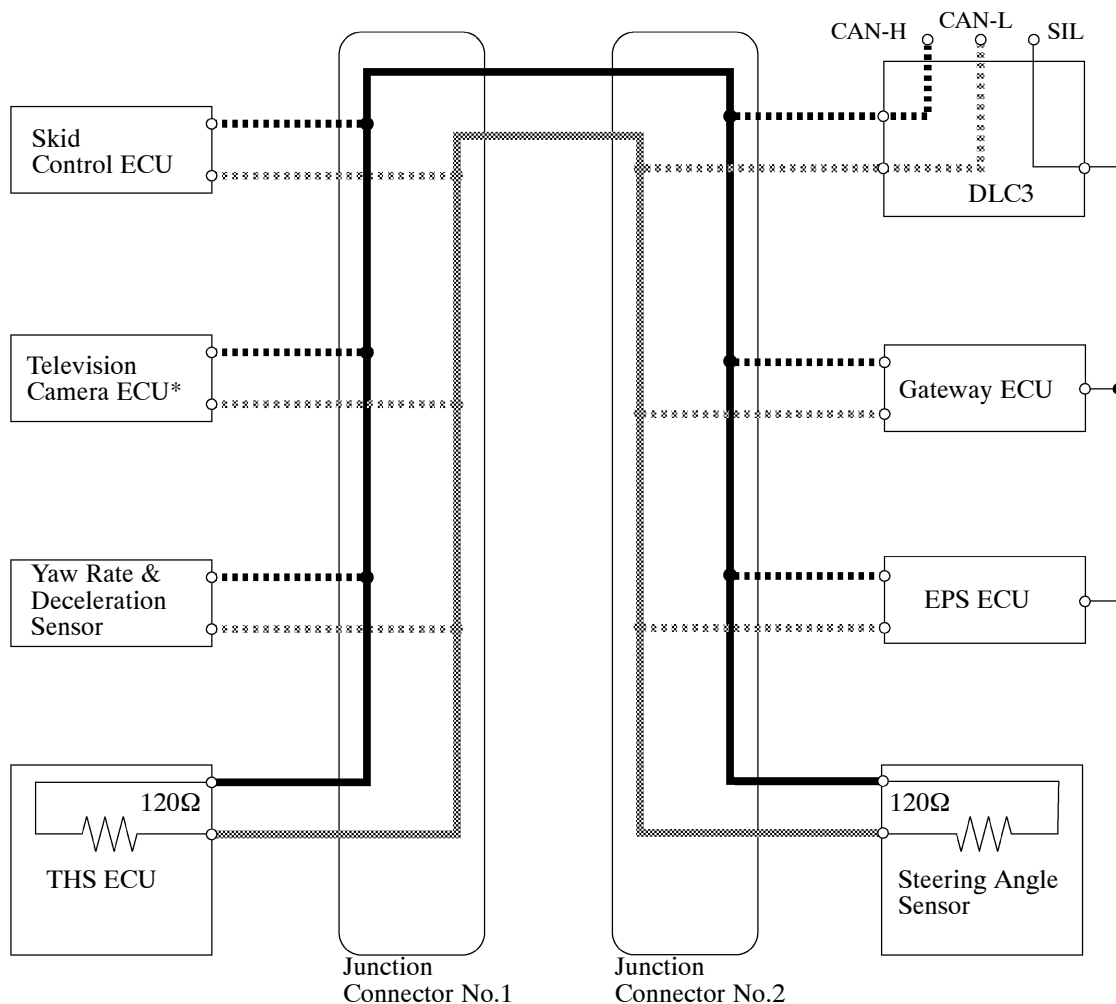


■ CAN (Controller Area Network)

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 RX400h is connected to the skid control ECU, EPS ECU, THS ECU, gateway ECU, steering angle sensor, yaw rate & deceleration sensor, television camera ECU* 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 THS ECU via CAN communication to the DLC3 connector (CAN-L and CAN-H terminals), then to an intelligent tester II. The DTCs associated with the brake control system are also output to the skid control ECU via CAN communication, and to the DLC3 connector.
- The DTCs associated with the EPS control system is output by the respective EPS ECU via a serial communication line (ISO9141) to the DLC3 connector (SIL terminal), then to an 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-18.



———— : CAN Main Bus Line (High)

..... : CAN Sub Bus Line (High)

----- : CAN Main Bus Line (Low)

----- : CAN Sub Bus Line (Low)

———— : Serial Communication Line (ISO9141)