

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-715  
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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year General Motors Corporation exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: TGM4.6VJGFEL    Displacement: 4.0 Liters (240 Cubic Inches)  
4.6 Liters (280 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Exhaust Gas Recirculation
- Three Way Catalytic Converter
- Dual Heated Oxygen Sensors
- Heated Oxygen Sensors (Two)
- Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards (alternative in-use compliance standards in parentheses) for this engine family in grams per mile are:

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|---------------------------------|------------------------|------------------------|-------------------------------|
| 50,000       | 0.25 (0.32)                     | 3.4 (5.2)              | 0.4 (n/a)              | 10.0 (n/a)                    |
| 100,000      | 0.31 (n/a)                      | 4.2 (n/a)              | 0.6 (n/a)              | n/a                           |

The certification exhaust emission values for this engine family in grams per mile are:

| <u>Miles</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|---------------------------------|------------------------|------------------------|-------------------------------|
| 50,000       | 0.15                            | 1.7                    | 0.2                    | 6.5                           |
| 100,000      | 0.20                            | 2.4                    | 0.2                    | n/a                           |

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth 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 under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That, based on a separate compliance plan submitted by the vehicle manufacturer, the listed vehicle models are permitted alternative in-use compliance as set forth 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 submitted alternative in-use compliance plan satisfies the requirement that a maximum of 20 percent of the manufacturer's projected sales of 1996 model-year California-certified passenger cars and light-duty trucks will be subject to alternative in-use compliance as stipulated in the above-referenced standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model 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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, 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 Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

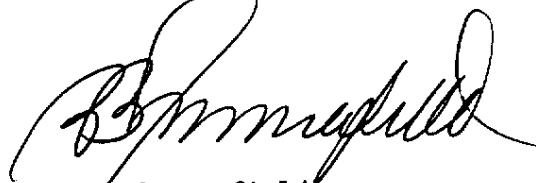
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned 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 provisions (Title 13, California Code of Regulations, 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 5<sup>th</sup> day of May, 1995.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
GASOLINE-FUELED PASSENGER CARS

VEHICLE MODELS: 1 J C 3 7 (EXAMPLE)

Digit 1 - Selling Division

- 1 - Chevrolet
- 2 - Pontiac
- 3 - Oldsmobile
- 4 - Buick
- 6 - Cadillac
- 8 - Saturn

Digit 2 - Body Designation

- A - Cutlass Ciera, Cutlass Cruiser, Century, Century Wagon
- B - Caprice, Custom Cruiser, Roadmaster Wagon, Coachbuilder Wagon, Roadmaster
- C - Ninety-Eight, Park Avenue
- D - Fleetwood, Limousine, Hearse/Coachbuilder
- E - Eldorado
- F - Camaro, Firebird, Trans Am
- G - Riviera, Aurora
- H - Bonneville, Eighty-Eight, LeSabre
- J - Cavalier, Sunfire
- K - Seville
- Ksp - Concours, Deville
- L - Corsica, Beretta
- N - Grand Am, Cutlass Calais, Skylark
- W - Grand Prix, Regal, Cutlass Supreme, Lumina, Monte Carlo
- Y - Corvette
- Z - Saturn Coupe/Sedan

Digit 3 - Trim Level

B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, Y, Z

Digits 4 & 5 - Body Style

- |                            |                            |
|----------------------------|----------------------------|
| 07 - 2Dr Sport Coupe       | 57 - 2Dr Hardtop Coupe     |
| 08 - 2Dr Hatchback Coupe   | 67 - 2Dr Convertible Coupe |
| 19 - 4Dr Sedan             | 68 - 4Dr Hatchback Sedan   |
| 27 - 2Dr (Notchback) Coupe | 69 - 4Dr (Notchback) Sedan |
| 35 - 4Dr Station Wagon     | 87 - 2Dr Hatchback Coupe   |
| 37 - 2Dr Hardtop Coupe     | 90 - Commercial Chassis    |
| 47 - 2Dr Hardtop Coupe     | 97 - 2Dr Hardtop Coupe     |

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM4.6VJGFEL  
 EVAP STD: 50K\_X USEFUL LIFE WITH R/L\_\_\_ EVAPORATIVE FAMILY: TGM1089AYPAA  
 EXH STD: TIER-0\_\_\_ TIER-1\_X TLEV\_\_\_ LEV\_\_\_ ULEV\_\_\_ ZEV\_\_\_; EPA TIER-0\_\_\_ TIER-1\_X  
 VEH CLASS(ES): PC\_X LDT1\_\_\_ LDT2\_\_\_ MDV1\_\_\_ MDV2\_\_\_ MDV3\_\_\_ MDV4\_\_\_ MDV5\_\_\_  
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA  
 EXH CERT FUEL(S): INDO\_\_\_ PH2\_X DIESEL: 13 CCR 2282\_\_\_ OR 40 CFR 86.113-90\_\_\_  
 OR -94\_\_\_ M85\_\_\_ CNG\_\_\_ LPG\_\_\_ OTHER (SPECIFY)\_\_\_\_\_  
 FUEL TYPE(S): DEDICATED\_\_\_ FLEX-FUEL\_\_\_ DUAL-FUEL\_\_\_ GASOLINE\_X DIESEL\_\_\_ M85\_\_\_  
 CNG\_\_\_ LNG\_\_\_ LPG\_\_\_ OTHER (SPECIFY)\_\_\_\_\_  
 HYBRID: TYPE A\_\_\_ B\_\_\_ C\_\_\_ APU CYCLE (E.G., OTTO, DIESEL, TURBINE): NA  
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 4.6 LITERS 280 CUBIC INCHES  
 ENGINE: FRONT\_X MID\_\_\_ REAR\_\_\_ DRIVE: FWD\_X RWD\_\* 4WD-FT\_\_\_ 4WD-PT\_\_\_  
 EXHAUST EMISSION CONTROL SYSTEM & COMPONENTS: EGR-TWC-SFI-2HO2S+(2)

RLHP/DPA: SECTION 08.13.02.00

| (LOC)<br>ENG<br>CODE<br>(NW) | VEH MODELS<br>(SEE PAGE 1) | TRANS TYPE:<br>A-AUTO<br>M-MAN | EQUIV.<br>TEST<br>WEIGHT | IGN SYSTEM<br>(PCME/PROM)<br>CALIB/PART NO.                                  | EGR<br>SYSTEM<br>PART NO. | CATALYST<br>PART NO. |
|------------------------------|----------------------------|--------------------------------|--------------------------|--|---------------------------|----------------------|
| 1.1A                         | 6KY69<br>6ET57             | A4/2                           | 4250                     | 16216546/BNXX  | 17094028                  | 25161559             |
| -1B<br>C<br>1E<br>1F         |                            |                                |                          | 16229206/BRYR<br>16229316/16214848<br>16233286/16214848<br>16234626/16214848 |                           |                      |
| 2.2A                         | 6ET57<br>6KY69<br>6KF69    |                                |                          | 16216556/BNXY  |                           |                      |
| 2B<br>2C<br>2E<br>2F         |                            |                                |                          | 16229216/BRYS<br>16229326/16214848<br>16233296/16214848<br>16234636/16214848 |                           |                      |
| 3                            | 6EL57<br>6KS69<br>6KD69    | A4/1                           | 4000<br>4250             | 16216526/BNXU  |                           |                      |
| 3A<br>3B<br>3D<br>3E         |                            |                                |                          | 16229186/BRYN<br>16229306/16214848<br>16233276/16214848<br>16234616/16214848 |                           |                      |

| CARLINE NAME | CARLINE CODE |
|--------------|--------------|
| SEVILLE      | 10005        |
| ELDORADO     | 10020        |
| DEVILLE      | 10010        |

