

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 any other causes, the fail-safe function, which is specified for each system, operates to prevent the system from malfunctioning.
- (b) This function operates for each system when communication is impossible. (For further details, see the pages for each system.)

Function	ECM	Skid Control ECU	Steering Angle Sensor	Yaw Rate Sensor	Action when unable to communicate	DTC detection (Driver detectable)
VSC Control (Controls VSC/TRAC engine output)	-	Rx	Tx	Tx	VSC function stops	Detectable (Light comes on)
VSC Control (Controls VSC/TRAC engine output)	Rx	Tx	-	-	VSC function stops	Detectable (Light comes on)

HINT:

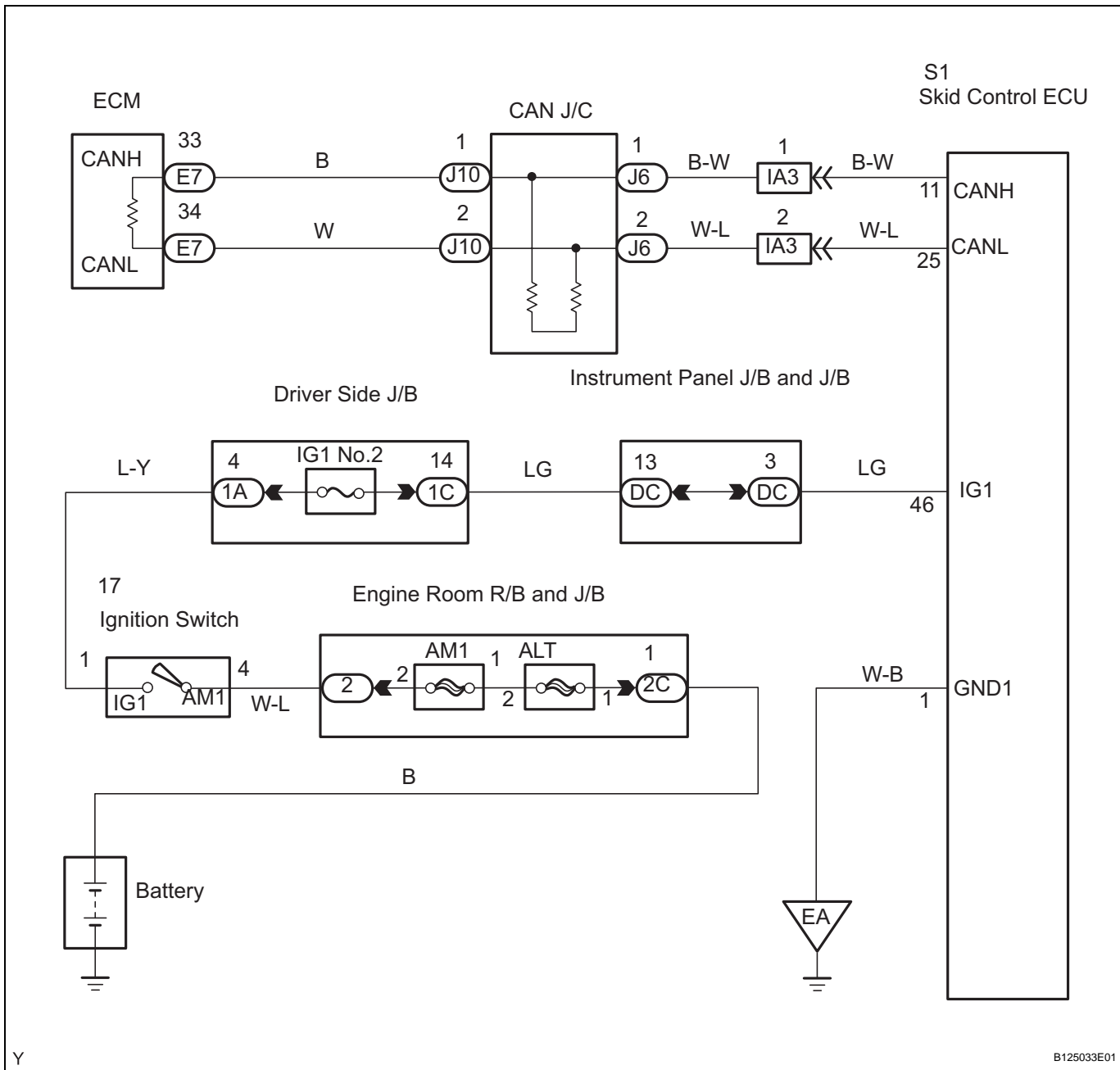
- Rx: Reception from each ECU (sensor)
- Tx: Transmission to each ECU (sensor)

Skid Control ECU Communication Stop Mode

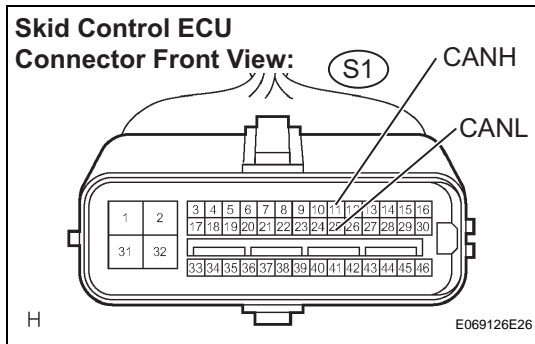
DESCRIPTION

Detection Item	Symptom	Trouble Area
SKID CONTROL ECU COMMUNICATION STOP MODE	<ul style="list-style-type: none"> ABS/VSC/TARC is not displayed on the "BUS CHECK" screen of the intelligent tester via the CAN VIM. DTCs are output from each ECU in skid control ECU communication stop mode as shown in the "DTC COMBINATION TABLE" (See page CA-7). 	<ul style="list-style-type: none"> Power source or inside the skid control ECU Skid control ECU sub bus line or connector

WIRING DIAGRAM



CA

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

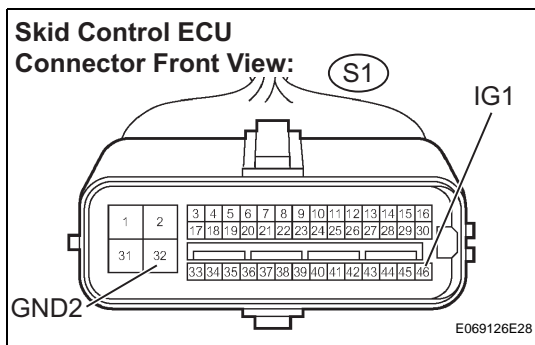
- Turn the ignition switch to the LOCK position.
- Disconnect the skid control ECU connector (S1).
- Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Value
S1-11 (CANH) - S1-25 (CANL)	<ul style="list-style-type: none"> Ignition switch OFF Stop light switch OFF 	54 to 69 Ω

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REPAIR OR REPLACE SKID CONTROL ECU BRANCH LINE OR CONNECTOR (CAN-H, CAN-L)

OK**2 CHECK WIRE HARNESS (IG, GND2)**

- Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Value
S1-32 (GND2) - Body ground	Always	Below 1 Ω

- Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Value
S1-46 (IG1) - Body ground	<ul style="list-style-type: none"> Ignition switch ON Stop light switch OFF 	10 to 14 V

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REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

OK

REPLACE MASTER CYLINDER SOLENOID

CA