State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-16-246 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 2000 model-year Mazda Motor Corporation exhaust emission control systems are certified as described below for passenger cars:

<u>Fuel Type</u>: Gasoline

Engine Family: YTKXV02.5VB4 Displacement: 2.5 Liters (152 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converter
Dual Heated Oxygen Sensors
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 certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane	Carbon	Oxides of	Carbon
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Nitrogen</u>	<u>Monoxide (20°F)</u>
50,000	0.25	3.4	0.4	10.0
100,000	0.31	4.2	0.6	n/a

The certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	Non-Methane	Carbon	Oxides of	Carbon
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Nitrogen</u>	<u>Monoxide (20°F)</u>
50,000	0.14	1.4	0.2	7.0
100,000	0.15		0.2	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 vehicle manufacturer is certifying the listed vehicle models to the "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 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 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.).

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 July 1999.

R. B. Summerfield, Chief

Mobile Source Operations Division

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(also list CA/ (if coded see attachment) etc.) Test Wt. RLHP Part No. Part	Manufacturer	Mazda Motor	Corporation	Exh Eng Far	n: YTKX	.V02.5VB4 E	vap Fam: <u>YTK</u>	KRO150AFA
Exh Sid: CA Tier-1 X TLEV LEV ULEV SULEV USEPA Tier-1 X MOVA MOV5 MDV3 MDV4 MDV5 MDV5 MDV4 MDV5 MDV5 MDV5 MDV5 MDV5 MDV5 MDV5 MDV5	All Engine Codes	s in Engine Fa	mily: CA	498	50S X	AB965	ORVR: YES	X NO
MOVE	Exh Std: CA	Tier-1 X	TLEV	LEV	ULEV	SULEV	. US EP	A Tier-1 X
Specify Spec	Veh Class (es): F	C X LE	DT1 LD	Γ2 ΜΙ	DV1	MDV2	MDV3 MD\	/4 MDV5
Every Ever	Single Cert Std fo	or Multi-Class I	Eng Fam :	V/A (spe	ecify : N/A I	DT1 MDV1 ME	NS MOV3 MD	1/4)
CNG	Fuel Type (s):	Dedicated	 ! x Flex-Fu	el Du	el-Fuel	Ri-Eugl	Gasolino V	rv T)
Diesel: 13 CGR 2282	,, ,,	CNG	ING	1 DC	W05	Other	Gasoline A	Diesel
Diesel: 13 CGR 2282	Eyh Emiss Tost E	uel (e) : Inde		CNC	- ¹⁰¹⁰⁵ -	Other	(specify)	
Evaporative Emission Test Procedure California Federal X	EMI EIIMOS TESCT	oer (s). Mod	X CBG_		LPG _	M85	Other (specif	y)
Non-methane HC (g/mi) Non-	Evoposetivo Caria	Dies 	er: 13 CCR 220		40CFR 8	6.113-90	. 40 CFR	86.113-94
MOG Test Procedure	evaporative emis	ision rest Pro	cedure : Califoi	rnia ——	Federa	al X		
Adves per Cylinder: 4	Service Accum :	Std. AMA	X Mod AM	Α	Mfr ADP_	Other ((specify)	
Adves per Cylinder: 4	NMOG Test Proci	edure : N/A	<u>X</u> Std_	Ec	juiv "	R/L Test Proc	: SHED F	T Source X
alves per Cylinder: 4	Engine Configura	tion:V-6	Displaceme	nt: 2.5	1	Liters 152.	4 ./ (Cubic Inches
Analysis Front X Mid. Rear Drive: FWD X RWD 4WD-FT 4WD-PT	√alves per Cylind∈	er: 4		Ŕ	ated HP :	170	@ 58	:00 RP
Catalyst	Engine : Front	X Mid.	Rear	. D	rive: FWD	X RWD	4WD-FT	4WD-PT
