

■ FUNCTION OF MAIN COMPONENTS

The table below describes the functions of the main components of the 4WD system.

Components	Function
Engine and Front Transaxle	The motive forces of MG2 that is built into the front transaxle and the engine are combined to drive the front wheels.
Rear Transaxle	The motive force of MGR that is built into the rear transaxle is transmitted to drive the rear wheels.
Skid Control ECU	• Detects the conditions of the vehicle based on the signals that are input from the sensors and the THS ECU, calculates the required total motive force and the torque distribution between the front and rear wheels, and transmits the signals to the THS ECU. • If the skid control ECU detects a failure in the system, it transmits a request to the THS ECU to display a 4WD warning on the multi-information display in the combination meter.
THS ECU	• 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 THS ECU controls the engine, MG2, and MGR based on the required total motive force and the torque distribution between the front and rear wheels, which are transmitted by the skid control ECU, in order to appropriately control the motive force.
Wheel Speed Sensors (FL, FR, RL, RR)	Detects the speed of each wheel, and transmits this signal to the skid control ECU.
Steering Angle Sensor	Detects the steering direction and the angle of the steering wheel, and transmits this signal to the skid control ECU.
Yaw Rate & Deceleration Rate Sensor (Deceleration Rate Signal)	Detects the vehicle's acceleration in the forward, rearward, and lateral directions, and sends these signals to the skid control ECU.
4WD Warning (Multi-Information Display)	The multi-information display in the combination meter displays a 4WD warning in accordance with the illumination request received from the THS ECU, in order to inform the driver. At the same time, the master warning light illuminates and the buzzer sounds.