

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-724  
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 medium-duty vehicles:

Fuel Type: Gasoline

Engine Family: TGM5.0HPG1EK Displacement: 5.0 Liters (305 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 for this engine family in grams per mile are:

| <u>Test Weight</u><br><u>(lbs.)</u> | <u>Miles</u> | <u>Non-Methane</u><br><u>Hydrocarbons</u> | <u>Carbon</u><br><u>Monoxide</u> | <u>Nitrogen</u><br><u>Oxides</u> | <u>Carbon</u><br><u>Monoxide (20°F)</u> |
|-------------------------------------|--------------|---|----------------------------------|----------------------------------|---|
| 3751-5750                           | 50,000       | 0.32                                      | 4.4                              | 0.7                              | 12.5                                    |
|                                     | 120,000      | 0.46                                      | 6.4                              | 0.98                             | n/a                                     |

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

| <u>Test Weight</u><br><u>(lbs.)</u> | <u>Miles</u> | <u>Non-Methane</u><br><u>Hydrocarbons</u> | <u>Carbon</u><br><u>Monoxide</u> | <u>Nitrogen</u><br><u>Oxides</u> | <u>Carbon</u><br><u>Monoxide (20°F)</u> |
|-------------------------------------|--------------|---|----------------------------------|----------------------------------|---|
| 3751-5750                           | 50,000       | 0.23                                      | 1.8                              | 0.3                              | 4.4                                     |
|                                     | 120,000      | 0.34                                      | 2.2                              | 0.36                             | n/a                                     |

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).

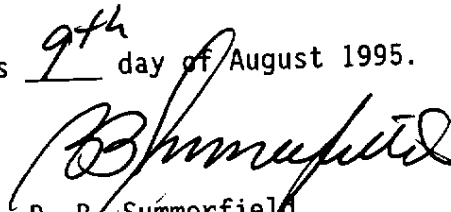
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned 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 9<sup>th</sup> day of August 1995.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES

Example, Pattern A: CC10703+E62  
Example, Pattern B: 1UM05

Digit 1 = Marketing Division

Pattern A  
C = Chevrolet  
T = GMC  
H = Oldsmobile  
G = Isuzu

Pattern B  
1 = Chevrolet  
2 = Pontiac  
3 = Oldsmobile

Note: Digit 1 is not used for Pattern A models on engine family pages or California Supplemental Data Sheets.

Digit 2 = Chassis Type (all)

U = Conventional 4x2 Front Wheel Drive  
C, S, M = Conventional 4x2 Rear Wheel Drive  
G = Forward Control 4x2 Rear Wheel Drive  
K, T, L = Conventional 4x4 Four Wheel Drive, All Wheel Drive

Digit 3 = Series/GVWR

Pattern A  
1 = 11,15,1500/3500-7300  
2 = 21,25,2500/6400-8600  
3 = 31,35,3500/7100-14500

Pattern B  
Letter code designates trim level rather than series/GVWR.

Digits 4 & 5

Pattern A = Dimensional Grouping  
05 = Blazer, Jimmy, Bravada  
06 = S/T Short Box  
07 = C/K Short Box  
08 = S/T Long Box & Cab-Chassis  
09 = C/K Long Box, Suburban,  
10 = M/L Long Body  
14 = G Short Wheelbase  
17 = G Long Wheelbase

Pattern B  
05 = Cargo (APV)  
06 = Passenger (Lumina APV, Trans Sport, Silhouette)

Digits 6 & 7 = Body/Cab Codes (Pattern A Only)

03 = Conventional Cab, Cab-Chassis  
05 = Cargo Van  
06 = Passenger Van, 4 Door Special Purpose Vehicle  
16 = 2 Door Special Purpose Vehicle  
43 = Crew Cab  
53 = Extended Cab

Pickup Body Codes (Optional, Used with Pattern A Only)

+E62 = Stepside, Fenderside  
+E63 = Fleetside, Wideside  
+ZW9 = Cab-Chassis

ISSUED: ML-TP099

REVISED:

