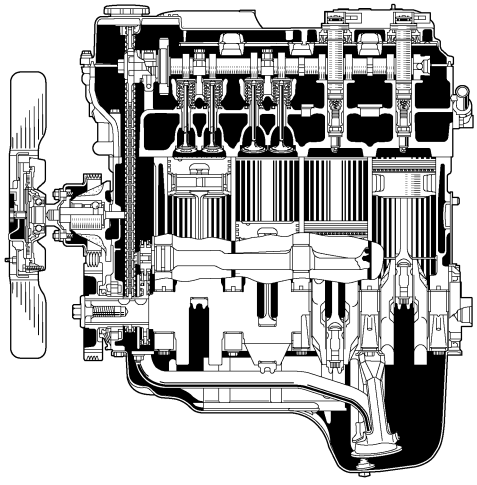
ENGINE

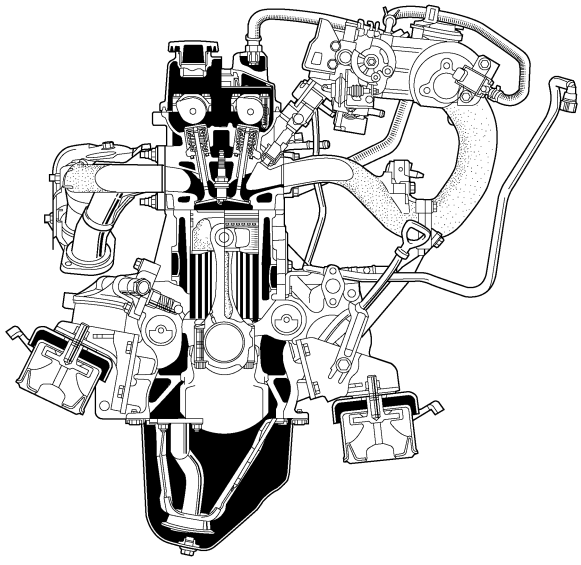
3RZ-FE ENGINE

■ DESCRIPTION

The 3RZ-FE engine is an in-line 4-cylinder, 2.7-liter, 16-valve DOHC engine. This engine achieves high performance and fuel economy, and reduces engine noise and vibration through the use of balance shafts. This is based on the previous 3RZ-FE engine. Furthermore, as on the previous model, the leaded and unleaded models are made available according to their destinations.



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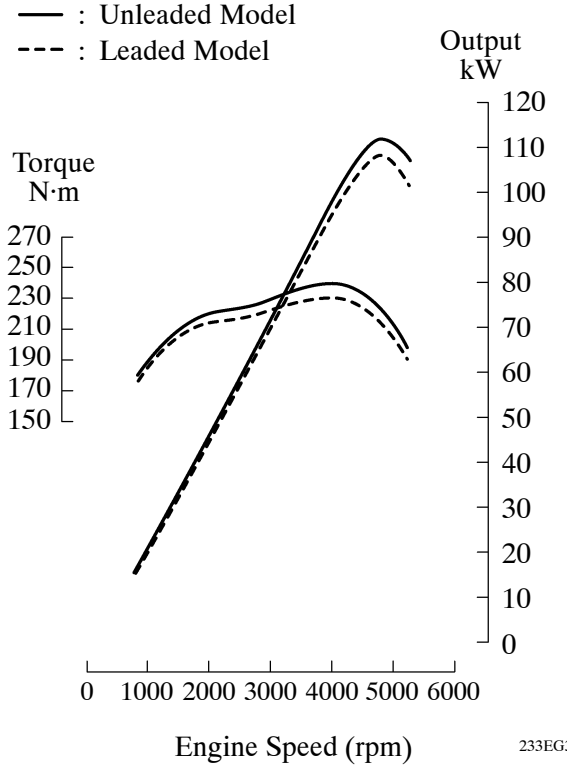
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▶ Engine Specifications ◀

Engine Type			3RZ-FE			
Model			New		Previous	
			Unleaded	Leaded	Unleaded	Leaded
No. of Cyls. & Arrangement			4-Cylinder, In-Line	←	←	←
Valve Mechanism			16-Valve DOHC, Chain Drive	←	←	←
Combustion Chamber			Pentroof Type	←	←	←
Manifolds			Cross-Flow	←	←	←
Fuel System			EFI	←	←	←
Displacement		cm^3 (cu.in.)	2694 (164.4)	←	←	←
Bore × Stroke		mm (in.)	95.0 × 95.0 (3.74 × 3.74)	←	←	←
Compression Ratio			9.5 : 1	←	←	←
Max. Output		(EEC)	112 kW@ 4800 rpm	108 kW@ 4800 rpm	112 kW@ 4800 rpm	108 kW@ 4800 rpm
Max. Torque		(EEC)	240 N·m @ 4000 rpm	230 N·m @ 4000 rpm	240 N·m @ 4000 rpm	230 N·m @ 4000 rpm
Valve Timing	Intake	Open	2° BTDC	←	5° BTDC	←
		Close	48° ABDC	←	45° ABDC	←
	Exhaust	Open	42° BBDC	←	←	←
		Close	2° ATDC	←	←	←
Firing Order			1 - 3 - 4 - 2	←	←	←
Research Octane Number			91 or Higher	←	←	←
Engine Service Mass* (Reference)		kg (lb)	Approx. 158 (348)	←	←	←
Oil Grade			API SJ, SL, EC or ILSAC	←	←	←
Emission Regulation			European STEP-II	—	—	—

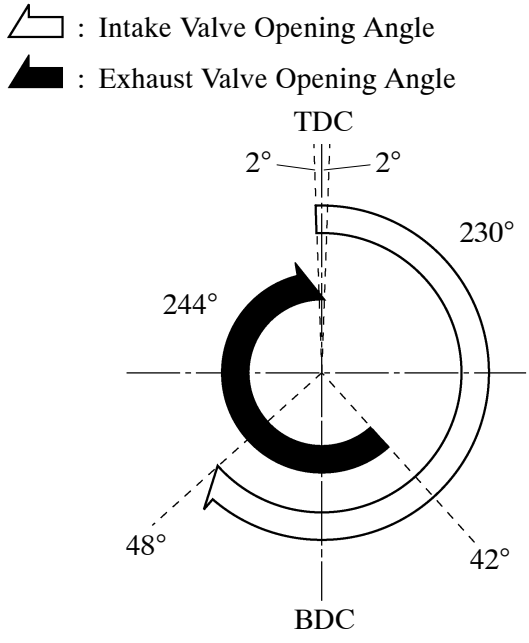
*: Weight shows the figure with the oil and water fully filled.

▶ Performance Curve ◀



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▶ Valve Timing ◀



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