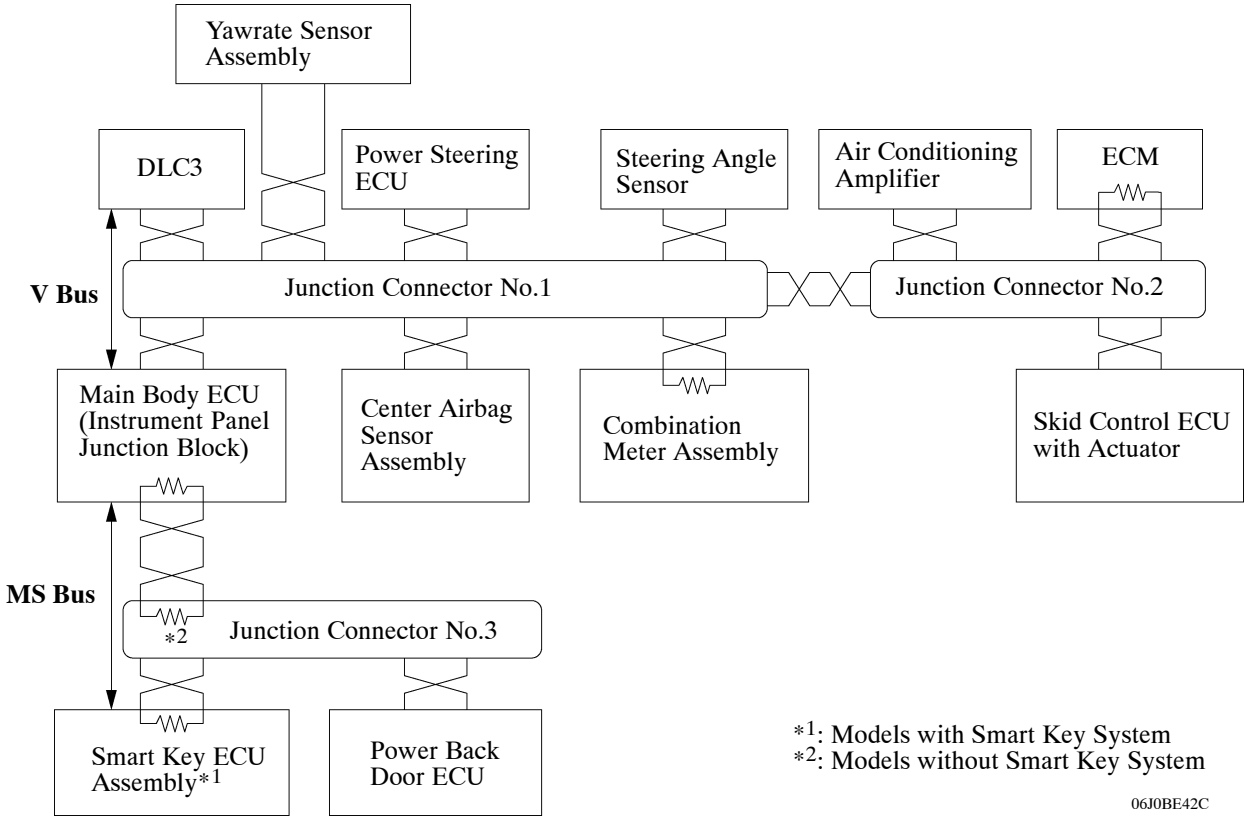
■CAN

1. General

The CAN (Controller Area Network) uses two different CAN buses: V bus for high-speed communication (500 kbps) and MS bus for medium-speed communication (250 kbps).

- The CAN has two terminating resistors of 120 Ω which are necessary for accurate judgment of communication on the main bus.
- The terminating resistors for the V bus are located in the ECM and the combination meter assembly.
- The terminating resistors for the MS bus are located in the Main Body ECU (Instrument Panel Junction Block), the junction connector No.3 (without Smart Key System), and the Smart Key ECU Assembly.
- The Main Body ECU (Instrument Panel Junction Block) has a gateway function and is used to transmit data between the V bus and the MS bus.

