375				
-4	1AW27, 4AH27	A3	3000				
	1AW19, 2AF19 2AG19, 3AJ19 3AM19, 4AH19 4AL27, 4AL19 3AJ37, 3AM37		3125				
	1AW35, 2AF35 3AJ35, 3AM35 4AH35, 4AL35 2AG35		3250				

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: 01-15-87

REV. NO.: 006

0239T/25T

(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): 2.5 (151)

Type: I4

Executive Order No. A-6-400

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
2B	1AW19, 1AW27 3AJ19 3AJ37, 3AM37 3AM19, 4AH19 2AG19, 4AH27 4AL27, 4AL19	A3	3125	16121532, 16121222	17087280	17084743	25102754
	1AW35, 2AF19		3250				
	2AF35, 2AG35 3AJ35, 3AM35 4AH35, 4AL35		3375				
4B	1AW27, 4AH27	A3	3000				
	1AW19, 2AF19 2AG19, 3AJ19 3AM19, 4AH19 4AL27, 4AL19 3AJ37, 3AM37		3125				
	1AW35, 2AF35 3AJ35, 3AM35 4AH35, 4AL35 2AG35		3250				

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: 006

REV. NO.:

0239T/25T

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(1988)

## 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-6-400

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
6	2PM37, 2PF37 2PE37	A3	3000	16069552	17087279	17084743	25101512
7	2NE27, 3NF27 3NT27		2875	16069532	17087280		25101504
	2NE69, 2NV27 4NM27, 4NC69 3NF69, 3NT69 4NJ27		3000				
	2NV69, 4ND69		3125				
8	2PM37, 2PE37, 2PF37		2875	16069552	17087279		25101512
9	2NE27, 2NV27 3NT27, 3NF27		2875	16069532	17087280		25101504
	2NE69, 2NV69 3NF69, 3NT69		3000				
	4ND69, 4NJ27 4NM27, 4NC69						

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: 01-15-87

REV. NO.: 003  
004  
005  
006

0239T/25T

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(1988)

## 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-6-400

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
6A	2PM37, 2PF37 2PE37	A3	3000	16086032	17087279	17084743	25101512
7A	2NE27, 3NF27 3NT27		2875	16066402	17087280, 17088139	17084743	25101504
	2NE69, 2NV27 4NM27, 4NC69 3NF69, 3NT69 4NJ27		3000				
	2NV69, 4ND69		3125				
8A	2PM37, 2PE37 2PF37		2875	16086032	17087279		25101512
9A	2NE27, 2NV27 3NT27, 3NF27		2875				
	2NE69, 2NV69 3NF69, 3NT69		3000				
	4ND69, 4NJ27 4NM27, 4NC69						

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: 001

REV. NO.: 002  
003  
004  
005  
006



(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): 2.5 (151)

Type: I4

Executive Order No. A-6-400

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
6B	2PM37, 2PF37 2PE37	A3	3000	16121512	17087279	17084743	25101512
8B	2PM37, 2PE37 2PF37		2875	16121512	17087279		25101512

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: 006

REV. NO.:

0239T/25T

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(1988)

## AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Liters (CID): 2.5 (151)

Type: 14

Executive Order No. A-6-400

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
17	2NE27, 3NF27 3NT27, 4NJ27 4NM27	M5	2875	16069542	17087269	17084743	25101504
	2NV27, 2NE69 2NV69, 4ND69 4NC69, 3NF69 3NT69		3000				
18	2PM37, 2PF37 2PE37		2875	16069562	17087279		25101512
9	2NE27, 2NE69 2NV27, 3NF69 3NT69, 4NJ27 4NM27, 4ND69 4NC69, 3NF27 3NT27		2875	16069542	17087269		25101504
	2NV69		3000				
20	2PM37, 2PF37 2PE37		2875	16069562	17087279		25101512

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: 01-15-87

REV. NO.: 004  
005  
006

0239T/25T

17-J1G2.5V5TPG4-5.1A

(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): 2.5 (151)

Type: I4

Executive Order No. A-6-400

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (CFI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
17A	2NE27, 3NF27 3NT27, 4NJ27 4NM27	M5	2875	16066412	17087269, 17088138	17084743	25101504
	2NV27, 2NE69 2NV69, 4ND69 4NC69, 3NF69 3NT69		3000				
19A	2NE27, 2NE69 2NV27, 3NF69 3NT69, 4NJ27 4NM27, 4ND69 4NC69, 3NF27 3NT27		2875				
	2NV69		3000				
18B	2PM37, 2PF37 2PE37		2875	16121522	17087279		25101512
20B	2PM37, 2PF37 2PE37						

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: 001

REV. NO.: 002  
004  
005  
006

0239T/25T