

3. Major Difference

The major difference between the 2AZ-FE engine on the new RAV4 and the 1AZ-FE engine on the previous RAV4 are the following:

System		Features
Engine Proper	Cylinder Block	<ul style="list-style-type: none"> ● The cylinder bore has been changed.
	Piston	<ul style="list-style-type: none"> ● The piston diameter has been increased.
	Crankshaft	<ul style="list-style-type: none"> ● The balance shaft drive gear has been installed onto the crankshaft. ● A balance shaft has been adopted.
Valve Mechanism		<ul style="list-style-type: none"> ● The cam profile has been changed in conjunction with the change in the valve timing.
Cooling System		<ul style="list-style-type: none"> ● The TOYOTA genuine Super Long Life Coolant has been adopted.
Intake and Exhaust system		<ul style="list-style-type: none"> ● The link-less type throttle body has been adopted. ● A high temperature resistant exhaust manifold with an integrated TWC (Three-Way Catalytic Converter) has been adopted. ● The 2 startup converters have been changed to a single startup converter. ● The exhaust pipe system has adopted an under floor catalyst, and a double-wall pipe upstream of the catalyst.
Fuel System		<ul style="list-style-type: none"> ● The 12-hole type injector has been improved.
Charging System		<ul style="list-style-type: none"> ● The segment conductor type alternator has been adopted in the automatic transaxle model.
Engine Control System		<ul style="list-style-type: none"> ● The ETCS-i (Electronic Throttle Control system-intelligent) has been adopted. ● The planar type air fuel ratio sensor has been adopted. ● The no-contact sensor has been adopted in the throttle position sensor. ● The linear type accelerator position sensor has been adopted. ● The number of the air fuel ratio sensor and the oxygen sensor become one.
Diagnosis		<ul style="list-style-type: none"> ● Along with the adoption of the ETCS-i, the DTCs (Diagnostic Trouble Codes) have been added.