State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-328
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: WTYXT02.7BBH Displacement: 2.7 Liters (164.4 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection
Exhaust Gas Recirculation
Heated Oxygen Sensors (two)
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:

Loaded Vehicle Weight(lbs.)	Miles	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Carbon Monoxide (20°F)
0-3750	50,000	0.25	3.4	0.4	10.0
	100,000	0.31	4.2	0.6	n/a

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

Loaded Vehicle Weight(lbs.)	Miles	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Carbon Monoxide (20°F)
0-3750	50,000	0.09	1.9	0.1	5.7
	100,000	0.10	2.2	0.1	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 "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 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 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 10th day of June 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: WTYXT02.7BBH Evap Fam: WTYXE0115AE0
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 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 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
Service Accum: Std AMA x Mod AMA ___ Mfr ADP ___ Other (specify) ___
NMOG Test Procedure: N/A x Std ___ 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 HP1: 150@4800 RPM
Engine: Front x Mid ___ Rear ___ Drive: FWD ___ RWD x 4WD-FT ___ 4WD-PT ___
Exhaust ECS (e.g., MFI, EGR, TC, CAC): SFI,EGR,HO2S(2),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.
5	RCK10L-TRMRKA	M5	3625	12.4/13.2	Before R/C 98-TR-2: 89661-34310	25620-75040	S94
6	RCK10L-TRMRKA		3625	13.6/14.5	After R/C 98-TR-2: 89661-34311		
7	RCK10L-TRSRKA	L4	3625	12.4/13.2	Before R/C 98-TR-2: 89661-34320	25620-75050	
8	RCK10L-TRSRKA		3625	13.6/14.5	After R/C 98-TR-2: 89661-34321		

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

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

Manufacturer: TOYOTA Exh Eng Fam: WTYXT02.7BBH Evap Fam: WTYXE0115AE0

VEHICLE MODELS:

TOYOTA T100 2WD
RCK10L-TRMRKA
RCK10L-TRSRKA

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

Manufacturer: TOYOTA Exh Eng Fam: WTYXT02.7BBH Evap Fam: WTYXE0095AE0
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 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 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 x Mod AMA ___ Mfr ADP ___ Other (specify) ___
NMOG Test Procedure: N/A x Std ___ 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 HP1: 150@4800 RPM
Engine: Front x Mid ___ Rear ___ Drive: FWD ___ RWD x*1 4WD-FT ___ 4WD-PT x*2
Exhaust ECS (e.g., MFI, EGR, TC, CAC): SFI,EGR,HO2S(2),TWC
(use abbreviations per SAE J1930 JUN93)

Note *1 : Applied to truck line 4RUNNER 2WD.
Note *2 : 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	RZN161L-TRMDKAB RZN171L-CRMDKAB RZN180L-GKMSKA	M5	3625 3750	13.6/14.0/13.9 11.3/12.1	Before R/C 98-TR-2: 89661-3D420*1 89661-04370*2	25620-75040	S92*1 S91*2
2	RZN161L-TRMDKAB RZN171L-CRMDKAB RZN180L-GKMSKA		3625 3750	15.0/15.4/15.3 12.4/13.3	After R/C 98-TR-2: 89661-3D421*1 89661-04371*2		
3	RZN161L-TRPDKAB RZN171L-CRPDKAB RZN180L-GKPSKA	L4	3625 3750	13.6/14.0/13.9 11.3/12.1	Before R/C 98-TR-2: 89661-3D350*1 89661-04380*2	25620-75050	
4	RZN161L-TRPDKAB RZN171L-CRPDKAB RZN180L-GKPSKA		3625 3750	15.0/15.4/15.3 12.4/13.3	After R/C 98-TR-2: 89661-3D351*1 89661-04381*2		

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

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

Manufacturer: TOYOTA Exh Eng Fam: WTYXT02.7BBH Evap Fam: WTYXE0095AE0

VEHICLE MODELS:

4RUNNER 2WD	TOYOTA TACOMA 4WD
RZN180L-GKMSKA	RZN161L-TRMDKAB
RZN180L-GKPSKA	RZN161L-TRPDKAB
	RZN171L-CRMDKAB
	RZN171L-CRPDKAB