

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-234
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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1994 model-year Toyota Motor Corporation exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: RTY1.5VHGOGA Displacement: 1.5 Liters (88.9 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Multiport Fuel Injection
Exhaust Gas Recirculation
Oxygen Sensor
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:

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
50,000	0.39	7.0	0.4

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

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>
50,000	0.13	1.1	0.1

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 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 on January 14, 1993, the Air Resources Board adopted the repeal of the currently-effective requirement that each manufacturer certify a minimum of 80 percent of its projected sales of 1994 model-year California-certified passenger cars and light-duty trucks to the phase-in standards for NMHC, or the more stringent standards in section 1960.1(g)(2) of Title 13, California Code of Regulations. If the repeal of such requirement does not become effective, the manufacturer shall submit a plan for compliance with the requirement; passenger cars and light-duty trucks not meeting such phase-in or more stringent standards shall be certified only to the extent allowed under the requirement.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles".

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 2290).

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 listed vehicle models also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

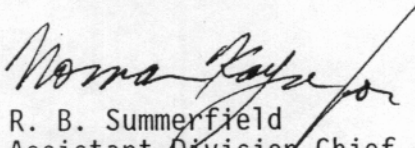
BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) 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 6th day of August, 1993.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer TOYOTA Engine family RTY1.5VHG0GA
 Passenger Car PC(PC) Light-Duty Truck (T1/T2) Medium-Duty Vehicle (M1/M2/M3/M4/M5)
 Stds Type: Tier 0 (Tier 0/1, AB965, TLEV, LEV, ULEV) Veh. Type (FFV, HEV(type A/B/C)): N/A
 Fuel Type: Gasoline Evaporative Family: RTY1047DYM00
 Engine Config. I4 Liter (CID) 1.5 (88.9)
 Engine: Front x Mid. Rear Drive: FWD x RWD 4WD-FT 4WD-PT
 Exhaust ECS & Special Features (incl. CARB, MFI, etc.) MFI, EGR, O2S, TWC
 (use abbreviations per SAE 1930 MAY91)

Engine Code/ (Cert. std.)	Vehicle Models (If Coded see attachmt)	Trans. Type: A or L -Auto M-Man.	ETW	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic converter Part No.
1	EL42L-ADKBEA -ADMREA -AEMREA	M4 M5	2250 2375	6.4 6.9	89661-16082	25620-11100	18450-16420*1 (B07)*3 18450-0W010*2 (B97)*3
2	EL42L-ADKBEA -ADMREA -AEMREA	M4 M5	2375	6.4 6.9			
3	EL42L-ADKBEA -ADMREA -AEMREA	M4 M5	2375	7.0 7.6			
4	EL42L-ADKBEA -ADMREA -AEMREA	M4 M5	2375	7.0 7.6			
5	EL42L-ADHREA -AEHDEA -AEHREA	L3	2375	6.9		25620-11090	
6	EL42L-ADHREA -AEHREA -AEHDEA		2375	6.9			
7	EL42L-ADHREA -AEHDEA -AEHREA		2375 2500	7.6			
8	EL42L-ADHREA -AEHDEA -AEHREA		2500	7.6			

17.11.00

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

Note *1 : 18450-16420 : Maker ; TOYOTA MOTOR CORPORATION

*2 : 18450-0W010 : Maker ; TABC, Inc.

*3 : Parenthetical information represents identifying marks found on production parts.

VEHICLE MODELS :

Tercel

EL42L-ADKBEA

-ADMREA

-AEMREA

EL42L-ADHREA

-AEHDEA

-AEHREA

1994 MODEL-YEAR CERTIFICATION REVIEW SHEET
EXHAUST/EVAPORATIVE SYSTEM & CALIFORNIA REQUIREMENTS

Mfr. TOYOTA Engine Family PTY1.5VHGOGA
 Passenger car x Evaporative Family RTY1047DYM00 *19.9*
 Light-Duty Truck LVW - Veh. Type: FFV HEV (Type A/B/C)
 Medium-Duty Vehicle LVW - Fuel Type(s) Gasoline