ISSUED: ML-TP032

REVISED: ML-TR001, ML-TR002, ML-TR005, ML-TR029, ML-TR064,  
ML-TR093

## 1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: TGM4.6VJGFEL  
 EVAP STD: 50K X USEFUL LIFE WITH R/L\_\_\_ EVAPORATIVE FAMILY: TGM1070AYPAA  
 EXH STD: TIER-0\_\_\_ TIER-1 X TLEV\_\_\_ LEV\_\_\_ ULEV\_\_\_ ZEV\_\_\_; EPA TIER-0\_\_\_ TIER-1 X  
 VEH CLASS(ES): PC X LDT1\_\_\_ LDT2\_\_\_ MDV1\_\_\_ MDV2\_\_\_ MDV3\_\_\_ MDV4\_\_\_ MDV5\_\_\_  
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA  
 EXH CERT FUEL(S): INDO\_\_\_ PH2 X DIESEL: 13 CCR 2282\_\_\_ OR 40 CFR 86.113-90\_\_\_  
 OR -94\_\_\_ M85\_\_\_ CNG\_\_\_ LPG\_\_\_ OTHER (SPECIFY)\_\_\_\_\_  
 FUEL TYPE(S): DEDICATED\_\_\_ FLEX-FUEL\_\_\_ DUAL-FUEL\_\_\_ GASOLINE X DIESEL\_\_\_ M85\_\_\_  
 CNG\_\_\_ LNG\_\_\_ LPG\_\_\_ OTHER (SPECIFY)\_\_\_\_\_  
 HYBRID: TYPE A\_\_\_ B\_\_\_ C\_\_\_ APU CYCLE (E.G., OTTO, DIESEL, TURBINE): NA  
 ENGINE CONFIGURATION: V8 DISPLACEMENT: 4.0 LITERS 240 CUBIC INCHES  
 ENGINE: FRONT X MID\_\_\_ REAR\_\_\_ DRIVE: FWD X RWD\_\_\_ 4WD-FT\_\_\_ 4WD-PT\_\_\_  
 EXHAUST EMISSION CONTROL SYSTEM & COMPONENTS: EGR-TWC-SFI-2HO2S+(2)  
 RLHP/DPA: SECTION 08.13.02.00

| (LOC)<br>ENG<br>CODE<br>(NW) | VEH MODELS<br>(SEE PAGE 1) | TRANS TYPE:<br>A-AUTO<br>M-MAN | EQUIV.<br>TEST<br>WEIGHT | IGN SYSTEM<br>(PCME/PROM)<br>CALIB/PART NO. | EGR<br>SYSTEM<br>PART NO. | CATALYST<br>PART NO. |
|------------------------------|----------------------------|--------------------------------|--------------------------|---|---------------------------|----------------------|
| 4                            | 3GR29                      | A4/1                           | 4250                     | 16216646/BNYK                               | 17094028                  | 25161933             |
| 4A                           |                            |                                |                          | 16229286/BRZA                               |                           |                      |
| 4B                           |                            |                                |                          | 16229336/16214848                           |                           |                      |
| 4D                           |                            |                                |                          | 16233306/16214848                           |                           |                      |
| 4E                           |                            |                                |                          | 16234646/16214848                           |                           |                      |
| 5                            | 3GR29                      |                                |                          | 16216656/BNYL                               |                           |                      |
| 5A                           |                            |                                |                          | 16229296/BRZB                               |                           |                      |
| 5B                           |                            |                                |                          | 16229346/16214848                           |                           |                      |
| 5D                           |                            |                                |                          | 16233316/16214848                           |                           |                      |
| 5E                           |                            |                                |                          | 16234656/16214848                           |                           |                      |

CARLINE NAME  
 AURORA

CARLINE CODE  
 29045

ISSUED: ML-TP032

REVISED: ML-TR002, ML-TR005, ML-TR029, ML-TR064, ML-TR093

17-TGM4.6VJGFEL-3