

## TERMINALS OF ECU

(2006/01- )

### NOTICE:

- Turn the ignition switch **OFF** before measuring the resistances of the main wire and 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 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.

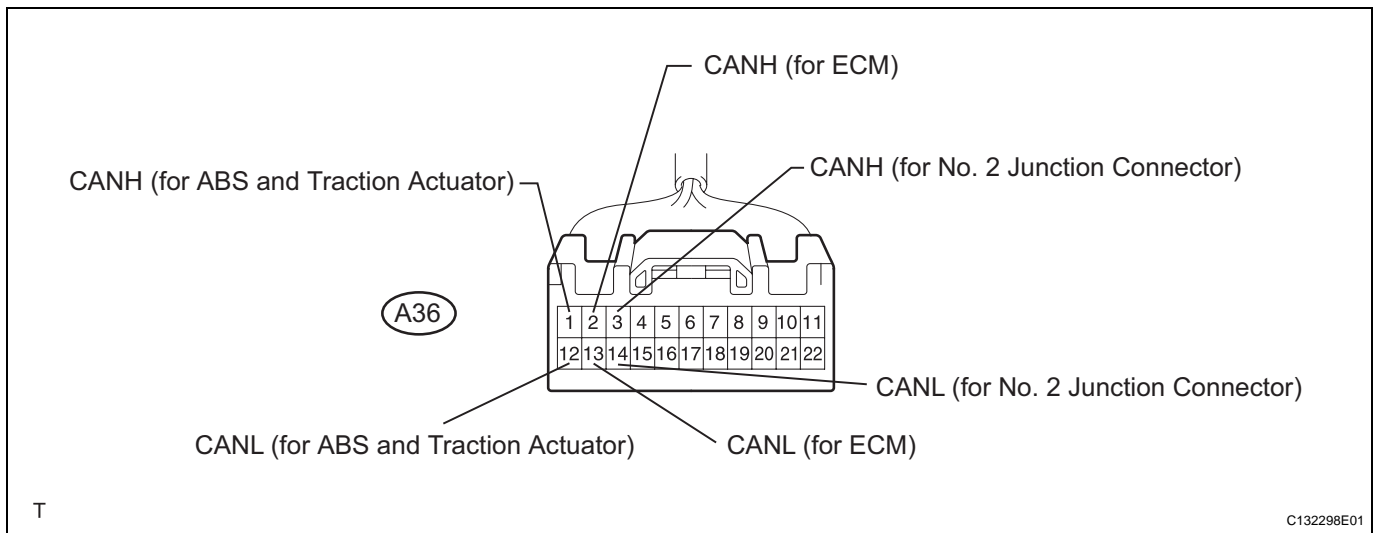
### HINT:

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

### 1. JUNCTION CONNECTOR

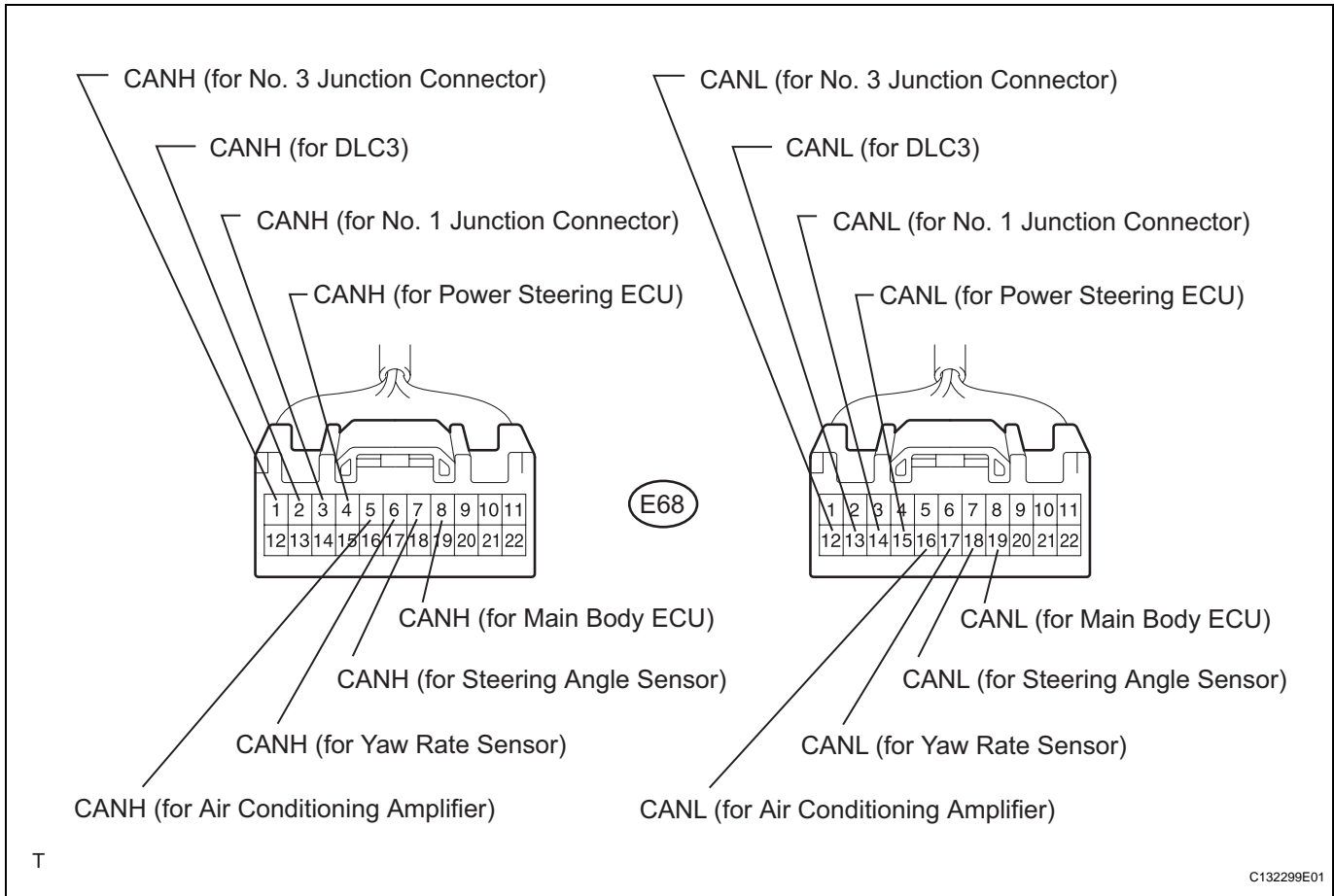
(a) No. 1 junction connector

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No. 1 Junction Connector	Wiring Color	Connect to
CANH (A36-1)	R	ABS and traction actuator (skid control ECU)
CANL (A36-12)	W	ABS and traction actuator (skid control ECU)
CANH (A36-2)	Y	ECM
CANL (A36-13)	W	ECM
CANH (A36-3)	L	No. 2 junction connector
CANL (A36-14)	W	No. 2 junction connector

