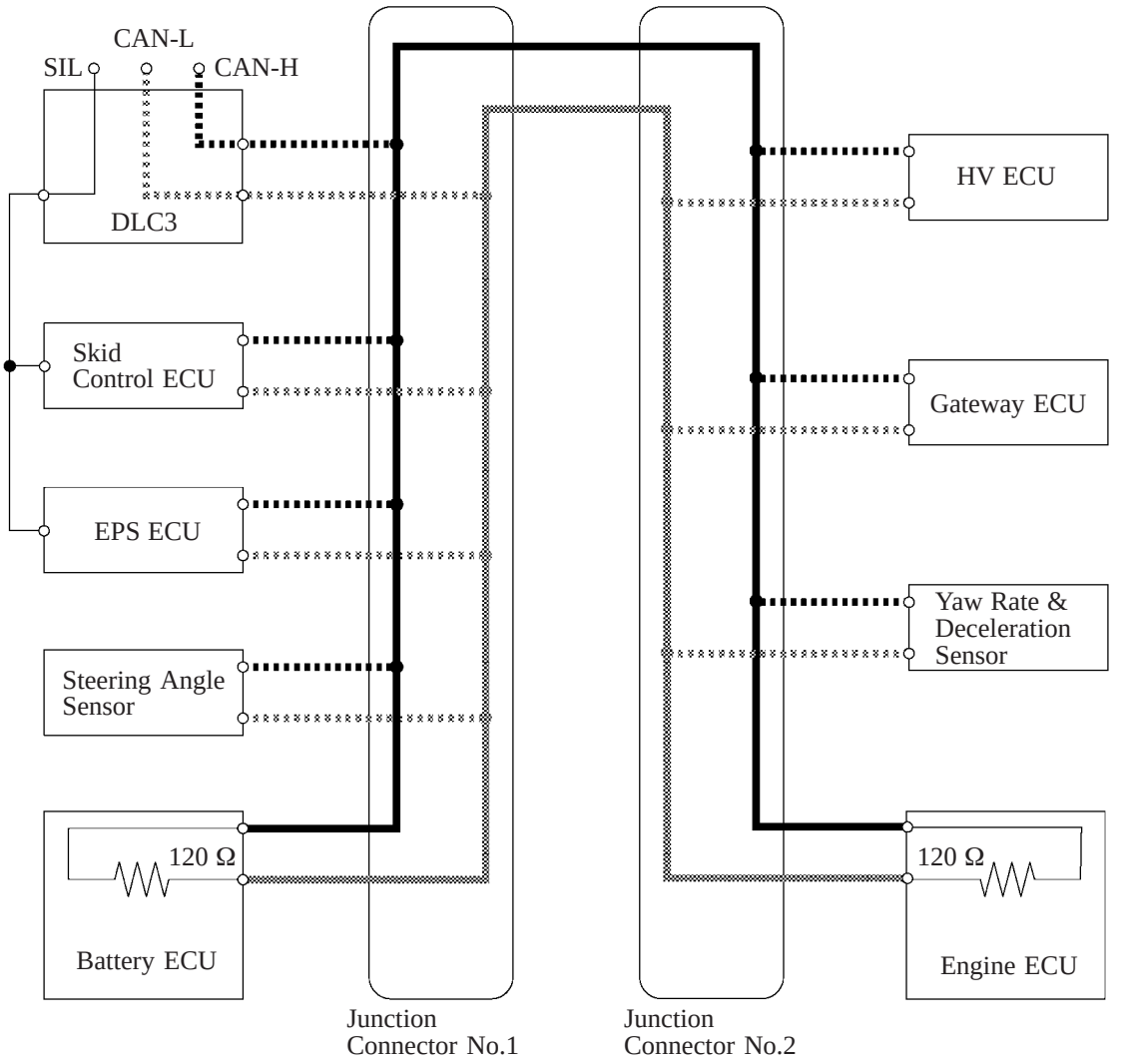
■CAN (CONTROLLER AREA NETWORK)

1. General

- CAN is a serial data communication system for real time application. It is a multiplex communication system to be equipped for a vehicle and has a high communication speed (500 kbps) and the function to detect malfunction.
- The CAN in the new Prius is connected to the battery ECU, skid control ECU, EPS ECU, ECM, HV ECU, gateway ECU, steering angle sensor, yaw rate & deceleration sensor and DLC3.
- CAN uses a twisted-pair wire as the communication line, so the bus line has a high line (2.5 to 3.5 V of voltage is applied) and a low line (1.5 to 2.5 V of voltage is applied).
- The DTCs (Diagnostic Trouble Codes) associated with the engine control system and the hybrid system control are output by the respective ECUs (ECM, HV, and battery ECUs) via CAN communication to the DLC3 connector (CAN-L and CAN-H terminals), then to a intelligent tester II.
- As in the past, the DTCs associated with the chassis control system (EPS and brake control system) are output by the respective ECUs (EPS and brake ECUs) via a serial communication line (ISO9141) to the DLC3 connector (SIL terminal), then to a intelligent tester II.
- DLC3 is equipped with CAN-H and CAN-L terminals for CAN diagnosis. It is possible to determine if there is an open or short on the main bus line by measuring the resistance value between these terminals. For details on CAN diagnosis, see page BE-61.



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