

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-127  
Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43100, 43102, 43103, and 43835; 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 General Motors Corporation exhaust emission control systems for 1978 model-year medium duty vehicles are certified for the vehicles described below:

- Engine Family: 812R4
- Engine: 454 CID
- Transmission: 4-speed manual, 3-speed automatic
- Exhaust Emission Control System: Air Injection, Early Fuel Evaporation, Exhaust Gas Recirculation, Oxidation Catalyst.

Models and Engine Codes as listed in attachment.

The following are the recommended values to be listed on the window decal required by California Assembly-Line Test Procedures for 1978 model-year vehicles:

| <u>Engine Family</u> | <u>Hydrocarbons<br/>Grams per Mile</u> | <u>Carbon Monoxide<br/>Grams per Mile</u> | <u>Nitrogen Oxides<br/>Grams per Mile</u> |
|----------------------|--|---|---|
| 812R4                | 0.6                                    | 15  | 2.3                                       |

BE IT FURTHER RESOLVED: That the above models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (13 California Administrative Code, Section 2290) for the aforementioned model year, or have been granted a temporary exemption from the aforementioned "Specifications" by Executive Order AA-6 series.

BE IT FURTHER RESOLVED: That the above models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-powered Motor Vehicles except Motorcycles".

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California, this 29 day of August, 1977.



G. C. Hass, Chief  
Vehicle Emissions Control Division

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET-GM FORMAT

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6-127 Page 1

Engine Family 812R4 Engine (CID) 454

ABBREVIATIONS

Distributor

- C-Centrifugal Advance
- V-Vacuum Advance
- VR-Vacuum Retard
- HEI-High Energy Ignition Fuel System
- EFI
- nV-nVenturi Carburetor

Exhaust Emission Control

- AI-Air Injection-
- CAI-Catalyst Air Injection
- EFI-Electronic Fuel Injection
- EGR-Exhaust Gas Recirculation
- EM-Engine Modification
- EFE-Early Fuel Evaporation

- ESAC-Electronic Spark Advance Control
- OC-Oxidation Catalyst
- OS-Oxygen Sensor
- PAI-Pulse Air Injection
- TC-Turbo Charged
- TWC-Three Way Catalyst

TRUCK MODEL IDENTIFICATION

1. C = Chevrolet; T = GMC Truck C C 10703

2. Chassis Type \_\_\_\_\_

3. GVW Range \_\_\_\_\_

4. CA Dimension Model Type \_\_\_\_\_

5. Cab or Body Style \_\_\_\_\_

  

**② Chassis Type**

- C—Conventional 4 x 2
- G—Forward Control 4 x 2 (Body-Frame Integral)
- K—Conventional 4 x 4 (Four Wheel Drive)
- F—Forward Control 4 x 2 (Conventional)

**③ Series GVW Range**

- 1—4800 to 7300
- 2—4400 to 8400
- 3—6400 to 14,500

**④ CA Dimension Model Type**

- 05—Blazer, Jimmy, Step-Van, Value Van
- 07—42"/Pickup, Chassis-Cab
- 08—FC or Motor Home Chassis, Step-Van, Value Van
- 09—54"/Suburban, Chassis-Cab, Pickup
- 10—60"/FC Chassis, Chevy Van, Vandura, Sportvan, Rally Wagon, Chassis-Cab, Step-Van, Value Van
- 11—Motor Home Chassis
- 13—Chevy Van, Vandura, Sportvan, Rally Wagon, Cutaway Van, Hi-Cube Van
- 14—64"/FC or Motor Home Chassis, Chassis-Cab, Step-Van, Value Van
- 16—Cutaway Van, Hi-Cube Van
- 18—Motor Home Chassis

**⑤ Cab or Body Style**

- 03—Conventional Cab (C-K models); Cutaway Van, Hi-Cube Van (G models)
- 09—Chevy Van, Vandura
- 06—Suburban/Sportvan, Rally Wagon with Panel Rear Door
- 16—Blazer, Jimmy
- 33—Motor Home Chassis
- 42—Forward Control Chassis, Step-Van, Value Van
- 43—Bonus Cab-Crew Cab