17-TGM5.0HPG1EK-1

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: TGM5.0HPG1EK EVAP. FAMILY: TGM1098AYMBA  
 ALL ENGINE CODES IN ENGINE FAMILY: CA X 49S X 50S      AB965       
 EXH STD: CA Tier-1 X TLEV      LEV      ULEV      ZEV     ; U.S. EPA Tier-1 NA  
 EVAP STD: 50K X USEFUL LIFE WITH R/L     ; IN-USE EXH STD: FULL      ALTERNATIVE       
 VEH CLASS(ES): PC      LDT1      LDT2      MDV1      MDV2 X MDV3      MDV4      MDV5       
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA  
 FUEL TYPE(S): DEDICATED X GASOLINE X; EMISS TEST FUEL(S): INDO      PHASE 2 X  
 SERVICE ACCUM: STD AMA      MFR ADP X; NMOG TEST PROC: NA EQUIV       
 R/L TEST PROC: NA PT SOURCE     ; HYBRID TYPE: NA APU CYCLE: NA  
 ENGINE CONFIGURATION: I4      V6      V8 X DISPLACEMENT: 5.0 LITERS/ 305 CU. IN.  
 VALVES/CYLINDER: 2 X 4      RATED HP: 220 @ 4600 RPM  
 ENGINE LOCATION: FRONT X DRIVE: FWD      RWD X 4WD-FT      4WD-PT X  
 EXHAUST EMISSION CONTROL SYSTEM: LEGR, TWC, 2HO2S-HO2S(2), SFI, OBD II  
 RLHP/DPA VALUES: SECTION 08.13.02.00

| ENG CODE<br>(LOC)<br>(C) | VEH MODELS<br>(SEE PAGE 1) | TRANS.<br>(M5, A4<br>ETC.) | EQUIV.<br>TEST<br>WEIGHT | IGNITION<br>(ECM/PCM)<br>PART NO./CALIB                                     | EGR<br>SYSTEM<br>PART NO. | CATALYTIC<br>CONVERTER<br>PART NO. |
|--------------------------|----------------------------|----------------------------|--------------------------|---|---------------------------|------------------------------------|
| 51                       | C10703+E62                 | A4                         | 5000                     | 16177415/<br>16187661-ENG   | 17096188.<br>17096309     | 25163811.<br>25163841              |
|                          | C10703+E63                 |                            |                          | 16187778.   |                           |                                    |
|                          | C10903+E63                 |                            | 5250                     | 16187779-TRANS  |                           |                                    |
|                          | C10753+E62                 |                            |                          | 16187577PB-OPER   |                           |                                    |
|                          | C10753+E63                 |                            | 5500                     |   |                           |                                    |
|                          | K10703+E62                 |                            | 5250                     |   |                           |                                    |
|                          | K10703+E63                 |                            |                          |   |                           |                                    |
|                          | K10753+E62                 |                            | 5500                     |   |                           |                                    |
|                          | K10753+E63                 |                            |                          |   |                           |                                    |
|                          | K10953+E63                 |                            |                          |   |                           |                                    |
|                          | C20903+E63                 |                            |                          |   |                           |                                    |
|                          | K10903+E63                 |                            |                          |   |                           |                                    |
| 51A                      |                            |                            |                          | 16177415/<br>16227413-ENG<br>16227572.<br>16227573-TRANS<br>16227245PF-OPER |                           |                                    |

| CARLINE NAME     | CARLINE CODE |
|------------------|--------------|
| C1500 PICKUP 2WD | 55015        |
| C2500 PICKUP 2WD | 55020        |
| K1500 PICKUP 4WD | 55030        |
| C1500 SIERRA 2WD | 80010        |
| C2500 SIERRA 2WD | 80015        |
| K1500 SIERRA 4WD | 80020        |

ISSUED: ML-TP099

REVISED: ML-TR053, ML-TR022, ML-TR073, ML-TR116

17-TGM5.0HPG1EK-2

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP.

