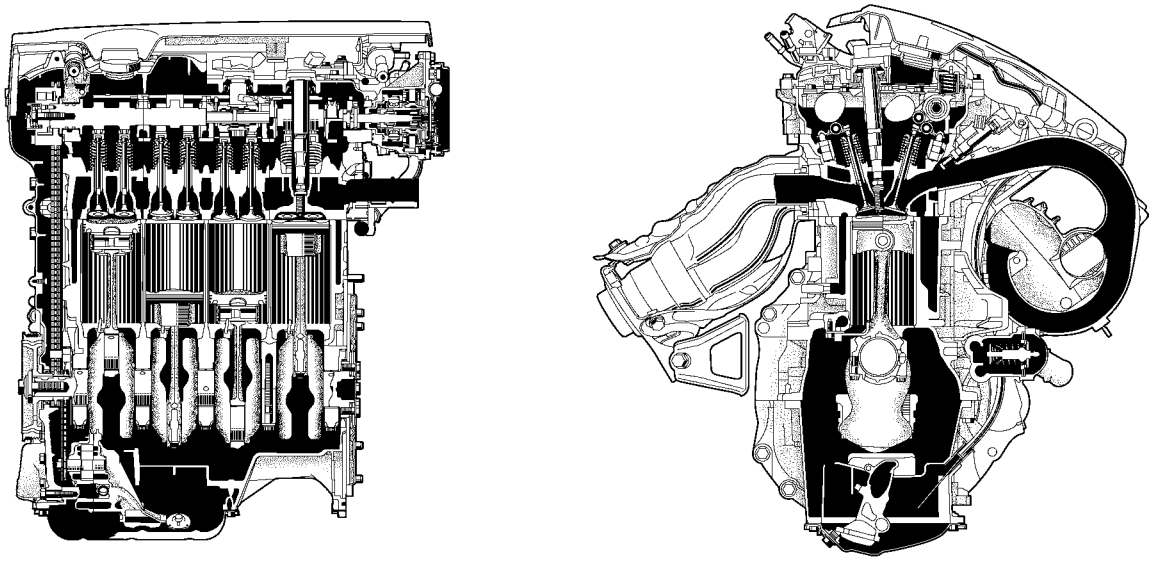
3ZR-FAE ENGINE

■ DESCRIPTION

- The 3ZR-FAE engine is an in-line 4-cylinder, 2.0-liter, 16-valve DOHC engine.
- This engine uses the VALVEMATIC, Dual Variable Valve Timing-intelligent (Dual VVT-i) system, Acoustic Control Induction System (ACIS), Direct Ignition System (DIS) and Electronic Throttle Control System-intelligent (ETCS-i). They have been developed to achieve high performance and fuel economy, and to reduce exhaust emissions.



01NEG240Y

▶ Engine Specifications ◀

No. of Cyls. & Arrangement			4-cylinder, In-line
Valve Mechanism			16-valve DOHC, Chain Drive (with VALVEMATIC and Dual VVT-i)
Combustion Chamber			Pentroof Type
Manifolds			Cross-flow
Fuel System			Electronic Fuel Injection (EFI)
Displacement			1987 cm^3 (121.3 cu. in.)
Bore × Stroke			80.5 mm × 97.6 mm (3.17 in. × 3.84 in.)
Compression Ratio			10.0 : 1
Max. Output [EEC]			116 kW @ 6200 rpm
Max. Torque [EEC]			198 N·m @ 4000 rpm
Valve Timing	Intake	Open	10° to -14° BTDC
		Closed	70° to -60° ABDC
	Exhaust	Open	65° to 25° BBDC
		Closed	-1° to 39° ATDC
Firing Order			1 – 3 – 4 – 2
Research Octane Number			95 or higher*1
Emission Regulation			EURO IV
Engine Service Mass (Reference)*2		M/T	129 kg (284.4 lb)
		CVT	122 kg (269.0 lb)

*1: Premium unleaded gasoline with a research octane number of 95 or higher required for optimum engine performance. If 95 octane cannot be obtained, you may use unleaded gasoline with a research octane number as low as 91. Use of unleaded fuel with a research octane number lower than 95 may result in engine knocking and significantly reduced performance. Persistent knocking can lead to engine damage and should be corrected by refueling with higher octane unleaded gasoline.

*2: Weight shows the figure with oil and water fully filled.