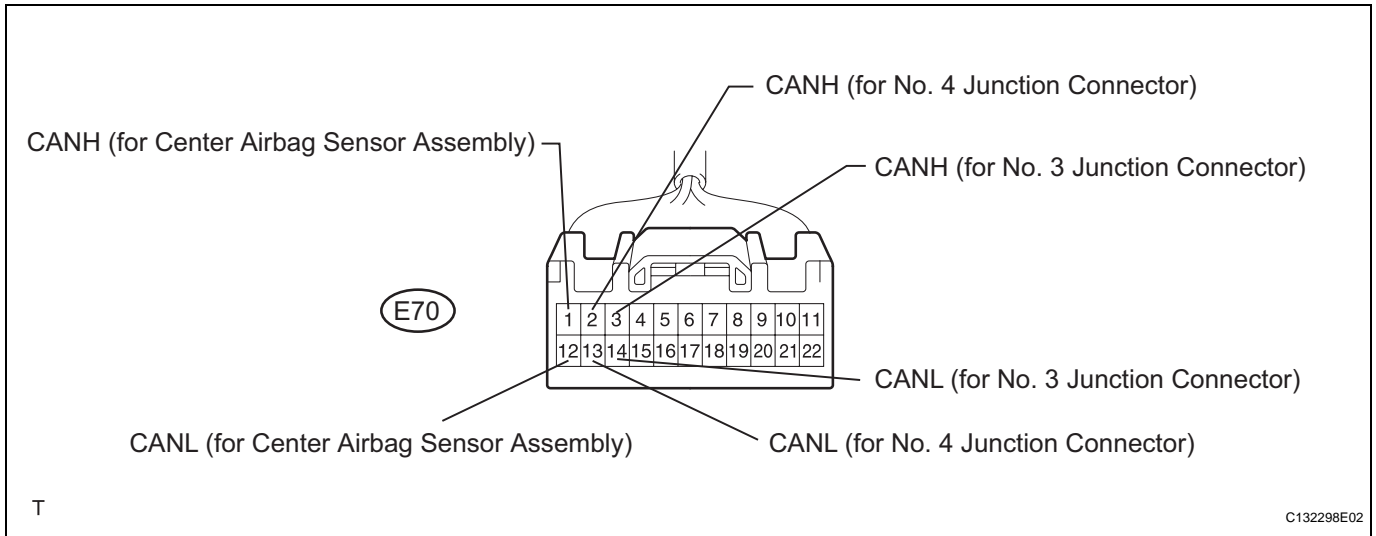
(b) No. 2 junction connector



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No. 2 Junction Connector	Wiring Color	Connect to
CANH (E68-3)	L	No. 1 junction connector
CANL (E68-14)	W	No. 1 junction connector
CANH (E68-6)	L	Yaw rate sensor
CANL (E68-17)	W	Yaw rate sensor
CANH (E68-4)	Y	Power steering ECU
CANL (E68-15)	W	Power steering ECU
CANH (E68-8)	R	Main body ECU
CANL (E68-19)	W	Main body ECU
CANH (E68-7)	BR	Steering angle sensor
CANL (E68-18)	W	Steering angle sensor
CANH (E68-2)	B	DLC3
CANL (E68-13)	W	DLC3
CANH (E68-5)	V	Air conditioning amplifier
CANL (E68-16)	W	Air conditioning amplifier
CANH (E68-1)	O	No. 3 junction connector
CANL (E68-12)	W	No. 3 junction connector

(c) No. 3 junction connector



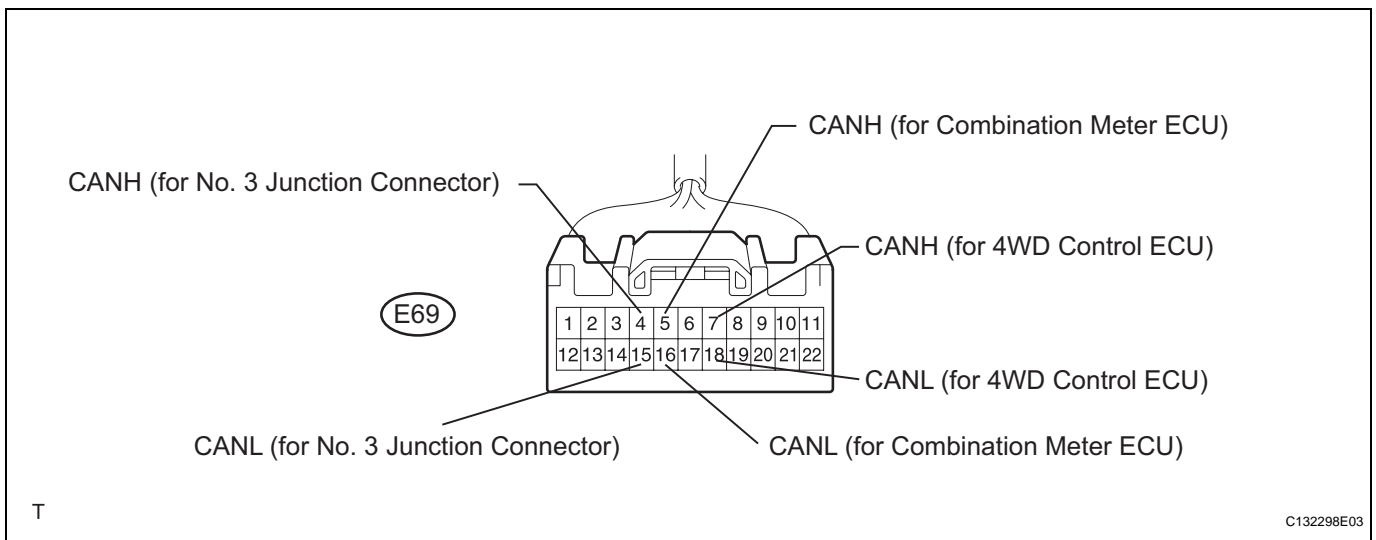
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No. 3 Junction Connector	Wiring Color	Connect to
CANH (E70-3)	O	No. 2 junction connector
CANL (E70-14)	W	No. 2 junction connector
CANH (E70-1)	B	Center airbag sensor assembly
CANL (E70-12)	W	Center airbag sensor assembly
CANH (E70-2)	V	No. 4 junction connector
CANL (E70-13)	W	No. 4 junction connector

