

4WD Control ECU Communication Stop Mode

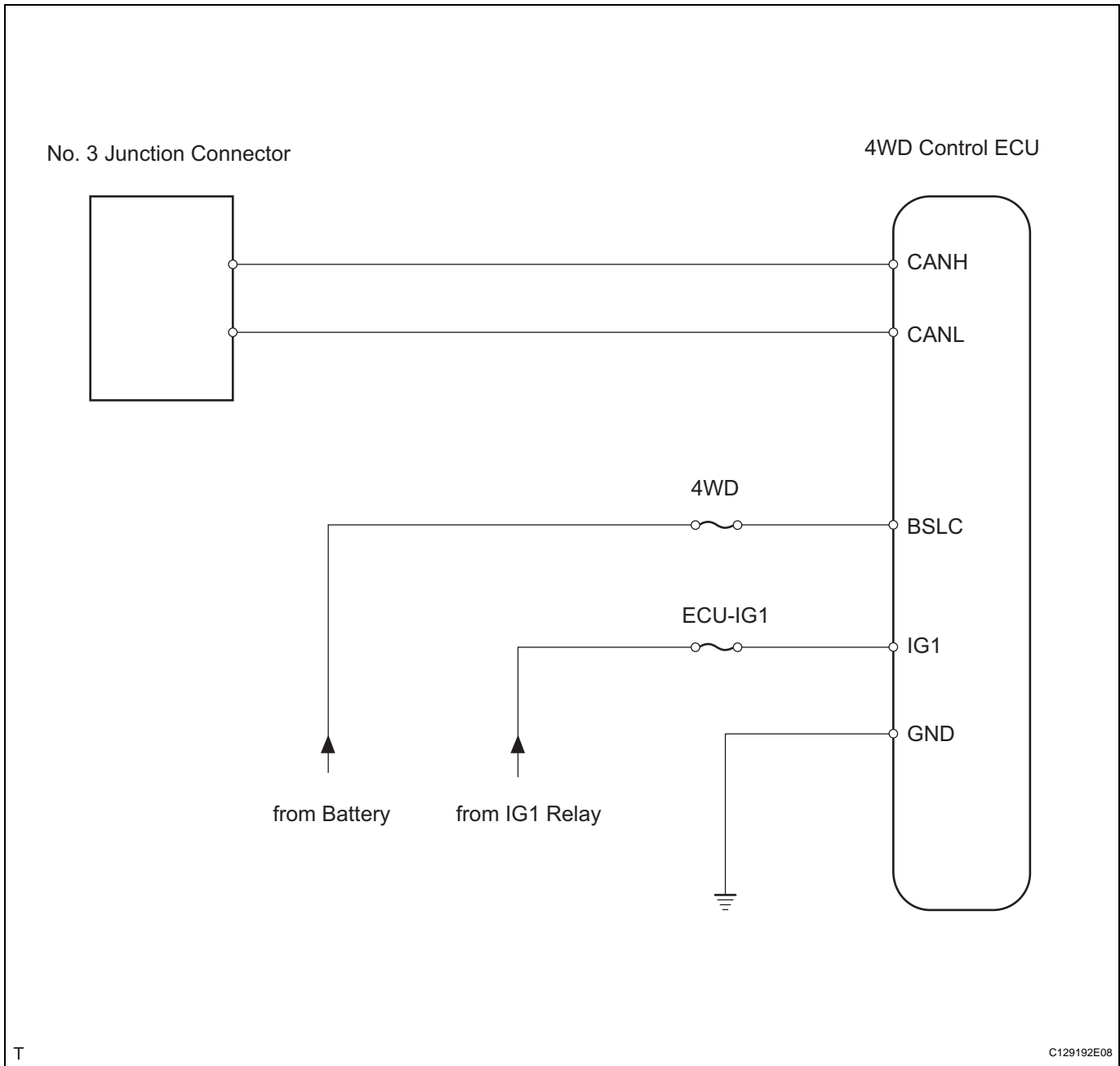
DESCRIPTION

| Detection Item | Symptom | Trouble Area |
|---|---|--|
| 4WD CONTROL ECU COMMUNICATION STOP MODE | <ul style="list-style-type: none"> 4WD is not displayed on "BUS CHECK" screen of intelligent tester Applies to "4WD CONTROL ECU COMMUNICATION STOP MODE" in "DTC COMBINATION TABLE" | <ul style="list-style-type: none"> Power source or inside 4WD control ECU 4WD control ECU branch wire and connector 4WD control ECU |

HINT:

For vehicle with 4WD only.