ENGINE FAMILY: TGM5.OHPG1EK

EVAP. FAMILY: TGM1098AYMBA

| ENG<br>CODE<br>(LOC)<br>(C) | VEH MODELS<br>(SEE PAGE 1) | TRANS.<br>(M5.A4<br>ETC.) | EQUIV.<br>TEST<br>WEIGHT | IGNITION<br>(ECM/PCM)<br>PART NO. | EGR<br>SYSTEM<br>PART NO. | CATALYTIC<br>CONVERTER<br>PART NO. |
|-----------------------------|----------------------------|---------------------------|--------------------------|-----------------------------------|---------------------------|------------------------------------|
| 81                          | C10703+E62                 | A4                        | 5000                     | 16177415/<br>16232348-ENG         | 17096188,<br>17096309     | 25163811,<br>25163841              |
|                             | C10703+E63                 |                           |                          | 16227572.                         |                           |                                    |
|                             | C10903+E63                 |                           | 5250                     | 16227573-TRANS                    |                           |                                    |
|                             | C10753+E62                 |                           |                          | 16235505PH-OPER                   |                           |                                    |
|                             | C10753+E63                 |                           | 5500                     |                                   |                           |                                    |
|                             | C10953+E63                 |                           | 5250                     |                                   |                           |                                    |
|                             | K10703+E62                 |                           |                          |                                   |                           |                                    |
|                             | K10703+E63                 |                           | 5500                     |                                   |                           |                                    |
|                             | K10753+E62                 |                           |                          |                                   |                           |                                    |
|                             | K10753+E63                 |                           |                          |                                   |                           |                                    |
|                             | K10953+E63                 |                           |                          |                                   |                           |                                    |
|                             | C20903+E63                 |                           |                          |                                   |                           |                                    |
|                             | K10903+E63                 |                           |                          |                                   |                           |                                    |
| 81A                         |                            |                           |                          | 16237015PJ-OPER                   |                           |                                    |
| 51B                         |                            |                           |                          | 16227527-ENG<br>16232915PG-OPER   |                           |                                    |
| 51C                         |                            |                           |                          | 16237015PJ-OPER                   |                           |                                    |

| <u>CARLINE NAME</u> | <u>CARLINE CODE</u> |
|---------------------|---------------------|
| C1500 PICKUP 2WD    | 55015               |
| C2500 PICKUP 2WD    | 55020               |
| K1500 PICKUP 4WD    | 55030               |
| C1500 SIERRA 2WD    | 80010               |
| C2500 SIERRA 2WD    | 80015               |
| K1500 SIERRA 4WD    | 80020               |

ISSUED: ML-TR022

REVISED: ML-TR062, ML-TR073, ML-TR116

17-TGM5.OHPG1EK-2.1

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP.

ENGINE FAMILY: TGM5.0HPG1EK

EVAP. FAMILY: TGM1098AYMBA

| ENG CODE<br>(LOC)<br>(C) | VEH MODELS<br>(SEE PAGE 1) | TRANS.<br>(M5.A4<br>ETC.) | EQUIV.<br>TEST<br>WEIGHT | IGNITION<br>(ECM/PCM)<br>PART NO.   | EGR<br>SYSTEM<br>PART NO. | CATALYTIC<br>CONVERTER<br>PART NO. |
|--------------------------|----------------------------|---------------------------|--------------------------|---|---------------------------|------------------------------------|
| 52                       | C10703+E62                 | A4                        | 5250                     | 16177415/<br>16187661-ENG<br>16187778.<br>16187779-TRANS<br>16187577PB-OPER | 17096188,<br>17096309     | 25163811.<br>25163841              |
|                          | C10703+E63                 |                           |                          |   |                           |                                    |
|                          | C10903+E63                 |                           |                          |   |                           |                                    |
|                          | C10753+E62                 |                           |                          |   |                           |                                    |
|                          | C10753+E63                 |                           |                          |   |                           |                                    |
|                          | C10953+E63                 |                           | 5500                     |   |                           |                                    |
|                          | K10703+E62                 |                           | 5250                     |   |                           |                                    |
|                          | K10703+E63                 |                           |                          |   |                           |                                    |
|                          | K10753+E62                 |                           | 5500                     |   |                           |                                    |
|                          | K10753+E63                 |                           |                          |   |                           |                                    |
|                          | K10953+E63                 |                           |                          |   |                           |                                    |
|                          | C20903+E63                 |                           | 6000                     |   |                           |                                    |
|                          | K10903+E63                 |                           | 5500                     |   |                           |                                    |
|                          | K10753+E62                 |                           | 6000                     |   |                           |                                    |
|                          | K10753+E63                 |                           |                          |   |                           |                                    |

