

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-16  
Relating to Certification of New Motor Vehicles

TOYOTA MOTOR COMPANY, LTD.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102, and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That Toyota Motor Company, Ltd. exhaust emission control systems for 1977 model-year light-duty trucks are certified for the engine family described below:

Engine Family: 2F(C)  
Engine: 257.9 CID  
Transmission: 4 Speed Manual  
Exhaust Emission Control Systems: Air injection, exhaust gas recirculation, thermal reactor

Models: Land Cruiser Softtop (2/4)\*  
Land Cruiser Softtop (4/4)\*\*  
Land Cruiser Hardtop (2/4)\*  
Land Cruiser Hardtop (4/4)\*\*  
Land Cruiser Station Wagon (2/4)\*

\* (2/4) means a transfer case can either be switch to two wheel drive or four wheel drive

\*\* (4/4) means permanent four wheel drive

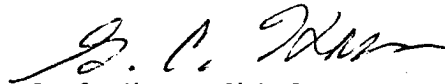
The following are the recommended values to be listed on the window decal required by California Assembly-Line Test Procedures for 1977 model vehicles:

<u>Engine Family</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
2F(C)	0.6	13	1.6

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California, this 28 day of October, 1976.



G. C. Hass, Chief  
Division of Vehicle Emissions Control

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Engine Family 2F(C) Engine (CID) 257.9 Engine Code \_\_\_\_\_

Emission Control System AI-EGR-EM-TR +10%(A/C) Yes  No

Vehicle Models (If Coded see attachment)	Trans	Inertia Weight	Distributor Type C,V,VR, Mfgr. Part Number	Fuel System Type 1-2V Mfgr. Part Number	EGR System Part No. Service**	Tune-Up Specification (1) Basic Timing (2) Idle Mixture (3) Idle Speed
Land Cruiser Softtop (2/4) Softtop (4/4) Hardtop (2/4) Hardtop (4/4)	M/T4	4000	Nippondenso 19100-61600	Aisan Kogyo 21100-61073	25620-61042	(1) 7° BTDC @ 650 ± 50 RPM in neutral; all vacuum lines remain connected to distributor. (2) Lean drop idle (See attached sheet) (3) 650 RPM in neutral
Land Cruiser Station Wagon		4500		21100-61063	25620-61032	

Comments Axle ratio: 4.111  
 \*\* No Service

Date of Issue October , 1976

**Abbreviations**

Distributor

- C-Centrifugal Advance
- V-Vacuum Advance
- VR-Vacuum Retard
- TI-Transistorized Ignition
- EI-Electronic Ignition
- Fuel System
- EFI, FI
- nV-nVenturi Carburetor
- VV-Variable Venturi

Exhaust Emission Control System

- AI-Air Injection
- CAI-Catalyst Air Injection
- EFI-Electronic Fuel Injection
- EGR-Exhaust Gas Recirculation
- EM-Engine Modification
- EFE-Early Fuel Evaporation
- ESAC-Electronic Spark Advance Control
- FI-Fuel Injection

- OC-Oxidation Catalyst
- PAI-Pulse Air Injection
- RC-Reduction Catalyst
- TR-Thermal Reactor
- TWC-Three Way Catalyst
- λ-Air Fuel Ratio Sensor
- \*Service
- I-Inspect, repair/replace as needed
- R-Replace

## Toyota Lean Idle Drop Method

Manufacturer: Toyota Motor Company, Ltd.  
Engine Family: 2F(C)

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All adjustments must be made with engine at normal operating temperature.

- (1) Coolant temperature 180°F
- (2) Choke valve fully open

Before adjusting the idle mixture, the basic timing, 7° BTDC @ 800 RPM (manual transmission (M/T)), and idle speed, 650 RPM (M/T), must be within specifications. All adjustments must be made in neutral with all accessories (wipers, heater, air conditionings, etc.) off.

Adjust the idle mixture screw to obtain the maximum engine speed (engine RPM). Readjust idle speed screw to return engine speed to 690 RPM (M/T). Repeat attempt to increase the engine speed by adjusting idle mixture screw and again readjusting the engine speed back to 690 RPM (M/T). When it is no longer possible to increase engine speed by adjusting the mixture screw, the idle mixture screw must be adjusted until the idle speed of 650 RPM (M/T) is obtained.