E.C Book

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-38
Relating to Certification of New Motor Vehicles

TOYOTA MOTOR COMPANY, LTD.

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43100, 43102, 43103, and 43835; 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 Toyota Motor Company, Ltd. exhaust emission control systems are certified as described below for 1981 model-year gasoline-powered passenger cars.

Engine Family	Displacement Cubic Inches (Liters)	Exhaust Emission Control Systems (Special Features)
BTY2.8V5HB4	168 (2.8)	Exhaust Gas Recirculation Closed Loop Three-Way Catalyst (Electronic Fuel Injection)

Vehicle Models, Transmissions, Engine Codes and Evaporative Emission Control Families as listed on attachments.

The following are the certification emission values to be listed on the window decal required by California Assembly-Line Test Procedures for 1981 model-year vehicles:

Engine Family	Hydrocarbons Grams per Mile	Carbon Monoxide Grams per Mile	Nitrogen Oxides Grams per Mile
BTY2.8V5HB4	0.25	3.0	0.3

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", amended June 26, 1980.

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 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That Toyota Motor Company, Ltd. has provided to the Executive Officer 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 15TH day of September, 1980.

K. D. Drachand, Chief
Mobile Source Control Division

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Toyota Motor Co., Ltd. Executive Order No. A-14-38 Page 1

Engine Family BTY2.8V5HB4 Evaporative Family EV-ME

ABBREVIATIONS Engine CID (Liters) 168 (2.8)

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
TR-Thermal Reactor
TWC-Three Way Catalyst System

Special Features
CCV-Combustion Chamber Valve
CFI-Central Fuel Injection
DI-Diesel Injection
EFI-Electronic Fuel Injection
MFI-Mechanical Fuel Injection
TC-Turbocharged

Fuel System
CFI, DI, EFI, MFI
nV-nVenturi Carburetor
VV-Variable Venturi

Engine Code	Models
1, 3	Celica Supra Hatchback
3	Cressida Sedan
3	Cressida Station Wagon

E.O. #A-14-38

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Toyota Motor Company, Ltd. Page 2

Engine Family BTY2.8V5HB4 Engine Code 1, 3

ECS (Special Features) EGR+CL+TWC (EFI) CID (Liter)-Type 168 (2.8) I6

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Test Weight Class	Ign. System VA, CA Distributor Part No.	Fuel System EFI Part No.	EGR Valve Part No.	Label Ident. Part No.
1*	Celica Supra Hatchback	M5	3250	Nippondenso 19100-43030	Nippondenso Air Flow Meter 22250-43040 Computer 89561-14060 Injector 23250-45011	25620-43020	See Page 3
3*	Celica Supra	A4					
	Cressida Sedan Station Wagon				Air Flow Meter 22250-43050 Computer 89561-22040 Injector 23280-41030		

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.

Date of Issue -

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1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Toyota Motor Co., Ltd. Executive Order No. A-14-38 Page 3

Engine Family BTY2.8V5HB4

VEHICLE EMISSION CONTROL INFORMATION

ENGINE FAMILY : BTY2.8V5HB4 168.4 CID
EVAP. FAMILY : EV-ME
EXHAUST EMISSION CONTROL SYSTEM EFI/O_2S/EGR/TWC/TWC

MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, AIR CONDITIONER OFF AND TRANSMISSION IN NEUTRAL.

ENGINE TUNE-UP SPECIFICATIONS

IDLE SPEED (RPM)	800
IGNITION TIMING (°BTDC)	8° @ 950 RPM MAX. WITH ALL VACUUM HOSES DISCONNECTED FROM DISTRIBUTOR AND SEALED.
IDLE MIXTURE SETTING	IDLE MIXTURE SCREW IS PRESET AND SEALED AT FACTORY. ADJUSTMENT DURING TUNE-UP IS NOT RECOMMENDED.
FAST IDLE SPEED (RPM)	N/A
VALVE CLEARANCE (IN.)	INTAKE 0.011 (0.28 mm) EXHAUST 0.014 (0.35 mm)

TOYOTA MOTOR CO., LTD. | CATALYST

THIS VEHICLE CONFORMS TO U.S. EPA AND STATE OF CALIFORNIA REGULATIONS APPLICABLE TO 1981 MODEL YEAR NEW MOTOR VEHICLES AND HAS DEMONSTRATED COMPLIANCE AT ALTITUDES BELOW 4,000 FEET.