52A

16177415/  
16227413-ENG  
16227572.  
16227573-TRANS  
16227245PF-OPER

| <u>CARLINE NAME</u> | <u>CARLINE CODE</u> |
|---------------------|---------------------|
| C1500 PICKUP 2WD    | 55015               |
| C2500 PICKUP 2WD    | 55020               |
| K1500 PICKUP 4WD    | 55030               |
| C1500 SIERRA 2WD    | 80010               |
| C2500 SIERRA 2WD    | 80015               |
| K1500 SIERRA 4WD    | 80020               |

ISSUED: ML-TR116

REVISED:

17-TGM5.0HPG1EK-2.2

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP.

ENGINE FAMILY: TGM5.0HPG1EK

EVAP. FAMILY: TGM1098AYMBA

| ENG CODE (LOC)<br>(C) | VEH MODELS<br>(SEE PAGE 1) | TRANS.<br>(M5, A4<br>ETC.) | EQUIV.<br>TEST<br>WEIGHT | IGNITION<br>(ECM/PCM)<br>PART NO. | EGR<br>SYSTEM<br>PART NO. | CATALYTIC<br>CONVERTER<br>PART NO. |
|-----------------------|----------------------------|----------------------------|--------------------------|-----------------------------------|---------------------------|------------------------------------|
| 82                    | C10703+E62                 | A4                         | 5250                     | 16177415/<br>16232348-ENG         | 17096188,<br>17096309     | 25163811,<br>25163841              |
|                       | C10703+E63                 |                            |                          | 16227572.                         |                           |                                    |
|                       | C10903+E63                 |                            | 5250                     | 16227573-TRANS                    |                           |                                    |
|                       | C10753+E62                 |                            |                          | 16235505PH-OPER                   |                           |                                    |
|                       | C10753+E63                 |                            | 5500                     |                                   |                           |                                    |
|                       | C10953+E63                 |                            | 5250                     |                                   |                           |                                    |
|                       | K10703+E62                 |                            |                          |                                   |                           |                                    |
|                       | K10703+E63                 |                            |                          |                                   |                           |                                    |
|                       | K10753+E62                 |                            | 5500                     |                                   |                           |                                    |
|                       | K10753+E63                 |                            |                          |                                   |                           |                                    |
|                       | K10953+E63                 |                            | 6000                     |                                   |                           |                                    |
|                       | C20903+E63                 |                            | 5500                     |                                   |                           |                                    |
|                       | K10903+E63                 |                            | 6000                     |                                   |                           |                                    |
|                       | K10753+E62                 |                            |                          |                                   |                           |                                    |
|                       | K10753+E63                 |                            |                          |                                   |                           |                                    |
| 82A                   |                            |                            |                          | 16237015PJ-OPER                   |                           |                                    |
| 52B                   |                            |                            |                          | 16227527-ENG<br>16232915PG-OPER   |                           |                                    |
| 52C                   |                            |                            |                          | 16237015PJ-OPER                   |                           |                                    |

| <u>CARLINE NAME</u> | <u>CARLINE CODE</u> |
|---------------------|---------------------|
| C1500 PICKUP 2WD    | 55015               |
| C2500 PICKUP 2WD    | 55020               |
| K1500 PICKUP 4WD    | 55030               |
| C1500 SIERRA 2WD    | 80010               |
| C2500 SIERRA 2WD    | 80015               |
| K1500 SIERRA 4WD    | 80020               |

ISSUED: ML-TR116

REVISED:

