## State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-6-465 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 1990 model-year General Motors Corporation emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family: L1G2.0W5JFH7 <u>Displacement</u>: 2.0 Liters (122 Inches<sup>3</sup>)
1.6 Liters (98 Inches<sup>3</sup>)

# Equipped with the following exhaust emission control systems:

Exhaust Gas Recirculation
Oxygen Sensor
Three-Way Catalyst
Throttle Body Electronic Fuel Injection
On-Board Diagnostics (Exempted)

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

The following are the emission standards for this engine family:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	
(Grams per Mile)	(Grams per Mile)	(Grams per Mile)	
0.39	7.0	0.4	

The following are the certification emission values for this engine family:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides		
(Grams per Mile)	(Grams per Mile)	(Grams per Mile)		
0.12	4.4	- 0.3		

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered 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" (Title 13, California Code of Regulations, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards 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" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Code of Regulations, Section 1968) 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 (Health and Safety Code Section 43205).

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

\_ day of March, 1989.

K. D. Drachand, Chief Mobile Source Division

## (FOR CARB USE ONLY)

#### SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

Section and Page No.	Rev. No. or Date	Item
17-L1G2.OW5JFH7-Index 1	002	Table of Contents
17-L1G2.0W5JFH7-1	02-01-89	Supplemental Data Sheet
17-L1G2.0W5JFH7-2	001	Supplemental Data Sheet
17-L1G2.0W5JFH7-3	002	Supplemental Data Sheet
17-L1G2.0W5JFH7-3.1	002	Supplemental Data Sheet
17-L1G2.0W5JFH7-4	02-01-89	Certification Review Sheet

## NOTES:

- (1) Please refer to manufacturer's HP lists (Attachment I) for correct dynotest HP settings based on model and equipment.
- (2) If two test weights are listed, the lower weight will be used for testing.
- (3) Letter derivative codes are the same as corresponding numeric codes except as indicated.

ISSUED: 02-01-89

REV. NO.: 001

002 (RC L1-030)

17-L1G2.0W5JFH7-Index 1 (1990)

## AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET GASOLINE-FUELED PASSENGER CARS

## VEHICLE MODELS:

## <u>1 J C 3 7</u> (EXAMPLE)

TENTOLE HOBELS.	1 0 c 3 7 (EXAMPLE	- /		
Digit 1 Selling Division	Digit 2 - Bo	ody Designation		
1-Chevrolet 2-Pontiac 3-Oldsmobile 4-Buick 6-Cadillac	B-Caprice, Safari Wagon, Custon Coachbuilder Wagon Coninety-Eight, Touring, Electronate Chassis D-Brougham E-Toronado, Riviera, Eldorado, F-Camaro, Firebird, Trans_Am H-Bonneville, Eighty-Eight, Les J-Cavalier, Sunbird, Skyhawk K-Seville L-Corsica, Beretta N-Grand Am, Cutlass Calais, Sky T-Lemans V-Allante	C-Ninety-Eight, Touring, Electra, DeVille, Fleetwood, Commercial Chassis D-Brougham E-Toronado, Riviera, Eldorado, Reatta F-Camaro, Firebird, Trans_Am H-Bonneville, Eighty-Eight, LeSābre J-Cavalier, Sunbird, Skyhawk K-Seville L-Corsica, Beretta N-Grand Am, Cutlass Calais, Skylark T-Lemans V-Allante W-Grand Prix, Regal, Cutlass Supreme, Lumina Y-Corvette		
Digit 3 <u>Trim Level</u>	Digits 4 & 5	5 - Body Style		
B, C, D, E, F, H, J, K, M, N, L, P, R, S, T, U, V, W, X, Y, Z	07-2Dr Sport Coupe 08-2Dr Hatchback Coupe 19-4Dr Sedan 27-2Dr (Notchback) Coupe 35-4Dr Station Wagon 37-2Dr Hardtop Coupe 47-2Dr Hardtop Coupe	57-Dr Hardtop Coupe 67-2Dr Convertible Coupe 68-4Dr Hatchback Sedan 69-4Dr (Notchback) Sedan 87-2Dr Hatchback Coupe 90-Commercial Chassis 97-2Dr Hardtop Coupe		

ISSUED: 02-01-89

REV. NO.:

#### AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G2.OW5JFH7

PASSENGER CARS\_X LIGHT DUTY TRUCKS\_\_\_ MEDIUM DUTY VEHICLES\_\_ GAS\_X DIESEL\_\_

ENGINE TYPE: I4 LITER (CID): 1.6 (98) / 2.0 (122) EVAP FAMILY: LAO-1H

EMISSION CONTROL SYSTEM: EGR, TWC, 0'2S (TBI)

ENGINE: FRONT X MID REAR DRIVE: FWD X RWD 4WD-FT 4WD-PT

CERTIFICATION STANDARDS: .4 NOX DPA: SEE ATTACHMENT I

ENG CODE	VEH MODELS (SEE PAGE 1A)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST <u>WEIGHT</u>	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM <u>PART NO.</u>	CATALYST PART NO.
51	2JB37 2JD37 2JB69	А3	2875	16120431/ AMWU	17089050	25127553
	2JU37 2JB67		3000 3125			
-51A				16147311/ ATWA		
52	2JB37 2JD37 2JB69 2JU37	M5	2875	16120451/ AMWX	17089051	
	2JB67		3000			
52A				16147331/ ATWC		
53	2JD37 2JB37 2JB69 2JU37	А3	2750 2875	16120431/ AMWU	17089050	
	2JB67		3000			
53A				16147311/ ATWA		

ISSUED: 02-01-89 REV. NO.: 001, 003, 004, 006

17-L1G2.0W5JFH7-2 (1990)

## AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G2.0W5JFH7

PASSENGER CARS X LIGHT DUTY TRUCKS MEDIUM DUTY VEHICLES GAS X DIESEL

ENGINE TYPE: 14 LITER (CID): 1.6 (98) / 2.0 (122) EVAP FAMILY: LAO-1H

EMISSION CONTROL SYSTEM: EGR, TWC, 02S (TBI)

ENGINE: FRONT X MID REAR DRIVE: FWD X RWD 4WD-FT 4WD-PT

CERTIFICATION STANDARDS: .4 NOX DPA: SEE ATTACHMENT I

_	ENG CODE	VEH MODELS (SEE PAGE 1A)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM <u>PART NO.</u>	CATALYST PART NO.
	54	2JB37 2JD37	M5	2750	16120451/ AMWX	17089051	25127553
		2JB69 2JU37 2JB67		2875 3000			
	54A				16147331/ ATWC		
	61	2TN08 2TN19	А3	2625	16134179/ ARAU	17087248	25127798
	61A				16139559/ ASFM		
	62	2TN08 2TN19		2500 2625	16134179/ ARAU		
	62A				16139559/ ASFM		
	63	2TX08 2TN08	M4 M5	2500	16134189/ ARAW	17087249	
		2NT19	HJ	2625	7114111		
	64	2TX08 2TN08 2TN19	M4 M5	2500			

ISSUED: 02-01-89 REV. NO.: 001, 002, 003, 004, 005

### AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: L1G2.OW5JFH7

PASSENGER CARS X LIGHT DUTY TRUCKS MEDIUM DUTY VEHICLES GAS X DIESEL

ENGINE TYPE: 14 LITER (CID): 1.6 (98) / 2.0 (122) EVAP FAMILY: LAO-1H

EMISSION CONTROL SYSTEM: EGR, TWC, 02S (TBI)

ENGINE: FRONT X MID REAR DRIVE: FWD X RWD 4WD-FT 4WD-PT

CERTIFICATION STANDARDS: .4 NOX DPA: SEE ATTACHMENT I

_	ENG CODE	VEH MODELS (SEE PAGE 1A)	TRANS TYPE: A-AUTO M-MAN	EQUIV TEST WEIGHT	IGN SYSTEM (ECU/PROM) PART NO.	EGR SYSTEM <u>PART NO.</u>	CATALYST PART NO.
	66	2TS08 2TR19	А3	2750	16134199/ ARAX	17089050	25127798
	66A				16139589/ ASFR		
,	67	2TS08 2TR19		2625 2750	16134199/ ARAX		
	67A				16139589/ ASFR		
	68	2TS08 2TR19	M5	2625 <b>27</b> 50	16134209/ ARAY	17089051	
	68A				16139599/ ASFS		
	69	2TS08 2TR19		2625	16134209/ ARAY		
	69A				16139599/ ASFS		

ISSUED: 002

REV. NO.: 005