

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-68
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 1985 model-year Toyota Motor Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

| <u>Engine Family</u> | <u>Displacement Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems (Special Features)</u> |
|----------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------|
| FTY1.6V2FCCX | 88.6/96.8 (1.5/1.6) | Air Injection - Valve Exhaust Gas Recirculation Three-Way Catalyst with Closed Loop |

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

The following are the certification emission standards for this engine family to be listed on the window decal required by "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles":

| <u>Hydrocarbons Grams per Mile</u> | <u>Carbon Monoxide Grams per Mile</u> | <u>Nitrogen Oxides Grams per Mile</u> |
|----------------------------------------|-------------------------------------------|-------------------------------------------|
| 0.39 | 7.0 | 0.7 |

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

| <u>Hydrocarbons Grams per Mile</u> | <u>Carbon Monoxide Grams per Mile</u> | <u>Nitrogen Oxides Grams per Mile</u> |
|----------------------------------------|-------------------------------------------|-------------------------------------------|
| 0.23 | 2.2 | 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 1960.15 of Title 13, California Administrative Code which includes repair or replacement of 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 Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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 30th day of July, 1984.


K. D. Drachand, Chief
Mobile Source Division

Manufacturer Toyota Motor Corporation

Executive Order No. A-14-68

Engine Family FTYL.6V2FCCX

Evaporative Family EV-A

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

ABBREVIATIONS

Ignition System

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

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
 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
 MFI-Mechanical Fuel Injection
 TC-Turbocharged

Fuel System

CFI, CL, DID, DIP, EFI, MFI
 nV-nVenturi Carburetor
 WV-Variable Venturi

VEHICLE MODELS :

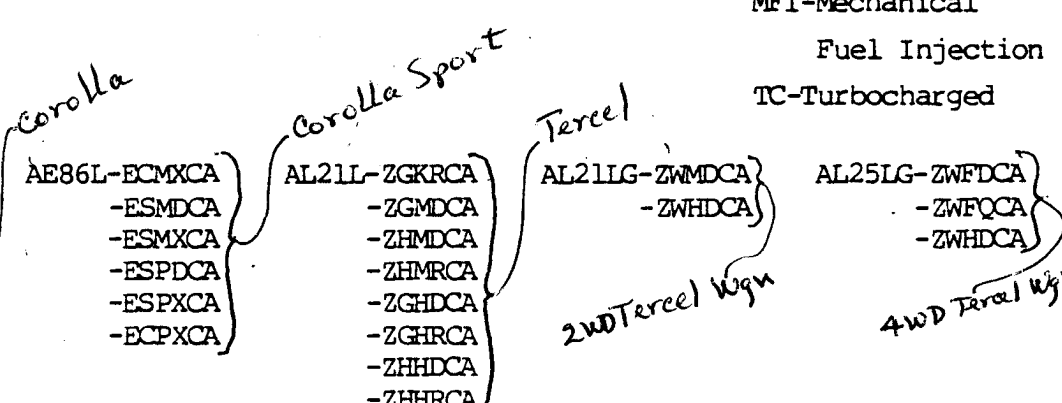
AE82L-EEMDCA
 -EEMNCA
 -ELMDCA
 -EEHDCA
 -ELHDCA
 -EEPECA
 -EENCA
 -ELPNCA

AE86L-ECMXCA
 -ESMDCA
 -ESMXCA
 -ESPDCA
 -ESPXCA
 -ECPXCA

AL21L-ZGKRCA
 -ZGMDCA
 -ZHMDCA
 -ZHMCA
 -ZGHDCA
 -ZGHRCA
 -ZHHCA
 -ZHHRCA

AL21LG-ZWMDCA
 -ZWHDCA

AL25LG-ZWFDCA
 -ZWFQCA
 -ZWHDCA



DRIVE SYSTEM : AL21L, AL21LG, AE82L series ; Front Engine/Front - Wheel Drive
 AE86L series ; Front Engine/Rear - Wheel Drive
 AL25LG series ; Front Engine/4 - Wheel Drive

1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

 Passenger Cars Light-Duty Trucks Medium-Duty Vehicles Gas DieselManufacturer Toyota Motor Corporation Page 2Engine Family FTY1.6V2FCCX Engine Code 1 thru 29ECS (Special Features) AIV + CL + EGR + IWC CID (Liter)- 88.6/96.8(1.5/1.6)
Type 4 cyl. in-line

