■ CAN

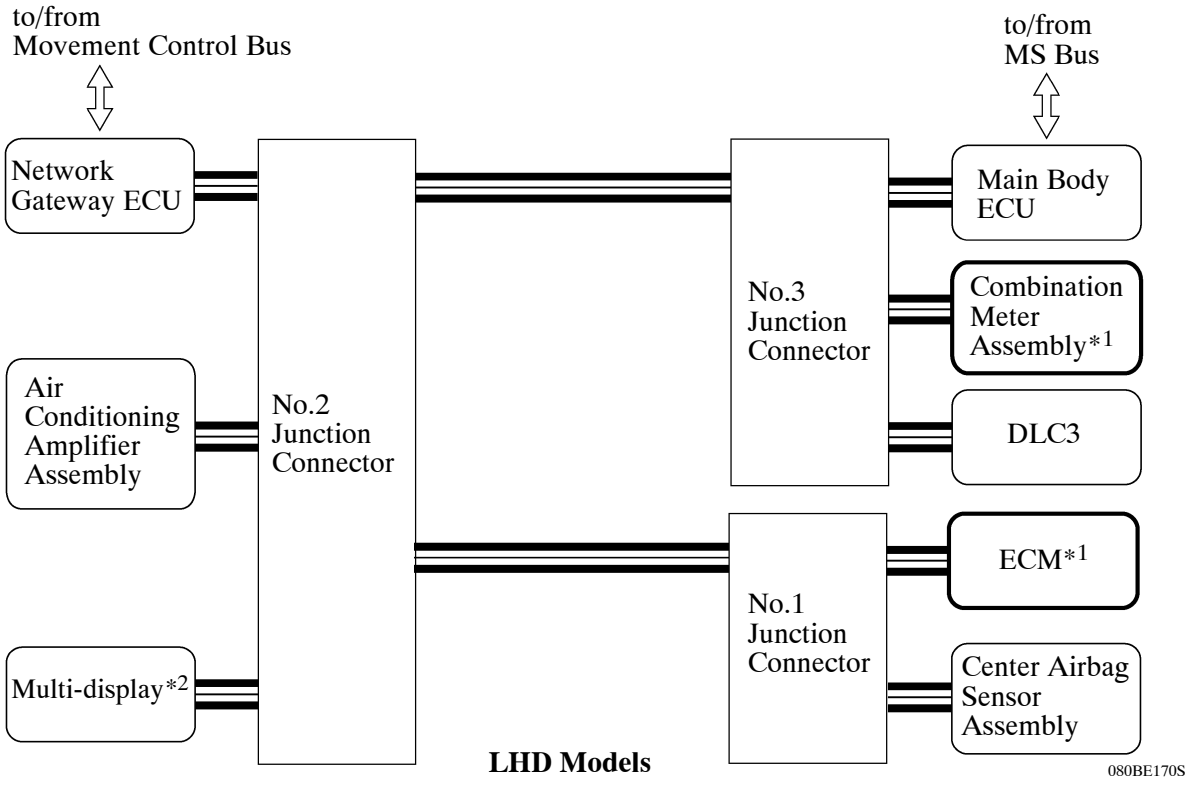
1. General

- The new Land Cruiser (Station Wagon) uses two types of CAN that have different communication speeds: HS-CAN (500kbps) and MS-CAN (250kbps).
- The HS-CAN consists of the V bus and movement control bus. The terminating resistors of the V bus are built into the ECM and combination meter assembly, and those of movement control bus are built into the network gateway ECU and No.1 CAN junction connector.
- The MS-CAN consists of the MS bus. The terminating resistors of the MS bus are built into the main body ECU and combination meter assembly.
- ECUs with the gateway functions are used to transmit data between buses (the network gateway ECU is used for data transmission between the V bus and the movement control bus, and the main body ECU is used between the V bus and the MS bus).

