State of California
Air Resources Board

EXECUTIVE ORDER A-6-88
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: 720X2E
Engine: 151 CID
Transmission: 3-speed automatic
Exhaust Emissions Control Systems: Early Fuel Evaporation, Exhaust Gas Recirculation, Oxidation Catalyst, Pulse Air Injection

Models: Pontiac

Astre Coupe
Astre Hatchback Coupe
Astre Station Wagon
Sunbird

The following are the recommended values to be listed on the window decal required by California Assembly-Line Test Procedures for 1977 model vehicles:

Engine Family	Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per Mile
720X2E	0.39	5.1	1.5

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.

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 14 day of September, 1976.

G. C. Hass, Chief
Division of Vehicle Emissions Control

1977 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET-GM FORMAT

(X) Passenger Cars ( ) Light-Duty Trucks

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6- 88 Page 1

Engine Family 720X2E Engine (CID) 151

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

Division	Basic Body	Trim	Body Type	Transmission Type	Inertia Weight	Distributor Type: HEI CV Mfgr. Part Number	Fuel System Type: 1-2V Mfgr. Part Number	EGR System Part No. Service*	Engine Code	Tune-Up Label Ident. & Page No.
						Delco Remy	Holley			
2	H		11 15 77	A-3	3000	1103303	527204	7045137 (no service)	1A	FR 2
2	H		11 15 77			1103303	527206	7045137 (no service)	2A	FS 3
2	H		27			1103303	527204	7045165 (no service)	3A or 3B	FR or FT 2
2	H		27			1103303	527206	7045165 (no service)	4A or 4B	FS or FU 3

Comments

See last page for model codes and names.

Date of Issue 091076.

Engine codes 3B & 4B added by RC 72-85, dynamometer HP settings removed, format revised 102976. Transm. code deleted 120276.

Abbreviations
Distributor
Centrifugal Advance
Vacuum Advance
HEI-High
EI-Electronic Ignition
l System
FI

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

FR
151 cu. in.
720X2E

VEHICLE EMISSION CONTROL INFORMATION

GM

SET PARKING BRAKE AND BLOCK DRIVE WHEELS. DISCONNECT A/C COMPRESSOR CLUTCH CONNECTOR AND START ENGINE. MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE. CHOKE OPEN, A/C OFF., MANUAL TRANSMISSION IN NEUTRAL. AUTOMATIC TRANSMISSION IN DRIVE UNLESS OTHERWISE NOTED.

1. DISCONNECT AND PLUG THE VACUUM ADVANCE HOSE AT DISTRIBUTOR.
2: SET TO SPECIFIED TIMING AT OR BELOW RECOMMENDED IDLE SPEED:
3. RECONNECT VACUUM ADVANCE HOSE EXCEPT 400 CU. IN. ENGINE MANUAL TRANSMISSION VEHICLES.
4. DISCONNECT PURGE HOSE AT CANISTER (PLUG HOSE ON 151 CU. IN. ENGINE).
5. FOR A/C CARS:
   A. (IDLE SOLENOID INACTIVE AND A/C OFF) SET IDLE SPEED SCREW TO OBTAIN SPECIFIED RPM.
   B. (IDLE SOLENOID ACTIVE AND A/C ON WITH COMP. CLUTCH CONNECTOR OFF.) OPEN THROTTLE MOMENTARILY TO INSURE SOLENOID IS FULLY EXTENDED. SET SOLENOID ACTIVE IDLE SPEED BY ADJUSTING SOLENOID PLUNGER (ADJACENT SOLENOID IDLE SCREW FOR 151 CU. IN. ENGINES) TURN A/C OFF.