| Engine code | Vehicle Models (If Coded see attachment) Refer to 08.13.03.00 | Trans. | Equiv. Test Weight | Ign. System EI, CA, VA Part No. [Distributor] | Fuel System 2V, CL Part No. [Carburetor] | EGR Valve Part No. | Label Ident. Part No. |
|-------------|--------------------------------------------------------------------------------|----------|-------------------------|--------------------------------------------------------|---------------------------------------------------|-----------------------|--------------------------|
| 1 | AL21L-ZGKRCA | M4 | 2,250 | 19030-15060 | 21100-15340 | 25620-15210 | 11298-15190 |
| 2 thru 5 | AL21L-ZGMDCA -ZHMDCA -ZHMRC AL21LG-ZWMDCA AL25LG-ZWFDCA -ZWFQCA | M5 | 2,375 2,500 2,625 | | | | |
| 6 thru 9 | AL21L-ZGHRCA -ZGHDCA -ZHHRCA -ZHHDCA AL21LG-ZWHDCA | A3 | 2,375 2,500 | | | | |
| 26 thru 29 | AL25LG-ZWHDCA | | 2,625 | | | | |
| 10 thru 13 | AE82L-EEMDCA -EEMNCA -ELMDCA | M5 | 2,375 2,500 | 19030-16040 | 21100-16120 | 25620-15250 | 11298-16101 |
| 14 thru 17 | AE82L-EEHDCA -ELHDCA AE82L-EEPECA -EEPNCA -ELPNCA | A3 A4 | 2,500 2,500 2,625 | | | 25620-15030 | |
| 18 thru 21 | AE86L-ESMDCA -ESMXCA -ECMXCA | M5 | 2,500 2,625 | 19030-16050 | 21100-16160 | 25620-15210 | 11298-16022 |
| 22 thru 25 | AE86L-ESPDCA -ESPXCA -ECPXCA | A4 | 2,500 2,625 | | | | |

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.

*Add 10% to dyno test HP for air conditioning usage.

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Issued : 06/06/84

1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

X Passenger Cars ___ Light-Duty Trucks ___ Medium-Duty Vehicles X Gas ___ DieselManufacturer Toyota Motor Corporation Page 2Engine Family FTY1.6V2FCCX Engine 1 thru 30
Code & 1R1 thru 30R1CID (Liter)- 88.6/96.8(1.5/1.6)ECS (Special Features) AIV + CL + EGR + TWC Type 4 cyl. in-line

| Engine code | Vehicle Models (If Coded see attachment) Refer to 08.13.03.00 | Trans. | Equiv. Test Weight | Ign. System EI, CA, VA Part No. [Distributor] | Fuel System 2V, CL Part No. [Carburetor] | EGR Valve Part No. | Label Ident. Part No. |
|-----------------------------------|--------------------------------------------------------------------------------|----------|-------------------------|--------------------------------------------------------|---------------------------------------------------|-----------------------|--------------------------|
| 1, 30, 1R1 & 30R1 | AL21L-ZGKRCA | M4 | 2,250 2,375 | 19030-15060 | 21100-15340 | 25620-15210 | 11298-15190 |
| 2 thru 5 & 2R1 thru 5R1 | AL21L-ZGMDCA -ZHMDCA -ZHMRC AL21LG-ZWMDCA AL25LG-ZWFDCA -ZWFOCA | M5 | 2,375 2,500 2,625 | | | | |
| 6 thru 9 & 6R1 thru 9R1 | AL21L-ZGHRCA -ZGHDCA -ZHHRCA -ZHHDCA AL21LG-ZWHDCA | A3 | 2,375 2,500 | | | | |
| 26 thru 29 & 26R1 thru 29R1 | AL25LG-ZWHDCA | | 2,625 | | | | |
| 10 thru 13 & 10R1 thru 13R1 | AE82L-EEMDCA -EEMNCA -ELMDCA | M5 | 2,375 2,500 | 19030-16040 | 21100-16120 | 25620-15250 | 11298-16101 |
| 14 thru 17 & 14R1 thru 17R1 | AE82L-EEHDCA -ELHDCA AE82L-EEPECA -EEPNCA -ELPNCA | A3 A4 | 2,500 2,500 2,625 | | | 25620-15030 | |

| Engine code | Vehicle Models (If Coded see attachment) Refer to 08.13.03.00 | Trans. | Equiv. Test Weight | Ign. System EI, CA, VA Part No. [Distributor] | Fuel System 2V, CL Part No. [Carburetor] | EGR Valve Part No. | Label Ident. Part No. |
|-----------------------------------|------------------------------------------------------------------------|--------|--------------------|--------------------------------------------------------|---------------------------------------------------|-----------------------|--------------------------|
| 18 thru 21 & 18R1 thru 21R1 | AE86L-ESMDCA -ESMXCA -ECMXCA | M5 | 2,500 2,625 | 19030-16050 | 21100-16160 | 25620-15210 | 11298-16022 |
| 22 thru 25 & 22R1 thru 25R1 | AE86L-ESPDCA -ESPXCA -ECPXCA | A4 | 2,500 2,625 | | | | |

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.

*Add 10% to dyno test HP for air conditioning usage.