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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-315
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: VTY3.42JG2GK Displacement: 3.4 Liters (206.1 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Sequential Multiport Fuel Injection
Heated Oxygen Sensors (two)
Three Way Catalytic Converter

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)
3751-5750	50,000	0.160	4.4	0.7	0.018	12.5
	100,000	0.200	5.5	0.9	0.023	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)
3751-5750	50,000	0.146	1.8	0.2	0.001	4.9
	100,000	0.161	2.1	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 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 7th day of August 1996.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

17.11.00

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

Manufacturer: TOYOTA Exh Eng Fam: VTY3.42JG2GK Evap Fam: VTY1115AYME0
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 LDT2 x 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: V-6 Displacement: 3.4 / Liters 206.1 / Cubic Inches
Valves per Cylinder: 4 Rated HP: 190 @ 4,800 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, HO2S(2), TWC
(use abbreviations per SAE J1930 SEP91)

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	VCK21L-CRMDKA VCK21L-CRMSKA VCK21L-TRMDKA	M5	4250	15.2, 16.6	89661-34290	N/A	S95*2 S96*1
2	VCK21L-CRMDKA VCK21L-CRMSKA VCK21L-TRMDKA			16.6, 18.0			
3	VCK11L-CRSDKA VCK11L-CRSSKA VCK11L-THSDKA VCK21L-CRSDKA VCK21L-CRSSKA VCK21L-TRSDKA	L4	3875 4250 4500 4250	12.3, 13.6 13.6 15.2, 16.6 15.2, 16.6 15.2, 16.6	Before R/C 97-TR-6: 89661-0W040*1 89661-0W030*2 After R/C 97-TR-6: 89661-0W041*1 89661-0W031*2		
4	VCK11L-CRSDKA VCK11L-CRSSKA VCK11L-THSDKA VCK21L-CRSDKA VCK21L-CRSSKA VCK21L-TRSDKA		3875 3875 4500 4500 4250	13.6, 15.0 15.0 16.6, 18.0 16.6, 18.0 16.6, 18.0			

Note *1 : Applied to truck line TOYOTA T100 2WD.
*2 : Applied to truck line TOYOTA T100 4WD.

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

Manufacturer: TOYOTA Exh Eng Fam: VTY3.42JG2GK Evap Fam: VTY1115AYME0

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	VCK11L-CRMDKA VCK11L-CRMSKA VCK11L-THMDKA	M5	3875 3750	12.3, 13.6 13.6 13.6	89661-34300	N/A	S96
6	VCK11L-CRMDKA VCK11L-CRMSKA VCK11L-THMDKA		3875	13.6, 15.0 15.0 15.0	-		

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

VEHICLE MODELS:

TOYOTA T100 2WD	TOYOTA T100 4WD
VCK11L-CRMDKA	VCK21L-CRMDKA
-CRMSKA	-CRMSKA
-CRSDKA	-CRSDKA
-CRSSKA	-CRSSKA
-THMDKA	-TRMDKA
-THSDKA	-TRSDKA

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

Manufacturer: TOYOTA Exh Eng Fam: VTY3.42JG2GK Evap Fam: VTY1095AYME0
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 ___ LDT2 x 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: V-6 Displacement: 3.4 / ___ Liters 206.1 / ___ Cubic Inches
Valves per Cylinder: 4 Rated HP: 190 @ 4,800*1 RPM
183 @ 4,800 *2,*3
Engine: Front x Mid ___ Rear ___ Drive: FWD ___ RWDx*2 4WD-FT ___ 4WD-PTx*1*3
Exhaust ECS(e.g., MFI, EGR, TC, CAC): SFI, HO2S(2), TWC + TWC
(use abbreviations per SAE 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	VZN170L-CRMDKAB VZN170L-CRMGKAB	M5	3750	14.5, 14.6*4 14.9	89661-04310	N/A	S99
2	VZN170L-CRMDKAB VZN170L-CRMGKAB		3875 3750	15.9, 16.0*4 16.3			
3	VZN170L-CRPDKAB VZN170L-CRPGKAB	L4	3750	14.5, 14.6*4 14.9	Before R/C 97-TR-6: 89661-04320 After R/C 97-TR-6: 89661-04321		
4	VZN170L-CRPDKAB VZN170L-CRPGKAB		3875	15.9, 16.0*4 16.3			
7	VZN180L-GKPGKA VZN185L-GKPGKA	L4	3875 4250	12.0, 12.1 12.2, 13.3	Before R/C 97-TR-6: 89661-3D320*3 89661-3D330*2 After R/C 97-TR-6: 89661-3D321*3 89661-3D331*2		S91
8	VZN180L-GKPGKA VZN180L-GKPZKA VZN185L-GKPGKA VZN185L-GKPZKA		3875 4000 4250	13.2, 13.3 13.3 13.5, 14.7 14.7			
9	VZN185L-GKMGKA	M5	4000	12.2, 13.3	89661-3D310		
10	VZN185L-GKMGKA		4250	13.5, 14.7			

Note *1 : Applied to TOYOTA TACOMA 4WD. *3 : Applied to 4-RUNNER 4WD.
*2 : Applied to 4-RUNNER 2WD. *4 : Added by Running Change 97-TR-12.
Comments : Please refer to manufacturer's HP list for correct dyno test HP setting based on model and equipment.

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

Manufacturer: TOYOTA Exh Eng Fam: VTY3.42JG2GK Evap Fam: VTY1095AYME0

VEHICLE MODELS:

TOYOTA TACOMA 4WD	4-RUNNER 2WD	4-RUNNER 4WD
VZN170L-CRMDKAB	VZN180L-GKPGKA	VZN185L-GKMGKA
-CRMGKAB	VZN180L-GKPZKA	VZN185L-GKPGKA
-CRPDKAB		VZN185L-GKPZKA
-CRPGKAB		