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State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-437 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 1989 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacement Liters (Cubic inches)		Exhaust Emission Control Systems (Special Features)		
K2G5.OW4NBAO	INBAO 5.0 (307)		Air injection — Pump Exhaust Gas Recirculation Three—Way Catalyst Oxygen Sensor		

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 Mile)	(Grams per Mile)	(Grams per Mile)	
0.39	7.0	0.7	

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)		
0.21	2.8	0.5		

BE IT FURTHER RESOLVED: That the listed models are 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 vehicle manufacturer is certifying to the optional NOx standard by providing evidence that there are sufficient projected sales of vehicles certifying to the primary NOx emission standard, or is allowed a delay in implementation under small volume manufacturer provisions, or is allowed a delay in implementation under the "in lieu" standards, or is certifying passenger cars weighing more than 5250 lbs. loaded vehicle weight.

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 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 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 ______

hall makeyer

day of March, 1988.

K. D. Drachand, Chief Mobile Source Division

17-K2G5.0W4NBA0-1A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation

Executive Order No.: A-6-437

Engine Family: K2G5.OW4NBAO

Evaporative Family: KB4-2B

Engine Displacement Liters (Cubic Inches) - Type: 5.0 (307) - V8

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

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
FI,DID,DIP,EPFI,HOS,MPFI,OS,SFI
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
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: 01-18-88

REV. NO.:

0175V/

17-K2G5.OW4NBAO-Index 1A (For CARB Use Only)

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SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

Section and Page No.	Rev. No. or Date	Item		
17-K2G5.OW4NBAO-Index 1A	002	Table of Contents		
17-K2G5.0W4NBAO-1A	01-18-88	Supplemental Data Sheet		
17-K2G5.OW4NBAO-2A	01-18-88	Supplemental Data Sheet		
17-K2G5.0W4NBAO-3A	002	Supplemental Data Sheet		
17-K2G5.OW4NBAO-4A	01-18-88	Certification Review Sheet		

NOTES:

- (1) See page one for abbreviations and family information.
- (2) Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment.
- (3) If two test weights are listed, the lower weight will be used for testing.
- (4) Letter derivative codes are the same as corresponding numeric codes except as indicated.

ISSUED: 01-18-88

REV. NO.: 001 (RC K2-066)

002 (RC K2-077)

0175V/11V

17-K2G5.OW4NBAO-2A

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AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET GASOLINE-FUELED PASSENGER CARS

Executive Order No. A-6-437

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, 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	47-2Dr	Hardtop Coupe
	Hatchback Coupe		Hardtop Coupe
	Notchback Coupe/Sedan		Convertible Coupe
19-4Dr	Sedan		Hatchback Sedan
23-4Dr	Auxiliary Seat Sedan		(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-Com	nercial Chassis
	•	97-2Dr	Hardtop Coupe

Engine: Front

Drive: RWD

SSUED: 01-18-88

REV. NO.:

0175V/

17-K2G5.0W4NBAO-3A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Liters (CID): 5.0 (307)

Type: V8

Executive Order No. A-6-437

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (4V) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
1	1BL35 1BN35 2BL35 3BP35 4BR35 4BV35 4BB90 6DW69	A4	4500	16085843	17088115	17085748	25100218, 25103918

1A

16132053

ISSUED: 01-18-88

REV. NO.: 001

002

0175V/11V