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(d) No. 4 junction connector

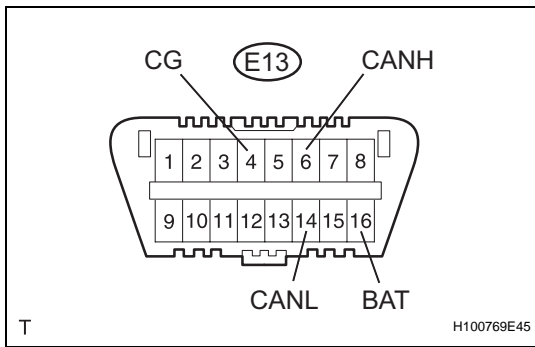


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No. 4 Junction Connector	Wiring Color	Connect to
CANH (E69-4)	V	No. 3 junction connector
CANL (E69-15)	W	No. 3 junction connector
CANH (E69-7)	P	4WD control ECU*
CANL (E69-18)	W	4WD control ECU*
CANH (E69-5)	G	Combination meter ECU
CANL (E69-16)	W	Combination meter ECU

HINT:  
\*: for 4WD



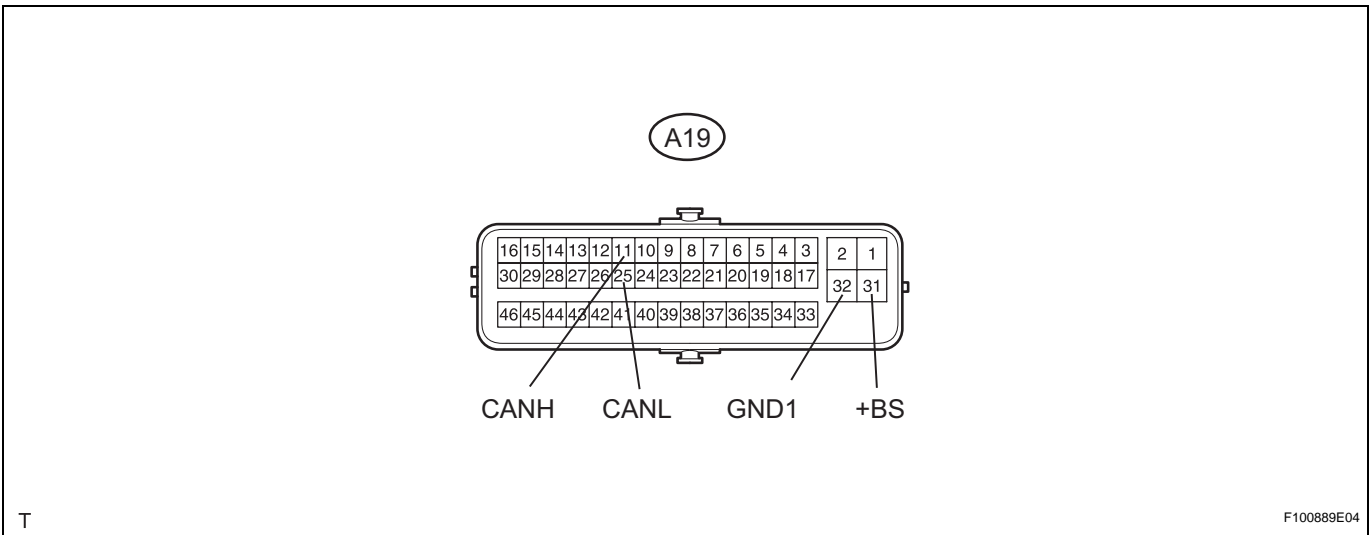
**2. CHECK DLC3**

- (a) Measure the resistance of the connector.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E13-6) - CANL (E13-14)	B - W	Ignition switch OFF	54 to 69 Ω
CANH (E13-6) - CG (E13-4)	B - BR	Ignition switch OFF	200 Ω or more
CANL (E13-14) - CG (E13-4)	W - BR	Ignition switch OFF	200 Ω or more
CANH (E13-6) - BAT (E13-16)	B - L	Ignition switch OFF	1 MΩ or more
CANL (E13-14) - BAT (E13-16)	W - L	Ignition switch OFF	1 MΩ or more

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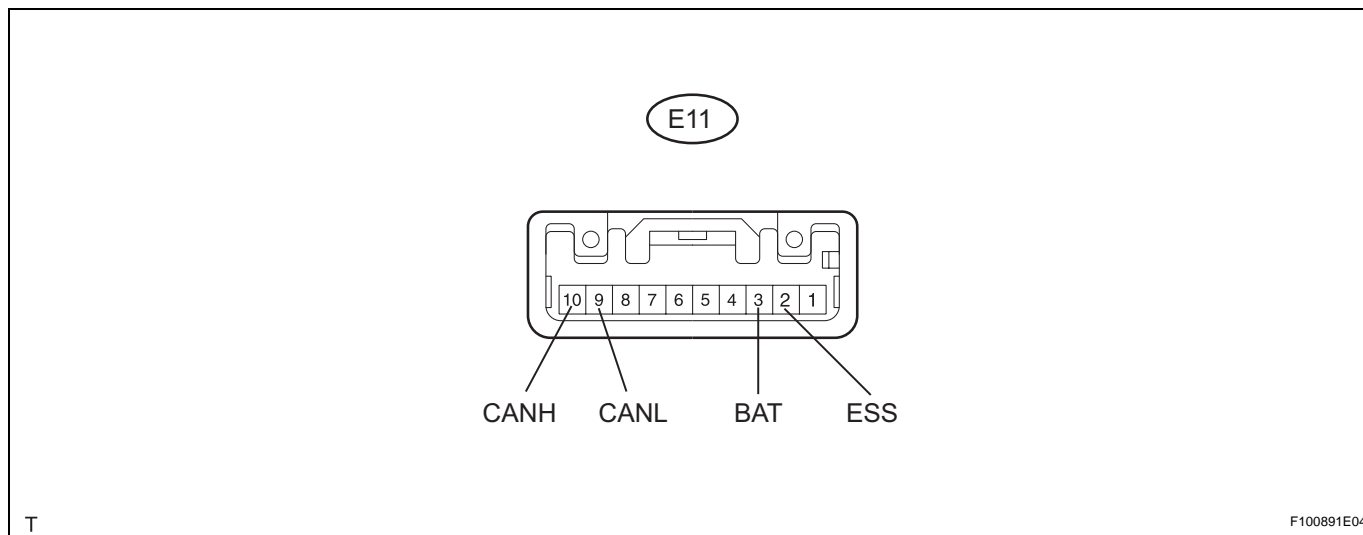
**3. CHECK ABS AND TRACTION ACTUATOR (SKID CONTROL ECU)**



