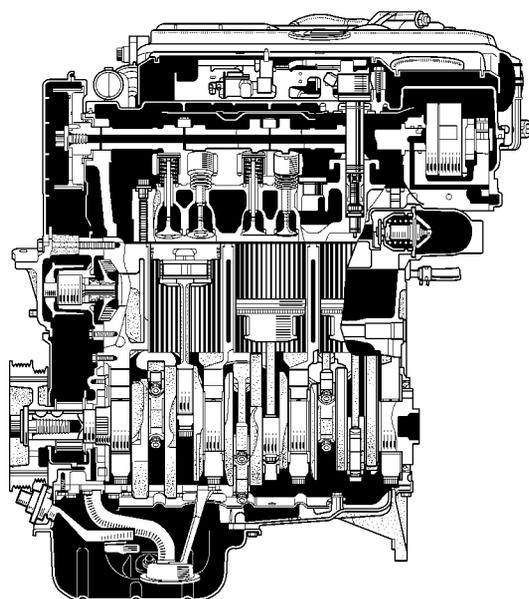


ENGINE

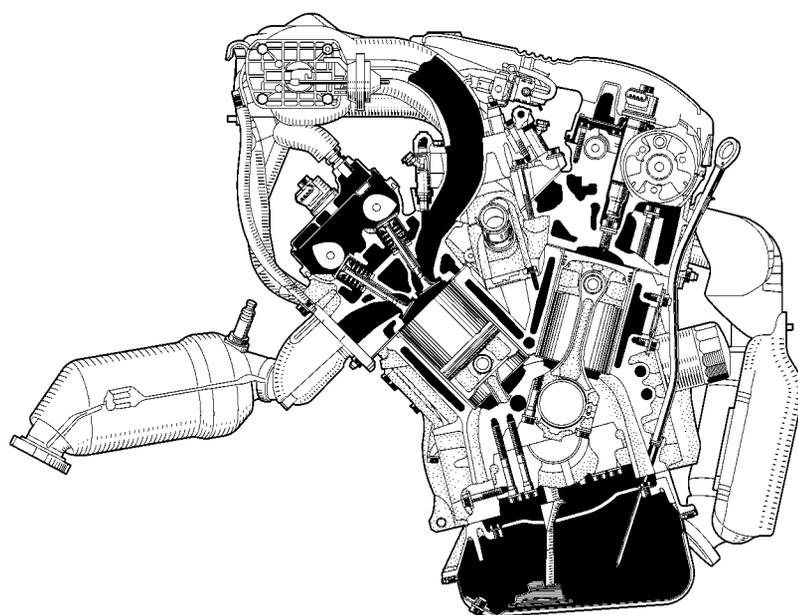
3MZ-FE ENGINE

■ DESCRIPTION

- The 3MZ-FE engine on the '04 RX330 is a newly developed V6, 3.3-liter, 24-valve DOHC engine. It is based on the 1MZ-FE engine of the '03 RX300, in which the cylinder bore has been increased. Furthermore, the VVT-i (Variable Valve Timing-intelligent) system, ACIS (Acoustic Control Induction System), and the ETCS-i (Electronic Throttle Control System-intelligent) are used.
- This engine complies with the ULEV-II (Ultra Low Emission Vehicle-II) regulations as a result of the changes made to its intake, exhaust, and fuel systems, as well as the optimal control of these systems.



241EG01



241EG02

► Engine Specifications ◀

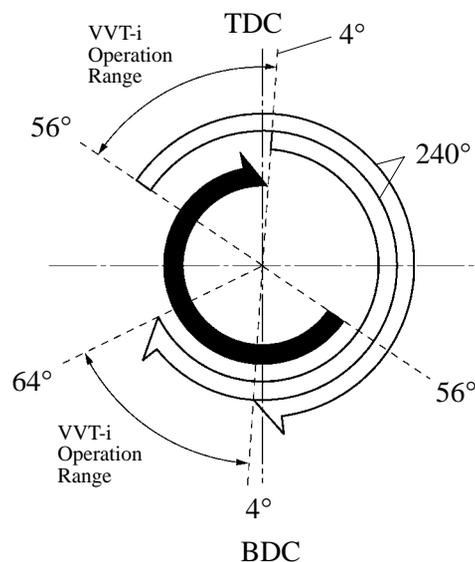
Model			'04 RX330	'03 RX300
Engine Type			3MZ-FE	1MZ-FE
No. of Cyls. & Arrangement			6-Cylinder, V Type	←
Valve Mechanism			24-Valve DOHC, Belt & Gear Drive (with VVT-i)	←
Combustion Chamber			Pentroof Type	←
Manifolds			Cross-Flow	←
Fuel System			SFI	←
Displacement		cm ³ (cu. in.)	3311 (202.1)	2995 (182.8)
Bore × Stroke		mm (in.)	92.0 × 83.0 (3.62 × 3.27)	87.5 × 83.0 (3.44 × 3.27)
Compression Ratio			10.8 : 1	10.5 : 1
Max. Output		(SAE-NET)	172 kw @ 5600 rpm (230 HP @ 5600 rpm)	164 kw @ 5800 rpm (220 HP @ 5800 rpm)
Max. Torque		(SAE-NET)	328 N·m @ 3600 rpm (242 ft·lbf @ 3600 rpm)	301 N·m @ 4400 rpm (222 ft·lbf @ 4400 rpm)
Valve Timing	Intake	Open	-4° ~ 56° BTDC	-4° ~ 56° BTDC
		Close	64° ~ 4° ABDC	60° ~ 0° ABDC
	Exhaust	Open	56° BBDC	54° BBDC
		Close	4° ATDC	2° ATDC
Firing Order			1-2-3-4-5-6	←
Research Octane Number			96 or higher	←
Octane Rating			91 or higher	←
Engine Service Mass* (Reference)		kg (lb)	160 (352)	157 (346)
Oil Grade			API SJ, SL, EC or ILSAC	API SH, SJ, EC or ILSAC
Tailpipe Emission Regulation			ULEV-II, SFTP	NLEV
Evaporative Emission Regulation			LEV-II, ORVR	LEV-I, ORVR

*: Weight shows the figure with the oil and engine coolant fully filled.

► Valve Timing ◀

◁ : Intake Valve Opening Angle

▴ : Exhaust Valve Opening Angle



241EG03