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6AR-FSE ENGINE CONTROL SFI SYSTEM CONTROL ELECTRONIC THROTTLE CONTROL SYSTEM-intelligent (ETCS-i) CONTROL

FUNCTION

- **a.** By controlling the throttle valve opening angle in accordance with the accelerator pedal opening angle, the ECM generates the most appropriate engine output through the whole driving range, helping realize both acceleration operability and vehicle stability.
- b. The throttle body with motor assembly incorporates throttle valve opening angle control (nonlinear control) and idle speed control (ISC).
- c. Cooperative control with the powertrain allows for excellent operability and driving comfort.
- d. Two CPUs; one for ETCS-i control and one for SFI control, mutually monitor each other, ensuring reliability.
- e. The throttle position sensor employs a dual-circuit system to reinforce the fail-safe function, thereby ensuring reliability.

ETCS-i Controls

Throttle valve opening angle control	Controls the throttle valve opening angle to generate engine output in accordance with driving conditions and accelerator pedal position.
Idle Speed Control	Controls fast idle speed in accordance with the engine coolant temperature and controls idle speed after the engine has warmed up. Also controls idle speed using the throttle opening angle in accordance with engine accessory load.
ECT Cooperative Control (Control at Variable Speed)	Controls the throttle valve opening angle when shifting, realizing quicker shifts and reduced shock during upshifts and downshifts.

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