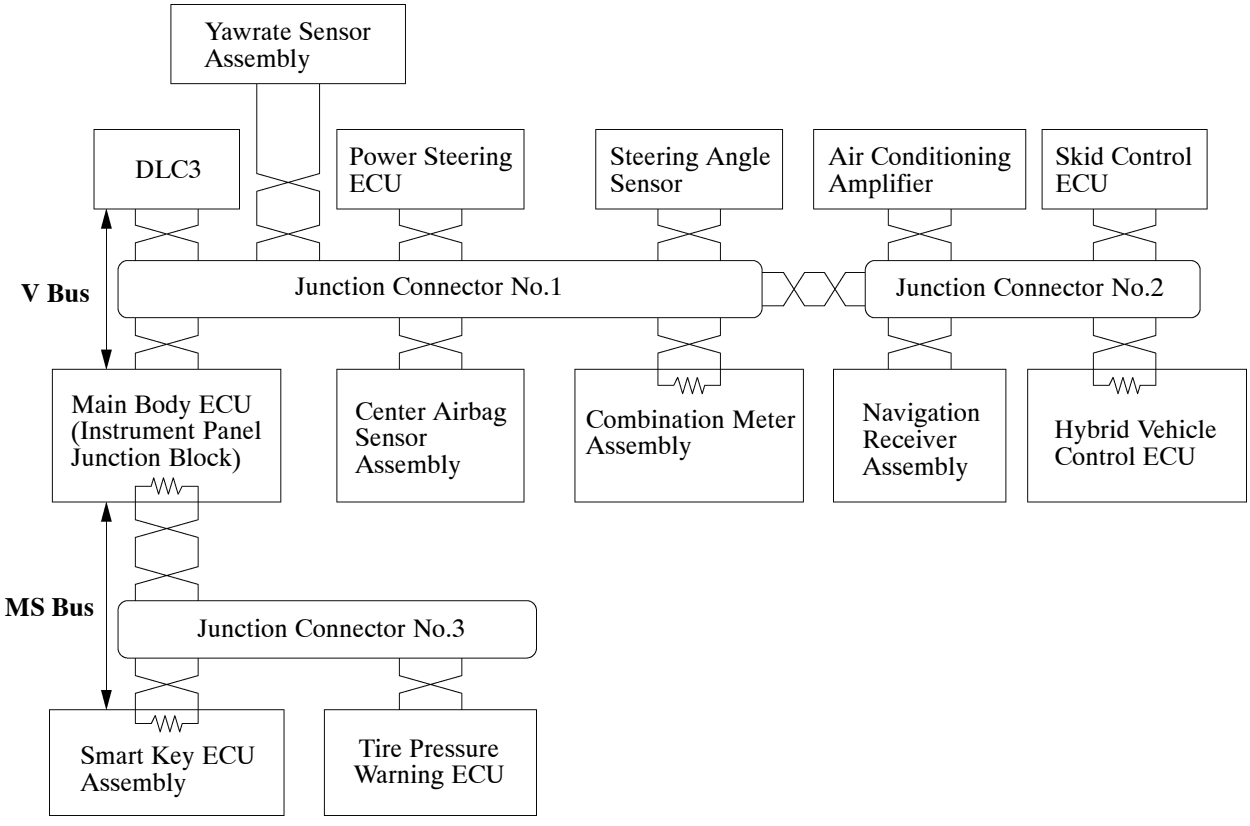
■CAN

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 hybrid vehicle control ECU and the combination meter assembly.
- The terminating resistors for the MS bus are located in the main body ECU (instrument panel junction block) 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.