**⑥ Body Code**

- ZW7—Base Body
- Z88—Blazer, Jimmy w/White Top
- Z97—Blazer, Jimmy w/Black Top
- Z04—RV Cutaway Van
- E31—Hi-Cube Van (10' Steel 96" Wide)
- E32—Step-Van, Value Van (Steel)
- E33—Step-Van, Value Van (Aluminum)
- E34—Hi-Cube Van (10' Steel 83" Wide)
- E36—Hi-Cube Van (96" Wide 10' Aluminum)
- E38—Hi-Cube Van (12' Steel 96" Wide)
- E39—Hi-Cube Van (96" Wide 12' Aluminum)
- E55—Suburban (w/End Gate)
- E62—Stepside (Fenderside) Pickup
- E63—Flitchide (Wide Side) Pickup
- E74—Beaverville Sportvan, Rally STX

**⑦ Engine Code**

- LD4—250 S4
- L28—392 S4
- LD9—308-2 V8
- LS9—350-4 V8
- LP4—400-4 V8
- LP8—454-4 V8

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET - GM FORMAT

Light Duty Trucks  Medium Duty Vehicles

Manufacturer: GENERAL MOTORS CORPORATION Executive Order No. A-6-127 Pg. 2

Engine Family 812R4 Engine (CID) 454 Transm. \_\_\_\_\_

Exhaust Emission Control System AI,EFE,EGR,OC +10% (A/C) Yes  No

| Eng. Code | Air Cond. | Distrib. Type HEI C,V<br>Mfgr. Part No. | Fuel System 4V<br>Mfgr. Part No. | EGR System Part No. Service | Inertia Wt. Class | See Page One for: |              | Transmission | Tune-up Label & Page No. | Rev. Notes |  |
|-----------|-----------|---|----------------------------------|-----------------------------|-------------------|-------------------|--------------|--------------|--------------------------|------------|--|
|           |           |   |                                  |                             |                   | Model Code        | Body Code(s) |              |                          |            |  |
| T         | WO        | Delco 1103358                           | Rochester 17058521               | 17056768<br>No Service      | 4500              | CC10703           | E63+F44      | A-3          | LR                       | 4          |  |
|           |           |   |                                  |                             |                   | T                 | E62+F44      |              |                          |            |  |
|           |           |   |                                  |                             |                   | C                 |              |              |                          |            |  |
|           |           |   |                                  |                             |                   | T                 |              |              |                          |            |  |
|           |           |   |                                  |                             | 5000              | CC10903           | E63+F44      |              |                          |            |  |
|           |           |   |                                  |                             |                   | T                 | E62+F44      |              |                          |            |  |
|           |           |   |                                  |                             |                   | T                 |              |              |                          |            |  |
|           |           |   |                                  |                             |                   | CC20903           | E63          |              |                          |            |  |
|           |           |   |                                  |                             | 5500              | T                 | E62          |              |                          |            |  |
|           |           |   |                                  |                             |                   | C                 |              |              |                          |            |  |
|           |           |   |                                  |                             |                   | T                 |              |              |                          |            |  |
|           |           |   |                                  |                             |                   | CC20906           | ZW9          |              |                          |            |  |
| 6000      | T         | E55                                     | LR<br>or<br>LT                   | 4<br>5                      |                   |                   |              |              |                          |            |  |
|           | C         |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | T         | ZW9                                     |                                  |                             |                   |                   |              |              |                          |            |  |
|           | CC20906   | E55                                     |                                  |                             |                   |                   |              |              |                          |            |  |
| 6000      | T         | ZW9                                     |                                  |                             |                   |                   |              |              |                          |            |  |
|           | CC10703   |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | T         |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | CC10903   |   |                                  |                             |                   |                   |              |              |                          |            |  |
| 6000      | T         |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | CC10903   |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | T         |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | CC20903   |   |                                  |                             |                   |                   |              |              |                          |            |  |
| 6000      | T         |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | CC10703   |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | T         |   |                                  |                             |                   |                   |              |              |                          |            |  |
|           | CC10903   |   |                                  |                             |                   |                   |              |              |                          |            |  |

Comments: See page one for abbreviations.  
Label LT is for incomplete vehicles.

