State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-362
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:

Emission Standard Category: Ultra-Low Emission Vehicle (ULEV)

Fuel Type: Compressed Natural Gas (CNG)

Engine Family: YTYXV02.2PPA Displacement: 2.2 Liters (132 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Warm Up Three Way Catalytic Converter
Three Way Catalytic Converter
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 ULEV certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane Organic Gases	Carbon Monoxide	Oxides of Nitrogen	Formaldehyde
50,000	0.040	1.7	0.2	0.008
100,000	0.055	2.1	0.3	0.011

The certification exhaust emission values set forth for non-methane organic gases (NMOG) reflect application of a reactivity adjustment factor (RAF) for CNG-fueld passenger car ULEVs, and the addition of the product of the methane exhaust emission value and a RAF for methane emission of CNG-fueled passenger car ULEVs.

Reactivity Adjustment Factor for NMOG Mass Emission: 0.43

Reactivity Adjustment Factor for Methane Mass Emission: 0.0047

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

Miles	Non-Methane Organic Gases	Carbon Monoxide	Oxides of Nitrogen	Formaldehyde
50,000	0.003	0.2	0.001	0.0002
100,000	0.003	0.2	0.001	0.0002

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 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.).

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 31st day of August 1999.

R. B. Summerfield, Chief
Mobile Source Operations Division

E.O.# A-14-362

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

Manufacturer: TOYOTA Exh Eng Fam: YTYXV02.2PPA Evap Fam: YTYXR00000W1

All Eng Codes in Eng Fam: CA ___ 49S ___ 50S _x_ AB965 ___ , ORVR: YES ___ NO _x_

Exh Std: CA Tier-1 ___ TLEV ___ LEV ___ ULEV _x_ 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 ___ Diesel ___
CNG _x_ LNG ___ LPG ___ M85 ___ Other (specify) _____

Exh Emiss Test Fuel(s): Indo ___ CBG ___ CNG _x_ 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) Assigned DF

NMOG Test Procedure: N/A ___ Std _x_ Equiv ___ R/L Test Proc: SHED ___ Pt Source ___

Engine Configuration: I-4 Displacement: 2.2 Liters 132 Cubic Inches

Valves per Cylinder: 4 Rated HP1: 118@5200 RPM

Engine: Front _x_ Mid ___ Rear ___ Drive: FWD _x_ 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)

Note *1 : A/F S means air fuel ratio sensor

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	SXV23L-AEPNCA	L4	3625	6.7	89666-33070*1 89666-33071*2	25620-74330	Front: S28 Rear: U19

Comment : Please refer to manufacturer's HP list for correct dyno HP setting based on model and equipment.
Note *1 : Before running change 00-TR-23
*2 : After running change 00-TR-23

VEHICLE MODELS:

CAMRY(CNG)
SXV23L-AEPNCA