- (a) Disconnect the A19 ECU connector.
- (b) Measure the resistance of the wire harness side connector.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (A19-11) - CANL (A19-25)	R - W	Ignition switch OFF	54 to 69 Ω
CANH (A19-11) - GND1 (A19-32)	R - W-B	Ignition switch OFF	200 Ω or more
CANL (A19- 25) - GND1 (A19-32)	W - W-B	Ignition switch OFF	200 Ω or more
CANH (A19-11) - +BS (A19-31)	R - W	Ignition switch OFF	1 MΩ or more
CANL (A19-25) - +BS (A19-31)	W - W	Ignition switch OFF	1 MΩ or more

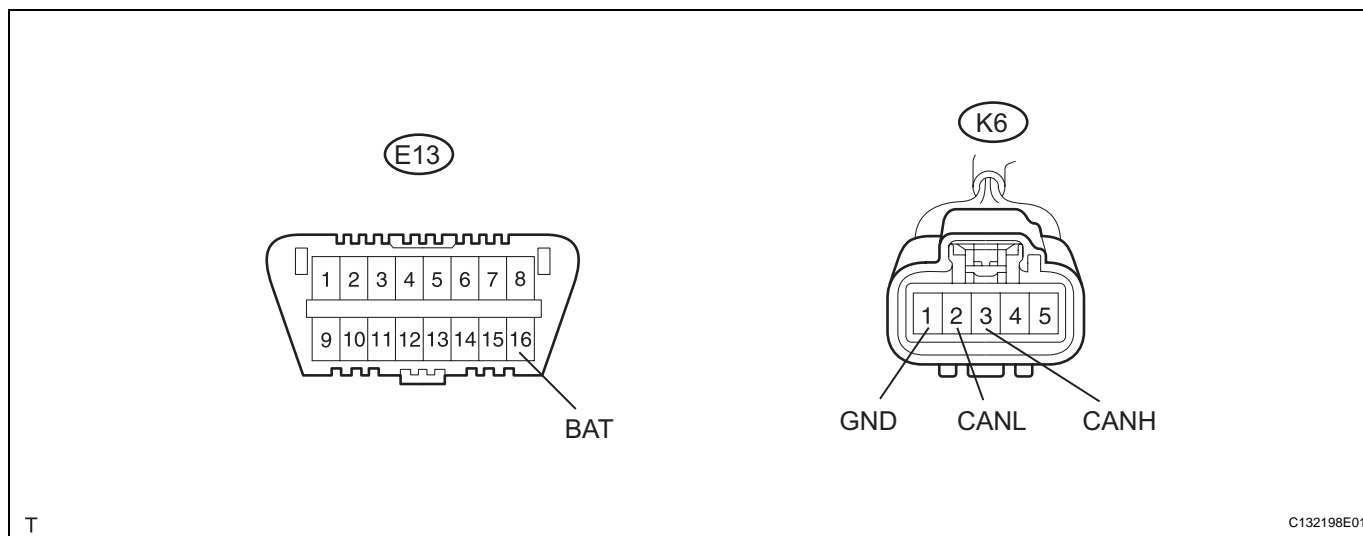
## 4. CHECK STEERING ANGLE SENSOR



- (a) Disconnect the E11 sensor connector.
- (b) Measure the resistance of the wire harness side connector.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E11-10) - CANL (E11-9)	BR - W	Ignition switch OFF	54 to 69 $\Omega$
CANH (E11-10) - ESS (E11-2)	BR - W-B	Ignition switch OFF	200 $\Omega$ or more
CANL (E11-9) - ESS (E11-2)	W - W-B	Ignition switch OFF	200 $\Omega$ or more
CANH (E11-10) - BAT (E11-3)	BR - R	Ignition switch OFF	1 M $\Omega$ or more
CANL (E11-9) - BAT (E11-3)	W - R	Ignition switch OFF	1 M $\Omega$ or more

