# ENGINE CONTROL

## ■ GENERAL

The engine control system of the N04C-VQ engine consists of the following systems.

| System | Outline |
|---|---|
| Fuel Injection Volume Control | Controls the injection volume by calculating an optimal level in accordance with the conditions of the engine. |
| Pilot Injection Control | Pilot injection is a method that provides auxiliary fuel injection. |
| Fuel Injection Timing Control | Controls the injection timing by calculating the optimal fuel injection timing in accordance with the conditions of the engine. |
| Fuel Pressure Control | Controls the fuel pressure by sending signals to the suction control valve of the injection or supply pump assembly in accordance with the operating conditions of the engine. |
| Throttle Control | Controls the extent of the opening of the throttle valve in accordance with the engine conditions. |
| Turbocharger Control | Controls the actuator in accordance with the engine condition. |
| Idle Speed Control | Controls the idle speed by calculating the target speed in accordance with the conditions of the engine. |
| Idle Speed Fluctuation Stabilization Control | Detects the fluctuations in the engine speed for each cylinder and makes injection volume corrections. |
| Air Conditioning Cut-off Control * | Cuts off the air conditioning during acceleration to ensure proper drivability. |
| EGR Control | Controls the volume of exhaust gas recirculation in accordance with the driving condition. |
| Exhaust Retarder Control | Closes the exhaust retarder valve in order to apply the engine brake. |
| Diagnosis | If a malfunction occurs in the system, this function illuminates an indicator light to alert the driver. Also, it is possible to diagnose the area of the malfunction by shorting the terminals. |
| Fail Safe | If a failure occurs in the sensor signals, this function continues control through the use of the standard values stored in the ECM, or causes the engine to stop. |

*: Models with Air Conditioner