▶ Image of Data Transmission between Buses ◀

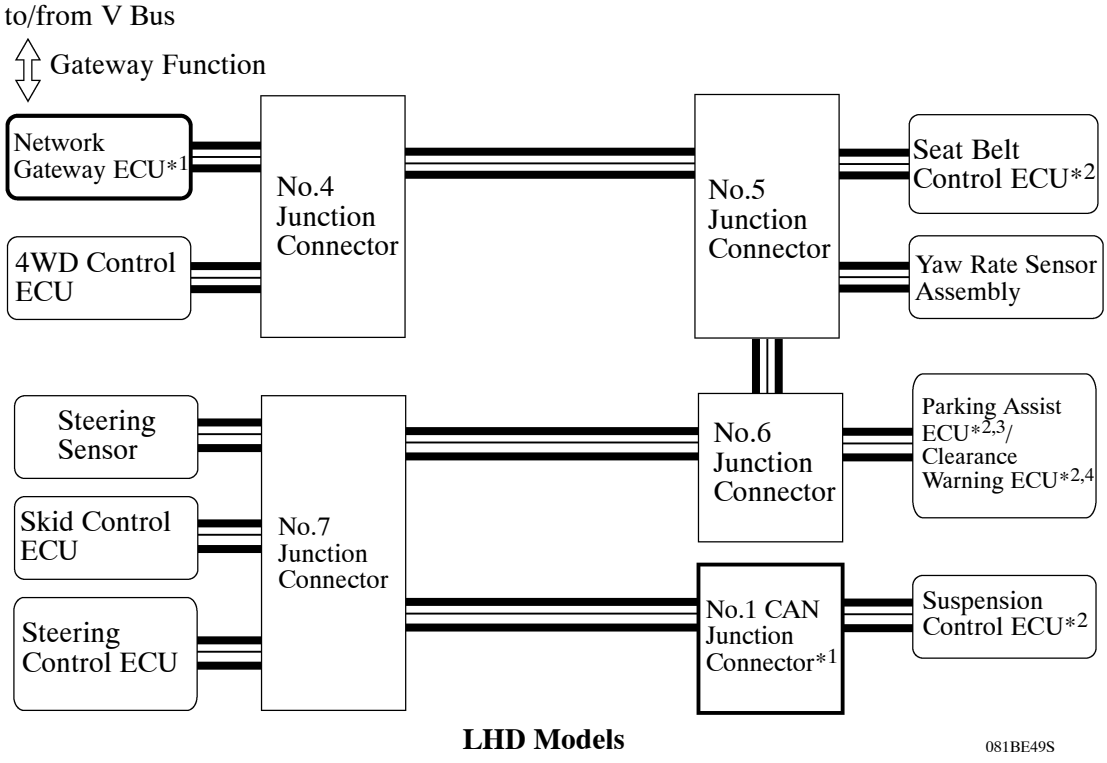
CAN	Bus	ECUs with Gateway Function	Connected Bus	ECUs with Terminating Resistor
HS-CAN	V Bus	Network Gateway ECU	Movement Control Bus	• ECM • Combination Meter Assembly
		Main Body ECU	MS Bus	
	Movement Control Bus	Network Gateway ECU	V Bus	• Network Gateway ECU • No.1 CAN Junction Connector
MS-CAN	MS Bus	Main Body ECU	V Bus	• Main Body ECU • Combination Meter Assembly

▶ V Bus ◀



*1: The ECUs enclosed by a bold line have a terminating register.
*2: Optional equipment