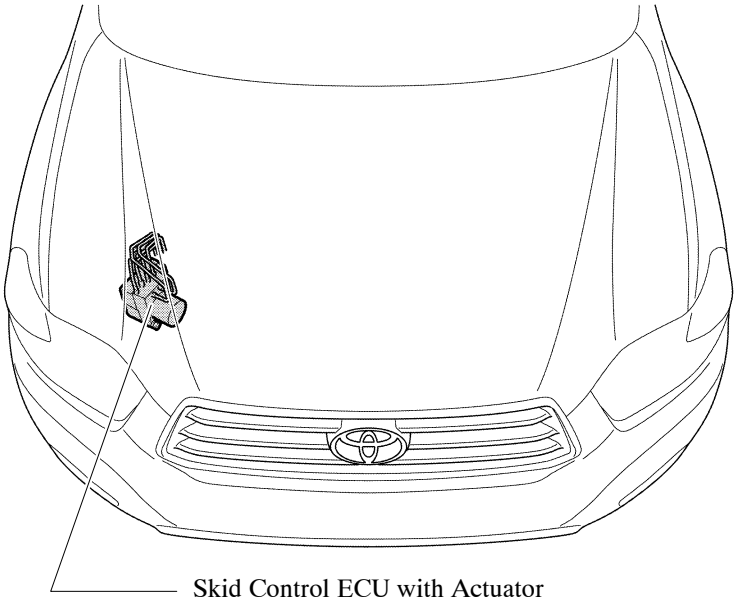
2. Wiring Diagram



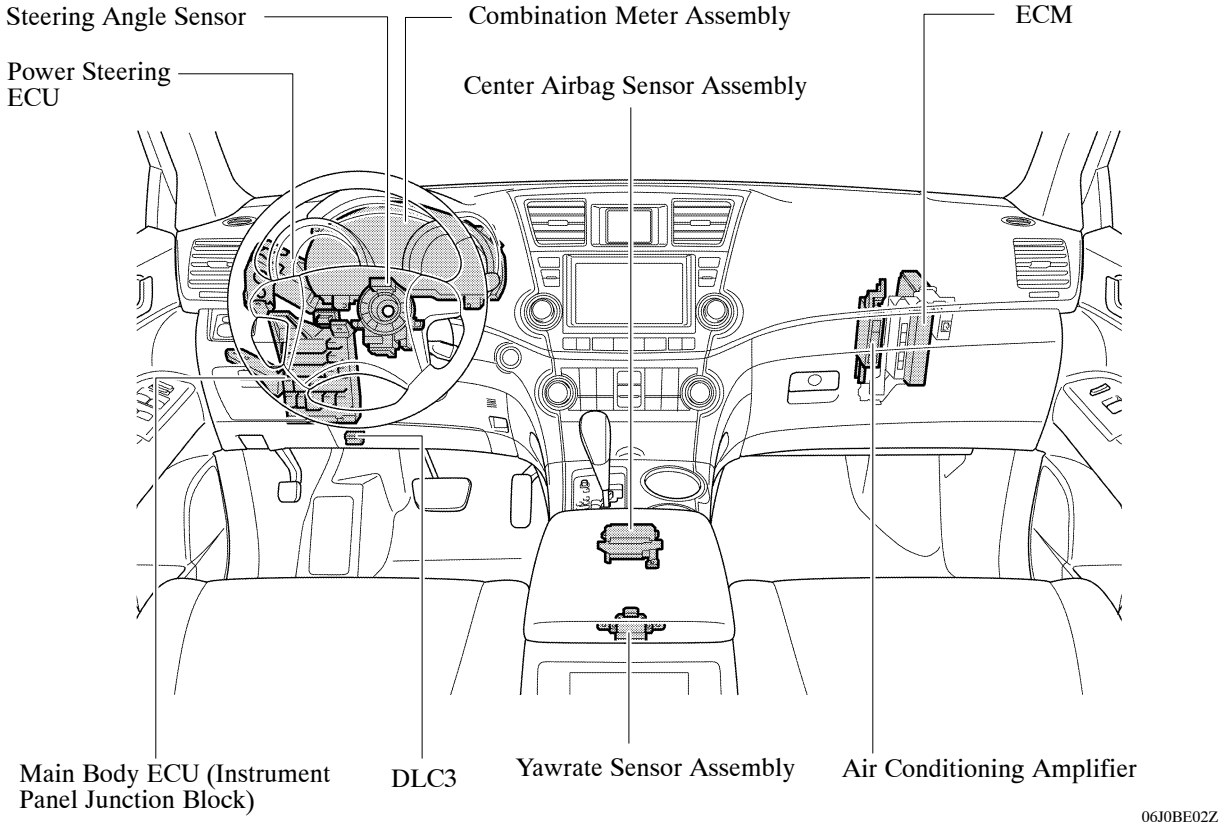
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3. Layout of Main Components

