

## ■ 1HZ ENGINE

### 1. General

Features indicated below have been adopted on the models for Australia and certain models for general countries (HZJ78L-RJMRS for China) to comply with the European STEP-II regulations.

- Emission Control System
- EGR System
- Injection Pump with TCV (Timing Control Valve) and BACS (Boost Altitude Compensation System)

The basic construction and operation are the same as new Land Cruiser (100 series) with 1HZ engine. For details, refer to [page 168](#) on Land Cruiser (100 series) section.

### ► Engine Specifications ◀

Model			Australia and General Countries* <sup>1</sup>	General Countries* <sup>2</sup>
No. of Cyls. & Arrangement			6-Cylinder, In-line	←
Valve Mechanism			12-Valve OHC, Gear and Belt Drive	←
Combustion Chamber			Swirl Type	←
Manifolds			Cross-Flow	←
Fuel System			Distributor Type (Mechanically Controlled)	←
Displacement		cm <sup>3</sup> (cu. in.)	4164 (254.0)	←
Bore x Stroke		mm (in.)	94.0 x 100.0 (3.70 x 3.94)	←
Compression Ratio			22.4 : 1	←
Max. Output		SAE-NET	96 kW @ 3800 rpm	←
Max. Torque		SAE-NET	285 N·m @ 2200 rpm	←
Valve Timing	Intake	Open	8° BTDC	←
		Close	36° ABDC	←
	Exhaust	Open	51° BBDC	←
		Close	5° ATDC	←
Firing Order			1-4-2-6-3-5	←
Fuel Cetane Number			48 or more	←
Emission Regulation			European STEP II	—
Oil Grade			API CF-4	←
Engine Service Mass		kg (lb)	317 (699)	313 (690)

\*1: HZJ78L-RJMRS for China

\*2: Others