

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-16-231
Relating to Certification of New Motor Vehicles

MAZDA MOTOR 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 1998 model-year Mazda Motor Corporation exhaust emission control systems are conditionally certified as described below for light-duty trucks:

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

Fuel Type: Gasoline

Engine Family: WTKXT03.02DM Displacement: 3.0 Liters (180 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converters (two)
Heated Oxygen Sensors (two)
Sequential Multiport Fuel Injection

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

The non-methane organic gases (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) TLEV certification exhaust emission standards for this engine family in grams per mile are:

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
3751-5750	50,000	0.160	4.4	0.7	0.018	12.5
	100,000	0.200	5.5	0.9	0.023	n/a

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

The certification exhaust emission values set forth for NMOG reflect application of a 0.98 RAF for 1998 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>	<u>HCHO</u>	<u>CO (20°F)</u>
3751-5750	50,000	0.065	0.7	0.03	0.00049	5.0
	100,000	0.071	0.7	0.03	0.001	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 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 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 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 are conditionally certified pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines") because the on-board diagnostic II system of the listed vehicle models has been determined to have three deficiencies. The listed vehicle models are approved subject to Mazda Motor Corporation paying a fine of fifty dollars (\$50.00) per vehicle for the third deficiency in the listed engine family that is produced and delivered for sale in California.

The vehicle manufacturer shall pay the full fine owed pursuant to this conditional certification to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty days after the end of the 1998 model year production period; failure to pay the total fine within this period shall be cause for the Executive Officer to rescind the certification ab initio and all vehicles sold in California under this conditional certification shall be deemed uncertified and be subject to a civil penalty of up to \$5,000 per vehicle pursuant to Health and Safety Code Section 43154.

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 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."

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.).

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 4th day of September 1997.



R. B. Summerfield, Chief
Mobile Source Operations Division

Manufacturer Mazda Motor Corporation Exh Eng Fam: WTKXT03.02DM Evap Fam: WTKXE0120BFA
 All Engine Codes in Engine Family: CA X 49S 50S AB965 , ORVR: YES NO X
 Exh Std: CA Tier-1 TLEV X LEV ULEV SULEV , US EPA Tier-1
 Veh Class (es): PC LDT1 LDT2 X MDV1 MDV2 MDV3 MDV4 MDV5
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)
 Fuel Type (s): Dedicated X Flex-Fuel Duel-Fuel Bi-Fuel Gasoline X Diesel
 CNG LNG LPG M85 Other (specify)
 Exh Emiss Test Fuel (s): Indo CBG X CNG LPG M85 Other (specify) Phase II
 Diesel: 13 CCR 2282 40CFR 86.113-90 40 CFR 86.113-94
 Evaporative Emission Test Procedure: California X Federal
 Service Accum: Std. AMA X Mod AMA Mfr ADP Other (specify)
 NMOG Test Procedure: N/A Std Equip X R/L Test Proc: SHED PT Source X
 Engine Configuration: V-6 Displacement: 3.0 / Liters 180 / Cubic Inches
 Valves per Cylinder: 3 Rated HP: 170 @ 5800 RPM
 Engine: Front X Mid. Rear Drive: FWD RWD X 4WD-FT 4WD-PT
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): HO2S/TWC/SFI

(Use abbreviations per SAE J1930 MAY91)

Engine Code (also list CA/ 49ST/50ST)	Vehicle Models (if coded see attachment)	Trans. Type (M5, A4 etc.)	ETW or Test Wt.	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalyst Part No.
2JEETAA7	Mazda MPV	A4	4000	11.0 *1	Distributor: JE96 ECU: JEC4	N/A	JEC4
2JEETAAV				10.8 *2			
				12.1 *1			
				11.8 *2			

Certification Standards (50,000 mile/ 100,000 mile/120,000 mile)

HC (g/mi)	---	---	---
NMOG (g/mi)	0.160	0.200	---
Non-methane HC (g/mi)	---	---	---
CO (g/mi)	4.4	5.5	---
NOx (g/mi)	0.7	0.9	---
HWFET NOx (g/mi)	1.4	1.8	---
Evap. (EPA : g/test)	---	---	---
Evap. (ARB : g/test)	---	2.0	---
Evap. (Abbrev : g/test)	---	2.5	---
Running Loss (g/test)	---	0.05	---
Spit Back (g/test)	---	1.0	---
Cold CO (g/mi)	12.5	---	---
Idle CO for LDT (%)	---	---	---
HCHO (mg/mi)	18	23	---
CST-HC	---	---	---
CST-CO	---	---	---
NMOG (g/mi) *1	0.32	---	---
HCHO (mg/mi) *1	36	---	---

*1:P195/75R 15 tires
*2:P215/65R 15 tires

Revisions:

1290

Issue date:	June 27, 1997				
Rev. No.					
Date					