Date of Issue 092177. Revisions:

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET - GM FORMAT

Light Duty Trucks  Medium Duty Vehicles

Manufacturer: GENERAL MOTORS CORPORATION Executive Order No. A-6-127 Pg. 3

Engine Family 812R4 Engine (CID) 454 Transm. \_\_\_\_\_

Exhaust Emission Control System AI,EFE,EGR,OC +10% (A/C) Yes  No

| Eng. Code | Air Cond.     | Distrib. Type HEI C,V<br>Mfgr. Part No. | Fuel System 4V<br>Mfgr. Part No. | EGR System Part No. Service | Inertia Wt. Class | See Page One for: |              | Trans- mission | Tune-up Label & Page No. | Rev. Notes |  |
|-----------|---------------|---|----------------------------------|-----------------------------|-------------------|-------------------|--------------|----------------|--------------------------|------------|--|
|           |               |   |                                  |                             |                   | Model Code        | Body Code(s) |                |                          |            |  |
| 2         | W             | Delco 1103358                           | Rochester 17058520               | 17056768<br>No Service      | 5000              | CC10703           | E63+F44      | A-3            | LR                       | 4          |  |
|           |               |   |                                  |                             |                   | T                 | E62+F44      |                |                          |            |  |
|           |               |   |                                  |                             |                   | C                 | E63+F44      |                |                          |            |  |
|           |               |   |                                  |                             |                   | T                 | E62+F44      |                |                          |            |  |
|           |               |   |                                  |                             |                   | CC20903           | E63          |                |                          |            |  |
|           |               |   |                                  |                             |                   | T                 | E62          |                |                          |            |  |
|           |               |   |                                  |                             |                   | C                 |              |                |                          |            |  |
|           |               |   |                                  |                             |                   | T                 |              |                |                          |            |  |
|           |               |   |                                  |                             |                   | 5500              | CC10906      |                |                          |            |  |
| T         | E55           |   |                                  |                             |                   |                   |              |                |                          |            |  |
| C         | ZW9           |   |                                  |                             |                   |                   |              |                |                          |            |  |
| T         | E55           |   |                                  |                             |                   |                   |              |                |                          |            |  |
| CC20906   |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| T         |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| C         |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| T         |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| 6000      | CC10703       | ZW9                                     |                                  |                             |                   |                   |              |                |                          |            |  |
| T         |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| CC10903   |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| T         |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| CC20903   |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| T         |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
|           |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
|           |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
|           |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
| 4         | W<br>or<br>WO | 1103240                                 | 17058501                         | 17058605                    | 5000              | CC20903           | E62          | M-4            | LR<br>or<br>LS           | 4<br>4     |  |
|           |               |   |                                  |                             |                   | T                 |              |                |                          |            |  |
|           |               |   |                                  |                             |                   | 5500              | CC20903      |                |                          |            |  |
|           | T             | ZW9                                     |                                  |                             |                   |                   |              |                |                          |            |  |
|           |               |   |                                  |                             |                   |                   |              |                |                          |            |  |
|           |               |   |                                  |                             |                   |                   |              |                |                          |            |  |

Comments: See page one for abbreviations.  
Labels LS & LT are for incomplete vehicles.

Date of Issue 092177. Revisions:

Manufacturer: General Motors Corporation

Executive Order No. A-6-127 Pg. 4

**LR**

454 CU. IN.  
812R4  
8BFV

**VEHICLE EMISSION CONTROL INFORMATION**

GENERAL MOTORS CORPORATION 

**SET PARKING BRAKE AND BLOCK DRIVE WHEELS.**

MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE FULL OPEN, AIR CLEANER INSTALLED, AND AIR CONDITIONING OFF, EXCEPT WHERE NOTED.

