

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-37 \\
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.

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
BTY2.4V2EC3	144.4 (2.4)	Air Injection - Pump Exhaust Gas Recirculation Three Way Catalyst with Closed Loop

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:

<u>Engine Family</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
BTY2.4V2EC3	0.10	2.2	0.4

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 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 21ST day of August, 1980.

K. D. Drachand by M.W.
K. D. Drachand, Chief
Mobile Source Control Division

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Toyota Motor Company Ltd. Executive Order No. A-14-37 Page 1
 Engine Family BTY2.4V2EC3 Evaporative Family EV-R1, EV-R2
 ABBREVIATIONS Engine CID (Liters) 144.4 (2.4)

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

Vehicle Models

Celica Coupe
 Celica Liftback
 Corona Sedan
 Corona Liftback
 Corona Station Wagon

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Toyota Motor Company, Ltd.

Page 2(1)

Engine Family BTY2.4V2ECS³

Engine Code _____

ECS (Special Features) AIP, EGR, TWC/CL

CID (Liter)-
Type

144.4 (2.4) L4

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Equiv. Test Weight *	Ign. System CA, VA, EI Mfgr. Part No.	Fuel System 1-2V Mfgr. Part No.	EGR Valve Part No.	Label Ident. Part No.
1,2	Celica Coupe Celica Liftback	M5	3000	Nippondenso 19100-35040	Aisan Kogyo 21100-35010	25620-35010	See page 3
1-R1 (1) 2-R1 (1)	Corona Sedan Corona Liftback Corona Sta. Wag.			19100-35010			See page 4
3,4	Celica Coupe Celica Liftback	A4		19100-35040	21100-35020		See page 3
3-R1 (1) 4-R1 (1)	Corona Sedan Corona Liftback Corona Sta. Wag.			19100-35010			See page 4

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 - 082180

Revisions: (L) 81-R-10, add Eng. Codes, corrected page no., 082280

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Toyota Motor Company, Ltd. Page 2a(2)

Engine Family BTY2.4V2EC3

Engine Code

ECS (Special Features) AIP, EGR, TWC/CL

CID (Liter)-
Type

144.4 (2.4) L4

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Equiv. Test Weight *	Ign. System CA, VA, EI Mfgr. Part No.	Fuel System 1-2V Mfgr. Part No.	EGR Valve Part No.	Label Ident. Part No.
1-R2 (2) 2-R2	Celica Coupe Celica Liftback	M5	3000	Nippondenso 19100- 35040	Aisan Kogyo 21100- 35180 (2)	25620- 35010	See pag 3
	Corona Sedan Corona Liftback Corona Sta. Wag.			19100- 35010			See page 4
3-R2 (2) 4-R2	Celica Coupe Celica Liftback	A4		19100- 35040	21100- 35021 (2)		See page 3
	Corona Sedan Corona Liftback Corona Sta. Wag.			19100- 35010			See page 4

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 - 082180

Revisions: (1) 81-R-10, add Eng. Codes, corrected page no., 082280
(2) 81-R-24, add eng. codes and Carb p/n, 011481

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Toyota Motor Company, Ltd. Executive Order No. A-14-37 Page 3

This label is applied to all vehicles except for Corona St. Wagon.

VEHICLE EMISSION CONTROL INFORMATION	
ENGINE FAMILY : BTY2.4V2EC3 144.4 CID	
EVAP. FAMILY : EV-R1	
EXHAUST EMISSION CONTROL SYSTEM AI/EGR/TWC/O ₂ S	
MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE FULL OPEN, AIR CLEANER INSTALLED, AIR CONDITIONER OFF AND TRANSMISSION IN NEUTRAL.	
ENGINE TUNE-UP SPECIFICATIONS	
IDLE SPEED (RPM)	MANUAL 700 AUTO. 750
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. ADJUSTMENTS DURING TUNE-UP IS NOT RECOMMENDED.
FAST IDLE SPEED (RPM)	2,600 WITH ALL VACUUM HOSES DISCONNECTED FROM EGR VALVE AND DISTRIBUTOR AND SEALED.
VALVE CLEARANCE (IN.)	INTAKE 0.008 (0.20 mm) EXHAUST 0.012 (0.30 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 PROVIDED THAT THIS VEHICLE IS ONLY INTRODUCED INTO COMMERCE FOR SALE IN THE STATE OF CALIFORNIA AND HAS DEMONSTRATED COMPLIANCE AT ALTITUDES BELOW 4,000 FEET.	

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Toyota Motor Company, Ltd. Executive Order No. A-14-37 Page 4

This label is applied to Corona St. Wagon.

VEHICLE EMISSION CONTROL INFORMATION	
ENGINE FAMILY : BTY2.4V2EC3 144.4 CID	
EVAP. FAMILY : EV-R2	
EXHAUST EMISSION CONTROL SYSTEM AI/EGR/TWC/O ₂ S	
MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE FULL OPEN, AIR CLEANER INSTALLED, AIR CONDITIONER OFF AND TRANSMISSION IN NEUTRAL.	
ENGINE TUNE-UP SPECIFICATIONS	
IDLE SPEED (RPM)	MANUAL 700 AUTO. 750
IGNITION TIMING (°BTDC)	8° @ 950 RPM MAX. WITH 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)	2,600 WITH ALL VACUUM HOSES DISCONNECTED FROM EGR VALVE AND DISTRIBUTOR AND SEALED.
VALVE CLEARANCE (IN.)	INTAKE 0.008 (0.20 mm) EXHAUST 0.012 (0.30 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 PROVIDED THAT THIS VEHICLE IS ONLY INTRODUCED INTO COMMERCE FOR SALE IN THE STATE OF CALIFORNIA AND HAS DEMONSTRATED COMPLIANCE AT ALTITUDES BELOW 4,000 FEET.	