V Bus

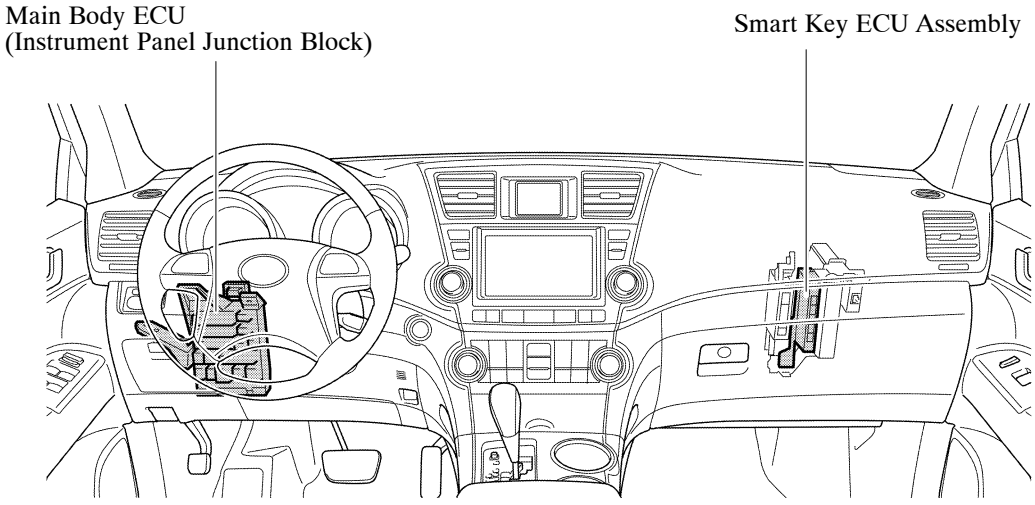


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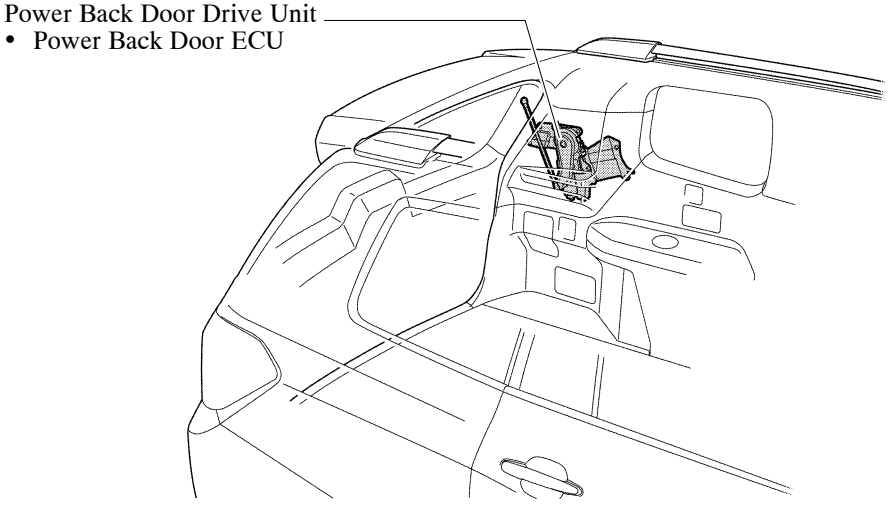


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MS Bus



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4. Diagnosis

If a malfunction occurs on the CAN communication bus, ECUs that are connected to the CAN communication bus store the DTC (Diagnostic Trouble Code) in memory.

- The 5-digit DTCs can be read after connecting an intelligent tester or Techstream* to DLC3.
- DLC3 is equipped with a CAN-H and a CAN-L terminal on the V bus to allow CAN diagnosis. It is possible to determine if there is an open or short in the main wires of the V bus by measuring the resistance value between these terminals.

For details, see the 2008 HIGHLANDER Repair Manual (Pub. No. RM06J0U).

*: Techstream is the name for the diagnostic tester in North America, but other countries will continue to use the intelligent tester.