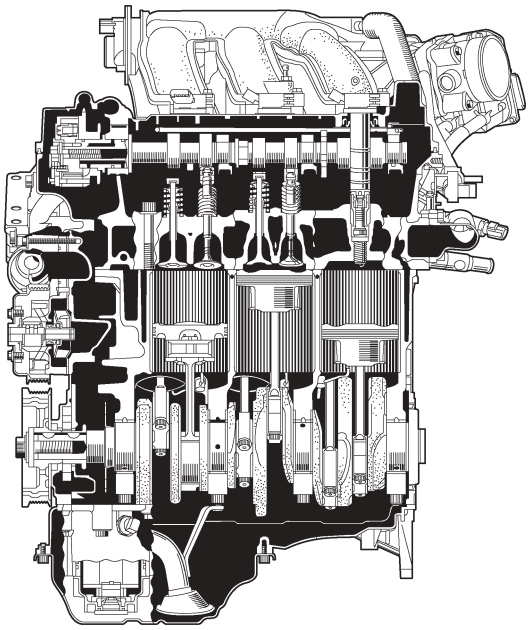
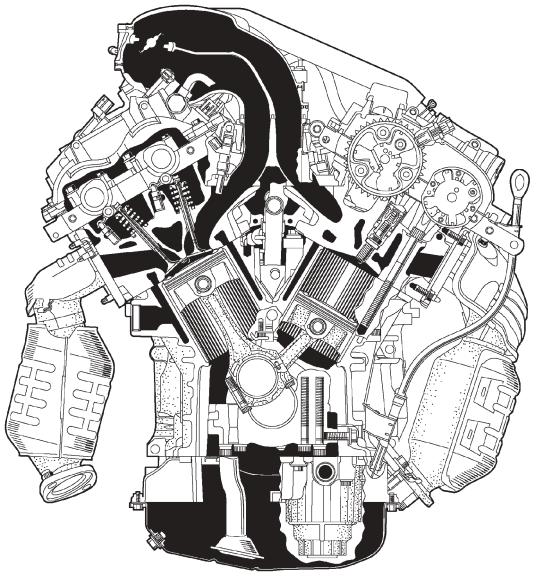
2GR-FE ENGINE

■ DESCRIPTION

The 2GR-FE engine on the new Camry is a newly developed, V6 3.5-liter, 24-valve DOHC engine. This engine uses the Dual VVT-i (Dual Variable Valve Timing-intelligent) system, DIS (Direct Ignition System), ACIS (Acoustic Control Induction System), and ETCS-i (Electronic Throttle Control System-intelligent). These control functions achieve improved engine performance, fuel economy, and reduced exhaust emissions.



285EG01



285EG02

▶ Engine Specifications ◀

No. of Cyls. & Arrangement			6-Cylinder, V Type
Valve Mechanism			24-Valve DOHC, Chain Drive (with Dual VVT-i)
Combustion Chamber			Pentroof Type
Manifolds			Parallel-Flow
Fuel System			EFI
Ignition System			DIS
Displacement		cm^3 (cu. in.)	3456 (210.9)
Bore x Stroke		mm (in.)	94.0 x 83.0 (3.70 x 3.27)
Compression Ratio			10.8 : 1
Max. Output		EEC	204 kW @ 6200 rpm*2
		SAE-NET	200 kW @ 6200 rpm*3
Max. Torque		EEC	346 N·m @ 4700 rpm*2
		SAE-NET	336 N·m @ 4700 rpm*3
Valve Timing	Intake	Open	–3° to 37° BTDC
		Close	71° to 31° ABDC
	Exhaust	Open	60° to 25° BBDC
		Close	4° to 39° ATDC
Firing Order			1 – 2 – 3 – 4 – 5 – 6
Oil Grade			API grade SL "Energy-Conserving", SM "Energy-Conserving" or ILSAC
Research Octane Number			95 or higher*4
			91 or higher*5
Emission Regulation		Taiwan	Tier 1
		Vietnam Philippines Indonesia	EURO II
		Thailand	EURO III
		Australia G. C. C. Countries	EURO IV
Engine Service Mass*1 (Reference)		kg (lb)	163 (359)

*1: Weight shows the figure with the oil and engine coolant fully filled.
*2: Taiwanese, Vietnamese, Philippine, Indonesian, Thai and Australian models
*3: G. C. C. Countries models
*4: Taiwanese models
*5: Vietnamese, Philippine, Indonesian, Thai, Australian and G. C. C. Countries models

▶ Valve Timing ◀