Type of Eng Code in Eng Fam: CA x FED 50S Rated HP 82 @ 5,200 RPM
 Stds. Type: Tier-0 x Tier-1 AB965 TLEV LEV ULEV ULEV
 Engine Config. I4 Liter (CID) 1.5 (88.9) Valves/Cyl. 3
 Engine: Front x Mid. Rear Drive: FWD x RWD 4WD-FT 4WD-PT
 Exhaust ECS & Special Features (incl. CARB, MFI, etc.) MFI, EGR, O2S, TWC
 (use abbreviations per SAE 1930 MAY91) DBD 2 EXEMPT

	Section/Page #		
1 Authorized Representative	<u>01.02.02</u>		
2 Fuel, Test Equip/Proc/Route	<u>03.00.00, 04.00.00, 05.00.00</u>		
3 Emiss. Warranty Statement	<u>17.10.00</u>		
4 Maint: Cert/Req'd/Recm'd	<u>06.00.00</u>		
5 Emiss. Label/Vac. Hose Diag.	<u>07.00.00</u>		
6 Evap. Control System	<u>19.00.00</u>		
7 Engine Parameters	<u>20.01.00</u>		
8 Fuel/Ignition Systems	<u>08.01.00.00</u>		
9 Exhaust Control System	<u>20.02.00</u>		
10 Proj. Sales(LDT/MDV Split)	<u>17.13.00</u>		
11 Vehicle Description	<u>20.02.08</u>		
12 Evap Bench Test Procedure	<u>13.02.00</u>		
13 Test Vehicle Information	Durability	Emission	Emission
C/O or C/A MY & ID	Data Vehicle	Data Vehicle	Data Vehicle
Vehicle Log Page(s)	<u>C/O 90-D3</u>	<u>91-EL6</u>	<u>93-EL1</u>
Zero Mile Book Page(s)	<u>20.03.04</u>	<u>20.03.04</u>	<u>20.03.04</u>
Maint. Logs & Engr. Eval.	<u>17.12 (90MY)</u>	<u>20.03.06</u>	<u>20.03.06</u>
	<u>17.12 (90MY)</u>	<u>N/A</u>	<u>N/A</u>
14 Gen. Std., Increase in Em., Safety, Mtg. all Reqts.	<u>20.03.05</u>		
15 Prod. Veh. same as Test Veh.	<u>17.01.01</u>		
16 Emiss. Label Durability	<u>07.00.00</u>		
17 Driveability Statement	<u>17.01.02</u>		
18 Fill Pipe Specifications	<u>17.04.02</u>		
19 Altitude A/F Requirements	<u>17.02.00</u>		
20 OBD Sys. incl Marked Revisions	<u>02.05.00</u>		
21 I&M Test Procedure & Data	<u>17.11.00</u>		
22 Cert Plan/50K-100K/OptNOx	<u>N/A</u>		
23 NMOG Compliance Plan & RAF	<u>17.15.00</u>		
24 EPA Certificate	<u>EO FIRST</u>		

PROJECTED EMISSIONS(g/mi, except g/test for evap.)(1),(2)

Data Veh. ID	Code Displ	Trans	Axle Ratio	ETW	DPA/ RLHP	MPG City/Hwy	Test Loc.	NMOG/ NMHC	CO	NOx	Hwy NOx	CO2	Evap/ Part
91-EL6 (05)	6	L3	3.52	2375	6.9	28.9/38.3	MFR	- /0.13	1.1	0.09	0.02	303	0.37/-
93-EL1 (02)	2	M4	3.53	2375	6.4	32.8/46.3	EPA	- /0.08	0.53	0.13	0.01	269	- /-

(1)The EDV above comply with standards of(@50K) : -/0.39 7.0 0.4 0.5 - 2.0/-
 (100K for PC & LDT, 120K for MDV) : - / - - - - - - / -
 and includes deterioration factors of(@50K) : -/1.008 1.234 1.057 1.057 - 0.003/-
 (100K for PC & LDT, 120K for MDV) : - / - - - - - - / -
 and an RAF(reactivity addjustment factor) for NMOG of : -

88-DT3, 90-D5,
91-DT1, 93-D1,

(2)Evaporative DF is the average of: Vehicle DF 93-DT1 & 94-D1 and Bench DF 83-BV-30

* : Configuration with the highest projected sales.

Remarks _____

Application

Processed by R. Ranney Date 8/3/93 Reviewed by Steve Hark Date 8/5/93