Fuel

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-86-209
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 1997 model-year Mitsubishi 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: VMT1.5VJG2EK Displacement: 1.5 Liters (89.6 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Heated Oxygen Sensors (two)
Exhaust Gas Recirculation
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 TLEV certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane Organic Gas	Carbon Monoxide	Nitrogen Oxides	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.125	3.4	0.4	0.015	10.0
100,000	0.156	4.2	0.6	0.018	n/a

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 1997 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Miles	Non-Methane Organic Gas	Carbon Monoxide	Nitrogen Oxides	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.065	1.0	0.2	0.002	7.1
100,000	0.073	1.2	0.2	0.002	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 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 NMOG fleet average 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 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 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.

Executive Order A-86-203 dated July 17, 1996 is superseded and replaced by Executive Order A-86-209.

Executed at El Monte, California this 3rd day of September 1996.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

17.16.02

E.O.# A-86-209

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS

Manufacturer : Mitsubishi Motors Corporation
Exh Engine Family : VMT1.5VJG2EK(1.5C)
Evap Engine Family: VMT1058AYM0C

All Eng Codes in Eng Fam: CA X 49S___ 50S___
Exh Std : CA Tier-1___ TLEV X LEV___ ULEV___ ZEV___ ;EPA Tier-0___ Tier-1___
Evap Std : 50K X Useful Life with R/L___
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
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___

Service Accum : Std AMA___ Mod AMA X Mfr ADP___ Other (specify)_____
NMOG Test Proc: N/A___ Std X Equiv___
R/L Test Proc : SHED___ Pt Source___
Hybrid : Type A___ B___ C___, APU Cycle (e.g., Otto, Diesel, Turbine)_____

Engine Configuration: IL4 Displacement: 1.5 Liters/ 89.6 Cubic Inches
Valves per Cylinder : 3' $ Rated HP: 92 @ 5500 RPM
Engine : Front X Mid___ Rear___
Drive : FWD X RWD___ 4WD-FT___ 4WD-PT___
Exhaust ECS (eg., EGR, MFI, TC, CAC): EGR+HO2S(2)+TWC+WUTWC+SFI
(use abbreviations per SAE J1930 SEP91)

Revised: 6/12/96

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Evap Engine Family: VMT1058AYM0C

Engine Code (also list CAL/FED/BOTH)	Vehicle Models (if coded see attachment)	Trans. Type *1	ETW	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
ACM(CAL)	Mitsubishi Mirage	M5	2625 2500	7.0 6.4	Distributor: MD326834 (T2T59471) ECM: MD319562 (E2T65780)	EGR Valve: MD327127 (K5T58993) Solenoid: MR127520 (K5T48271)	Front: MR188791 Rear: MR188781
CM(CAL)			2500 2500	6.4 5.9			
ACA(CAL)		L4	2625 2500	6.3 5.7			
CA(CAL)			2625 2500	5.8 5.3			

*1: M-Manual transmission
L-Automatic transmission with lock-up