1. DISCONNECT AND PLUG VACUUM HOSE AT DISTRIBUTOR. SET IGNITION TIMING AT SPECIFIED ENGINE SPEED. UNPLUG AND RECONNECT VACUUM HOSE TO DISTRIBUTOR.
2. DISCONNECT AND PLUG VACUUM HOSE AT EGR VALVE AND CANISTER PURGE HOSE AT CANISTER. ADJUST CARBURETOR SPEED SCREW TO OBTAIN SPECIFIED CURB IDLE SPEED.
3. ON AUTOMATICS WITH AIR CONDITIONING: DISCONNECT ELECTRICAL LEAD FROM AIR CONDITIONING COMPRESSOR. WITH AIR CONDITIONING SWITCH ON AND SOLENOID FULLY EXTENDED, ADJUST SOLENOID SCREW TO SPECIFIED RPM. RECONNECT COMPRESSOR LEAD. TURN AIR CONDITIONING SWITCH OFF.
4. WITH TRANSMISSION IN PARK OR NEUTRAL, ADJUST FAST IDLE SCREW TO SPECIFIED SPEED ON HIGH STEP OF CAM. UNPLUG AND RECONNECT VACUUM HOSE TO EGR VALVE AND CANISTER PURGE HOSE TO CANISTER.

POWERED BY U.S.A.

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1978 MODEL YEAR NEW MOTOR VEHICLES.

PT. NO. 473500

**LS**

454 CU. IN.  
812R4  
8BFV

**VEHICLE EMISSION CONTROL INFORMATION**

GENERAL MOTORS CORPORATION 

**SET PARKING BRAKE AND BLOCK DRIVE WHEELS.**

MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE FULL OPEN, AIR CLEANER INSTALLED, AND AIR CONDITIONING OFF.

1. DISCONNECT AND PLUG VACUUM HOSE AT DISTRIBUTOR. SET IGNITION TIMING AT SPECIFIED ENGINE SPEED. UNPLUG AND RECONNECT VACUUM HOSE TO DISTRIBUTOR.
2. DISCONNECT AND PLUG VACUUM HOSE AT EGR VALVE AND CANISTER PURGE HOSE AT CANISTER. ADJUST CARBURETOR SPEED SCREW TO OBTAIN SPECIFIED CURB IDLE SPEED.
3. WITH TRANSMISSION IN NEUTRAL, ADJUST FAST IDLE SCREW TO SPECIFIED SPEED ON HIGH STEP OF CAM. UNPLUG AND RECONNECT VACUUM HOSE TO EGR VALVE AND CANISTER PURGE HOSE TO CANISTER.

POWERED BY U.S.A.

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1978 MODEL YEAR NEW MOTOR VEHICLES WHEN COMPLETED AT A MAXIMUM CURB WEIGHT OF 5450 POUNDS AND A MAXIMUM FRONTAL AREA OF 41.0 SQUARE FEET.

PT. NO. 14001901

**CATALYST**

AIR-EGR-EFE  
LOW ALTITUDE CERTIFICATION

|   | TRANSMISSION    |          |
|---|-----------------|----------|
|   | AUTOMATIC       | MANUAL   |
| TIMING (° BTC @ RPM)                          | F° @ 550        | F° @ 700 |
| SPARK PLUG GAP (IN.)                          | 0.045           | 0.045    |
| CURB IDLE SPEED (RPM)                         | 550 (DR)        | 700 (M)  |
| FAST IDLE SPEED (RPM)                         | 1600 (P) OR (M) | 1600 (M) |
| SOLENOID ASM. ADJUSTMENT WITH AIR COND. (RPM) | 600 (DR)        | —        |

**NOTE** IDLE MIXTURE SCREWS ARE PRESET AND CAPPED AT FACTORY — DO NOT BREAK CAPS — ADJUSTMENT DURING TUNE UP IS NOT RECOMMENDED.

FOR MAJOR REPAIR, ADJUSTING MIXTURE SETTING BY OTHER THAN APPROVED SERVICE MANUAL PROCEDURE MAY VIOLATE FEDERAL AND/OR CALIFORNIA OR OTHER STATE LAWS.

SEE SERVICE MANUAL AND MAINTENANCE SCHEDULE 1 FOR ADDITIONAL INFORMATION.

