State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-86-233 Relating to Certification of New Motor Vehicles

MITSUBISHI 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 2000 model-year Mitsubishi Motors Corporation exhaust emission control systems are certified as described below for passenger cars:

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

Fuel Type: Gasoline

Engine Family: YMTXV01.8GNG

Displacement: 1.8 Liters (112 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Exhaust Gas Recirculation
Heated Oxygen Sensors (two)
Three Way Catalytic Converter
Warm Up Three Way Catalytic Converter
Sequential Multiport Fuel Injection

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

The LEV certification exhaust emission standards for this engine family in grams per mile are (Title 13, California Code of Regulations, Section 1960.1):

<u>Miles</u> 50,000	Non-Methane Organic Gases 0.075	Carbon <u>Monoxide</u> 3.4	Nitrogen <u>Oxides</u> 0.2	Formaldehyde 0.015	Carbon Monoxide (20°F) 10.0
100,000	0.090	4.2	0.3	0.013	10.0 n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for non-methane organic gases (NMOG) reflect application of a 0.94-RAF for 2000 model-year LEVs. The certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u> 50,000 100,000	Non-Methane Organic Gases 0.035 0.038	Carbon <u>Monoxide</u> 0.6 0.7	Nitrogen Oxides 0.03 0.04	Formaldehyde 0.0004 0.0004	Carbon Monoxide (20°F) 5.3
100,000	0.058	0.7	0.04	- 0.0004	n/a

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 set forth in Title 13, California Code of Regulations, Section 1960.1 ("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 NMOG fleet-average compliance-plan, if the manufacturer incurs an 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 NMOG debits incurred 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 running-loss and useful-life standards applicable to 1995 and subsequent model-year vehicles in "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles;" and that the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to "California Refueling Emission Standards and Test Procedures for 1998 and Subsequent-Model Motor Vehicles," Title 13, California Code of Regulations, Section 1978, and the listed vehicle models comply with those standards.

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 models also comply with the Board's high-altitude requirements and highway emission standards, and with the Inspection and Maintenance 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 "California Motor Vehicle Emission Control and Smog-Index 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 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) 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 Passengers 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 27 day of July 1999.

R. B. Summerfield, Chief

Mobile Source Operations Division

E	0	#	A	-	86	 2	3	3	

2000 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS

Manufacturer : Mitsubishi Motors Corporation Exh Engine Family : YMTXV01.8GNG (1.8N) Evap Engine Family : YMTXR0140A1A
All Eng Codes in Eng Fam : CA 49S 50S X ORVR : Yes X No Exh Std : CA Tier-1 TLEV LEV X ULEV SULEV ; EPA Tier-0 Tier-1 In-Use Exh Std : Full in use X Alt In Use
Veh Class(es): PC X LDT1 LDT2 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1) Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Bi-Fuel Gasoline X +1 Diesel CNG LNG LPG M85 Other (specify)
Emis Test Fuel: Indo Ph2 X CNG LPG M85 Other (specify) Diesel: 13 CCR 2282 or 40 CFR 86.113-90 or -94 Evaporative Emission Test Procedure: California Federal X
Service Accum : Std AMA Mod AMA X Mfr ADP Other (specify) MMOG Test Proc : N/A Std X Equiv R/L Test Proc : SHED X Pt Source
Engine Configuration: IL4 Displacement: 1.8 Liters/ 111.9 Cubic Inches Valves per Cylinder: 4 Rated HP: 111 @ 5500 RPM Engine : Front X Mid Rear Drive : FWD X RWD 4WD-FT 4WD-PT
Cxhaust ECS (eg., EGR, MFI, TC, CAC): EGR+HO2S(2)+TWC+WUTWC , SFI (use abbreviations per SAE J1930 SEP91)

Note) *1: Cert. emission is tested by Phase-II Evap. emission is tested by Indolene

E.O.# 1-86-233

2000 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS

Manufacturer

Mitsubishi Motors Corporation

Exh Engine Family : YMTXV01.8GNG (1.8N)

Evap Engine Family : YMTXR0140A1A

Engine Code (also list CAL/FED /BOTH)	Vehicle Models (if coded see attachment)	Trans. type *1	ETW	DPA or RLHP	(ECM/PCM)	EGR System Part No.	Catalytic Converter Part No.
ANM (BOTH)	Mitsubishi Mirage	M5 (M5FG2)			Distibutor: N/A	Valve: MD327127	Front: MR373057
NM (BOTH)	•		2625 2750		ECM:	(HC#)	Rear:
ANA (BOTH)			2625 2750		MR420756 (E2T73189)	Solenoid: MR127520	MR385625 (2E)*2
		(L4FG)	2/30			(K5T48271)	
NA (BOTH)			2750	5.8			
<u></u>			2625	5.5			

*1 : M-Manual transmission

L-Automatic transmission with lock-up

*2 : With Ni

N/A: Not Applicable