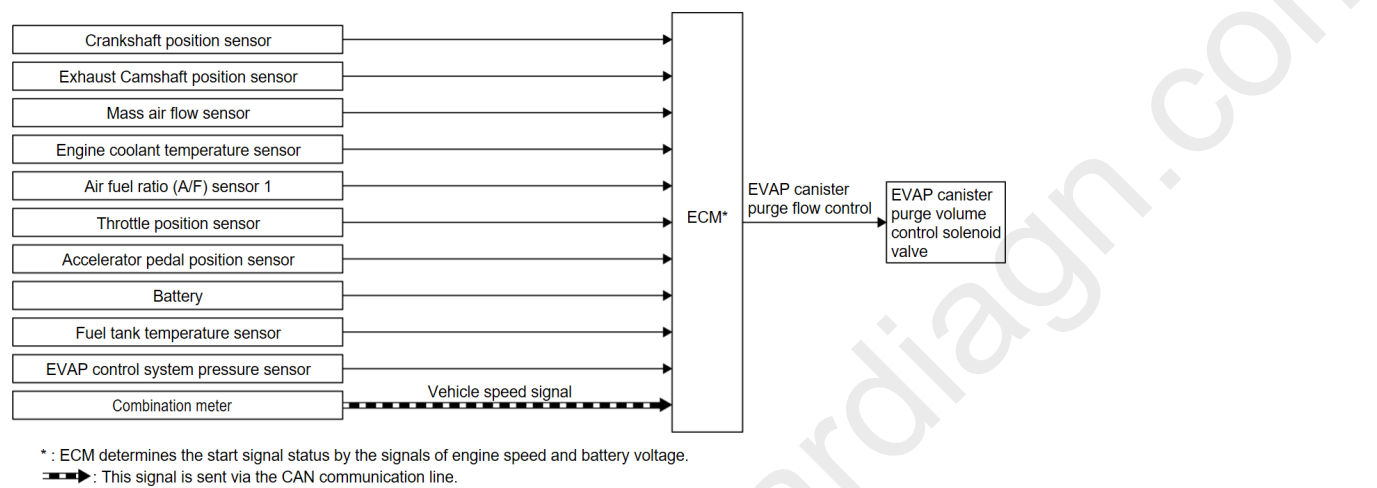













System Description

SYSTEM DIAGRAM



Component parts	Function
Crankshaft position sensor	Refer to Crankshaft Position Sensor  .
Exhaust camshaft position sensor	Refer to Exhaust Camshaft Position Sensor  .
Mass air flow sensor (With intake air temperature sensor)	Refer to Mass Air Flow Sensor (With Intake Air Temperature Sensor)  .
Engine coolant temperature sensor	Refer to Engine Coolant Temperature Sensor  .

Component parts	Function
Air fuel ratio (A/F) sensor 1	Refer to Air Fuel Ratio (A/F) Sensor 1  .
Throttle position sensor	Refer to Electric Throttle Control Actuator  .
Accelerator pedal position sensor	Refer to Accelerator Pedal Position Sensor  .
Battery	ECM detects the battery voltage.
Fuel tank temperature sensor	Refer to Fuel Tank Temperature Sensor  .
EVAP control system pressure sensor	Refer to EVAP Canister Vent Control Valve  .
Combination meter	It transmits the vehicle speed signal to ECM via CAN communication.
ECM	Refer to ECM  .
EVAP canister purge volume control solenoid valve	Refer to EVAP Canister Purge Volume Control Solenoid Valve  .

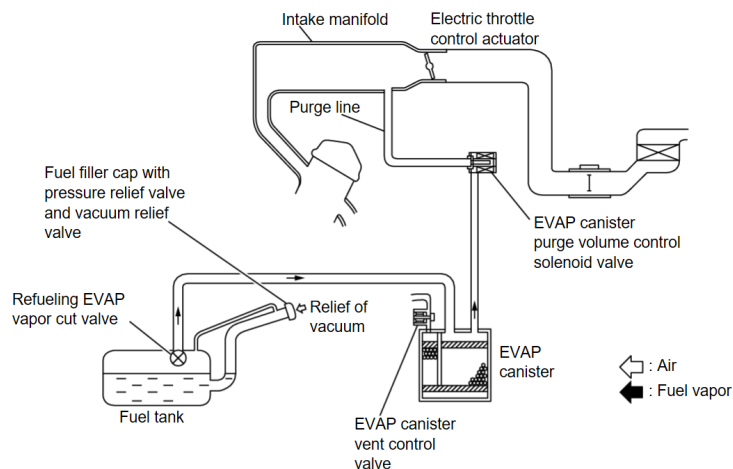
INPUT/OUTPUT SIGNAL CHART

Sensor	Input signal to ECM	ECM function	Actuator
Crankshaft position sensor Camshaft position sensor	Engine speed* ¹	EVAP canister purge flow control	EVAP canister purge volume control solenoid valve
Mass air flow sensor	Amount of intake air		
Engine coolant temperature sensor	Engine coolant temperature		
Battery	Battery voltage* ¹		
Throttle position sensor	Throttle position		
Accelerator pedal position sensor	Accelerator pedal position		
Air fuel ratio (A/F) sensor 1	Density of oxygen in exhaust gas (Mixture ratio feedback signal)		
Fuel tank temperature sensor	Fuel temperature in fuel tank		
EVAP control system pressure sensor	Pressure in purge line		
Combination meter	Vehicle speed* ²		

*1: ECM determines the start signal status by the signals of engine speed and battery voltage.

*2: This signal is sent to the ECM through CAN communication line.

SYSTEM DESCRIPTION



The evaporative emission system is used to reduce hydrocarbons emitted into the atmosphere from the fuel system. This reduction of hydrocarbons is accomplished by activated charcoals in the EVAP canister.

The fuel vapor in the sealed fuel tank is led into the EVAP canister which contains activated carbon and the vapor is stored there when the engine is not operating or when refueling to the fuel tank.

The vapor in the EVAP canister is purged by the air through the purge line to the intake manifold when the engine is operating. EVAP canister purge volume control solenoid valve is controlled by ECM. When the engine operates, the flow rate of vapor controlled by EVAP canister purge volume control solenoid valve is proportionally regulated as the air flow increases.

EVAP canister purge volume control solenoid valve also shuts off the vapor purge line during decelerating.