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: TGM5.0HPG1EK EVAP. FAMILY: TGM1098AYMBB  
 ALL ENGINE CODES IN ENGINE FAMILY: CA X 49S X 50S     AB965      
 EXH STD: CA Tier-1 X TLEV     LEV     ULEV     ZEV    ; U.S. EPA Tier-1 NA  
 EVAP STD: 50K X USEFUL LIFE WITH R/L    ; IN-USE EXH STD: FULL     ALTERNATIVE      
 VEH CLASS(ES): PC     LDT1     LDT2     MDV1     MDV2 X MDV3     MDV4     MDV5      
 SINGLE CERT STD FOR MULTI-CLASS ENGINE FAMILY: NA  
 FUEL TYPE(S): DEDICATED X GASOLINE X; EMISS TEST FUEL(S): INDO     PHASE 2 X  
 SERVICE ACCUM: STD AMA     MFR ADP X; NMOG TEST PROC: NA EQUIV      
 R/L TEST PROC: NA PT SOURCE    ; HYBRID TYPE: NA APU CYCLE: NA  
 ENGINE CONFIGURATION: I4     V6     V8 X DISPLACEMENT: 5.0 LITERS/ 305 CU. IN.  
 VALVES/CYLINDER: 2 X 4     RATED HP: 200 @ 4400 RPM  
 ENGINE LOCATION: FRONT X DRIVE: FWD     RWD X 4WD-FT     4WD-PT      
 EXHAUST EMISSION CONTROL SYSTEM: LEGR, TWC, 2HO2S-HO2S(2), SFI, OBD II  
 RLHP/DPA VALUES: SECTION 08.13.02.00

| ENG CODE (LOC)      | VEH MODELS (SEE PAGE 1) | TRANS. (M5, A4 ETC.) | EQUIV. TEST WEIGHT | IGNITION (ECM/PCM) PART NO./CALIB                              | EGR SYSTEM PART NO.   | CATALYTIC CONVERTER PART NO. |
|---------------------|-------------------------|----------------------|--------------------|--|-----------------------|------------------------------|
| 53.53M,<br>54.54M   | G11405                  | A4                   | 5500               | 16177415/<br>16187719-ENG<br>16187779-TRANS<br>16187577PB-OPER | 17096188,<br>17096309 | 25163811                     |
| 53A.53N,<br>54A.54N |                         |                      |                    | 16174415/<br>16227416-ENG<br>16227573-TRANS<br>16227245PF-OPER |                       |                              |
| 83.83M,<br>84.84M   |                         |                      |                    | 16177415/<br>16232354-ENG<br>16227573-TRANS<br>16235505PH-OPER |                       |                              |
| 53B.53P,<br>54B.54P |                         |                      |                    | 16177415/<br>16227545-ENG<br>16227573-TRANS<br>16232915PG-OPER |                       |                              |
| 53C.53Q,<br>54C.54Q |                         |                      |                    | 16237015PJ-OPER  |                       |                              |

CARLINE NAME  
 G1500/G2500 CHEVY VAN 2WD  
 G1500/G2500 SAVANA 2WD CARGO

CARLINE CODE  
 55050  
 80040

ISSUED: ML-TP099

REVISED: ML-TR053, ML-TR022, ML-TR062, ML-TR073

17-TGM5.0HPG1EK-3



## 1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MFR: GENERAL MOTORS CORP. ENGINE FAMILY: TGM5.0HPG1EK EVAP. FAMILY: TGM1098AYMBB

| <u>ENG<br/>CODE<br/>(LOC)</u> | <u>VEH MODELS<br/>(SEE PAGE 1)</u> | <u>TRANS.<br/>(M5, A4<br/>ETC.)</u> | <u>EQUIV.<br/>TEST<br/>WEIGHT</u> | <u>IGNITION<br/>(ECM/PCM)<br/>PART NO./CALIB</u>               | <u>EGR<br/>SYSTEM<br/>PART NO.</u> | <u>CATALYTIC<br/>CONVERTER<br/>PART NO.</u> |
|-------------------------------|------------------------------------|-------------------------------------|-----------------------------------|--|------------------------------------|---|
| 83A, 83N,<br>84A, 84N         | G11405                             | A4                                  | 5500                              | 16177415/<br>16232354-ENG<br>16227573-TRANS<br>16237015PJ-OPER | 17096188,<br>17096309              | 25163811                                    |

| <u>CARLINE NAME</u>          |
|------------------------------|
| G1500/G2500 CHEVY VAN 2WD    |
| G1500/G2500 SAVANA 2WD CARGO |

| <u>CARLINE CODE</u> |
|---------------------|
| 55050               |
| 80040               |

ISSUED: ML-TR073

REVISED:

17-TGM5.0HPG1EK-3.1