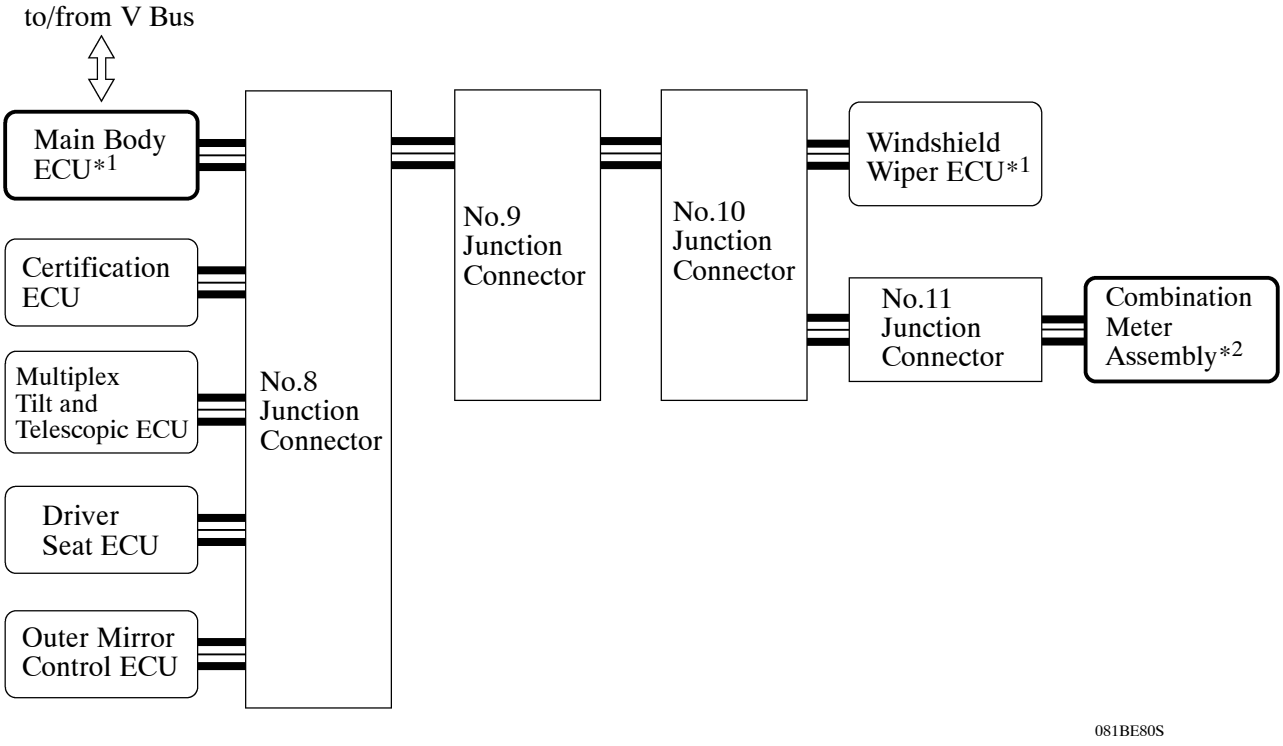
▶ Movement Control Bus ◀



*1: The ECUs and junction connector enclosed by a bold line have a terminating register.
*2: Optional Equipment
*3: Models with the parking assist monitor system
*4: Models with the clearance sonar system

