

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-90-3
Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102, and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That General Motors Corporation exhaust emission control systems for 1977 model-year passenger cars are certified for the engine family described below:

- Engine Family: 740E2LU
- Engine: 231 CID
- Transmission: 3-speed manual, 3-speed automatic
- Exhaust Emission Control Systems: Air Injection, Exhaust Gas Recirculation, Oxidation Catalyst, Early Fuel Evaporation.

Models: Pontiac

- Phoenix Coupe
- Phoenix Sedan

BE IT FURTHER RESOLVED: That this certification is contingent upon General Motors Corporation affixing a permanent catalyst overheat warning label on the driver's sun-visor of all catalyst-equipped vehicles. This label must be approved by the Executive Officer.

BE IT FURTHER RESOLVED: That this certification is also contingent upon General Motors Corporation listing in the owner's manual the operating cautions associated with a catalyst-equipped vehicle. This listing must be approved by the Executive Officer.

These vehicles are in addition to those previously certified for this engine family.

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 18 day of February, 1977.



G. C. Hass, Chief
Vehicle Emissions Control Division

1977 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET - GM FORMAT

Passenger Cars

Light-Duty Trucks

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6-90 Page 1

Engine Family 740E2LU Engine (CID) 231 Transm. _____

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

| Divisions | Basic Body | | Body Type | Trans- mission Type | Inertia Weight | Distributor Type HEI C,V Mfr. Part Number | Fuel System 1-2V Mfr. Part Number | EGR System Part No. Service* | Engine Code | Tune-Up Label Ident. & Page No. |
|---------------------------------|-----------------------|------------------|----------------------------|---------------------------|-------------------|---|--|------------------------------------|----------------|--|
| | Trim | | | | | | | | | |
| 3 23 4 4 3 | X X X X | B B W X | 17 27 27 69 | A-3 | 3500 | Delco Remy 1110686 | Rochester 17057446 | 7044098 No Service | 1 | JD 11 |
| 2 4 3 2 4 2 4 | X X X X | E C | 17 17 27 69 | | | | | | | |
| 234 234 | B B | | 37 69 | | | | | | | |
| 2 3 4 234 234 | X X X X X | Y B | 17 17 17 27 69 | | 3500 | | | | | |
| 2 4 2 | X X X | Z C | 17 17 69 | 4000 | | | | | | |

Comments See page 3 for model codes and names. Some models have special road load HP settings.

Date of Issue 081776. Was pages 1 thru 5, 17057446 opt. carb. added to E.C. 3 by RC 74-133, format revised 120276. Inertia Wt. was 4000 for 2XY17 before RC 74-168 on 010777. Inertia Wt. was 4000 for 3XB17, 4XBW27, 3X69 in E.C. 1 and 4XB17, 4X27, 4X69 in E.C. 3 before RC 74-217, last 3 lines moved to page 2 on 042877.

Abbreviations

Distributor
C-Centrifugal Advance
V-Vacuum Advance
HEI-High Energy Ignition
EI-Electronic Ignition
Fuel System
EFI, Electronic Fuel Injection

Exhaust Emission Control System

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

FI-Fuel Injection

OC-Oxidation Catalyst
*Service
I-Inspect, repair/
replace as needed
R-Replace

1977 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET - GM FORMAT

Passenger Cars

Light-Duty Trucks

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6-90 Page 2

Engine Family 740E2LU Engine (CID) 231 Transm. _____

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

| Divisions | Basic Body | | Body Type | Transmission Type | Inertia Weight | Distributor Type HEI C,V Mfgr. Part Number | Fuel System 1-2V Mfgr. Part Number | EGR System Part No. Service* | Engine Code | Tune-Up Label Ident. & Page No. |
|-----------|------------|---|-----------|-------------------|----------------|--|------------------------------------|------------------------------|-------------|---------------------------------|
| | Trim | | | | | | | | | |
| 234 | A | | 29 | A-3 | 4000 | 1110686 | 17057448 | 7044098 | 3 | |
| 234 | A | | 37 | | | | | | | |
| 34 | A | | 57 | | | | | | | |
| 234 | B | | 37 | A-3 | 4000 | 1110686 | 17057448 | 7044098 | 3 | |
| 234 | B | | 69 | | | | | | | |
| 2 | F | | 87 | | | | | | | |
| 234 | H | | 07 | A-3 | 3500 | 1110677 | 17057448 | 7044296 | 4 | |
| 2 | H | | 27 | | | | | | | |
| 234 | H | | 07 | | | | | | | |
| 234 | H | | 27 | | | | | | | |
| 23 | X | | 27 | M-3 | 4000 | 1110677 | 17057445 | | 6 | |
| 4 | X | B | 27 | | | | | | | |
| 4 | X | W | 27 | | | | | | | |
| 3 | X | B | 69 | | | | | | | |
| 234 | X | | 17 | M-3 | 4000 | 1110677 | 17057445 | | 6 | |
| 2 | X | | 27 | | | | | | | |
| 4 | X | C | 27 | | | | | | | |
| 2 4 | X | | 69 | | | | | | | |
| 3 | X | E | 69 | | | | | | | |
| 234 | A | | 29 | A-3 | 4000 | 1110686 | 17057448 | 7044098 | 3 | |
| 234 | A | | 37 | | | | | | | |
| 34 | A | | 57 | | | | | | | |
| 2 | F | | 87 | | | | | | | |

