■DIAGNOSIS

1. Diagnosis of CAN

- If communication is interrupted at the ECUs or sensors, CAN simultaneously outputs multiple DTCs to indicate the malfunctioning areas.
- The DTCs, which are transmitted via the diagnostic serial communication lines of the ECUs, can be output to a hand-held tester through the DLC3 connector.

▶ DTC Combination Chart ◀

DTC Code Output	Detection Item
U0121, U0123 U0124, U0126 Simultaneous output	Interrupted communication from skid control ECU
U0126	Interrupted communication from steering angle sensor
U0123 U0124 Simultaneous output	Interrupted communication from yaw rate & deceleration sensor

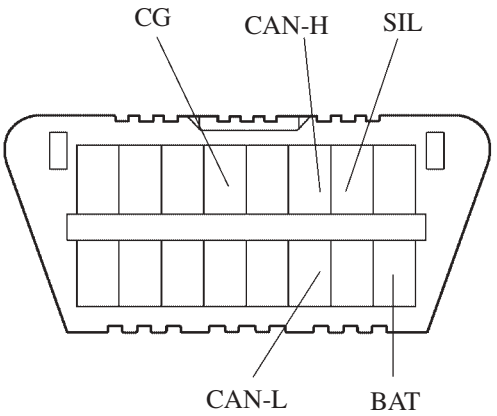
▶ DTC Chart Output from Skid Control ECU ◀

DTC	Detection Item
U0121	CAN communication function fault
U0123	Interrupted communication between skid control ECU and yaw rate & deceleration sensor (no yaw rate signal)
U0124	Interrupted communication between skid control ECU and yaw rate & deceleration sensor (no deceleration sensor signal)
U0126	Interrupted communication between skid control ECU and steering angle sensor

- CAN-H and CAN-L terminals are provided in the DLC3 connector for the purpose of diagnosing CAN. An open or short circuit in the main bus line can be determined by measuring the resistance between these terminals. Furthermore, a short circuit between the bus line and power or ground can be determined by measuring the resistance between the 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 (both sub bus lines of main and sub)
54 Ω – 67 Ω	Normal
	Yaw rate & deceleration sub bus line open (DTC is output)
	Short between bus line and power or ground
108 Ω – 132 Ω	Open in main bus line
∞ Ω	Open in DLC3 sub bus line



DLC3
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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 kΩ	Bus line is OK if no DTC is output
	less than 1 kΩ	Short between bus line and power or ground
CAN-L～BAT	more than 1 kΩ	Bus line is OK if no DTC is output
	less than 1 kΩ	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

- When there is a communication failure between the skid control ECU and the steering angle sensor or the yaw rate & deceleration sensor, the skid control ECU stops the control of the VSC (Vehicle Stability Control) system.

2. Diagnosis of BEAN

If a malfunction occurs in BEAN communication line, body ECU stores DTCs in its memory. The DTCs can be read by connecting a hand-held tester to DLC3. For details, see the Kluger Repair Manual (Pub. No. RM1087E).

3. Diagnosis of AVC-LAN

If a malfunction occurs in the AVC-LAN communication line, DTCs (Diagnostic Trouble Codes) are stored in the multi display memory in models with a multi display. In models without multi display, they are stored in the audio head unit.

DTCs for AVC-LAN can be read on the diagnosis menu display on the multi display in models with a multi display. In models without a multi display, they can be read on the LCD of the audio head unit, or on the diagnosis menu display of the rear display. For details, see the Kluger Repair Manual (Pub. No. RM1087E).