

Throttle Body

- The adoption of the ETCS-i has realized excellent throttle control.
- The accelerator pedal position sensor is attached to the accelerator pedal.
- A link-less type throttle body has been adopted.
- The accelerator position sensor, which is provided on the accelerator pedal, transmits the operation by the driver (amount of pedal effort on the accelerator) to the engine ECU. The engine ECU determines the throttle position that suits the driving conditions and actuates the throttle motor. Then, the throttle position sensor gives feedback regarding the throttle valve position to the engine ECU.
- A motor with excellent response and minimal power consumption is used for the throttle control motor. The engine ECU performs the duty ratio control of the direction and the amperage of the current that flows to the throttle control motor in order to regulate the opening angle of the throttle valve.
- Both the accelerator position sensor and the throttle position sensor consist of two internal circuits (main, sub), in order to constantly monitor the system for malfunctions.
- If a malfunction is detected, the system illuminates a warning light in the combination meter to alert the driver, and cuts the current to the motor. The throttle valve return spring returns the throttle valve to a predetermined position. Thus, by cutting the fuel injection off and retarding the ignition timing, the system regulates the engine power output in accordance with the accelerator position to enable the vehicle to continue driving.

