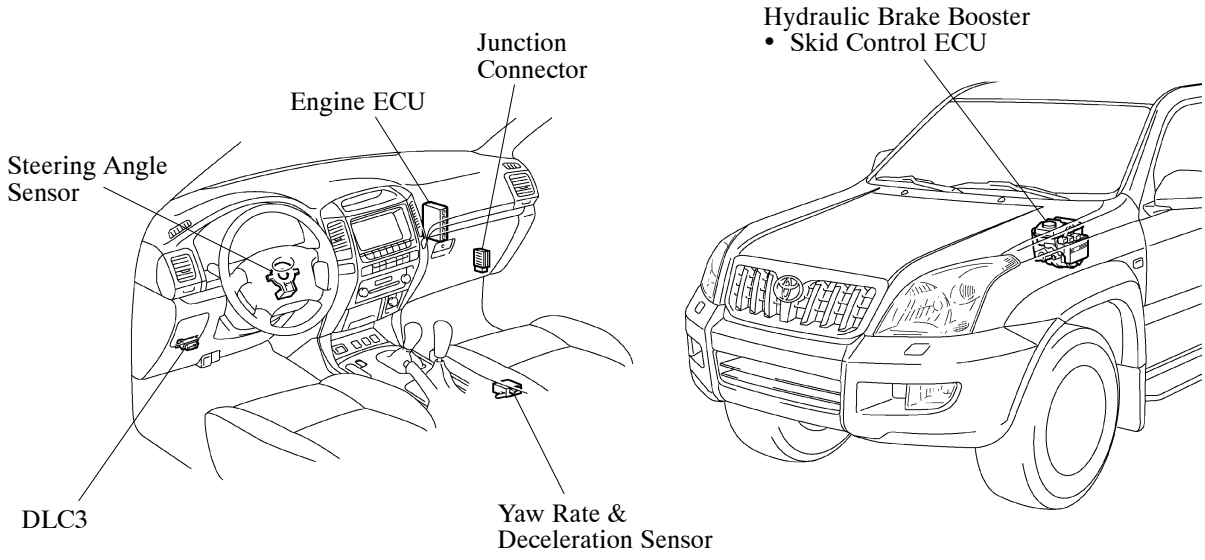
2. Layout of Main Components



3. Diagnosis

- If the CAN has a communication error at the ECU or a sensor, DTCs (Diagnostic Trouble Codes) are output simultaneously to indicate the malfunction location.
- The DTCs for CAN communication concerning the brake control system can be read by connecting the SST 09843-18040 to the Tc and CG terminals of the DLC3 connector and observing the blinking of the ABS and VSC warning light (2-digit code) or by connecting an intelligent tester II (5-digit code). For details, see the Land Cruiser/ Land Cruiser Prado Repair Manual Supplement (Pub. No.1151E).

▶ DTC Combination Chart ◀

DTC Code Output (from skid control ECU)	Mode
U0073/94, U0100/65, U0123/62 U0124/95, U0126/63	Skid Control ECU communication stop mode
U0100/65	Engine ECU communication stop mode
U0123/62, U0124/95	Yaw rate and deceleration sensor communication stop mode
U0126/63	Steering angle sensor communication stop mode

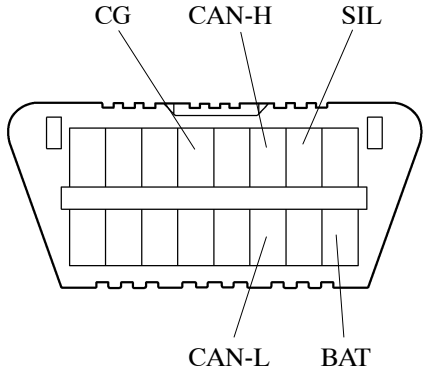
▶ DTC Chart ◀

DTC	Detection Item
U0073/94	Malfunction in CAN communication
U0100/65	Malfunction in CAN communication, between skid control ECU and engine ECU
U0123/62	Malfunction in CAN communication with yaw rate sensor
U0124/95	Malfunction in CAN communication with deceleration sensor
U0126/63	Malfunction in CAN communication with steering angle sensor

- 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. It is possible to determine if there is a short between the bus line - power supply/ground by measuring the resistance value between terminal CAN-H or CAN-L, and the BAT or CG terminal.

▶ CAN-H - CAN-L Inspection ◀

Resistance Value	Bus Line Status
Less than 54 Ω	Short between lines
	Short between bus line and power or ground (DTC is output)
54 Ω - 69 Ω	Normal
	Sub bus line open (DTC is output)
	Short between bus line and power or ground (DTC is output)
More than 69 Ω	Sub bus line open
	Main bus line open



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▶ Inspection for short between bus line - power supply/ground ◀

Inspection Item	Resistance Value	Bus Line Status
CAN-H - BAT	more than 1 MΩ	Bus line is OK if no DTC is output
	less than 1 MΩ	Short between bus line and power or ground
CAN-L - BAT	more than 1 MΩ	Bus line is OK if no DTC is output
	less than 1 MΩ	Short between bus line and power or ground
CAN-H - CG	more than 3 kΩ	Bus line is OK if no DTC is output
	less than 3 kΩ	Short between bus line and power or ground
CAN-L - CG	more than 3 kΩ	Bus line is OK if no DTC is output
	less than 3 kΩ	Short between bus line and power or ground

- If a communication malfunction occurs between the skid control ECU and the steering angle sensor or the yaw rate & deceleration sensor, the skid control ECU stops control of the VSC.
- For details of the CAN diagnosis system, see the Land Cruiser/ Land Cruiser Prado Repair Manual Supplement (Pub. No. RM1151E).

4. Fail-Safe

The fail-safe function provided for each system will operate if a failure occurs in the communication wire such as a short or an open circuit.

- On the new Land Cruiser/ Land Cruiser Prado, the following fail-safe functions will operate if CAN communication is unavailable.

Location of Disabled Communication	Fail-Safe
Skid Control ECU, Engine ECU, Yaw Rate, Deceleration Sensor, and Steering Angle Sensor	• Stops VSC/ABS functions • Illuminates VSC indicator light and ABS indicator light • Detects DTCs