

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-373
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 light-duty trucks:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: YTYXT02.7FFJ Displacement: 2.7 Liters (164 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converters (two)
Air Fuel Ratio Sensor
Heated Oxygen Sensor
Exhaust Gas Recirculation
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) LEV 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>
0-3750	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 LEV 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>
0-3750	50,000	0.044	0.7	0.1	0.001	3.2
	100,000	0.050	0.8	0.1	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 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.

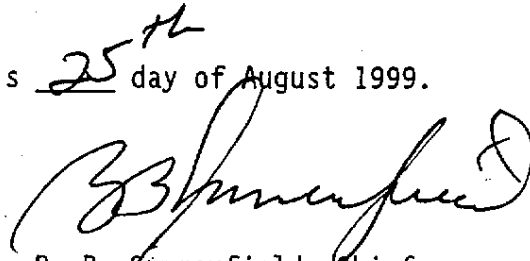
BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

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 25th day of August 1999.

A handwritten signature in black ink, appearing to read "R. B. Summerfield", is written over the printed name below.

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: YTYXT02.7FFJ Evap Fam: YTYXE0095AE0
 All Eng Codes in Eng Fam: CA ___ 49S ___ 50S x AB965 ___ , ORVR: YES ___ NO x
 Exh Std: CA Tier-1 ___ TLEV ___ LEV x ULEV ___ SULEV ___ , US EPA Tier-1 ___
 Veh Class(es): PC ___ LDT1 x 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 ___
 CNG ___ LNG ___ LPG ___ M85 ___ Other (specify) _____
 Exh Emiss Test Fuel(s): Indo ___ CBG x CNG ___ LPG ___ M85 ___ Other (specify) _____
 Diesel: 13 CCR 2282 ___ 40 CFR 86.113-90 ___ 40 CFR 86.113-94 ___
 Evaporative Emission Test Procedure: California ___ Federal x
 Service Accum: Std AMA ___ Mod AMA ___ Mfr ADP x Other (specify) _____
 NMOG Test Procedure: N/A ___ Std x Equiv ___ R/L Test Proc: SHED x Pt Source ___
 Engine Configuration: I-4 Displacement: 2.7 Liters 164.4 Cubic Inches
 Valves per Cylinder: 4 Rated HPI: 150@4800 RPM
 Engine: Front x Mid ___ Rear ___ Drive: FWD ___ RWD x*2 4WD-FT ___ 4WD-PT x*3
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): SFI,EGR,A/F S(*1),TWC(2),HO2S
 (use abbreviations per SAE J1930 JUN93)

- Note *1 : A/F S means Air-fuel ratio sensor.
- Note *2 : Applied to truck line TOYOTA TACOMA 2WD
- Note *3 : Applied to truck line TOYOTA TACOMA 4WD

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.
1 1R1	RZN161L-TRMDKAB RZN171L-CRMDKAB	M5	3625 3750	13.6/14.0/13.9	89661-04620*1 89661-04621*2	25620-75040	Q11 U69
2 2R1	RZN161L-TRMDKAB RZN171L-CRMDKAB	M5	3625 3750	15.0/15.4/15.3			
3 3R1	RZN161L-TRPDKAB RZN191L-TRPDKAB RZN196L-CRPDKAB	L4	3625 3500	13.6/14.0/13.9 13.7/14.1/14.4	89661-04630*1 89661-04631*2 89661-04640 89661-04641*2	25620-75050	
4 4R1	RZN161L-TRPDKAB RZN191L-TRPDKAB RZN196L-CRPDKAB	L4	3750 3500 3625	15.0/15.4/15.3 15.0/15.5/15.8	89661-04360 89661-04640 89661-04641*2		

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

Note *1 : Before Running change 00-TR-9. *2 : After Running change 00-TR-9.

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

Manufacturer: TOYOTA

Exh Eng Fam: YTYXT02.7FFJ

Evap Fam: YTYXE0095AE0

VEHICLE MODELS:

TOYOTA TACOMA 2WD

RZN191L-TRPDKAB

RZN196L-CRPDKAB

TOYOTA TACOMA 4WD

RZN161L-TRMDKAB

RZN161L-TRPDKAB

RZN171L-CRMDKAB