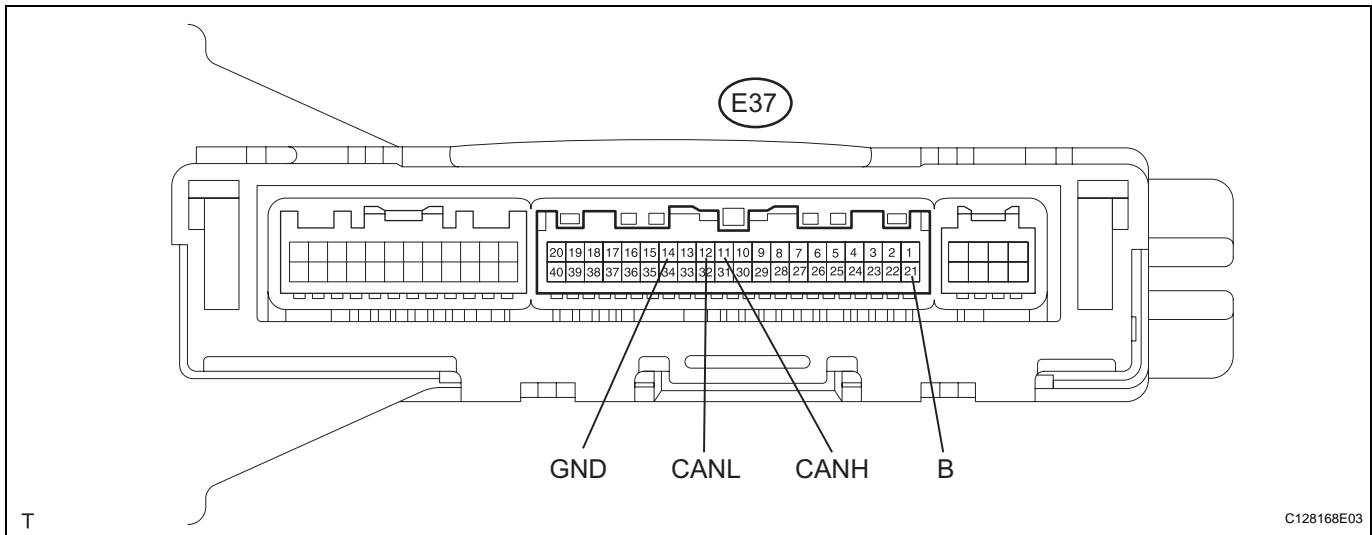
## 5. CHECK YAW RATE SENSOR



- (a) Disconnect the K6 sensor connector.
- (b) Measure the resistance of the wire harness side connector.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (K6-3) - CANL (K6-2)	L - W	Ignition switch OFF	54 to 69 $\Omega$
CANH (K6-3) - GND (K6-1)	L - W-B	Ignition switch OFF	200 $\Omega$ or more
CANL (K6-2) - GND (K6-1)	W - W-B	Ignition switch OFF	200 $\Omega$ or more
CANH (K6-3) - BAT (E13-16)	L - L	Ignition switch OFF	1 M $\Omega$ or more
CANL (K6-2) - BAT (E13-16)	W - L	Ignition switch OFF	1 M $\Omega$ or more

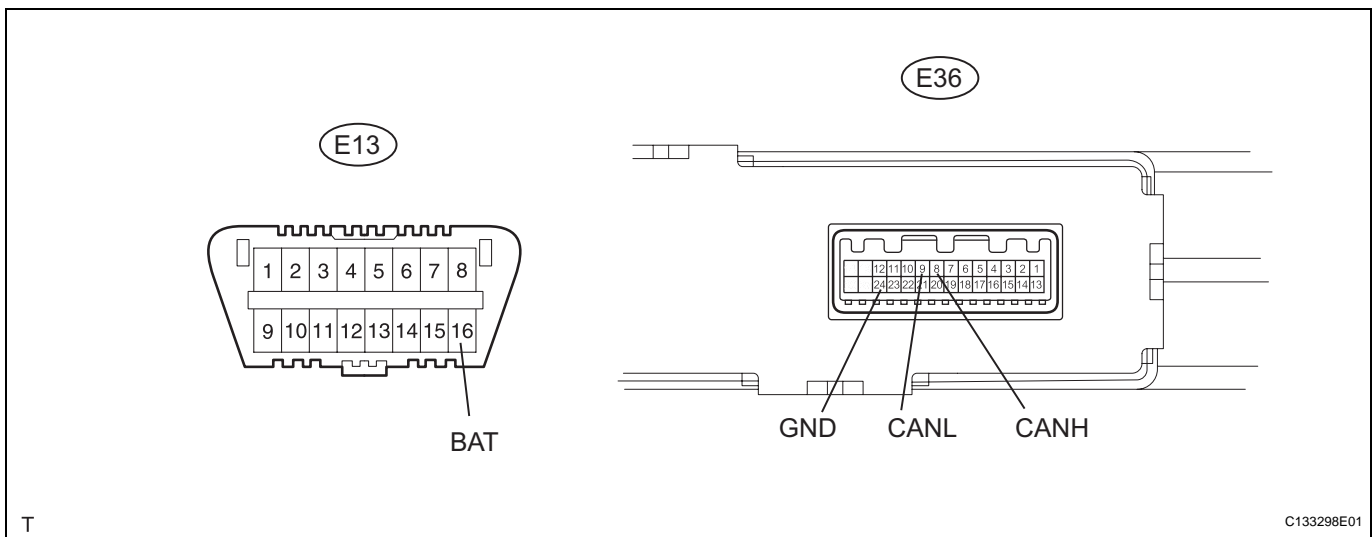
**6. CHECK AIR CONDITIONING AMPLIFIER (for Automatic Air Conditioning System)**



- (a) Disconnect the E37 amplifier connector.
- (b) Measure the resistance of the wire harness side connector.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E37-11) - CANL (E37-12)	V - W	Ignition switch OFF	54 to 69 Ω
CANH (E37-11) - GND (E37-14)	V - W-B	Ignition switch OFF	200 Ω or more
CANL (E37-12) - GND (E37-14)	W - W-B	Ignition switch OFF	200 Ω or more
CANH (E37-11) - B (E37-21)	V - R	Ignition switch OFF	1 MΩ or more
CANL (E37-12) - B (E37-21)	W - R	Ignition switch OFF	1 MΩ or more