Comments See page 3 for model codes and names. Some models have special road load HP settings.

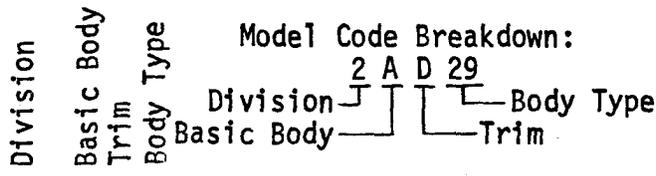
Issue Date 081776. 23A29, 3A57 added to E.C. 3 & 6 by RC 74-60 & 88 on 101376. Was pages 6 thru 10, 1705446 opt. carb. added to E.C. 3 by RC 74-133, format revised 120276. 2H07 added by RC 74-170 on 010777. Inertia Wt. was 4000 for 3XBE27, 4XBW27, 3XB69 before RC 74-217, first 3 lines moved from page 1 on 042877.

1977 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
Passenger Cars

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6-90 Page 3

Engine Family 740E2LU

3 (Cont'd.)



B-N 37 Delta 88 Royale Pillar Coupe
 -L 37 Delta 88 Pillar Coupe
 -N 69 Delta 88 Royale Pillar Sedan
 -L 69 Delta 88 ~~Royale~~ Pillar Sedan

H-T 07 Starfire
 -D 07 Starfire SX

2

PONTIAC

A-G 29 Grand LeMans Sedan -
 -D 29 LeMans Sedan -
 -G 37 Grand LeMans Coupe -
 -F 37 LeMans Sport Coupe -
 -D 37 LeMans Coupe -

B-N 37 Bonneville Coupe
 -L 37 Catalina Coupe
 -N 69 Bonneville Sedan
 -L 69 Catalina Sedan

F-S 87 Firebird -
 -T 87 Firebird Esprit -

H-M 07 Sunbird Hatchback Coupe
 -M 27 Sunbird

X-Z 17 Ventura 'SJ' Hatchback Coupe -
 -Y 17 Ventura Hatchback Coupe -
 -X 27 Phoenix Coupe -
 -Z 27 Ventura 'SJ' Coupe -
 -Y 27 Ventura Coupe -
 -X 69 Phoenix Sedan -
 -Z 69 Ventura 'SJ' Sedan -
 -Y 69 Ventura Sedan -

3

OLDSMOBILE

A-M 29 Cutlass Brougham Hardtop Sedan -
 -G 29 Cutlass Hardtop Sedan -
 -J 29 Cutlass Supreme Hardtop Sedan -
 -J 37 Cutlass Supreme Hardtop Coupe -
 -G 37 Cutlass 'S' Hardtop Coupe -
 -M 57 Cutlass Brougham Hardtop Coupe -

X-E 17 Omega Brougham Hatchback Coupe -
 -B 17 Omega Hatchback Coupe -
 -E 27 Omega Brougham Coupe -
 -B 27 Omega Coupe -
 -S 27 F-85 Coupe -
 -E 69 Omega Brougham Sedan -
 -B 69 Omega Sedan -

4

BUICK

A-H 29 Century Custom Sedan -
 -D 29 Century Sedan -
 -E 37 Century Special Coupe -
 -D 37 Century Coupe -
 -H 57 Century Custom Coupe -
 -J 57 Regal Coupe -
 B-P 37 LeSabre Custom Coupe
 -N 37 LeSabre Coupe
 -P 69 LeSabre Custom Sedan
 -N 69 LeSabre Sedan
 H-S 07 Skyhawk
 -T 07 Skyhawk 'S'

X-C 17 Skylark 'SR' Hatchback Coupe -
 -B 17 Skylark Hatchback Coupe -
 -C 27 Skylark 'SR' Coupe -
 -W 27 Skylark 'S' Coupe -
 -B 27 Skylark Coupe -
 -C 69 Skylark 'SR' Sedan -
 -B 69 Skylark Sedan -

2 AG29, 3AM29 and 3AM57 added by RC74-60 & 88 on 101376.
 Was last page, format revised 120276.
 2HM07 added by RC 74-170 on 010777.
 2XX27 & 69 added by RC74-175 on 021077.