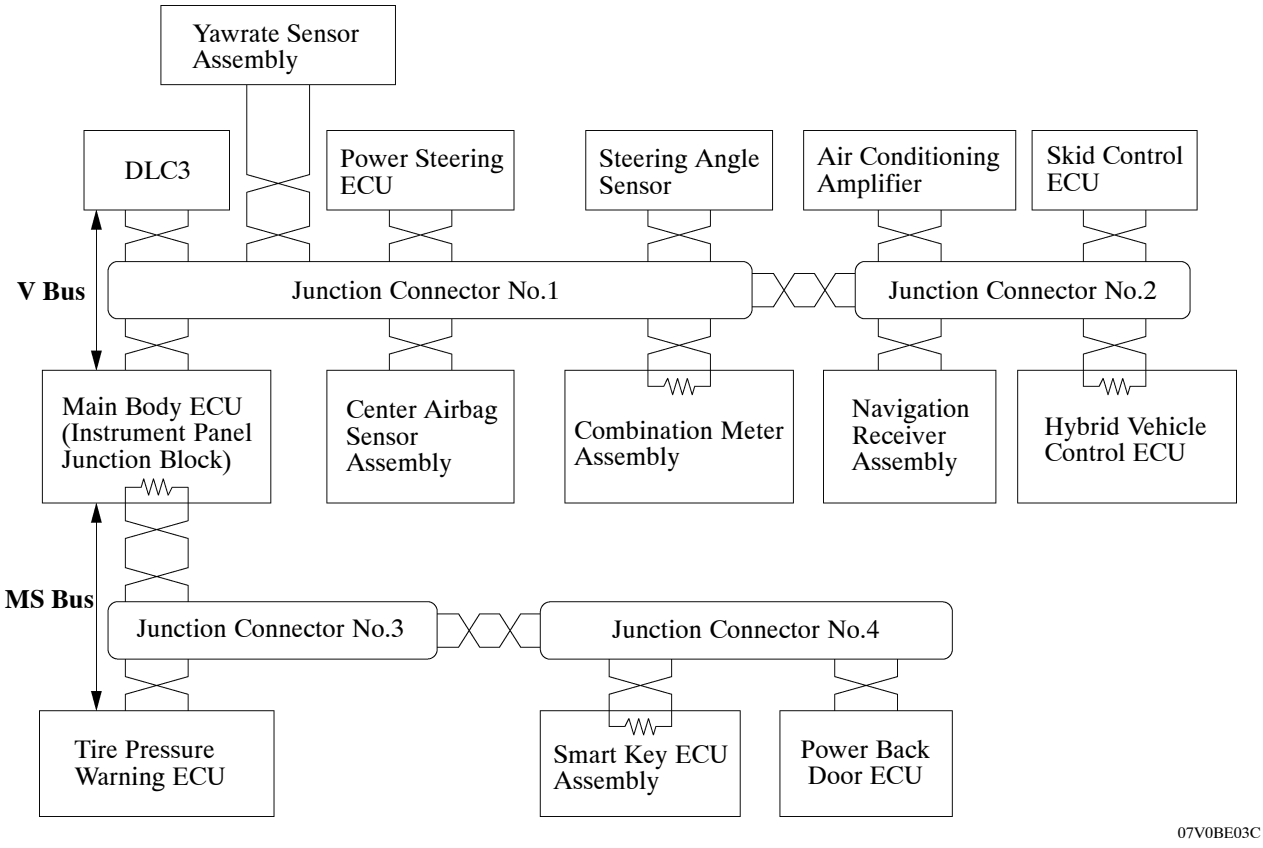
2. Wiring Diagram



Models without Power Back Door System

07V0BE02C

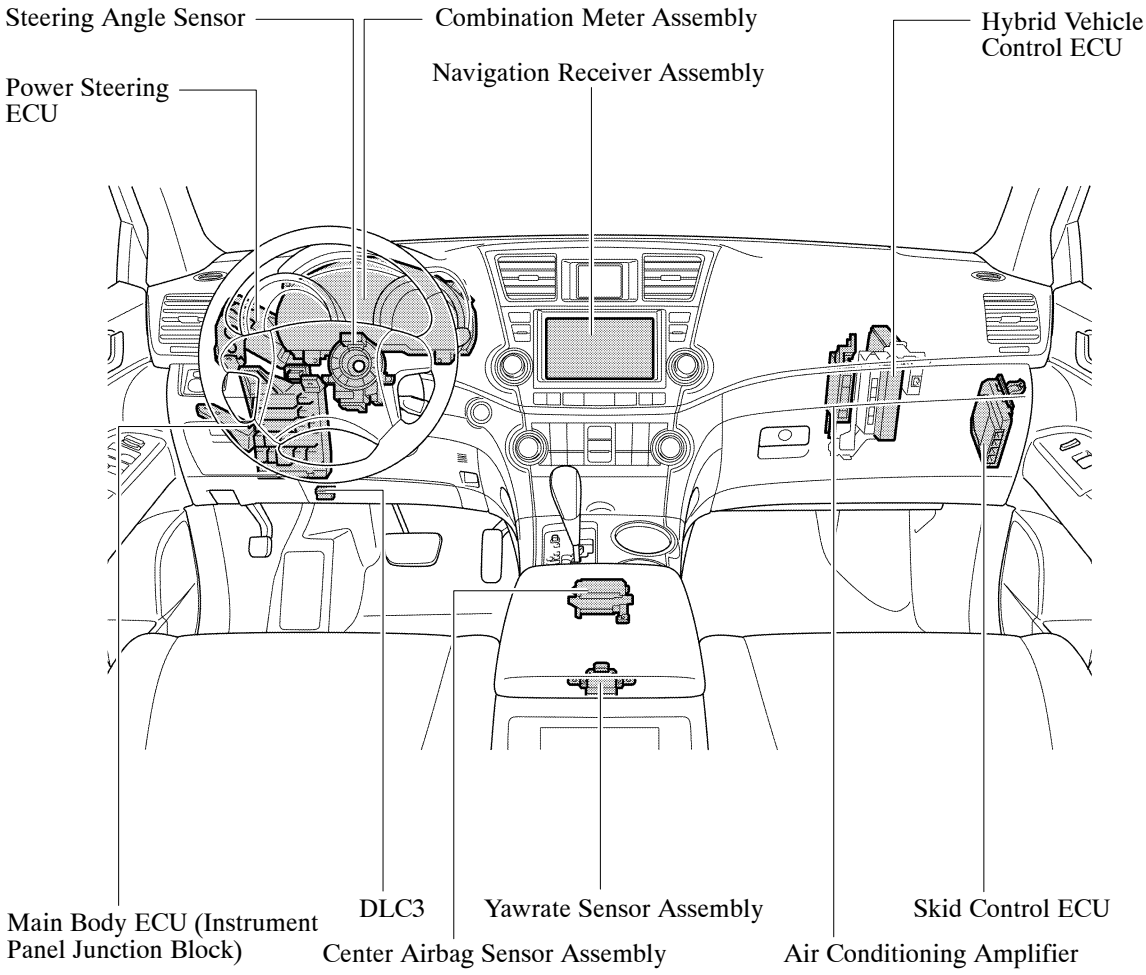
BE



Models with Power Back Door System

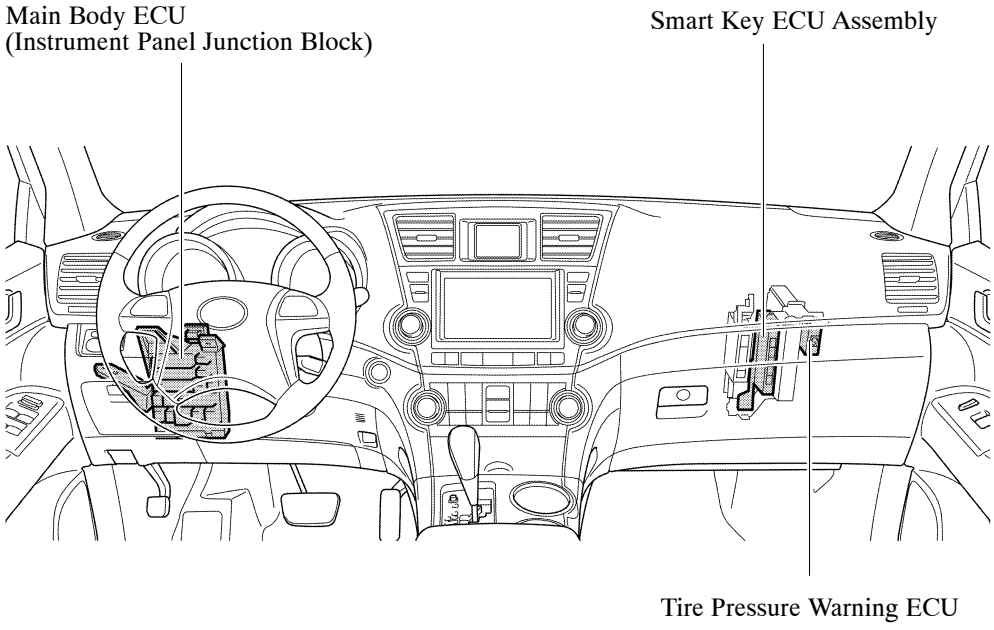
3. Layout of Main Components

