

## 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 for another reason, the fail-safe function, which is specified for each system, operates to prevent the system from malfunctioning.
- (b) The fail-safe function activates on each system when communication is impossible. (For further details, refer to the relevant systems of each part.)

ECM	Skid Control ECU	Steering Sensor	Yaw Rate Sensor	A/C Amplifier	Normal condition	Conditions when communication is impossible	DTC detection (Driver detectable)
B	A	B	B	-	VSC Control (Controls driving force while VSC is in operation)	VSC function stops	Detectable (Light comes on)
B	A	-	-	-	TRC control (Activation control and engine torque control usage during acceleration slip)	TRC function stops	Detectable (Light comes on)
B	-	-	-	A	A/C and PTC heater control	A/C control stops PTC heater control stops	Not Detectable (Detected when A/C is not effective)

#### HINT:

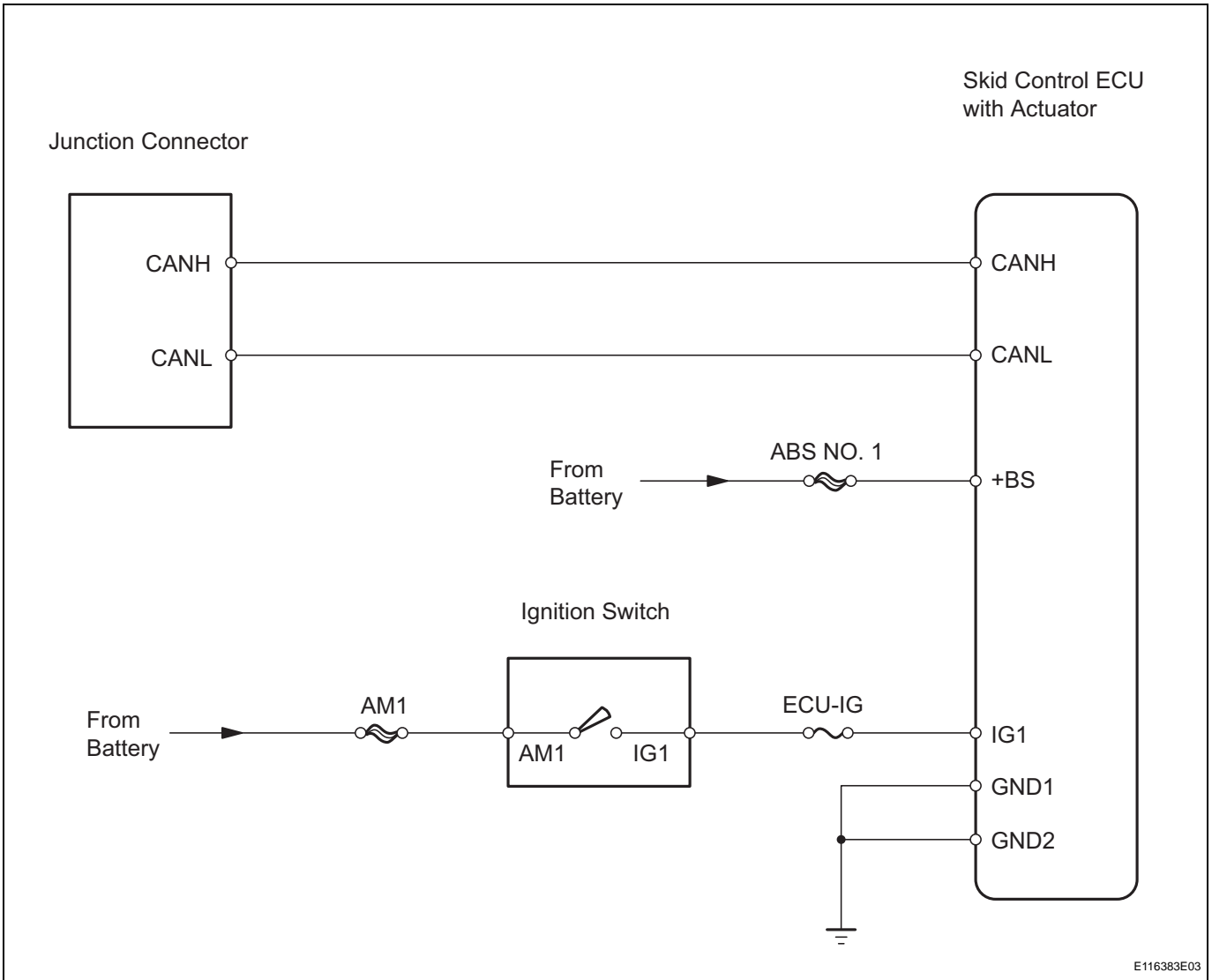
- Fail-safe function operation during an A-B communication error is shown in the above chart.
- A: Main control system
- B: Related system