Engine Family 740E2LU

TUNE-UP LABELS

| | | | | |
|--|---|-----------------|--|-------------------------------|
| JC 231 CU. IN. 740E2LU | VEHICLE EMISSION CONTROL INFORMATION GENERAL MOTORS CORPORATION | TIMING MARK | CATALYST EGR-EFE-RAIR LOW ALTITUDE CERTIFICATION | TRANSMISSION AUTO. MAN. |
| MAKE ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE OPEN, AIR CLEANER ON, AND AIR CONDITIONING OFF. PLUG DISCONNECTED VACUUM FITTINGS AND/OR HOSES. | | | | |
| SET PARKING BRAKE AND BLOCK WHEELS. | | | | |
| 1. DISCONNECT EVAPORATIVE PURGE HOSE TO VAPOR CANISTER. 2. DISCONNECT AND PLUG DISTRIBUTOR VACUUM HOSE TO CARB., AND EGR HOSE TO EGR VALVE 3. SET TIMING AT SPECIFIED RPM. DISCONNECT THROTTLE SOLENOID WIRE (WHERE APPLICABLE). 4. ADJUST CARBURETOR SPEED SCREW TO SPECIFIED RPM. 5. RECONNECT SOLENOID WIRE. MANUALLY EXTEND SOLENOID SCREW AND ADJUST TO SPECIFIED RPM. (WHERE APPLICABLE). 6. RECONNECT DISTRIBUTOR, CANISTER, AND EGR HOSES. (SEE SERVICE MANUAL AND MAINTENANCE SCHEDULE II FOR ADDITIONAL INFORMATION). | | | | |
| | | | IDLE MIXTURE SCREWS ARE PRESET AND CAPPED AT FACTORY - <u>DO NOT</u> 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. | |
| | | | PART NO. 1256396 | |
| THIS VEHICLE CONFORMS TO U.S. EPA, AND WHERE APPLICABLE CALIFORNIA, REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES. | | | | |

Label Location

"A", "X", "F" and "H" Bodies - On sheet metal cover over radiator support.

| | | | | |
|---|---|-----------------|--|-------------------------------|
| JD 231 CU. IN. 740E2LU | VEHICLE EMISSION CONTROL INFORMATION GENERAL MOTORS CORPORATION | TIMING MARK | CATALYST EGR-EFE-RAIR LOW ALTITUDE CERTIFICATION | TRANSMISSION AUTO. MAN. |
| MAKE ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE OPEN AND WHERE APPLICABLE, AIR CONDITIONING OFF. PLUG DISCONNECTED VACUUM FITTINGS AND/OR HOSES. | | | | |
| SET PARKING BRAKE AND BLOCK WHEELS | | | | |
| 1. DISCONNECT EVAPORATIVE PURGE HOSE TO VAPOR CANISTER. 2. DISCONNECT AND PLUG DISTRIBUTOR VACUUM HOSE TO CARB., AND EGR HOSE TO EGR VALVE. 3. SET TIMING AT SPECIFIED R.P.M. 4. ADJUST CARBURETOR SPEED SCREW TO SPECIFIED R.P.M., IN DRIVE. 5. <u>ON AIR CONDITIONING CARS</u> - AFTER COMPLETING ABOVE ADJUSTMENTS, A/C ON, DISCONNECT ELECTRICAL CONNECTOR AT A/C COMPRESSOR CLUTCH AND ADJUST SOLENOID (ENERGIZED) SCREW TO SPECIFIED R.P.M. IN DRIVE. RECONNECT ELECTRICAL CONNECTOR. 6. RECONNECT DISTRIBUTOR, CANISTER, AND EGR VALVE HOSES. (SEE SERVICE MANUAL AND MAINTENANCE SCHEDULE II FOR ADDITIONAL INFORMATION) | | | | |
| | | | IDLE MIXTURE SCREWS ARE PRESET AND CAPPED AT FACTORY - <u>DO NOT</u> BREAK CAPS - ADJUSTMENT DURING TUNE-UP IS <u>NOT</u> RECOMMENDED. | |
| | | | FOR MAJOR REPAIR, ADJUSTING MIXTURE SETTING BY OTHER THAN APPROVED SERVICE MANUAL PROCEDURE MAY VIOLATE FEDERAL AND/OR CALIFORNIA OR OTHER STATE LAWS. | |
| | | | PART NO. 1256394 | |
| THIS VEHICLE CONFORMS TO U.S. EPA, AND WHERE APPLICABLE CALIFORNIA, REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES. | | | | |

Label Location

"A", "B", "X", "F" and "H" Bodies - On sheet metal cover over radiator support.