State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-93
Relating to Certification of New Motor Vehicles

TOYOTA MOTORS 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 1987 model-year Toyota Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacement Cubic Inches (Liters)	Exhaust Emission Control Systems (Special Features)
HTY1.6V2FCC1	88.6/96.8 (1.5/1.6)	Air Injection-Valve Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst

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

The following are the emission standards for this engine family:

Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per mile
0.39	7.0	0.7

The following are the certification emission values for this engine family:

Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per Mile
0.30	3.9	0.4

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered 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" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) 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 regulations (Title 13, California Administrative Code, Section 2035 et seq.) and with Health and Safety Code Section 43204.

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 31st day of July, 1986.

Bob Gross for

K. D. Drachand, Chief
Mobile Source Division

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Manufacturer Toyota Motor Corporation Engine Family HTY1.6V2FCC1

Evaporative Family EV-A Engine Type 4 cyl. in-line

Liters (CID) 1.5/1.6 (88.6/96.8)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
EEC-Electronic Engine Control
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

Fuel System

CFI, CL, DID, DIP, EFI, MFI
nV-nVenturi Carburetor

Exhaust Emissions Control System

AIP-Air Injection-Pump
AIV-Air Injection-Valve
CL-Closed Loop
EGR-Exhaust Gas Recirculation
EM-Engine Modification
OC-Oxidation Catalyst System
SPL-Smoke Puff limiter or Throttle Delay
TOC-Trap Oxidizer Continual
TOP-Trap Oxidizer Periodical
TR-Thermal Reactor
TWC-Three Way Catalyst System

Special Features

CCV-Combustion Chamber Valve
CFI-Central Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EFI-Electronic Fuel Injection
IC-Intercooler or aftercooler
MFI-Mechanical Fuel Injection
TC-Turbocharger

VEHICLE MODELS :

1. Corolla	2. Corolla sport	3. Tercel wgn. 2WD	4. Tercel wgn. 4WD
AE82L-EEMNCA	AE86L-ECMXCA	AL21LG-ZWMDCA	AL25LG-ZWFDCA
-ELMDCA	-ESMXCA	-ZWHDCA	-ZWFQCA
-EEHDCA	-ESPXCA		-ZWHDCA
-ELHDCA			
-EEPECA			
-EEPNCA			
-EEMDCA			

Engine: Front 1 thru 4 Mid. ____ Rear ____

Drive: FWD 1,3 RWD 2 4WD Full time ____ 4WD Part time 4

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Passenger Cars x Light-Duty Trucks ___ Medium-Duty Vehicles ___ Gas x Diesel ___

Manufacturer Toyota Motor Corporation Engine family HTY1.6V2FCC1

Liter (CID) 1.5/1.6 (88.6/96.8) Eng. Type 4 cyl. in-line

Emission Control Sys. (Special Features) AIV + CL + EGR + TWC

Engine code	Vehicle Models (If Coded see attachment) (Dyno Hp: Refer to 08.13.03.00)	Trans. Type	Equiv. Test Weight	Ign. System EI, CA, VA Part No. [Distributor]	Fuel System 2V, CL Part No. [Carburetor]	EGR Valve Part No.	Catalyst Part No.
1 thru 4	AL21LG-ZWMDCA AL25LG-ZWFDCA -ZWFQCA	M5	2,500 2,625	19030-15060	21100-15340	25620-15210	18450-15110
5 thru 8	AL21LG-ZWHDCA	A3	2,500				
9 thru 12	AL25LG-ZWHDCA		2,625				
13 thru 16 and 13R1 thru 16R1	AE82L-EEMDCA -EEMNCA -ELMDCA	M5	2,500 2,625	19030-16082	21100-16210	25620-15250	
17 thru 20	AE82L-EEHDCA -ELHDCA -EEPECA -EEPNCA	A3 A4	2,500 2,625 2,625			25620-15030	
17R1 thru 20R1	AE82L-EEHDCA -ELHDCA -EEPECA -EEPNCA	A3 A4	2,500 2,625 2,625			25620-15250	
21 thru 24	AE86L-ESMXCA -ECMXCA	M5	2,500 2,625	19030-16101	21100-16220	25620-15250	
25 thru 28	AE86L-ESPXCA	A4	2,625			25620-15030	

Comments : See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.