

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-319  
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 passenger cars:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: WTYXV02.2GXB Displacement: 2.2 Liters (132 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection  
Exhaust Gas Recirculation  
Air Fuel Ratio Sensor  
Warm Up Three Way Catalytic Converter  
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:

<u>Miles</u>	<u>Non-Methane Organic Gas</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</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 gas (NMOG) reflect application of a 0.94 RAF for 1998 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	<u>Non-Methane Organic Gas</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.046	0.6	0.1	0.001	3.3
100,000	0.048	0.6	0.2	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 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.).

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 23<sup>rd</sup> day of July 1997.



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: WTYXV02.2GXB Evap Fam: WTYXR0135AK1  
 All Eng Codes in Eng Fam: CA  49S \_\_\_ 50S \_\_\_ AB965 \_\_\_ ORVR: YES  NO \_\_\_  
 Exh Std: CA Tier-1 \_\_\_ TLEV \_\_\_ LEV  ULEV \_\_\_ SULEV \_\_\_ US EPA Tier-1 \_\_\_  
 Veh Class(es): PC  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  Flex-Fuel \_\_\_ Dual-Fuel \_\_\_ Bi-Fuel \_\_\_ Gasoline  Diesel \_\_\_  
 CNG \_\_\_ LNG \_\_\_ LPG \_\_\_ M85 \_\_\_ Other (specify) \_\_\_  
 Exh Emiss Test Fuel(s): Indo \_\_\_ 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 \_\_\_  
 Service Accum: Std AMA \_\_\_ Mod AMA \_\_\_ Mfr ADP  Other (specify) \_\_\_  
 NMOG Test Procedure: N/A \_\_\_ Std  Equip \_\_\_ R/L Test Proc: SHED  Pt Source \_\_\_  
 Engine Configuration: I-4 Displacement: 2.2 Liters 132.0 Cubic Inches  
 Valves per Cylinder: 4 Rated HP1: 130@5200 RPM  
 Engine: Front  Mid \_\_\_ Rear \_\_\_ Drive: FWD  RWD \_\_\_ 4WD-FT \_\_\_ 4WD-PT \_\_\_  
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): SFI,EGR,A/F S(\*1),WU-TWC,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.
1	SXV20L-CEMDKA	M5	3375	6.7	89661-06500	25620-74320	U03*2 U97*3
2	SXV20L-CEMDKA		3375	7.4	89661-06550		
3	SXV20L-CEPDKA	L4	3375	6.7	89661-3T270	25620-74330	
4	SXV20L-AEPGKA		3500	7.4	89661-3T290		
	SXV20L-AEPNKA		3375	3500	89661-06510		
	SXV20L-CEPDKA				89661-06560		
	SXV20L-CEPGKA						
	SXV20L-CEPNKA						

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

- Note\*1 : A/F S means Air-Fuel ratio sensor.
- \*2 : Maker ; TOYOTA MOTOR CORPORATION
- \*3 : Maker ; TABC, Inc.

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

Manufacturer: TOYOTA      Exh Eng Fam: WTYXV02.2GXB      Evap. Fam: WTYXR0135AK1

VEHICLE MODELS:

CAMRY

- SXV20L-AEPGKA
- SXV20L-AEPNKA
- SXV20L-CEMDKA
- SXV20L-CEPDKA
- SXV20L-CEPGKA
- SXV20L-CEPNKA