

## FAIL-SAFE CHART

### 1. FAIL-SAFE FUNCTION

- (a) When communication fails in any of the CAN bus lines (communication lines) due to a short circuit or other causes, the fail-safe function, which is specified for each system, operates to prevent the system from malfunctioning.
- (b) Relationships between components and system functions and effects of communication failure on these functions. (For further details, see the pages for each system.)

Function	ECM	Skid control ECU	Yaw rate sensor	Steering Angle Sensor	Condition when communication impossible	DTC detection (Driver detectable)
VSC Control (Controls VSC/TRAC engine output)	○	●	○	○	VSC function stops	Detectable (Light comes on)

HINT:

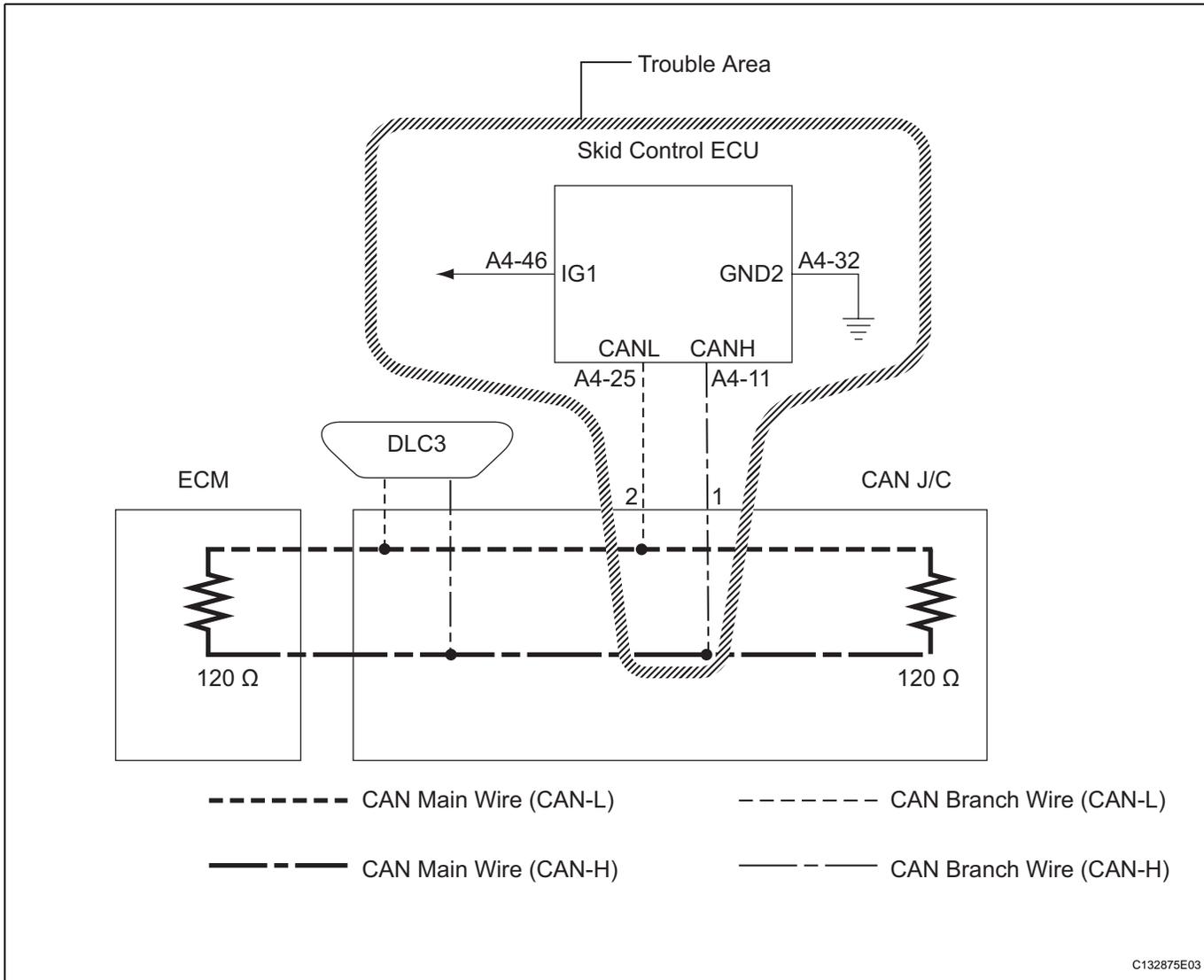
- ●: Control master
- ○: System related

## Skid Control ECU Communication Stop Mode

### DESCRIPTION

Detection Item	Symptom	Trouble Area
Skid Control ECU Communication Stop Mode	<ul style="list-style-type: none"> <li>"ABS/VSC/TRAC" not displayed on "BUS CHECK" screen of intelligent tester via CAN VIM</li> <li>Applies to "Skid Control ECU Communication Stop Mode" in "DTC combination table"</li> </ul>	<ul style="list-style-type: none"> <li>Power source circuit of skid control ECU</li> <li>Skid control ECU branch wire or connector</li> <li>Skid control ECU</li> </ul>

### WIRING DIAGRAM



### INSPECTION PROCEDURE

#### NOTICE:

- Turn the ignition switch off before measuring the resistances of the CAN main wire and the CAN branch wire.
- After the ignition switch is turned off, check that the key reminder warning system is not in operation.

- Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the ignition switch, any other switches or the doors. If doors need to be opened in order to check connectors, open the doors and leave them open.

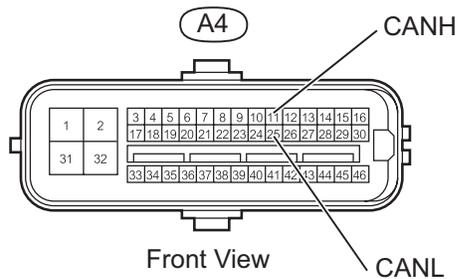
**HINT:**

Operating the ignition switch, any switches or any doors triggers related ECU and sensor communication with the CAN, which causes resistance variation.

## 1 CHECK CAN BUS LINE FOR DISCONNECTION (SKID CONTROL ECU BRANCH WIRE)

**Wire Harness Side:**

Skid Control ECU Connector



Front View

C132867E01

- Turn the ignition switch OFF.
- Disconnect the A4 skid control ECU connector.
- Measure the resistance.

**Standard resistance**

Tester connection	Condition	Specified Condition
A4-11 (CANH) - A4-25 (CANL)	Ignition switch OFF	54 to 69 $\Omega$

**NG**

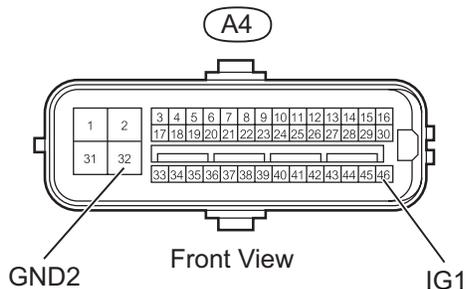
**REPAIR OR REPLACE CAN BRANCH WIRE CONNECTED TO SKID CONTROL ECU (CAN-H, CAN-L)**

**OK**

## 2 CHECK HARNESS AND CONNECTOR (IG1, GND2)

**Wire Harness Side:**

Skid Control ECU Connector



Front View

C132867E06

- Disconnect the A4 skid control ECU connector.
- Measure the resistance.

**Standard resistance**

Tester connection	Condition	Specified Condition
A4-32 (GND2) - Body ground	Always	Below 1 $\Omega$

- Measure the voltage.

**Standard voltage**

Tester connection	Condition	Specified Condition
A4-46 (IG1) - Body ground	Ignition switch ON	11 to 14 V

**NG**

**REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

**REPLACE MASTER CYLINDER SOLENOID**

**CA**