File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-307
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 1997 model-year Toyota Motor Corporation exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: VTY2.01JG2GK Displacement: 2.0 Liters (121.9 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection
Exhaust Gas Recirculation
Oxygen Sensors (two)
Three Way Catalytic Converters (two)

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

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) TLEV certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
0-3750	50,000	0.125	3.4	0.4	0.015	10.0
	100,000	0.156	4.2	0.6	0.018	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for NMOG reflect application of a 0.98 RAF for 1997 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
0-3750	50,000	0.075	0.7	0.1	0.0003	3.1
	100,000	0.080	0.8	0.2	0.0003	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 Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

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.).

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 12th day of August 1996.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

E.O.# A-14-307

1997 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: TOYOTA Exh Eng Fam: VTY2.01JG2GK Evap Fam: VTY1095AYME1
All Eng Codes in Eng Fam: CA x 49S 50S AB965
Exh Std: CA Tier-1 TLEV x LEV ULEV ZEV ; US EPA Tier-1
Evap std: 50K Useful Life with R/L x In-Use Exh Std: Full In Use x Alt In Use
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)
Emiss Test Fuel(s): Indo Ph2 x CNG LPG M85 Other(specify)
Diesel: 13CCR 2282 40 CFR 86.113-90 40 CFR 86.113-94
Service Accum: Std AMA x Mod AMA Mfr ADP Other(specify)
NMOG Test Procedure: N/A Std x Equiv R/L Test Proc: SHED x Pt Source
Hybrid: Type A B C , APU Cycle(e.g., Otto, Diesel, Turbine):
Engine Configuration: I-4 Displacement: 2.0 / Liters 121.9 / Cubic Inches
Valves per Cylinder: 4 Rated HP: 120 @ 5,400 RPM
Engine: Front x Mid Rear Drive: FWD x*1 RWD 4WD-FT x*2 4WD-PT
Exhaust ECS(e.g., MFI, EGR, TC, CAC): SFI, EGR,O2S(2), TWC(2)
(use abbreviations per SAE J1930 SEP91)

Note *1 : Applied to truck line RAV4 2WD.
*2 : Applied to truck line RAV4 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	SXA15L-AZMGKA SXA16L-AWMGKA SXA10L-AZMGKA SXA11L-AWMGKA	M5	2875 3000 3000 3125 3250	8.7 8.7 9.7 10.4 9.7 10.4	Before R/C 97-TR-7 : 89661-42230 89661-42250 After R/C 97-TR-7 : 89661-42231 89661-42251	25620-74300	Front: S18 Rear: 06
2	SXA15L-AZMGKA SXA16L-AWMGKA SXA10L-AZMGKA SXA11L-AWMGKA		2875 3125 3125 3250	9.6 9.6 10.7 11.4 10.7 11.4	Before R/C 97-TR-7 : 89661-42230 89661-42250 After R/C 97-TR-7 : 89661-42231 89661-42251		
3	SXA15L-AZPGKA SXA16L-AWPGKA SXA11L-AWPGKA	L4	2875 3125 3250	8.7 8.7 9.7 10.4	Before R/C 97-TR-7 : 89661-42240 89661-42260 After R/C 97-TR-7 : 89661-42241 89661-42261	25620-74310	

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

1997 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: TOYOTA Exh Eng Fam: VTY2.01JG2GK Evap Fam: VTY1095AYME1

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.
4	SXA15L-AZPGKA SXA16L-AWPGKA SXA11L-AWPGKA	L4	3000 3125 3250 3375	9.6 9.6 10.7 11.4	Before R/C 97-TR-7 : 89661-42240 89661-42260 After R/C 97-TR-7 : 89661-42241 89661-42261	25620-74310	Front: S18 Rear: 06

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

VEHICLE MODELS:

RAV4 2WD	RAV4 4WD
SXA15L-AZPGKA	SXA10L-AZMGKA
SXA15L-AZMGKA	SXA11L-AWPGKA
SXA16L-AWPGKA	SXA11L-AWMGKA
SXA16L-AWMGKA	