

■ 1UZ-FE ENGINE

1. Description

The 1UZ-FE engine has adopted the VVT-i (Variable Valve Timing-intelligent) system and the ACIS (Acoustic Control Induction System) to improve engine performance and fuel economy and to reduce exhaust emissions.

In addition, it has adopted the ETCS-i (Electronic Throttle Control System-intelligent) to ensure excellent controllability of the vehicle and to improve its comfort.

2. Engine Specifications and Performance Curve

1UZ-FE Engine			'98 LS400	'97 LS400
Item				
No. of Cyls. & Arrangement			8-Cylinder, V Type	←
Valve Mechanism			32-Valve DOHC, Belt & Gear Drive	←
Combustion Chamber			Pentroof Type	←
Manifolds			Cross-Flow	←
Fuel System			SFI	←
Displacement		cm ³ (cu. in.)	3969 (242.1)	←
Bore×Stroke		mm (in.)	87.5×82.5 (3.44×3.25)	←
Compression Ratio			10.5 : 1	10.4 : 1
Max. Output		[SAE-NET]	216 kW @ 6000 rpm (290HP @ 6000rpm)	194 kW @ 5300 rpm (260HP @ 5300 rpm)
Max. Torque		[SAE-NET]	407 N·m @ 4000 rpm (300 ft·lbf @ 4000 rpm)	366 N·m @ 4500 rpm (270 ft·lbf @ 4500 rpm)
Valve Timing	Intake	Open	−14°~36° BTDC	6° BTDC
		Close	64°~14° ABDC	46° BTDC
	Exhaust	Open	46° BBDC	←
		Close	3° ATDC	←
Fuel Octane Number (RON)			96	←
Oil Grade			API SH EC-II, SJ EC or ILSAC	API SH EC-II or ILSAC