V Bus

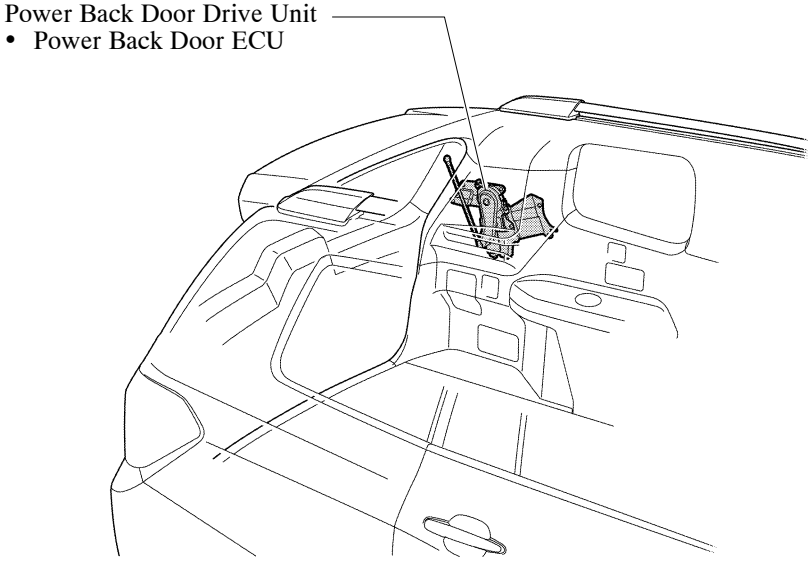


07V0BE04Z

MS Bus



07V0BE05Z



06J0BE19Z

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 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 HYBRID VEHICLE Repair Manual (Pub. No. RM07V0U).