(Use abbreviations per SAE J1930 MAY91) Ingine Code (also list CA/ (if coded see (M5, A4 or or Or (ECM/PCM) System (ECM/PCMS)) Authorized (Also list CA/ (If coded see (M5, A4 or Or Or Or (ECM/PCM) System (ECM/PCMS)) BKLDTAAW Millenia A4 3625 5.8 Distrubutor: EGR Control Valve: ECU: KF34 ECU: KLG8 KLP2 Certification Standards (50,000 mile/ 100,000 mile/120,000 mile) HC (g/mi) 0.41 , Non-methane HC (g/mi) 0.25 .0.31 , NOx (g/mi) 0.4 .0.6 , HWFET NOX (g/mi) 0.5 .0.8 Evap. (AAB: g/test) ,2.0 , Evap. (AAB: g/test) ,2.5 , Running Loss (g/test) ,0.05 , Spit Back (g/test) ,0.05 , Spit Back (g/test) ,0.05 , Spit Back (g/test) ,0.05 , Cold CO (g/mi) 10.0 , ,0.2 , CST -HC at Idle: 100. at 2500 rpm: 100 at Idle: 0.5. at 2500 rpm: 0.5	- Exhaust ECS (e.g.	., MFI, EGR. T			2 H	OSCHACECER	ET / 110 % (G)	
Catalyst		, , , = = , .			Ilsa abbrou	viations per SAE	11020 MAYO1)	
(also list CA/ (if coded see attachment) etc.) Test Wt. RLHP Part No. Part				· · · · · · · · · · · · · · · · · · ·	OGC ADDIEV	nations per SAC	DISOUNATEI)	
## A9ST/50ST) attachment) etc.) Test Wt. RLHP Part No.	ingine Code	Vehicle Model	s Trans. Type	ETW	DPA	Ignition	EGR	
### Apstroscription	(also list CA/	•	(M5, A4	or	or	(ECM/PCM)	System	Catalyst
Millenia	49ST/50ST)	attachment)	etc.)	Test Wt.				
Certification Standards (50,000 mile/ 100,000 mile/120,000 mile) HC (g/mi)	BKLDTAAW	Millenia	A4	3625	5.8	Distrubutor:		
Certification Standards (50,000 mile/ 100,000 mile/120,000 mile) HC (g/mi)						1		1223
Certification Standards (50,000 mile/ 100,000 mile/120,000 mile) HC (g/mi)				-		ECU:	KLG8	
HC (g/mi) Non-methane HC (g/mi) CO (g/mi) NOx (g/mi) NOx (g/mi) Evap. (EPA : g/test) Evap. (ABB : g/test) Evap. (Abbrev : g/test) Bunning Loss (g/test) ORVR (g/gallon) Cold CO (g/mi) CST -CO Q.4 0.5 0.31 0.2 1.0 1.				<u> </u>		KLP2		
HC (g/mi) Non-methane HC (g/mi) CO (g/mi) NOx (g/mi) NOx (g/mi) Evap. (EPA : g/test) Evap. (ABB : g/test) Evap. (Abbrev : g/test) Bunning Loss (g/test) ORVR (g/gallon) Cold CO (g/mi) CST -CO Q.4 0.5 0.31 0.2 1.0 1.								
Non-methane HC (g/mi) CO (g/mi) NOx (g/mi) N	Certification	Standards	(50,000 mile/	100,000 mil	e/120,000	mile)		
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NOx (g/mi) NOx (g/mi) HWFET NOx (g/mi) Evap. (EPA: g/test) Evap. (ARB: g/test) Evap. (ABbrev: g/test) Running Loss (g/test) Spit Back (g/test) ORVR (g/gallon) Cold CO (g/mi) CST-HC CST-CO at Idle: 100. at 2500 rpm: 100 at Idle: 0.5. at 2500 rpm: 0.5	Non-methane E	-U -C (a/mi) 0	25 031	, ***	=			
NOx (g/mi) HWFET NOx (g/mi) Evap. (EPA : g/test) Evap. (ARB : g/test) Evap. (Abbrev : g/test) Running Loss (g/test) Spit Back (g/test) CORVR (g/gallon) COId CO (g/mi) CST -HC CST -CO At Idle: 100. at 2500 rpm :0.5	CO (g/mi)	3.	4 /4.2	1 844	•			-
HWFET NOx (g/mi) 0.5 , 0.8 , Evap. (EPA: g/test), 2.0 , Evap. (ARB: g/test), 2.5 , Running Loss (g/test), 0.05 , Spit Back (g/test), 1.0 , ORVR (g/gallon), 0.2 , Cold CO (g/mi) 10.0 ,, CST-HC at Idle: 100. at 2500 rpm: 100 CST-CO at Idle: 0.5, at 2500 rpm: 0.5					•			
Evap. (AR8 : g/test)				, •••		· .		
Evap. (Abbrev: g/test)				,		·		į
Running Loss (g/test)								İ
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ORVR (g/gallon) , 0.2 , Cold CO (g/mi) 10.0 , , CST-HC at Idle: 100, at 2500 rpm:100 CST-CO at Idle: 0.5, at 2500 rpm:0.5								
CST-HC at Idle: 100, at 2500 rpm:100 CST-CO at Idle: 0.5, at 2500 rpm:0.5	ORVR (g/gallon	1)					1	
CST-CO at Idle: 0.5, at 2500 rpm :0.5								
visions:								
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