

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-292-49-A
Relating to Certification of New Motor Vehicles

mitsubishi motor manufacturing of america, inc.

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 Motor Manufacturing of America, Inc. exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: YDSXV02.4GNG Displacement: 2.4 Liters (143 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Warm Up Three Way Catalytic Converter
- Three Way Catalytic Converter
- Heated Oxygen Sensors (Two)
- Exhaust Gas Recirculation
- 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> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Formaldehyde</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|---------------------------------|------------------------|------------------------|---------------------|-------------------------------|
| 50,000 | 0.075 | 3.4 | 0.2 | 0.015 | 10.0 |
| 100,000 | 0.090 | 4.2 | 0.3 | 0.018 | NA |

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> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Formaldehyde</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|---------------------------------|------------------------|------------------------|---------------------|-------------------------------|
| 50,000 | 0.035 | 0.6 | 0.03 | 0.0004 | 6.2 |
| 100,000 | 0.036 | 0.7 | 0.04 | 0.0004 | NA |

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 and "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 the "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 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 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 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.

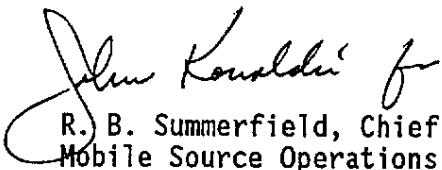
BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et 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 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 18th day of March 1999.


R. B. Summerfield, Chief
Mobile Source Operations Division

17.16.02

E.O.# 1-292-49A2000 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS

Manufacturer : Mitsubishi Motor Manufacturing of America, Inc.
 Exh Engine Family : YDSXV02.4GNG (2.4N)
 Evap Engine Family : YDSXR0165A1F

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
 Diesel ___ CNG ___ LNG ___ LPG ___ M85 ___ Other (specify) ___
 Emis Test Fuel^{*1}: 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) ___
 NMOG Test Proc : N/A ___ Std X Equiv ___
 R/L Test Proc : SHED X Pt Source ___

Engine Configuration : IL4 Displacement: 2.4 Liters/ 143.4 Cubic Inches
 Valves per Cylinder : 4 Rated HP: 147/5500 (M/T) RPM
140/5500 (A/T) 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
 (use abbreviations per SAE J1930 SEP91)

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

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Evap Engine Family : YDSXR0165A1F

| 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. |
|--|---|----------------------|------|-------------------|-----------------------------------|-------------------------------------|------------------------------------|
| ANM-S (BOTH) | Mitsubishi Eclipse | M5 (M5FS1) | 3250 | 6.2 | ECM(M/T): MR420673 | Valve: MD353689 | Front: MR212859 |
| NM-S (BOTH) | | | | 5.5 | (E2T75776#) | (ST#) | Rear: |
| ANA-SM (BOTH) | | L4 | 3375 | 6.2 | MR420674 | Solenoid: | MR281011*2 |
| ANA-S (BOTH) | | (L4FS1) | | 6.1 | (E2T76472#) | MR127520 | |
| NA-S (BOTH) | | | 3250 | 5.5 | MR420675 (E2T76473#) | (K5T48271) | |
| ANA (BOTH) | Mitsubishi Galant | L4 (L4FS1) | 3625 | 6.6 | PCM: MR420672 | Valve: MD353689 | Front: MR212859 |
| NA (BOTH) | | | | | (E2T76471#) | (ST#) | Rear: MR281011*2 |
| | | | | | | Solenoid: MR127520 (K5T48271) | |

- *1 : M-Manual transmission
L-Automatic transmission with lock-up and manual shift mode
- *2 : With Ni