**CATALYST**

AIR-EGR-EFE  
LOW ALTITUDE CERTIFICATION

|                       | TRANSMISSION |          |
|-----------------------|--------------|----------|
|                       | AUTOMATIC    | MANUAL   |
| TIMING (° BTC @ RPM)  | F° @ 700     | F° @ 700 |
| SPARK PLUG GAP (IN.)  | 0.045        | 0.045    |
| CURB IDLE SPEED (RPM) | 700 (M)      | 700 (M)  |
| FAST IDLE SPEED (RPM) | 1600 (M)     | 1600 (M) |

**NOTE** IDLE MIXTURE SCREWS ARE PRESET AND CAPPED AT FACTORY — DO NOT BREAK CAPS — ADJUSTMENT DURING TUNE UP IS NOT RECOMMENDED.

FOR MAJOR REPAIR, ADJUSTING MIXTURE SETTING BY OTHER THAN APPROVED SERVICE MANUAL PROCEDURE MAY VIOLATE FEDERAL AND/OR CALIFORNIA OR OTHER STATE LAWS.

SEE SERVICE MANUAL AND MAINTENANCE SCHEDULE 1 FOR ADDITIONAL INFORMATION.

**LT**  
454 CU. IN.  
812R4  
8BFV

**VEHICLE EMISSION CONTROL INFORMATION**  
GENERAL MOTORS CORPORATION 

**CATALYST**  
AIR-EGR-EFE  
LOW ALTITUDE CERTIFICATION

TRANSMISSION

AUTOMATIC

**SET PARKING BRAKE AND BLOCK DRIVE WHEELS.**

MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE FULL OPEN, AIR CLEANER INSTALLED, AND AIR CONDITIONING OFF, EXCEPT WHERE NOTED.

1. DISCONNECT AND PLUG VACUUM HOSE AT DISTRIBUTOR. SET IGNITION TIMING AT SPECIFIED ENGINE SPEED. UNPLUG AND RECONNECT VACUUM HOSE TO DISTRIBUTOR.
2. DISCONNECT AND PLUG VACUUM HOSE AT EGR VALVE AND CANISTER PURGE HOSE AT CANISTER. ADJUST CARBURETOR SPEED SCREW TO OBTAIN SPECIFIED CURB IDLE SPEED.
3. WITH AIR CONDITIONING: DISCONNECT ELECTRICAL LEAD FROM AIR CONDITIONING COMPRESSOR. WITH AIR CONDITIONING SWITCH ON AND SOLENOID FULLY EXTENDED, ADJUST SOLENOID SCREW TO SPECIFIED RPM. RECONNECT COMPRESSOR LEAD. TURN AIR CONDITIONING SWITCH OFF.
4. WITH TRANSMISSION IN PARK OR NEUTRAL, ADJUST FAST IDLE SCREW TO SPECIFIED SPEED ON HIGH STEP OF CAM. UNPLUG AND RECONNECT VACUUM HOSE TO EGR VALVE AND CANISTER PURGE HOSE TO CANISTER.

TIMING (° BTC @ RPM)

SPARK PLUG GAP (IN.)

CURB IDLE SPEED (RPM)

FAST IDLE SPEED (RPM)

SOLENOID ASM. ADJUSTMENT WITH AIR COND. (RPM)

**NOTE:** IDLE MIXTURE SCREWS ARE PRESET AND CAPPED AT FACTORY — DO NOT DRUM CAPS — ADJUSTMENT DURING TUNE UP IS NOT RECOMMENDED.  
FOR MAJOR REPAIR, ADJUSTING MIXTURE SETTING BY OTHER THAN APPROVED SERVICE MANUAL PROCEDURE MAY VIOLATE FEDERAL AND/OR CALIFORNIA OR OTHER STATE LAWS.  
SEE SERVICE MANUAL AND MAINTENANCE SCHEDULE 1 FOR ADDITIONAL INFORMATION.

PRINTED IN U.S.A.

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1978 MODEL YEAR NEW MOTOR VEHICLES WHEN COMPLETED AT A MAXIMUM CURB WEIGHT OF 5950 POUNDS AND A MAXIMUM FRONTAL AREA OF 41.0 SQUARE FEET.

PT. NO. 14001902