

Fuel Gauge

- The fuel gauge consists of an electronic meter that actuates the indicator on the fuel gauge. The meter ECU inputs and processes the data for actuating the indicator, and controls a stepper motor in accordance with the data in order to indicate the fuel residual volume.
- The meter ECU effects initialization control to return the indicator to the zero position each time power is applied to the combination meter.

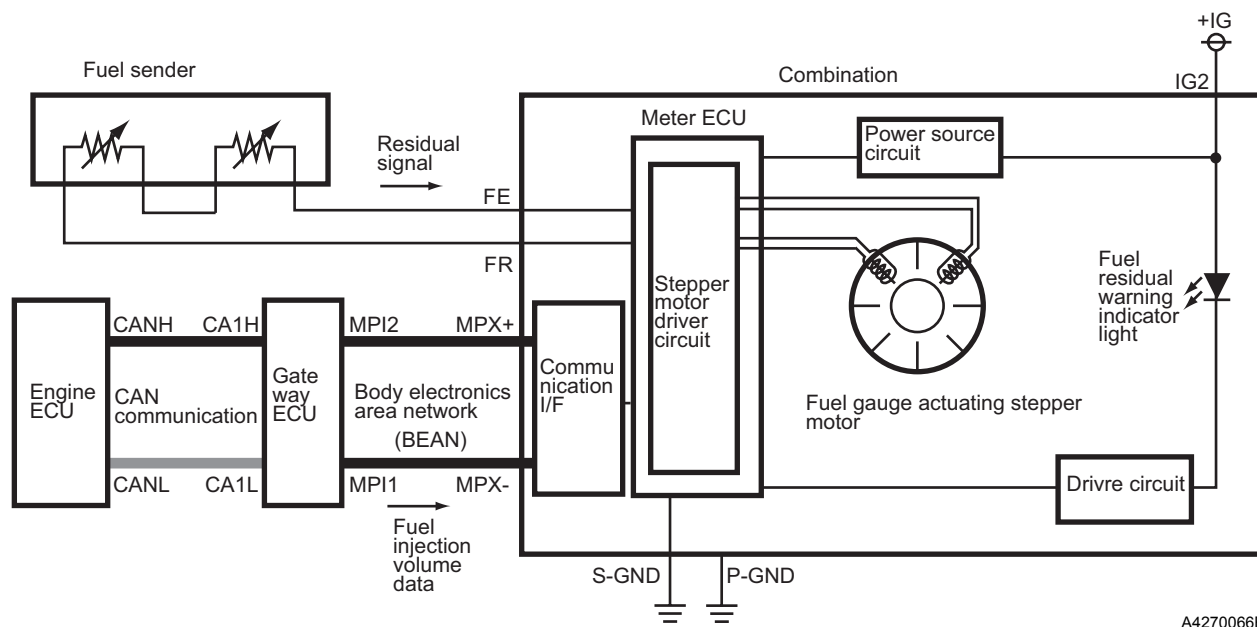
Fuel Gauge Operation

Normal operation

- The meter ECU receives the input of the fuel residual volume (residual volume signal) from inside the fuel tank and the fuel consumption volume of the engine (fuel injection volume data from the BEAN (Body Electronics Area Network)). The meter ECU processes these pieces of data in order to calculate the fuel residual volume display data. This minimizes the fluctuation of the indicator and calculates the residual volume more accurately when the fuel level fluctuates, such as when the vehicle is being driven on a slope or turning.
- Based on the calculated fuel residual volume data, the meter ECU controls the rotational angle, direction, and speed of the indicator (the rotor of the stepper motor) by actuating the stepper motor driver circuit in order to indicate the fuel residual volume.

Handling a Failure in Fuel Injection Volume Data

- If the meter ECU cannot receive the fuel consumption volume of the engine {fuel injection volume data from the BEAN (Body Electronics Area Network)}, it will calculate the fuel residual volume display data based only on the residual volume of the fuel tank (residual volume signal).



Fuel Residual Warning Operation

- If the fuel residual volume display data that the meter ECU has calculated for the purpose of actuating the fuel gauge has decreased to an approximately fuel residual volume of 12 liters, the fuel residual volume warning indicator light illuminates in the combination meter.