WIRING DIAGRAM



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INSPECTION PROCEDURE

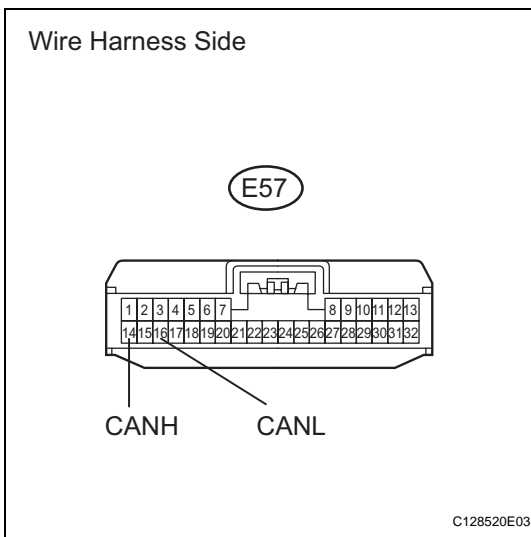
NOTICE:

- Turn the ignition switch OFF before measuring the resistances of the main wire and the branch wire.
- After the ignition switch is turned OFF, check that the key reminder warning system and light reminder warning system are not in operation.
- Before measuring the resistance, leave the vehicle for at least 1 minute and do not operate the ignition switch, any switches or 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 (4WD CONTROL ECU BRANCH WIRE)



- Disconnect the E57 4WD control ECU connector.
- Measure the resistance of the wire harness side connector.

Standard resistance

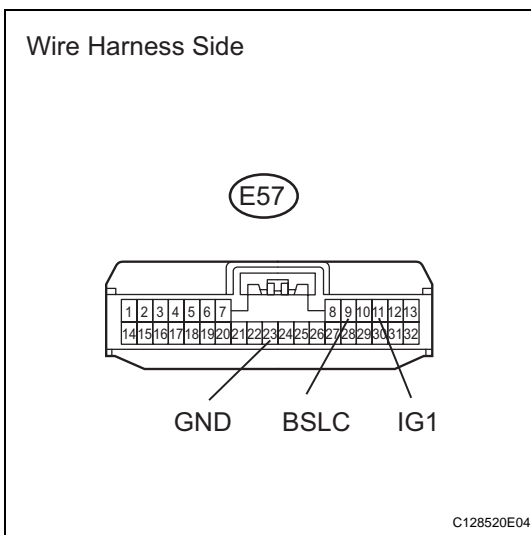
| Tester Connection | Condition | Specified Condition |
|-------------------------------|---------------------|---------------------|
| E57-14 (CANH) - E57-16 (CANL) | Ignition switch OFF | 54 to 69 Ω |

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REPAIR OR REPLACE CAN BRANCH WIRE CONNECTED TO 4WD CONTROL ECU (CANH, CANL)

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2 CHECK WIRE HARNESS (4WD CONTROL ECU - BATTERY AND BODY GROUND)



- Disconnect the E57 4WD control ECU connector.
- Measure the resistance of the wire harness side connector.

Standard resistance

| Tester Connection | Specified Condition |
|----------------------------|---------------------|
| E57-23 (GND) - Body ground | Below 1 Ω |

- Measure the voltage of the wire harness side connector.

Standard voltage

| Tester Connection | Condition | Specified Condition |
|----------------------------|--------------------|---------------------|
| E57-9 (BSLC) - Body ground | Always | 10 to 14 V |
| E57-11 (IG1) - Body ground | Ignition switch ON | 10 to 14 V |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

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OK

REPLACE 4WD CONTROL ECU