**7. CHECK AIR CONDITIONING AMPLIFIER (for Manual Air Conditioning System)**



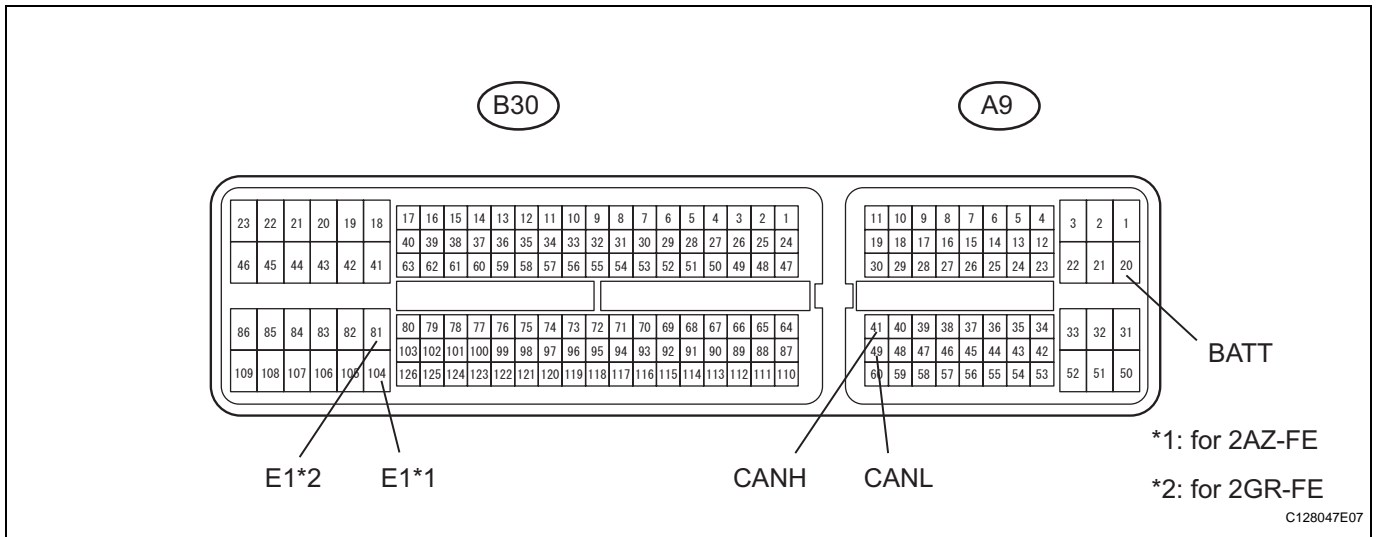
- (a) Disconnect the E36 amplifier connector.
- (b) Measure the resistance of the wire harness side connector.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E36-8) - CANL (E36-9)	V - W	Ignition switch OFF	54 to 69 Ω
CANH (E36-8) - GND (E36-24)	V - W-B	Ignition switch OFF	200 Ω or more
CANL (E36-9) - GND (E36-24)	W - W-B	Ignition switch OFF	200 Ω or more

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Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E36-8) - BAT (E13-16)	V - L	Ignition switch OFF	1 MΩ or more
CANH (E36-9) - BAT (E13-16)	W - L	Ignition switch OFF	1 MΩ or more

8. CHECK ECM



- (a) Disconnect the A9 and B30 ECM connectors.
- (b) Measure the resistance of the wire harness side connectors.

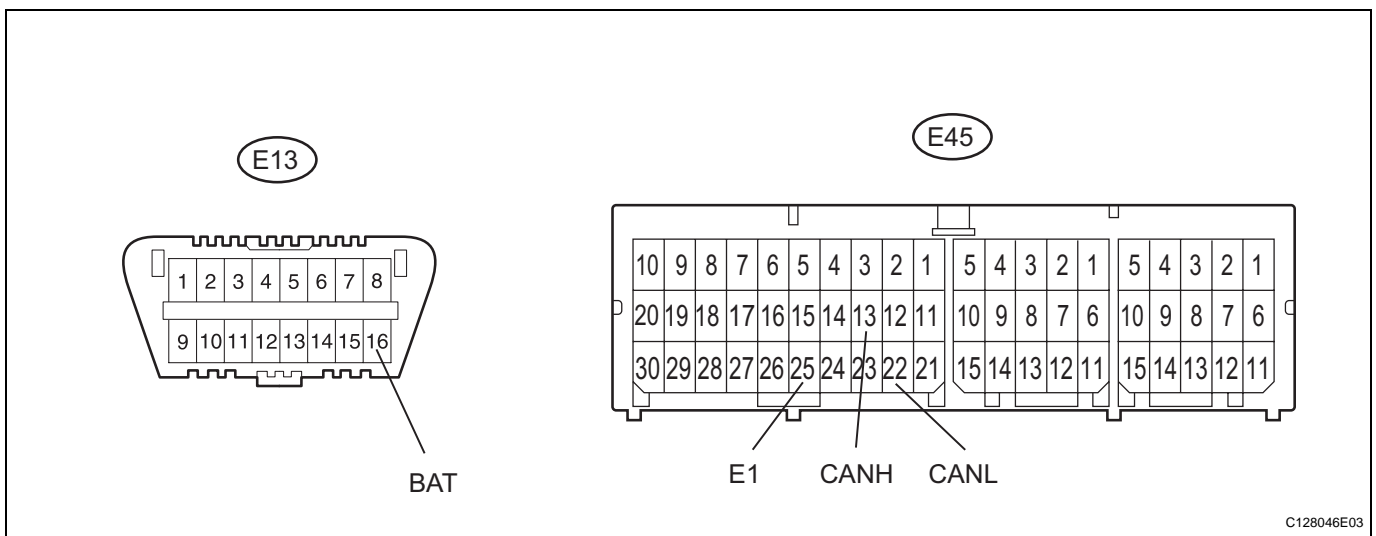
Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (A9-41) - CANL (A9-49)	Y - W	Ignition switch OFF	108 to 132 Ω
CANH (A9-41) - E1 (B30-104)*1	Y - BR	Ignition switch OFF	200 Ω or more
CANL (A9-49) - E1 (B30-104)*1	W - BR	Ignition switch OFF	200 Ω or more
CANH (A9-41) - E1 (B30-81)*2	Y - BR	Ignition switch OFF	200 Ω or more
CANL (A9-49) - E1 (B30-81)*2	W - BR	Ignition switch OFF	200 Ω or more
CANH (A9-41) - BATT (A9-20)	Y - W	Ignition switch OFF	1 MΩ or more
CANL (A9-49) - BATT (A9-20)	W - W	Ignition switch OFF	1 MΩ or more

HINT:

