

Book

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-31
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 1980 model-year gasoline-powered light duty trucks.

<u>Engine Family</u>	<u>Displacement Cubic Inches</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
2F(C)	258	Air Injection Exhaust Gas Recirculation Oxidation Catalyst

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 1979 model-year vehicles:

<u>Engine Family</u>	<u>Inertia Weight Class</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
2F(C)	4000- 6000	0.20	3.3	1.5

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 except Motorcycles".

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 1980 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 3rd day of August, 1979.



K. D. Drachand, Acting Chief
Mobile Source Control Division

1980 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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 Engine Family 2F(C) Engine (CID) 258

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

EFI, MFI
 nV-nVenturi Carburetor
 VV-Variable Venturi

Exhaust Emissions Control System

AI-Air Injection
 CL-Closed Loop
 EGR-Exhaust Gas Recirculation
 EM-Engine Modification
 OC-Oxidation Catalyst
 PAI-Pulse Air Injection
 TR-Thermal Reactor
 TWC-Three Way Catalyst

Special Features

CCAV-Combustion Chamber Air Valve
 EFI-Electronic Fuel Injection
 MFI-Mechanical Fuel Injection
 TC-Turbo Charged

Engine Code

CMS-4
 CMD-4

CMS-5
 CMD-5

Model

Land Cruiser Hardtop

Land Cruiser Station Wagon

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

Manufacturer Toyota Motor Co.

Page 2

Engine Family 2F(C)

CID-Type 258 - I6

Engine Code 1

ECS (Special Features) AI, EGR, OC

+ 10% (A/C)

Yes No X


Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Test Weight Class (Inertia)	Ign. System CA, VA, EI Distributor Part No.	Fuel System 2V Carburetor Part No.	EGR Valve Part No.	Label Ident.
1	Land Cruiser Hardtop 4WD	4M	4000 (4000)	Nippondenso 19100-61101	Aisan Kogyo 21100-61065	25620 -61070	See Page 3
	Land Cruiser Station Wagon 4WD		4500 (4500)				

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, equipment and inertia weight class.

Date of Issue -

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VEHICLE EMISSION CONTROL INFORMATION											
ENGINE FAMILY	2F (C) 257.9 CID										
EVAP. FAMILY	EV-F										
EXHAUST EMISSION CONTROL SYSTEM	AI+EGR+CCo										
<p>MAKE ALL ADJUSTMENTS WITH ENGINE AT NORMAL OPERATING TEMPERATURE, CHOKE FULL OPEN, AIR CLEANER INSTALLED AND AIR CONDITIONER OFF.</p> <p>ENGINE TUNE UP SPECIFICATIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 50%;">IDLE SPEED (RPM)</td> <td>800 (N)</td> </tr> <tr> <td>IGNITION TIMING (°BTDC)</td> <td>7° @ MAX. 900 RPM WITH HOSE FARTHEST FROM THE DISTRIBUTOR HOUSING DISCONNECTED AND ITS END SEALED.</td> </tr> <tr> <td> IDLE MIXTURE SETTING (SEE REPAIR MANUAL FOR THE PARTICULARS) </td> <td> LEAN DROP IDLE SET TO THE 850 RPM (N) AT BEST IDLE. TURN IN IDLE MIXTURE ADJUSTING SCREW UNTIL 800 RPM (N). </td> </tr> <tr> <td>FAST IDLE SPEED (RPM)</td> <td>1800 WITH THE VACUUM HOSES (a), (b) AND (c) (REF. VACUUM HOSE INFO.) DISCONNECTED AND THE PIPE ENDS SEALED.</td> </tr> <tr> <td>VALVE CLEARANCE (IN.)</td> <td> INTAKE 0.008 (0.20 mm) EXHAUST 0.014 (0.35 mm) </td> </tr> </tbody> </table>		IDLE SPEED (RPM)	800 (N)	IGNITION TIMING (°BTDC)	7° @ MAX. 900 RPM WITH HOSE FARTHEST FROM THE DISTRIBUTOR HOUSING DISCONNECTED AND ITS END SEALED.	IDLE MIXTURE SETTING (SEE REPAIR MANUAL FOR THE PARTICULARS)	LEAN DROP IDLE SET TO THE 850 RPM (N) AT BEST IDLE. TURN IN IDLE MIXTURE ADJUSTING SCREW UNTIL 800 RPM (N).	FAST IDLE SPEED (RPM)	1800 WITH THE VACUUM HOSES (a), (b) AND (c) (REF. VACUUM HOSE INFO.) DISCONNECTED AND THE PIPE ENDS SEALED.	VALVE CLEARANCE (IN.)	INTAKE 0.008 (0.20 mm) EXHAUST 0.014 (0.35 mm)
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 TOYOTA MOTOR CO., LTD.	CATALYST										
<p>THIS VEHICLE CONFORMS TO U.S. EPA AND STATE OF CALIFORNIA REGULATIONS APPLICABLE TO 1980 MODEL YEAR NEW MOTOR VEHICLES AND HAS DEMONSTRATED COMPLIANCE AT ALTITUDE BELOW 4,000 FEET.</p>											