# Skid Control ECU Communication Stop Mode

## DESCRIPTION

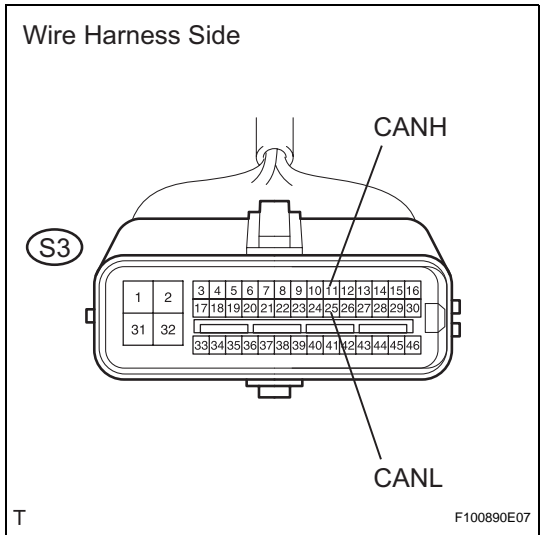
Detection Item	Symptom	Trouble Area
SKID CONTROL ECU COMMUNICATION STOP MODE	<ul style="list-style-type: none"> <li>ABS/VSC/TRAC is not displayed on the "BUS CHECK" screen of the intelligent tester</li> <li>Applies to "SKID CONTROL ECU COMMUNICATION STOP MODE" in the "DTC, BUS CHECK COMBINATION TABLE"</li> </ul>	<ul style="list-style-type: none"> <li>Power source or inside the skid control ECU</li> <li>Skid control ECU sub bus line and connector</li> </ul>

## WIRING DIAGRAM



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**1 CHECK CAN BUS LINE FOR DISCONNECTION (SKID CONTROL ECU SUB BUS LINE)**



- (a) Disconnect the S3 ECU connector.
- (b) Measure the resistance of the wire harness side connector.

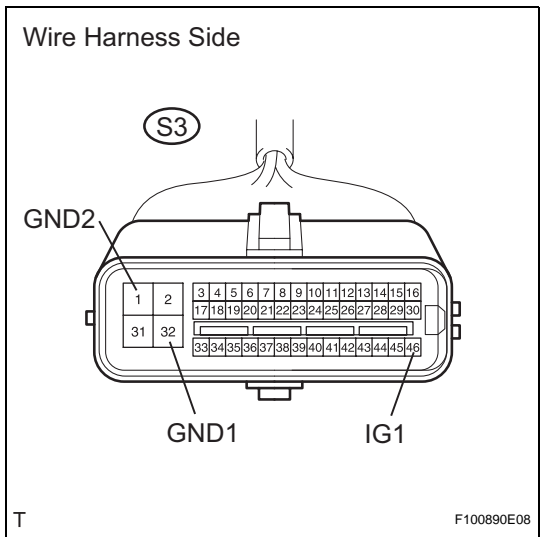
**Standard resistance**

Tester Connection	Condition	Specified Condition
S3-11 (CANH) - S3-25 (CANL)	Ignition switch OFF	54 to 69 Ω

**NG** REPAIR OR REPLACE SKID CONTROL ECU SUB BUS LINE AND CONNECTOR (CANH, CANL)

**OK**

**2 CHECK WIRE HARNESS (SKID CONTROL ECU - BATTERY AND BODY GROUND)**



- (a) Disconnect the S3 ECU connector.
- (b) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
S3-32 (GND1) - Body ground	Below 1 Ω
S3-1 (GND2) - Body ground	Below 1 Ω

- (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Condition	Specified Condition
S3-46 (IG1) - Body ground	Ignition switch ON	10 to 14 V

**NG** REPAIR OR REPLACE HARNESS AND CONNECTOR

**OK**

**REPLACE BRAKE ACTUATOR ASSEMBLY**

CA