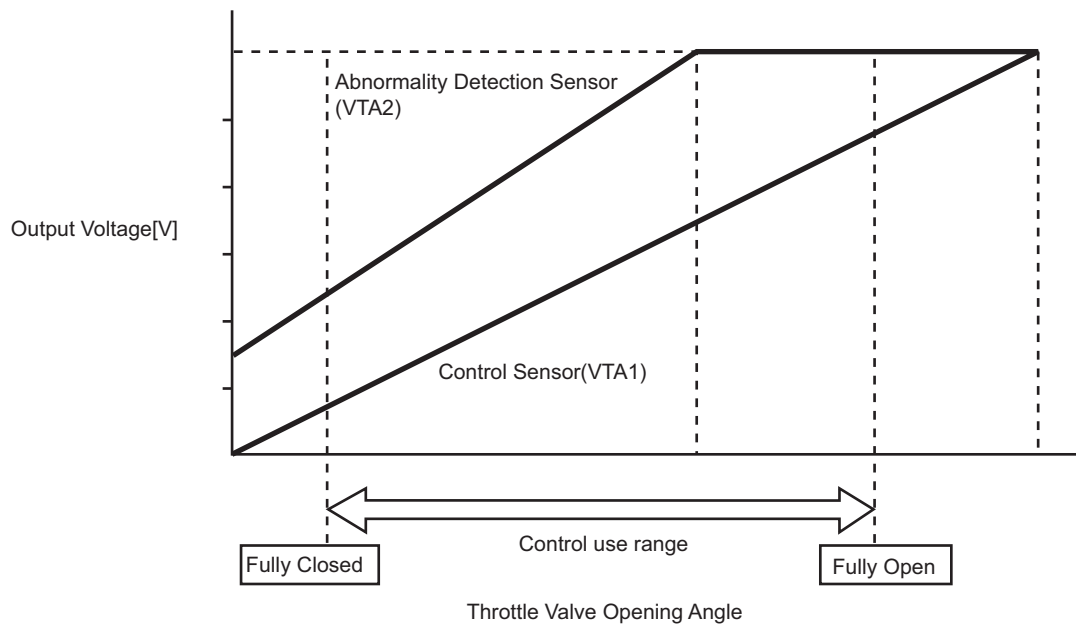
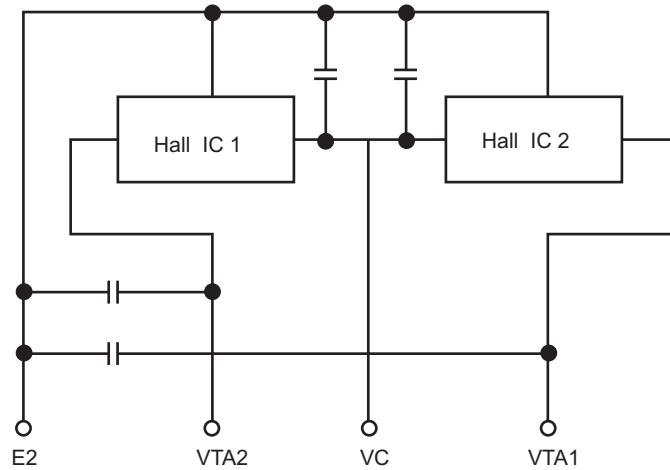


Throttle Position Sensor

- This sensor, which is located in the throttle body, detects the position of the throttle valve. By using a Hall element, in the same way as the accelerator position sensor, this electronic position sensor enables accurate control and ensures permanent reliability. In addition, this sensor consists of a dual system having different output characteristics to ensure reliability.

EG

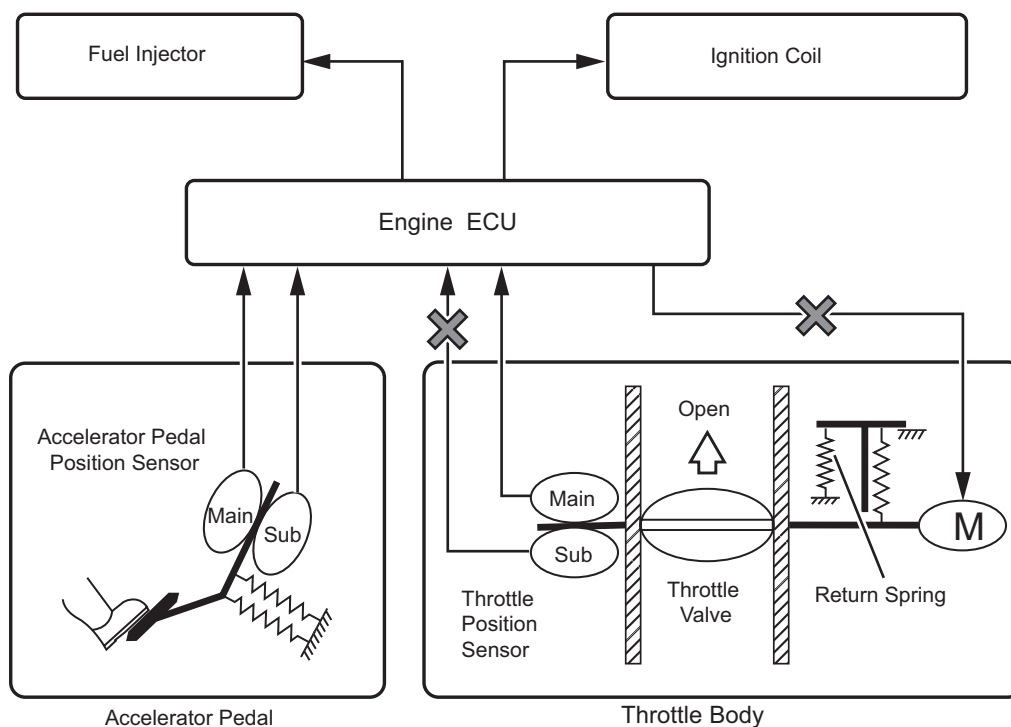


Fail Safe

- The throttle position sensor comprises two (main, sub) sensor circuits, to detect the throttle position. In case of an abnormal condition in the signal, the engine ECU switches to the failsafe driving mode.

Failure Detection

The throttle position sensor comprises two (main, sub) sensor circuits. If a malfunction occurs in either one of the sensor circuits, the engine ECU detects the abnormal signal voltage difference between these two sensor circuits, cuts off the current to the throttle control motor, and switches to the limp mode. Then, the force of the return spring causes the throttle valve to return and stay at the prescribed opening. At this time, the vehicle can be driven in the limp mode while the engine output is regulated through the control of the fuel injection and ignition timing in accordance with the accelerator opening.



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