

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-981-A
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 the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below:

Model Year: 2001

Vehicle Type: 3751-5750 Pound Loaded Vehicle Weight Light-Duty Truck

Exhaust Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Test Group: 1GMXT04.3187

Engine Displacement: 4.3 Liters

Evaporative Family: 1GMXR0212923

Special Features and Exhaust Emission Control Systems:

Sequential Multiport Fuel Injection
Warm Up Three Way Catalytic Converter
Three Way Catalytic Converter
Dual Heated Oxygen Sensors
Heated Oxygen Sensor
Exhaust Gas Recirculation

Models Covered: Chevrolet Astro Cargo 2WD/AWD, Astro Passenger 2WD; GMC Safari Cargo 2WD/AWD, Safari Passenger 2WD

The exhaust certification emission levels and standards, in grams per mile, of non-methane organic gases (NMOG) or non-methane hydrocarbon (NMHC), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) for the listed vehicle models are as follows. The exhaust certification emission levels and standards under the Supplemental Federal Test Procedure (SFTP) US06 and SC03 tests are also listed below. The NMOG exhaust certification emission levels include application of the reactivity adjustment factor (RAF) as specified.

The evaporative hydrocarbon (HC) certification emission levels and standards for three-day diurnal plus hot soak (3D) and two-day diurnal plus hot soak (2D) in grams per test, running loss (RL) in grams per mile, and onboard refueling vapor recovery (ORVR) in grams per gallon of fuel dispensed, for the listed vehicle models are as follows.

<u>Type of Emissions</u>	<u>Miles</u>	<u>Certification Level</u>	<u>Certification Standards</u>
<u>EXHAUST @ NMOG RAF = 0.94</u>			
..... NMOG fleet average		0.084 (projected)	0.098
NMOG	50,000	0.064	0.100
NMOG	100,000	0.084	0.130
CO	50,000	1.8	4.4
CO	100,000	2.6	5.5
NOx	50,000	0.05	0.4
NOx	100,000	0.1	0.5
NOx (highway)	50,000	0.05	0.5
NOx (highway)	100,000	0.1	0.7
HCHO	50,000	0.001	0.018
..... HCHO	100,000	0.001	0.023
..... CO (20°F)	50,000	6.8	12.5
NMOG (50°F)	4,000	n/a	0.200
CO (50°F)	4,000	n/a	4.4
NOx (50°F)	4,000	n/a	0.4
HCHO (50°F)	4,000	n/a	0.036
NMHC+NOx (SFTP US06)	4,000	0.03	0.25
CO (SFTP US06)	4,000	0.6	10.5
NMHC+NOx (SFTP SC03)	4,000	0.05	0.27
CO (SFTP SC03)	4,000	0.5	3.5
<u>EVAPORATIVE</u>			
HC-2D	100,000	1.4	2.5
HC-3D	100,000	1.0	2.0
HC-RL	100,000	0.00	0.05
HC-ORVR	100,000	0.09	0.20

BE IT FURTHER RESOLVED: That any debit in the manufacturer's NMOG fleet average compliance plan shall be equalized as required by the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the 50° Fahrenheit testing requirement for the listed vehicle models has been met based on the compliance plan submitted by the manufacturer in lieu of actual testing.


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.)

BE IT FURTHER RESOLVED: That for the listed vehicle models, the manufacturer has attested to compliance with the following California emission regulations and requirements. Vehicles certified under this Executive Order shall conform to all applicable California emission regulations and requirements.

- Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks (Title 13, California Code of Regulations, Section 2235.)
- Motor Vehicle Emission Control and Smog Index Label Specifications (Title 13, California Code of Regulations, Section 1965.)
- Emission Control System Warranty (Title 13, California Code of Regulations, Sections 2035 et seq.)
- High-Altitude Requirements and California Inspection and Maintenance Emission Standards (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.)

The Bureau of Automotive Repair will be notified by copy of this order.

Executed at El Monte, California this 6th day of March 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division