\*1: for 2AZ-FE

\*2: for 2GR-FE

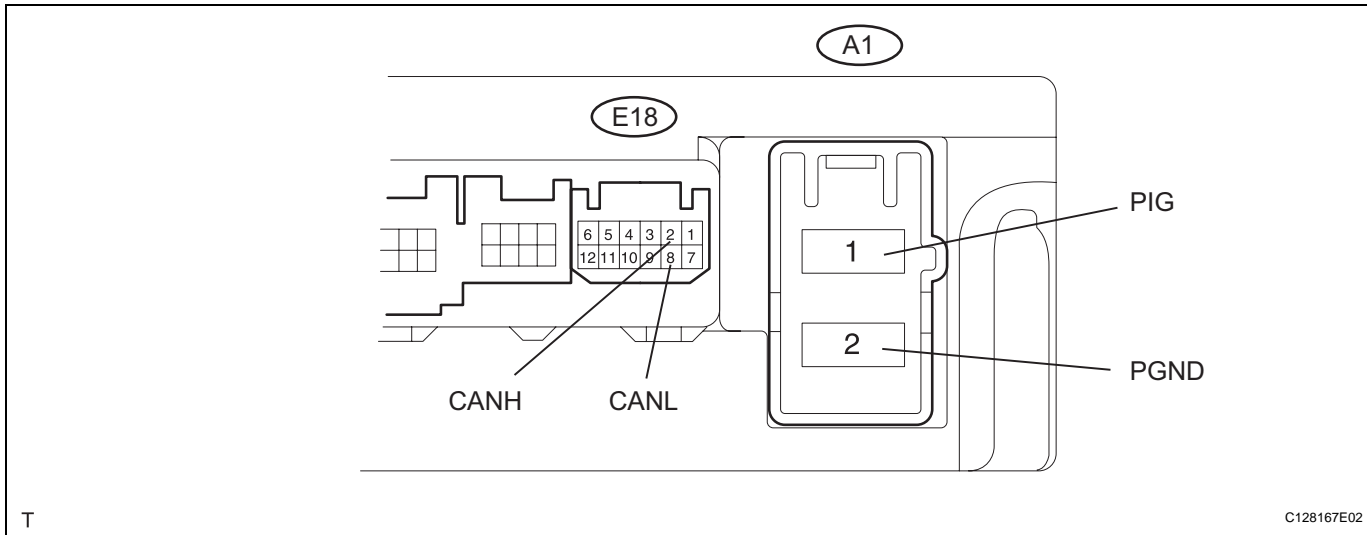
9. CHECK CENTER AIRBAG SENSOR ASSEMBLY



- (a) Disconnect the E45 sensor connector.
- (b) Measure the resistance of the wire harness side connectors.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E45-13) - CANL (E45-22)	B - W	Ignition switch OFF	54 to 69 Ω
CANH (E45-13) - E1 (E45-25)	B - W-B	Ignition switch OFF	200 Ω or more
CANL (E45-22) - E1 (E45-25)	W - W-B	Ignition switch OFF	200 Ω or more
CANH (E45-13) - BAT (E13-16)	B - L	Ignition switch OFF	1 MΩ or more
CANL (E45-22) - BAT (E13-16)	W - L	Ignition switch OFF	1 MΩ or more

**10. CHECK POWER STEERING ECU**



- (a) Disconnect the A1 and E18 ECU connectors.
- (b) Measure the resistance of the wire harness side connectors.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E18-2) - CANL (E18-8)	Y - W	Ignition switch OFF	54 to 69 Ω
CANH (E18-2) - PGND (A1-2)	Y - W-B	Ignition switch OFF	200 Ω or more
CANL (E18-8) - PGND (A1-2)	W - W-B	Ignition switch OFF	200 Ω or more
CANH (E18-2) - PIG (A1-1)	Y - W-B	Ignition switch OFF	1 MΩ or more
CANL (E18-8) - PIG (A1-1)	W - W-B	Ignition switch OFF	1 MΩ or more

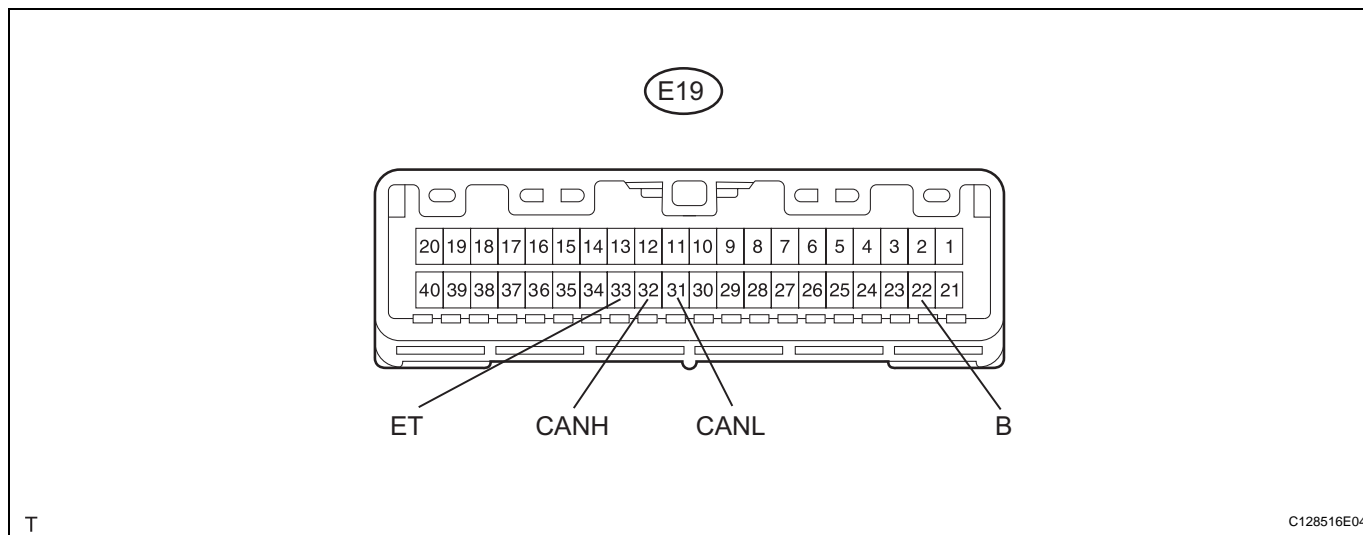
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## 11. CHECK COMBINATION METER ECU