BE

▶ MS Bus ◀

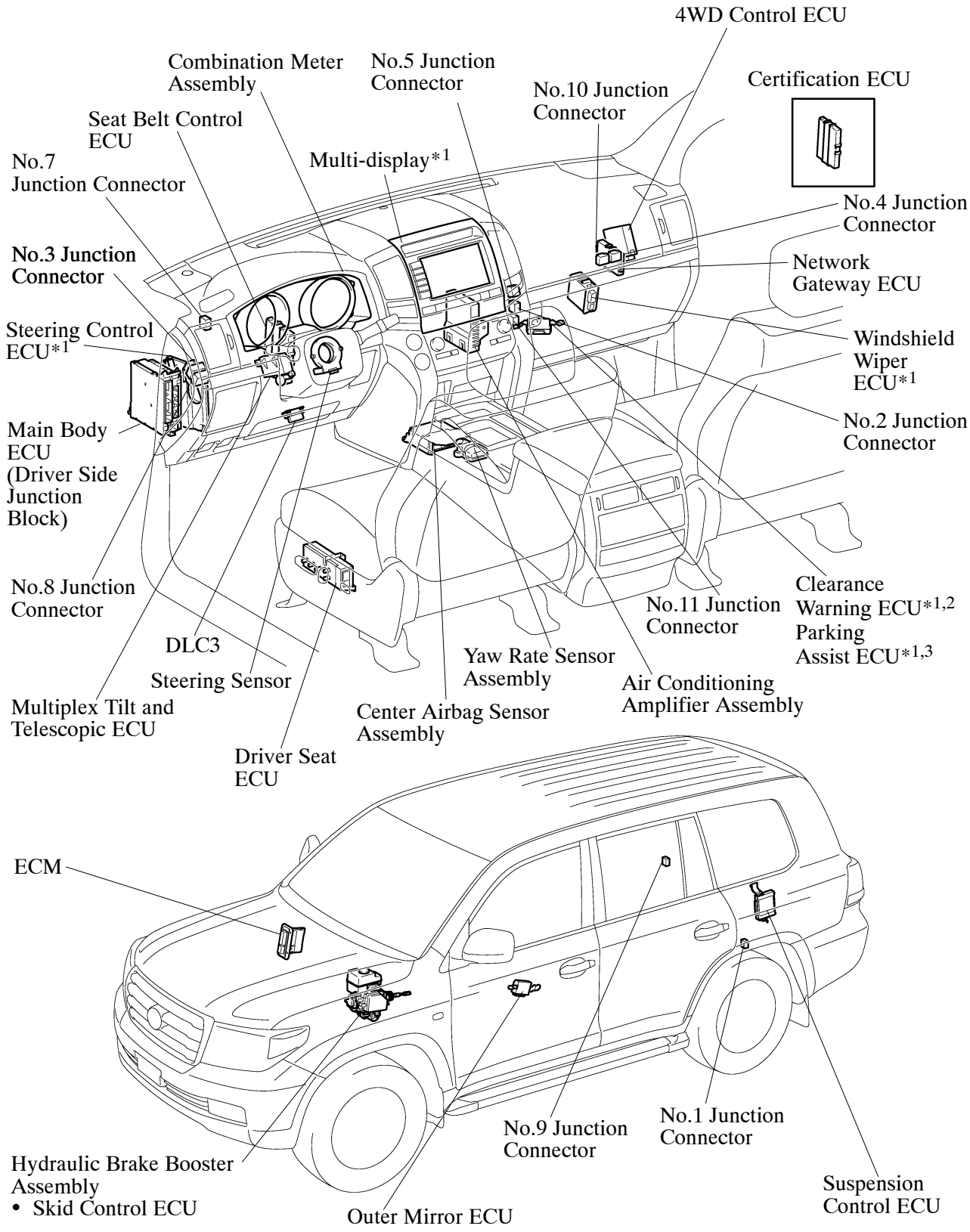


LHD Models

*1: The ECUs enclosed by a bold line have a terminating register.

*2: The combination meter assembly comprises a terminating register for the MS bus, however, this does not communicate as the MS bus.

2. Layout of Main Components



081BE05H

LHD Models

*1: Optional Equipment
*2: Models with the clearance sonar system
*3: Models with the parking assist monitor system

BE

3. Diagnosis

- If a malfunction occurs on the CAN communication line, the ECU that is connected to the CAN communication line stores the DTC (Diagnostic Trouble Code) in its memory.
- The 5-digit DTC can be read by connecting an intelligent tester II to the DLC3.
- The 2-digit DTC can be read by connecting a SST (09843-18040) between the TC and CG terminals of the DLC3.
- The 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 in the main wire of the V bus by measuring the resistance value between these terminals.

For details, see the Land Cruiser (Station Wagon) Repair Manual (Pub. No. RM0810E)