3. Major Difference

The major difference between the 2AZ-FE engine on the new Avensis Verso and the 1AZ-FE engine on the previous Avensis Verso are the following:

System		Features
Engine Proper	Cylinder Block	The cylinder bore has been changed.
	Piston	The piston diameter has been increased.
	Crankshaft	 The balance shaft drive gear has been installed onto the crankshaft. A balance shaft has been adopted.
Valve Mechanism		• The cam profile has been changed in conjunction with the change in the valve timing.
Cooling System		The TOYOTA genuine Super Long Life Coolant (SLLC) has been adopted.
Intake and Exhaust system		 An electronic throttle body with a built-in no-contact type throttle position sensor and a throttle control motor has been adopted. 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. The ceramic type TWC has been adopted directly below the exhaust manifold and under floor.
Fuel System		The 12-hole type injector has been adopted.
Charging System		The segment conductor type alternator has been adopted.
Engine Control System		 The ETCS-i (Electronic Throttle Control system-intelligent) has been adopted. A flat type knock sensor has been adopted. The air fuel ratio sensor has been discontinued and two oxygen sensor has been adopted. A contact type accelerator pedal position sensor has been adopted. A no-contact type throttle position sensor has been adopted. The charging control has been adopted.
Diagnosis		• Along with the adoption of the ETCS-i, the DTCs (Diagnostic Trouble Codes) have been added.