

# MAIN MECHANISMS

## ENGINE

The new Land Cruiser is provided with two types of gasoline engines and three types of diesel engines.

Engine Type		No. of Cyls & Arrangement	Displacement cm <sup>3</sup> (cu in.)	Maximum Output kW @ rpm	Maximum Torque N·m @ rpm	Characteristic
Gasoline Engine	2UZ-FE	8-Cylinder, V Type	4664 (284.5)	173@4800*1	434@3400*1	Newly developed
				170@4800*2	410@3400*2	Newly developed
				186@4800*3	431@3400*3	Newly developed
	1FZ-FE	6-Cylinder, In-Line	4477 (273.1)	165@4600*2	387@3600*2	Improved performance; complies with exhaust gas regulations
				179@4600*3	407@3600*3	
Diesel Engine	1HD-FTE	6-Cylinder, In-Line	4164 (254.1)	150@3400*1	1400*1 430@ 3200	Equipped with intercooler and EFI (electronic fuel injection)
	1HD-T	6-Cylinder, In-Line	4164 (254.1)	118@3600*2	360@2100*2	Continual application
				96@3800*2	285@2200*2	
	1HZ	6-Cylinder, In-Line	4164 (254.1)	100@3800*3	290@2200*3	Continual application

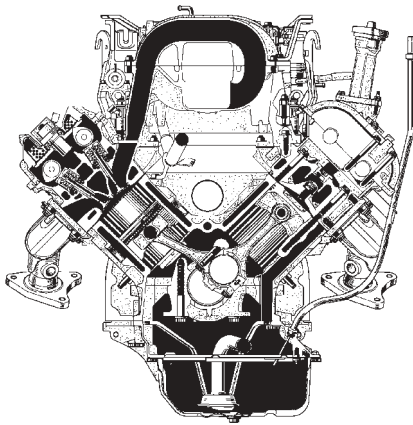
\*1: EEC (for Europe)

\*2: SAE-NET (For Australia and General Countries)

\*3: SAE-GROSS (For G.C.C. Countries)

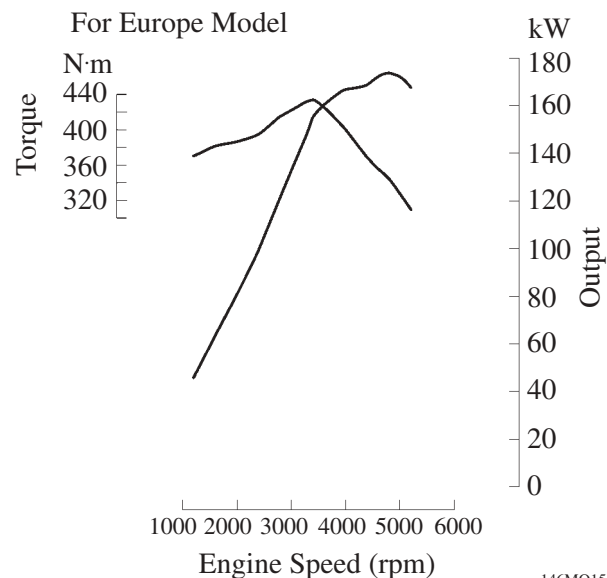
### ► 2UZ-FE Engine ◀

#### Cross Section Drawing



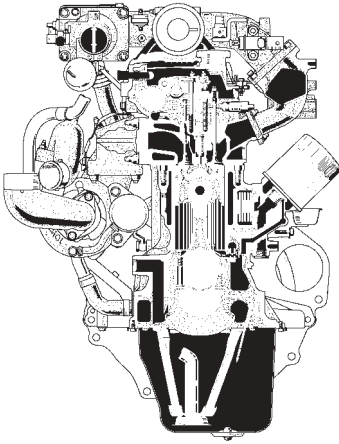
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#### Performance Curve