   FOR NON A/C CARS: SET IDLE SPEED SCREW ON CARBURETOR TO OBTAIN SPECIFIED RPM (SOLENOID ACTIVE, IF SO EQUIPPED).
6. RECONNECT DISTRIBUTOR VACUUM HOSE ON 400 CU. IN. ENGINE MANUAL TRANSMISSION VEHICLES.
7. PLACE AUTOMATIC TRANSMISSION IN PARK.
8. DISCONNECT AND PLUG EGR VACUUM HOSE AT EGR VALVE.
9. ADJUST FAST IDLE SCREW ON TOP STEP (SECOND STEP FOR 301 CU. IN. ENGINE ONLY) OF FAST IDLE CAM TO OBTAIN SPECIFIED RPM.
10. STOP ENGINE AND RECONNECT EGR HOSE, CANISTER HOSE, AND A/C COMPRESSOR CLUTCH CONNECTOR.

CATALYST

PAIR-EGR-EFE	AUTOMATIC TRANSMISSION
TIMING (°B.T.D.C. @ RPM)	12° @ 1000 MAX.
SPARK PLUG GAP	.060 INCH
CARB SCREW (RPM) SOLENOID INACTIVE	650 IN DRIVE
CARB SCREW (RPM) SOLENOID ACTIVE	850 IN DRIVE
CHOKE SETTING	2 NOTCH RICH
FAST IDLE SCREW (RPM)	2400 IN PARK
VACUUM BREAK SETTING - REAR	—

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

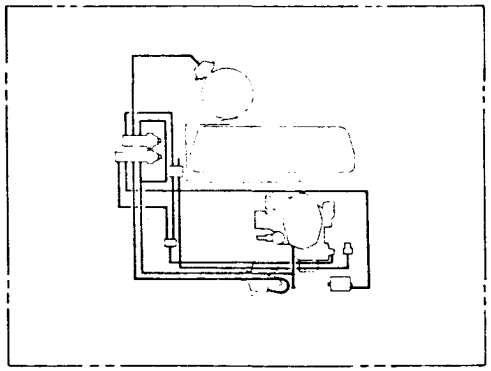
FOR MAJOR REPAIR, ADJUSTING MIXTURE SETTING BY OTHER THAN APPROVED SERVICE MANUAL PROCEDURE MAY VIOLATE FEDERAL AND/OR CALIFORNIA OR OTHER STATE LAWS.

SEE SERVICE MANUAL AND MAINTENANCE SCHEDULE I FOR ADDITIONAL INFORMATION.

LOW ALTITUDE CERTIFICATION

528113

VACUUM HOSE ROUTING



THIS VEHICLE CONFORMS TO U.S. E.P.A., AND WHERE APPLICABLE CALIFORNIA, REGULATIONS APPLICABLE TO 1977 MODEL YEAR NEW MOTOR VEHICLES.

GENERAL MOTORS CORPORATION

RC 72-85 added 102976.
RC 72-85 adds Engine Code 3B and tune-up label FT. Label FT is same as label FR except timing is 14° BTC. Illustration of label FT will follow when available.

FS
151 cu. in.
720X2E

VEHICLE EMISSION CONTROL INFORMATION

GM

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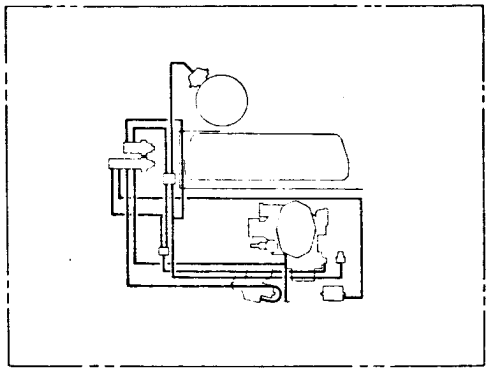
LOW ALTITUDE CERTIFICATION

528114

VACUUM HOSE ROUTING



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GENERAL MOTORS CORPORATION

RC 72-85 added 102976.
RC 72-85 adds Engine Code 4B and tune-up label FU. Label FU is same as label FS except timing is 14° BTC. Illustration of label FU will follow when available.

SUPPLEMENTAL INFORMATION

Model Codes - Engine Family 720X2E

Pontiac Model Code	Pontiac Model Name
2HC11	Astre Coupe
2HC77	Astre Hatchback Coupe
2HC15	Astre Station Wagon
2HM27	Sunbird