

EC Board

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER P-14-7
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 1988 model-year Toyota Motors Corporation federally-certified emission control systems are certified for sale in California as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
JTY1.6V5FFF4	1.6	(96.8)	Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst (Electronic Port Fuel Injection)

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

The following are the emission standards for this engine family:

<u>Hydrocarbons</u> <u>Grams per Mile</u>	<u>Carbon Monoxide</u> <u>Grams per Mile</u>	<u>Nitrogen Oxides</u> <u>Grams per Mile</u>
0.41	3.4	1.0
<u>Hydrocarbons</u> <u>Grams per Mile</u>	<u>Carbon Monoxide</u> <u>Grams per Mile</u>	<u>Nitrogen Oxides</u> <u>Grams per Mile</u>
0.13	0.6	0.6

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 "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided evidence of federal certification of vehicle models listed in the attachments which are not available as California-certified models.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate that the vehicle manufacturer has sufficient emissions credits for its estimated California sales of federally-certified 1988 model-year vehicles using the "Guidelines for Certification of 1983 and Subsequent Model-Year Federally Certified Light-Duty Motor Vehicles For Sale in California" (Title 13, California Administrative Code, Section 1960.5).

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.).

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 23rd day of February, 1988.



K. D. Drachand, Chief
Mobile Source Division

Manufacturer Toyota Motor Corporation Engine Family JTY1.6V5FFF4
 Evaporative Family EV-E Engine Type 4 cyl. in-line
 Liters (CID) 1.6 (96.8)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
 ECU-Electronic Control Unit
 EI-Electronic Ignition
 ESAC-Electronic Spark Advance Control
 VA-Vacuum Advance
 VR-Vacuum Retard

Fuel System

CFI, EPFI, MPFI, SFI,
 DID, DIP, HOS, OS
 nV-nVenturi Carburetor
 VV-Variable Venturi Carburetor

Exhaust Emissions Control System

AIP-Air Injection - Pump
 AIV-Air Injection - Valve
 EGR-Exhaust Gas Recirculation
 EIC-Electronic Injection Control (Diesel Only)
 EM-Engine Modification
 SPL-Smoke Puff Limiter or Throttle Delay
 TOC-Trap Oxidizer, Continual
 TOP-Trap Oxidizer, Periodical
 DBC-Dual Bed Catalyst
 OC-Oxidation Catalyst
 TWC-Three-Way Catalyst
 WUOC-Warm-up Oxidation Catalyst
 WUTWC-Warm-up Three-Way Catalyst
 OS-Oxygen Sensor
 HOS-Heated Oxygen Sensor

Special Features

CFI-Central Fuel Injection or Throttle Body Injection
 EPFI-Electronic Port Fuel Injection
 MPFI-Mechanical Port Fuel injection
 SFI-Sequential Fuel Injection
 DID-Diesel Injection-Direct
 DIP-Diesel Injection-Prechamber
 TC-Turbocharger
 SC-Supercharger
 IC-Intercooler or Aftercooler
 CCV-Combustion Chamber Valve
 OBD-On-Board Diagnostics

VEHICLE MODELS :

Corolla All-Trac Wagon

AE95L-CWMDKA
 -CWPDKA
 -CWMXKA

Engine: Front x Mid. Rear
 Drive: FWD RWD 4WD Full time x 4WD Part time

17.11.00

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1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Toyota Motor Corporation Engine family JTY1.6V5FFF4

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

Emission Control Sys. (Special Features) EGR + OS + TWC (EPFI)

Engine code	Vehicle Models (If Coded see attachment) (Dyno Hp: Refer to 08.13.03.00)	Trans. Type	Equiv. Test Weight	Ign. System ECU, EI, ESAC Part No. [Computer]	Fuel System EPFI, OS Part No. [Computer] [Injector]	EGR Valve Part No.	Catalyst Part No.
1 thru 4	AE95L-CWMDKA -CWMXKA	M5	3,000	89661-12270	89661-12270 23250-16100	25620-16100	18450-16300
5 thru 8	AE95L-CWPDKA	A4	3,000	89661-12390	89661-12390 23250-16100		

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.