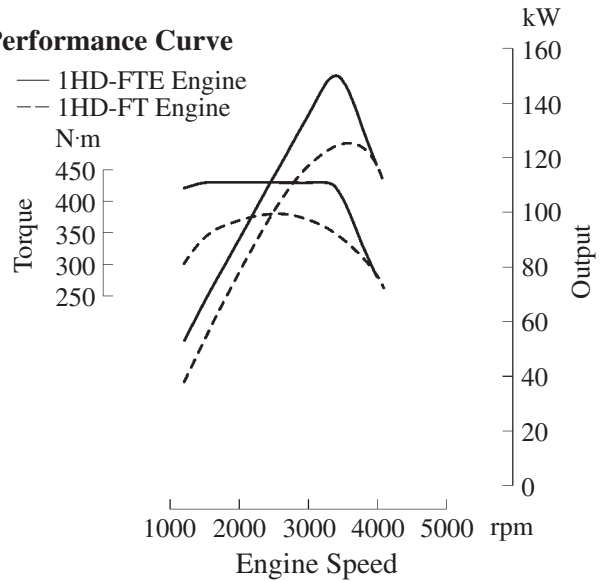
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### ► 1HD-FTE Engine ◀ Cross Section Drawing



147MO24

### Performance Curve



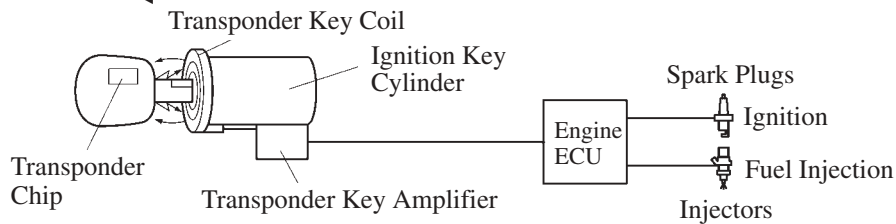
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## ENGINE IMMOBILISER

An engine immobiliser system, which determines if an attempted theft is taking place and which prohibits the ignition and the injection of fuel in the engine, is provided.

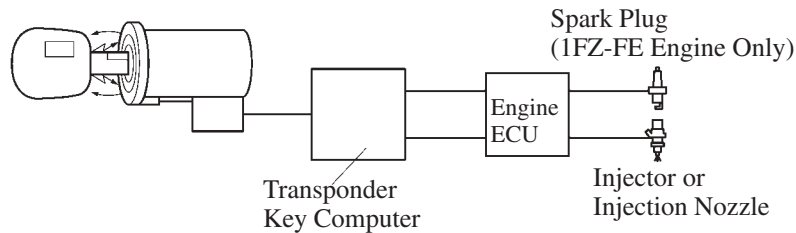
- The engine immobiliser system prevents vehicle theft by comparing the ID code that is stored in the engine ECU (2UZ-FE engine model) or transponder key computer (except 2UZ-FE engine model) against the ID code that is stored in the ignition key and permits ignition and the injection of fuel if the codes match.

### ► 2UZ-FE Engine Model ◀



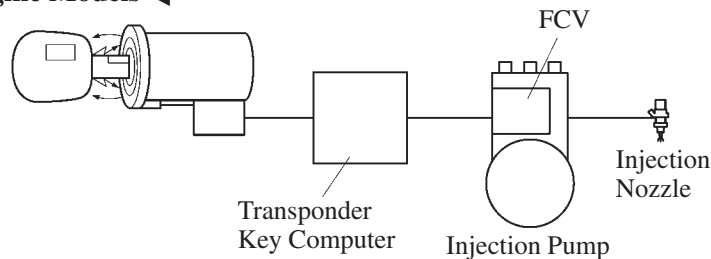
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### ► 1FZ-FE and 1HD-FTE Engine Models ◀



147MO19

### ► 1HZ and 1HD-T Engine Models ◀



147MO20