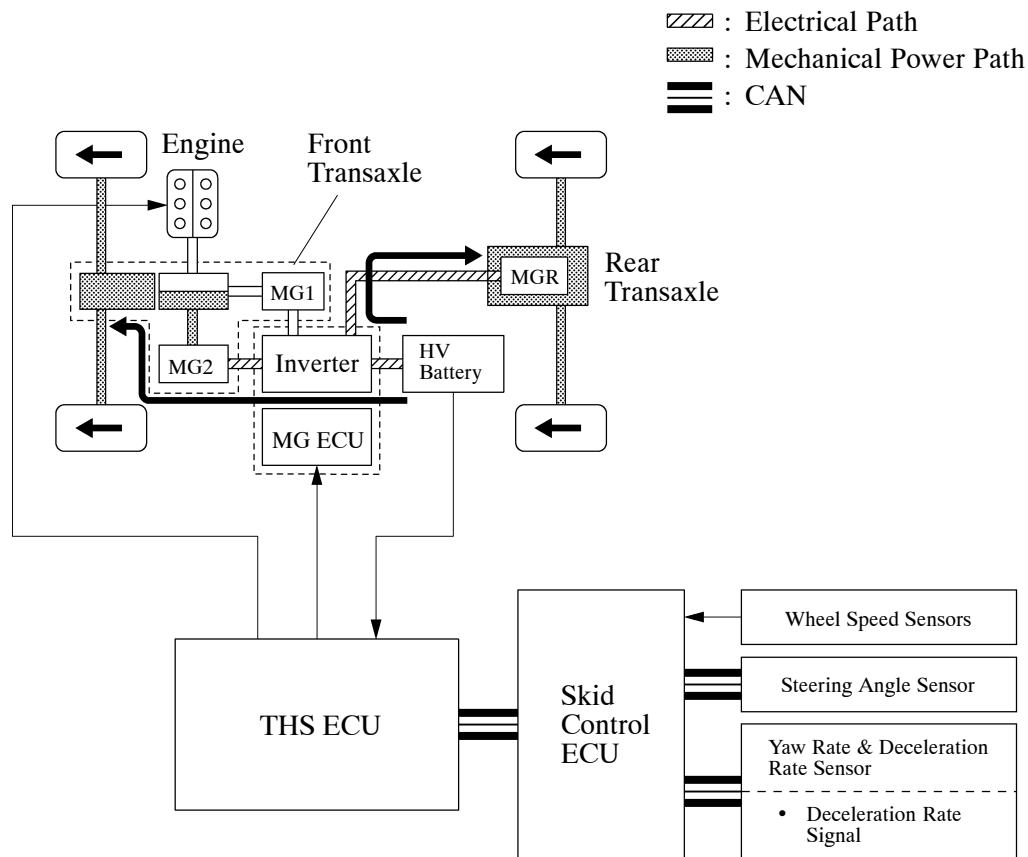


■ OPERATION

1. Start-off Control

- The THS ECU calculates the required motive force based on the amount of effort applied to the accelerator pedal by the driver and the signals from the sensors. Then, the THS ECU transmits the required motive force and the shift position signal to the skid control ECU.
- The skid control ECU determines that the vehicle is in the start-off state based on the signals from the wheel speed sensors, steering angle sensor, and the yaw rate & deceleration rate sensor (deceleration rate signal). Then, the skid control ECU calculates the torque distribution between the front and rear wheels based on the foregoing signals and the required motive force and the shift position signal from the THS ECU, and transmits them to the THS ECU.
- Upon receiving the signals from the skid control ECU, the THS ECU appropriately controls the motive forces of MG2 and MGR, in order to achieve traction performance while ensuring driving stability.
- The THS ECU constantly monitors the SOC (state of charge) of the HV battery. Thus, it appropriately controls whether to use the electrical power of the HV battery to drive MG2 and MGR, use the electrical power generated by MG1 to drive MG2 and MGR, or use both electrical powers.



2. Normal Driving

- As a rule, the system stops the driving of the rear wheels during normal driving, to ensure fuel economy performance.
- If the vehicle is being driven on a slippery road surface, accelerates, or makes a tight turn, the skid control ECU detects the conditions of the vehicle based on the signals provided by the wheel speed sensors, steering angle sensor, and the yaw rate & deceleration rate sensor (deceleration rate signal). Then, the skid control ECU calculates the torque distribution between the front and rear wheels, and transmits the signals to the THS ECU.
- Upon receiving the signals from the skid control ECU, the THS ECU appropriately controls the motive forces of the engine, MG2, and MGR, in order to achieve traction performance while ensuring driving stability.
- The THS ECU constantly monitors the SOC (state of charge) of the HV battery. Thus, it appropriately controls whether to use the electrical power of the HV battery to drive MG2 and MGR, use the electrical power generated by MG1 to drive MG2 and MGR, or use both types of electrical power.

