

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-433
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:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
K2G3.3V8JAW4	3.3	(201)	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</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.41	7.0	0.7

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

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.15	1.4	0.3

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 2nd day of March, 1988.


K. D. Drachand, Chief
Mobile Source Division

17-K2G3.3V8JAW4-1A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation Executive Order No.: A-6-433
Engine Family: K2G3.3V8JAW4 Evaporative Family: KBO-2C
Engine Displacement Liters (Cubic Inches) - Type: 3.3 (201) V6
Exhaust Emission Control System (Special Features): 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

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: 02-16-88

REV. NO.:

0199V/

17-K2G3.3V8JAW4-Index 1A

(For CARB Use Only)

(1989)

SECTION 17.00.00.00

B-O-C SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

<u>Section and Page No.</u>	<u>Rev. No. or Date</u>	<u>Item</u>
17-K2G3.3V8JAW4-Index 1A	009	Table of Contents
17-K2G3.3V8JAW4-1A	007	Supplemental Data Sheet
17-K2G3.3V8JAW4-2A	02-16-88	Supplemental Data Sheet
17-K2G3.3V8JAW4-3A	009	Supplemental Data Sheet
17-K2G3.3V8JAW4-4A	009	Supplemental Data Sheet
17-K2G3.3V8JAW4-5A	008	Supplemental Data Sheet
17-K2G3.3V8JAW4-6A	007	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: 02-16-88

REV. NO.: 001 (RC K2-008)
002 (RC K2-036)
003 (Corr. RC K2-036)
004 (RC K2-053)
005 (RC K2-060)
006 (RC K2-084)
007
008 (RC K2-100)
009 (RC K2-104)

0199V/14V

17-K2G3.3V8JAW4-2A

(For CARB Use Only)
(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
GASOLINE-FUELED PASSENGER CARS

Executive Order No. A-6-433

VEHICLE MODELS:

1 1 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
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

ISSUED: 02-16-88

REV. NO.:

0199V/

17-K2G3.3V8JAW4-3A

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(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___ GAS X DIESEL___

Liters (CID): 3.3 (201)

Type: V6

Executive Order No. A-6-433

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (RI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.	
11	3AJ37 3AJ69 3AM37 3AS37 4AH37 4AL37 3AM69 3AS69 4AH69 4AL69 2AJ69 2AF69 2AJ35 2AF35 2AG69 2AH69 3AJ35 3AM35 4AH35 4AL35	A4	3250 3375 3500		16084414, DK090044	17089014, 17089095	NA	25127732
11A				16084404				
11B				16134534				
11C				16133374				

ISSUED: 02-16-88

REV. NO.: 001
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004
005
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009

0199V/14V

17-K2G3.3V8JAW4-4A

(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): 3.3 (201)

Type: V6

Executive Order No. A-6-433

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (RI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.	
12	3AJ37 3AJ69 3AM37 3AS37 4AH19 4AH27 4AH37 4AL37 3AM69 3AS69 4AH69 4AL69 2AJ69 2AF69 2AJ35 2AF35 2AG69 2AH69 3AJ35 3AM35 4AH35 4AL35	A3	3250 3375 3500		16084354, DK090042	17089014, 17089095	NA	25127732
12A				16129784				
12B				16134524				
12C				16134544				

ISSUED: 02-16-88

REV. NO.: 001
002
003
004
005
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0199V/14V

17-K2G3.3V8JAW4-5A

(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): 3.3 (201)

Type: V6

Executive Order No. A-6-433

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (RI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
13	3NF27 3NT27 3NL27 3NF69 3NK27 3NK69 3NL69 3NT69 4NC69 4ND69 4NJ27 4NM27	A3	3000 3125	16072924	17089014, 17089095	NA	25127259
13A				16126414			
13B				16131074			
13C				16136554			

ISSUED: 02-16-88

REV. NO.: 002
004
005
008

0199V/14V