State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-340 Relating to Certification of New Motor Vehicles

TOYOTA 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 1999 model-year Toyota Motor Corporation exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: XTYXV03.0GXB <u>Displacement</u>: 3.0 Liters (183 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection Exhaust Gas Recirculation Dual Air Fuel Ratio Sensors Dual Warm Up Three Way Catalytic Converters Three Way Catalytic Converter Heated Oxygen Sensor

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:

Miles	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen Oxides	<u>Formaldehyde</u>	Carbon <u>Monoxid</u> e (20 ⁰ F)
50,000	0.075	3.4	0.2	0.015	10.0
100,000	0.090	4.2	0.3	0.018	n/a

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

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a 0.94 RAF for 1999 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

Miles	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen Oxides	Formaldehyde	Carbon <u>Monoxide (20°F)</u>
50,000	0.055	0.5	0.1	0.001	5.7
100,000	0.078	0.6	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 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 manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year 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").

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 3^{κ}

_ day of June 1998.

R. B. Summerfield, Chief

Mobile Source Operations Division

Manufacturer TOVOT	Page
Manufacturer: TOYOTA Exh Eng Fam: XTYXV03.0GXB Evap Fam: XT	Y X R 0 1 3 5 A K 1
All Eng Codes in Eng Fam: CA x 49S 50S AB965 Exh Std: CA Tier-1 TLFV LFV AND	ES X NO
Exh Std: CA Tier-1 TLEV LEV X ULEV SULEV Veh Class(es): PC x LDT1 LDT2 MDV1 MDV2 MDV2 MDV2	US EPA Tier-I
Veh Class(es): PC x LDT! LDT2 MDV! SULEV Single Cert Std for Multi-Class Eng Fam: N/A (Specific N/A LDT)	MDV5
Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV1, MDV2,	V3 MDV1) —
Fuel Type(s): Dedicated x Flex-Fuel Dual-Fuel Bi-Fuel Gasoline	S Dieral
CNG LNG LPG M85 Other (specify)	<u></u>
	. C .
Evaporative Emission Test Procedure: 13 CCR 2282 40 CFR 86 113-90 40 CFR	TFR 86 113-91
Engine Configuration. V-6 Displacement: 3.0 Liters 183 Ct	thic Inches
Valves per Cylinder: 4 Rated HP1 192@ 5200*2	RPM
Engine: Front X Mid Rear Drive: FWD X WD 4WD-FT Exhaust ECS (e.g., MFL, EGR, TC, CAC): SFLEGP 24 (ESCAL)	4W D - PT
_ STILEGR.2A7FS(*1),2W U-1 W C.1 W C.1[O2S	
(IISE Abbieviations par CA E 11020 III) AS	
Note *1: A/F S means air fuel ratio sensor Note *2: Applied to carline CAMRY & CAMRY COLARA	
The same country and the country of	
Note *3: Applied to carline AVALON	

Engine		T	T				
Code			ETW				
also list		(M5,	OI.		Ignition		Catalytic
CA/49S/	Vehicle Models	A4,	Test	DPA or	(ECM/PCM)	EGR system	Converte
50ST	(if coded see attachment)	etc.)	Wt	RLHP	Part No.	Part No.	Part No.
3	MCV20L-AEPGKA	L4	3625	6.7	89661-06640*4*9	25620-20020	V03*6
	MCV20L-AEPNKA				89661-3T410*5*9		V02*7
					89661-06641*4*10		V01*7
					89661-3T411*5*10		U13*8
	MCV20L-CEPGKA				89661-06640*9		V03*6
	MCV20L-CEPNKA				89661-06641*10		V02*7
	MCV20L-GCPNKA			5.8/6.1			V01*7
				L			U92*6
	MCX10L-AEPGKA		3750	5.7	89661-07220*9		
I	MCX10L-AEPNKA				89661-07221*10*11		
	MCX10L-AESGKA				89661-070222*12		
	MCX10L-AESNKA	ĺ		}			

Comments : Please refer to manufacturer's HP list for correct dyno test HP setting based on model and equipment.

Note *4 : Maker : DENSO MANUFACTURING TENNESSEE INC.

*5 : Maker ; DENSO CO., LTD.

*6 : Maker; TABC, INC.

*7 : Maker ; CATALER INEDUSTRIAL CO., LTD.

*8 : Maker; TOYOTA MOTOR CORPORATION

*9 : Before running change 99-TR-6

*10 : After running change 99-TR-6

*11 : Before running change 99-TR-17

*12: After running change 99-TR-17

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Issued: 04/01/98 Rev.4: 05/19/98 99-TR-6: 09/30/98 99-TR-17: 04/08/99

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TOYOTA

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1999MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

VEHICLE MODELS:

CAMRY SOLARA	AVALON	CAMRY	
MCV20L-GCPNKA	MCX10L-AEPGKA	MCV20L-AEPGKA	
	MCX10L-AEPNKA	MCV20L-AEPNKA	
	MCX10L-AESGKA	MCV20L-CEPGKA	
	MCX10L-AESNKA	MCV20L-CEPNKA	

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