## ■1AZ-FE ENGINE

## 1. Major Difference (from previous 1AZ-FE Engine)

Item	Outline				
Destination	Europe & General Countries				
Valve Mechanism	The cam profile has been changed in conjunction with the change in the valve timin				
Cooling System (See Page 157)	SLLC (Super Long Life Coolant) has been adopted.				
Intake and Exhaust System (See Page 158)	<ul> <li>An electronic throttle body with a built-in no-contact type throttle position sensor and a throttle control motor has been adopted.</li> <li>The exhaust system has been revised to optimize exhaust performance. In addition, the 2 TWCs located directly below the exhaust manifold have been integrated into 1 TWC, and a TWC has been added under the floor.</li> <li>The ceramic type TWC has been adopted directly below the exhaust manifold and under floor.</li> </ul>				
Fuel System (See Page 160)	The compact 12-hole type injector with high atomizing performance has been adopted.				
Charging System (See Page 161)	A segment conductor type alternator has been adopted.				
Engine Control System (See Page 163)	<ul> <li>The ETCS-i (Electronic Throttle Control System-intelligent) has been adopted.</li> <li>A planar type air-fuel ratio sensor has been adopted.</li> <li>A flat type knock sensor has been adopted.</li> <li>A contact type accelerator pedal position sensor has been adopted.</li> <li>A no-contact type throttle position sensor has been adopted.</li> <li>The number of the air fuel ratio sensor and the oxygen sensor become one.</li> </ul>				

## **▶** Engine Specifications **◄**

Model				New	Previous
No. of Cyli. & Arrangement				4-Cylinder, Inline	<b>←</b>
Valve Mechanism				16-Valve DOHC, Chain Drive	←
Combustion Chamber				Pentroof Type	<b>←</b>
Manifolds				Cross-Flow	←
Fuel System				EFI	←
Ignition System				DIS	←
Displacement cm <sup>3</sup> (cu. in.)			(cu. in.)	1998 (121.9)	←
Bore & Stroke mm (in.)			mm (in.)	86.0 x 86.0 (3.39 x 3.39)	←
Compression Ratio Unleaded Gasol		asoline	9.8 : 1	<b>←</b>	
Max. Output (EEC) Unlead		Unleaded Gasoline		110 kW @ 6000 rpm	←
Max. Torque (EEC)		Unleaded Gasoline		192 N·m @ 4000 rpm	←
Valve Timing	Intake	Unleaded	Open	3° − 43° BTDC	-4° − 46° BTDC
		Gasoline	Close	60° − 20° ATDC	60° – 10° ATDC
	Exhaust		Open	37° BBDC	45° BBDC
			Close	3° ATDC	←
Fuel Octane Number RON Unleaded Gasoline		95 or Higher	←		
Oil Grade				API SL, EC or ILSAC	API SJ, EC or ILSAC
Emission Regulation				European STEP IV	European STEP III