

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-361  
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 2000 model-year Toyota Motor Corporation exhaust emission control systems are certified as described below for passenger cars:

Exhaust Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: YTYXV01.8FFD Displacement: 1.8 Liters (110 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Dual Three Way Catalytic Converters  
Three Way Catalytic Converter  
Dual Heated Oxygen Sensors  
Heated Oxygen Sensor  
Sequential Multiport Fuel Injection

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

<u>Miles</u>	<u>Non-Methane Organic Gases</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen</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	n/a

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 Organic Gases</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.038	1.0	0.1	0.0003	3.5
100,000	0.047	1.1	0.2	0.0004	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 set forth in Title 13, California Code of Regulations, Section 1960.1 ("California Exhaust Emission Standards and Test Procedures for 1988 Through 2000 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 through 2005 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 Through 2000 Model Motor Vehicles," and that 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 Through 2000 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 models also comply with the Board's high-altitude requirements and highway emission standards, and with the Inspection and Maintenance standards in place at the time of certification as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 Through 2000 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

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 Through 2000 Model Passengers Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "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 21 day of December 1999.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division

2000 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: TOYOTA Exh Eng Fam: YTYXV01.8FFD Evap Fam: YTYXR0115AK1  
 All Eng Codes in Eng Fam: CA     49S     50S x AB965    , ORVR: YES x NO      
 Exh Std: CA Tier-1     TLEV     LEV x ULEV     SULEV    , US EPA Tier-1      
 Veh Class(es): PC x LDT1     LDT2     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     Dual-Fuel     Bi-Fuel     Gasoline x Diesel      
 Exh Emiss Test Fuel(s): CNG     LNG     LPG     M85     Other (specify)      
 Evaporative Emission Test Procedure: Indo     Diesel:     CBG x CNG     LPG     M85     Other (specify)      
 Service Accum: Std AMA     California     Federal x 40 CFR 86.113-90     40 CFR 86.113-94      
 NMOG Test Procedure: N/A     Mod AMA     Mfr ADP x Other (specify)      
 Engine Configuration I-4 Displacement: 1.8 Liters     R/L Test Proc: SHED x Pt Source      
 Valves per Cylinder: 4 Drive: FWD     WD x 4WD-FT     4WD-PT      
 Engine: Front     Mid x Rear     Rated HP1: 138@6,400 RPM      
 Exhaust ECS (e.g., MFI, EGR, TC, CAC):     SFI,2H02S,2TWC,TWC,HO2S  
 (use abbreviations per SAE J1930 JUN93)

Engine Code (also list CA/49S/50ST)	Vehicle Models (if coded see attachment)	Trans. (M5, A4, etc.)	ETW or Test Wt	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR system Part No.	Catalytic Converter Part No.
I	ZZW30L-AKMQHA	M5	2625	7.9	89661-17600	N/A	X05 ZZ001

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

VEHICLE MODELS:

MR2  
ZZW30L-AKMQHA