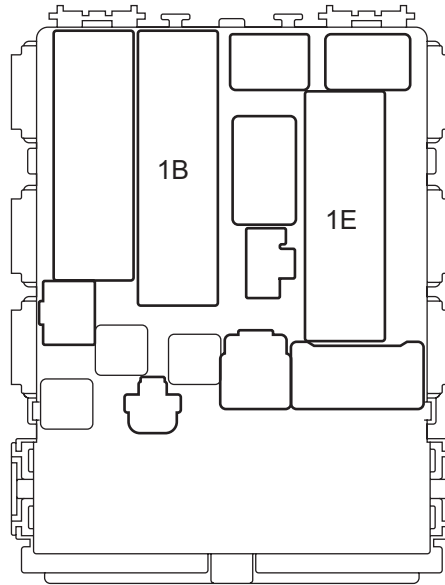
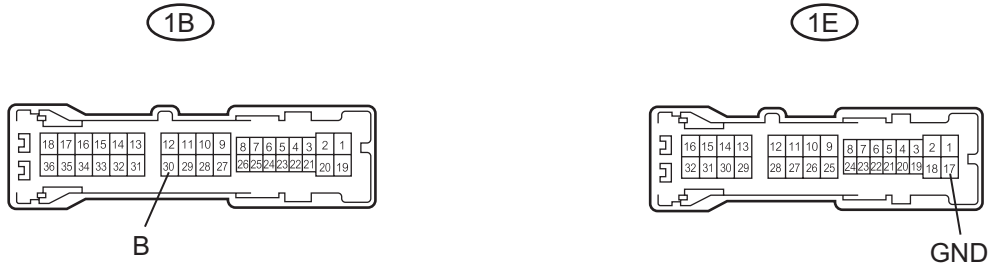
- (a) Disconnect the E19 ECU connector.
- (b) Measure the resistance of the wire harness side connector.

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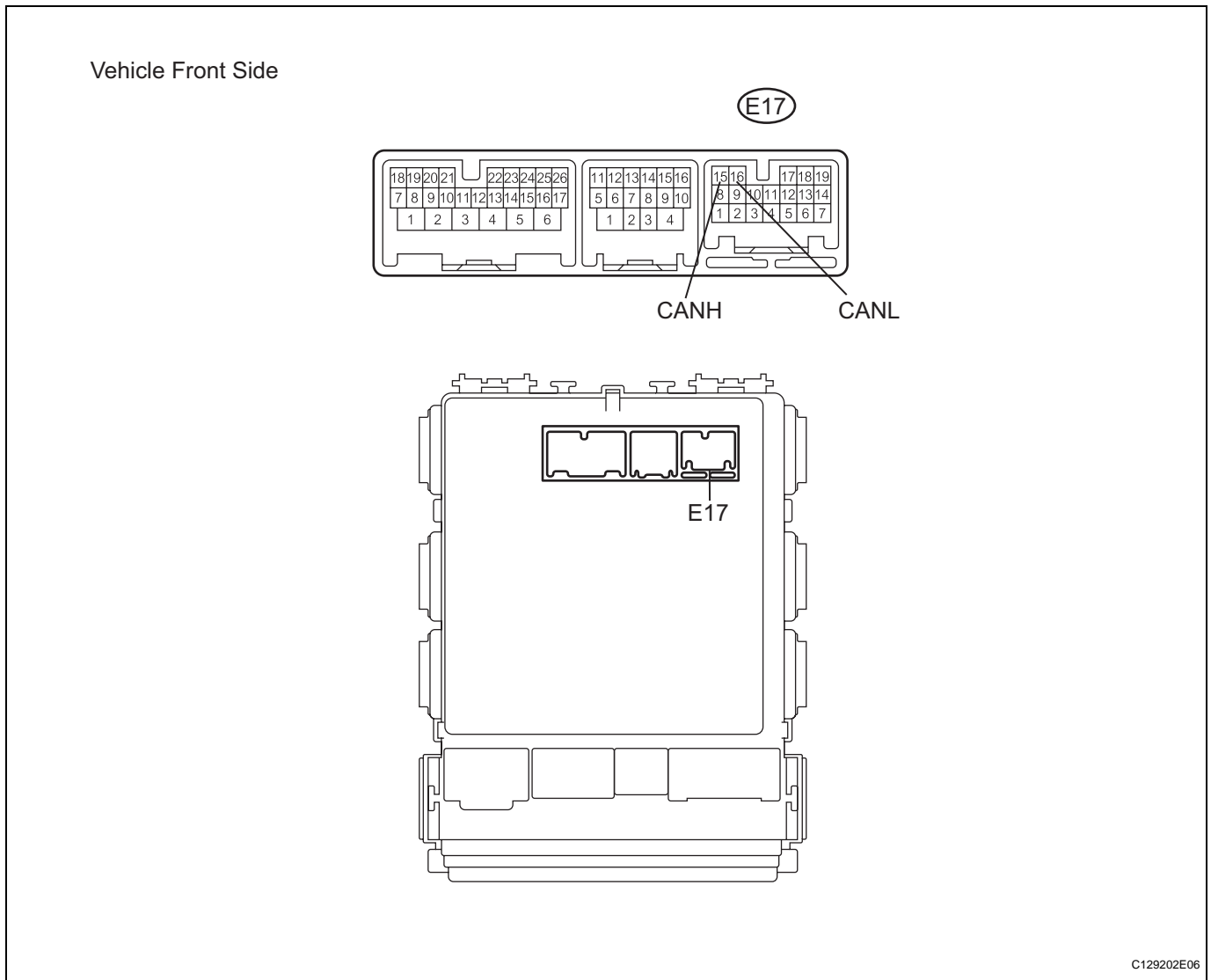
Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E19-32) - CANL (E19-31)	G - W	Ignition switch OFF	108 to 132 $\Omega$
CANH (E19-32) - CANL (E19-31)	G - BR	Ignition switch OFF	200 $\Omega$ or more
CANL (E19-31) - ET (E19-33)	W - BR	Ignition switch OFF	200 $\Omega$ or more
CANH (E19-32) - B (E19-22)	G - R	Ignition switch OFF	1 M $\Omega$ or more
CANL (E19-31) - B (E19-22)	W - R	Ignition switch OFF	1 M $\Omega$ or more

### 12. CHECK INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

Vehicle Rear Side



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- (a) Disconnect the 1B and 1E junction block connectors.
- (b) Disconnect the E17 ECU connector.
- (c) Measure the resistance of the wire harness side connectors.

Symbols (Terminal No.)	Wiring Color	Condition	Specified Condition
CANH (E17-15) - CANL (E17-16)	R - W	Ignition switch OFF	54 to 69 $\Omega$
CANH (E17-15) - GND1 (1E-17)	R - W-B	Ignition switch OFF	200 $\Omega$ or more
CANL (E17-16) - GND1 (1E-17)	W - W-B	Ignition switch OFF	200 $\Omega$ or more
CANH (E17-15) - BECU (1B-30)	R - R	Ignition switch OFF	1 M $\Omega$ or more
CANL (E17-16) - BECU (1B-30)	W - R	Ignition switch OFF	1 M $\Omega$ or more