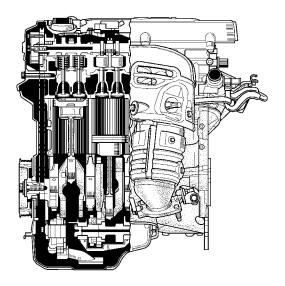
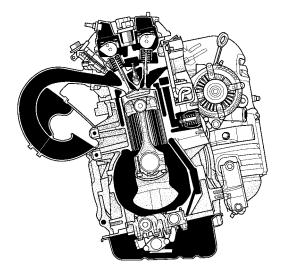
# **ENGINE**

### **1AZ-FE AND 2AZ-FE ENGINES**

### **■ DESCRIPTION**

- The 1AZ-FE engine, which is an in-line, 4-cylinder, 2.0-liter, 16-valve DOHC engine, based on the 1AZ-FE engine on the current RAV4.
- The 2AZ-FE engine, which is an in-line, 4-cylinder, 2.4-liter, 16-valve DOHC engine, based on the 2AZ-FE engine on the current Previa.
- These engines have following features that have been optimized in order to realize the further improvement of the engine performance, fuel economy and to reduce exhaust emissions.
  - The PS (Planetary reduction Segment conductor motor) starter has been adopted.
  - Meets the European STEP III regulation requirements
  - ETCS-i (Electronic Throttle Control System-intelligent) has been adopted.
  - VVT-i (Variable Valve Timing-intelligent) system is used.
  - A big bore/long port intake manifold is used.
  - A balance shaft is used.





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# **▶** Engine Specification **◄**

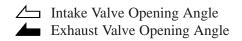
Model		Camry	RAV4
Engine Type		1AZ-FE	+
No. of Cyls. & Arrangement		4-cylinder, In-line	←
Valve Mechanism		16-Valve, DOHC, Chain Drive	←
Combustion Chamber		Pentroof Type	←
Manifolds		Cross-Flow	<b>←</b>
Fuel System		EFI	<b>←</b>
Displacement	cm <sup>3</sup> (cu. in.)	1998 (121.9)	<b>←</b>
Bore × Stroke	mm (in.)	86.0 × 86.0 (3.39 × 3.39)	<b>←</b>
Compression Ratio		9.8 : 1	<b>←</b>
Max. Output	(EEC)	106 kW @ 5600 rpm	<b>←</b>
Max. Torque (EEC)		190 N·m @ 4000 rpm	←
Firing Order		1-3-4-2	<b>←</b>
Research Octane Number		95 or more	<b>←</b>
Duy Weight Ira (lh)	M/T	125 (276)	<b>←</b>
Dry Weight kg (lb	A/T	119 (262)	<b>←</b>
Oil Grade		API SJ, EC or ILSAC	<b>←</b>

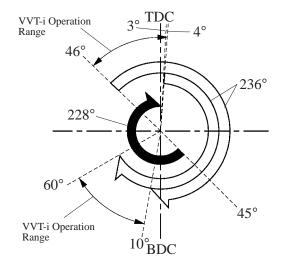
# **▶** Performance Curve **◄**

# 

Engine Speed (rpm)

# **▶** Valve Timing **◄**





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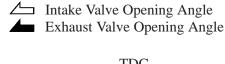
# **▶** Engine Specification **◄**

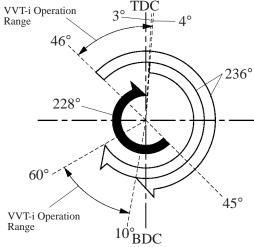
Model		Camry	Previa
Engine Type		2AZ-FE	←
No. of Cyls. & Arrangement		4-cylinder, In-line	<b>←</b>
Valve Mechanism		16-Valve, DOHC, Chain Drive	←
Combustion Chamber		Pentroof Type	←
Manifolds		Cross-Flow	←
Fuel System		EFI	←
Displacement	cm <sup>3</sup> (cu. in.)	2362 (144.2)	<b>←</b>
Bore × Stroke	mm (in.)	88.5 × 96.0 (3.48 × 3.78)	<b>←</b>
Compression Ratio		9.6 : 1	←
Max. Output (EEC)		114 kW @ 5600 rpm	←
Max. Torque (EEC)		218 N·m @ 4000 rpm	←
Firing Order		1-3-4-2	←
Research Octane Number		95 or more	←
Day Weight Ira (III)	M/T	127 (280)	_
Dry Weight kg (lb)	A/T	121 (267)	_
Oil Grade		API SJ, SL, EC or ILSAC	API SH, SJ, EC or ILSAC

# **▶** Performance Curve **◄**

# Torque 200 - 80 Output - 40 - 40 Engine Speed (rpm)

# **▶** Valve Timing **◄**





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