## State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-14-311 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:

Fuel Type: Casoline

Engine Family: VTY2.71JGKEK <u>Displacement</u>: 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	Carbon	Nitrogen	Carbon	
		<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20°F)</u>	
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	Carbon	Nitrogen	Carbon	
		<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20<sup>0</sup>F)</u>	
0-3750	50,000 100,000	0.15 0.17	2.4	0.1 0.1	5.5 n/a	

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 Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

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 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 \_\_\_\_\_\_\_ day of August 1996.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

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

Manufacturer: TOYOTA All Eng Codes in Eng Fam: CA	Exh Eng Fam: VTY2.71JGKEK 49S 50S x AB963	Evap Fam: VTY1095AYME0
Exh Std: CA Tier-1 x TLEV		ZEV; US EPA Tier-1 x
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:		LDT1, MDV1, MDV2, MDV3, MDV4)
	ex-Fuel Dual-Fuel	
CNG LNG		Bi-Fuel Gasoline x Diesel Other(specify)
Emiss Test Fuel(s): Indo x Ph2	CNG LPG M8	
	R 2282 40 CFR 86.113-9	(0)
		0 40 CFR 86.113-94 Other(specify)
NMOG Test Procedure: N/A x Sto		
Hybrid: Type A B C	APU Cycle(e.g., Otto, Diesel,	st Proc: SHED x Pt Source
Engine Configuration: I-4	Displacement: 2.7 /	
Valves per Cylinder: 4		Liters 164.4 / Cubic Inches
Engine: Front x Mid Rear		Jaco Id IVI
Exhaust ECS(e.g., MFI, EGR, TC, CAC):		$VD_{x*1} = 4WD-FT_{x*2}$
	SFI, EGR, HO2S(2), TWC	
	(use abbreviations per S	AE J1930 SEP91)

Engine Code/ (also list CA/49S 50ST)	Vehicle Models (if coded see attachmt)	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	RZN180L-GKMSKA RZN161L-TRMDKAB RZN171L-CRMDKAB	M5	3750 3500 3625	11.3, 12.3 14.0, 13.9*3, 14.6	89661-3D280*1 89661-04260*2	25620-75040	S92*1 S93*2
2	RZN180L-GKMSKA RZN161L-TRMDKAB RZN171L-CRMDKAB		3750 3625 3750	12.4, 13.5, 15.4, 15.3*3, 16.0			
3	RZN180L-GKPSKA RZN161L-TRPDKAB RZN171L-CRPDKAB	L4	3750 3500 3750	11.3, 12.3 13.9*3, 14.0, 14.6	89661-3D300*1 89661-04270*2	25620-75050	
4	RZN180L-GKPSKA RZN161L-TRPDKAB RZN171L-CRPDKAB		3750 3625 3750	12.4, 13.5 15.4, 15.9*3, 16.0			

Comment

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

equipment.

Note \*1 : Applied to 4RUNNER 2WD.

\*2 : Applied to TOYOTA TACOMA 4WD. \*3 : Added by Running Change 97-TR-12.

### VHECLE MODELS:

TOYOTA TACOMA 4WD
RZN161L-TRMDKAB RZN161L-TRPDKAB
RZN171L-CRMDKAB RZN171L-CRPDKAB

4RUNNER 2WD RZN180L-GKMSKA RZN180L-GKPSKA

Page

17.11-VTY2.71JGKEK-1

Issued : (

: 06/14/96

97-TR-12: 04/24/97