State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-659 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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1995 model-year General Motors Corporation exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: S4G1.9V7G2EA <u>Displacement</u>: 1.9 Liters (116 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Exhaust Gas Recirculation
Three Way Catalytic Converter

Oxygen Sensor

Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

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

<u>Miles</u>	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Formaldehyde</u>
50,000	0.125	3.4	0.4	0.015
100,000	0.156	4.2	0.6	0.018

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a 0.98 RAF for 1995 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Mil <u>es</u>	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Formaldehyde</u>
50,000	0.100	0.8	0.3	0.003
100,000	0.120	1.0	0.4	0.003

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth 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 under the submitted compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

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 for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) 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.).

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

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 18 day of April, 1994.

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R. B. Summerfield Assistant Division Chief

Mobile Source Division

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: S4G1.9V7G2EA

PASSENGER CARS_X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___

FUEL TYPE: GAS (PHASE 2) STANDARDS TYPE: TLEV VEHICLE TYPE: NA

ENGINE CONFIG: 14 LITER (CID): 1.9 (116) EVAP FAMILY: S4G1035AYPOB

ENGINE: FRONT_X MID_ REAR__ DRIVE: FWD_X RWD_ 4WD-FT_ 4WD-PT__

EMISSION CONTROL SYSTEM & SPECIAL FEATURES: EGR. 02S, TWC. MFI

DPA: SECTION 08.13.02.00

ENG <u>CODE</u> 1	VEH MODELS (SEE PAGE 1) 8ZH69 8ZH35 8ZF27	TRANS TYPE: A-AUTO M-MAN A	EQUIV TEST WEIGHT 2625 2750 2625	IGN SYSTEM (ECM/PCM) PART NO. 21023075/ ECM 8498. TCM 8488	EGR SYSTEM <u>PART NO.</u> 21006601	CATALYST PART NO. 25145003
_ IA	01. - /			21023110/ ECM 0584. TCM 8488		
2	8ZH69 8ZH35 8ZF27		2750 2625	21023075/ ECM 8498, TCM 8488		
2A	Q 2. 2.			21023110/ ECM 0584 TCM 8488		

CARLINE NAME	CARLINE CODE
SL1 SEDAN	37320
SW1 WAGON	37330
SC1 COUPE	37310

ISSUED: ML-SP121 REVISED: ML-SR041

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: \$4G1.9V7G2EA

PASSENGER CARS_X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___

FUEL TYPE: GAS (PHASE 2) STANDARDS TYPE: TLEV VEHICLE TYPE: NA

ENGINE CONFIG: I4 LITER (CID): 1.9 (116) EVAP FAMILY: S4G1035AYPOB

ENGINE: FRONT X MID___ REAR___ DRIVE: FWD_X RWD__ 4WD-FT___ 4WD-PT___

EMISSION CONTROL SYSTEM & SPECIAL FEATURES: EGR, O2S, TWC, MFI

DPA: SECTION 08.13.02.00

ENG <u>CODE</u>	VEH MODELS (SEE PAGE 1)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECM/PCM) PART NO.	EGR SYSTEM PART NO.	CATALYST PART NO.
1B	8ZH69 8ZH35 8ZF27	Α	2625 2750 2625	21023589/ ECM 8907. TCM 8488	21006601	25145003
2B	8ZH69 8ZH35 87F27		2750 2625			

CARLINE NAME	CARLINE CODE
SL1 SEDAN	37320
SW1 WAGON	37330
SC1 COUPE	37310

ISSUED: ML-SR142 REVISED:

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: S4G1.9V7G2EA

PASSENGER CARS_X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___

FUEL TYPE: GAS (PHASE 2) STANDARDS TYPE: TLEV VEHICLE TYPE: NA

ENGINE CONFIG: 14 LITER (CID): 1.9 (116) EVAP FAMILY: S4G1035AYPOB

ENGINE: FRONT_X MID_ REAR__ DRIVE: FWD_X RWD_ 4WD-FT_ 4WD-PT__

EMISSION CONTROL SYSTEM & SPECIAL FEATURES: EGR, 02S, TWC, MFI

DPA: SECTION 08.13.02.00

ENG CODE 3	VEH MODELS (SEE PAGE 1) 8ZG69 8ZF69 8ZG35 8ZE27	TRANS TYPE: A-AUTO M-MAN M	EQUIV TEST WEIGHT 2625	IGN SYSTEM (ECM/PCM) PART NO. 21023074/ ECM 8492	EGR SYSTEM PART NO. 21006601	CATALYST PART NO. 25145003
3 A				21023109/ ECM 0583, TCM 8488		
4	8ZG69 8ZF69 8ZG35 8ZE27			21023074/ ECM 8492		
4A				21023109/ ECM 0583. TCM 8488		

CARLINE NAME	<u>CARLINE CODE</u>
SL1 SEDAN	$\frac{37320}{}$
SW1 WAGON	37330
SC1 COUPE	37310

ISSUED: ML-SP121 REVISED: ML-SR040

17-S4G1.9V7G2EA-3

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: S4G1.9V7G2EA

PASSENGER CARS_X LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES___

FUEL TYPE: GAS (PHASE 2) STANDARDS TYPE: TLEV VEHICLE TYPE: NA

ENGINE CONFIG: I4 LITER (CID): 1.9 (116) EVAP FAMILY: S4G1035AYPOB

ENGINE: FRONT_X MID___ REAR___ DRIVE: FWD_X RWD___ 4WD-FT___ 4WD-PT___ EMISSION CONTROL SYSTEM & SPECIAL FEATURES: EGR, 02S, TWC, MFI

DPA: SECTION 08.13.02.00

8ZG35 8ZE27

ENG CODE 3B	VEH MODELS (SEE PAGE 1) 8ZG69 8ZF69 8ZG35 8ZE27	TRANS TYPE: A-AUTO M-MAN M	EQUIV TEST <u>WEIGHT</u> 2625	IGN SYSTEM (ECM/PCM) PART NO. 21023588/ ECM 8906	EGR SYSTEM PART NO. 21006601	CATALYST PART NO. 25145003
4B	8ZG69 8ZF69					

CARLINE NAME SI 1 SEDAN SW1 WAGON SC1 COUPE

CARLINE CODE 37330 37310

TSSUED: ML-SR142 REVISED: