

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-331  
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 1998 model-year Toyota Motor Corporation exhaust emission control systems are certified as described below for light-duty trucks:

Fuel Type: Gasoline

Engine Family: WTYXT03.0BBP Displacement: 3.0 Liters (182.7 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

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

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:

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
3751-5750	50,000	0.32	4.4	0.7	12.5
	100,000	0.40	5.5	0.97	n/a

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

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
3751-5750	50,000	0.15	1.2	0.2	3.1
	100,000	0.16	1.2	0.28	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 non-methane organic gas (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 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 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.

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 25<sup>th</sup> day of July 1997.



per R. B. Summerfield, Chief  
Mobile Source Operations Division

1998 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: TOYOTA Exh Eng Fam: WTYXT03.0BBP Evap Fam: WTYXE0115AE1  
 All Eng Codes in Eng Fam: CA     49S     50S x AB965     , ORVR: YES     NO x  
 Exh Std: CA Tier-1 x TLEV     LEV     ULEV     SULEV     , US EPA Tier-1 x  
 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     Dual-Fuel     Bi-Fuel     Gasoline x Diesel      
                   CNG     LNG     LPG     M85     Other (specify)      
 Exh Emiss Test Fuel(s): Indo x CBG     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 x Std     Equiv     R/L Test Proc: SHED x Pt Source      
 Engine Configuration: V-6 Displacement: 3.0 Liters 182.7 Cubic Inches  
 Valves per Cylinder: 4 Rated HP1: 194@5200 RPM  
 Engine: Front x Mid     Rear     Drive: FWD x RWD     4WD-FT     4WD-PT      
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): SFI,2HO2S,HO2S,TWC

(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.
1	MCL10L-GFSDKA MCL10L-SESDKA	L4	4000 3875	7.8/8.6 7.8	89661-08010	N/A	U99*1
2	MCL10L-GFSDKA MCL10L-GFSGKA MCL10L-PFSDKA MCL10L-PFSGKA MCL10L-SESDKA	L4	4250	8.6/9.5			
			3875	8.6			

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

Note \*1: Maker, TOYOTA MOTOR CORPORATION

VEHICLE MODELS:

- SIENNA
- MCL10L-GFSDKA
  - MCL10L-SESDKA
  - MCL10L-GFSGKA
  - MCL10L-PFSDKA
  - MCL10L-PFSGKA