

Cruise Main Indicator Light Circuit

DESCRIPTION

- The ECM detects a cruise control switch signal and sends it to the combination meter via BEAN. Then the CRUISE main indicator light comes on.
- The CRUISE main indicator light circuit uses BEAN for communication. If there is a malfunction in this circuit, check for DTCs in multiplex communication system before troubleshooting this circuit.

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- Connect the intelligent tester to the DLC3.
- Check the CRUISE main indicator light by using ACTIVE TEST.

Combination Meter:

Item	Test Details	Diagnostic Note
CRUISE INDIC	"CRUISE" indicator is ON/OFF	-

OK:
Indicator light comes on / goes off.

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REPLACE COMBINATION METER ASSEMBLY

OK

2 READ VALUE OF INTELLIGENT TESTER

- Connect the intelligent tester to the DLC3.
- Turn the ignition switch on, and turn the intelligent tester main switch on.
- Check the DATA LIST for proper functioning of the CRUISE main indicator light.

Hybrid Vehicle Control ECU (Cruise Control):

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
CCS INDICATOR M	Cruise indicator signal (Main CPU) / ON or OFF	ON: "CCS READY" ON OFF: "CCS READY" OFF	-

OK:
When cruise control main switch operation is performed, the result will be same as above.

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REPLACE ECM

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

TC and CG Terminal Circuit

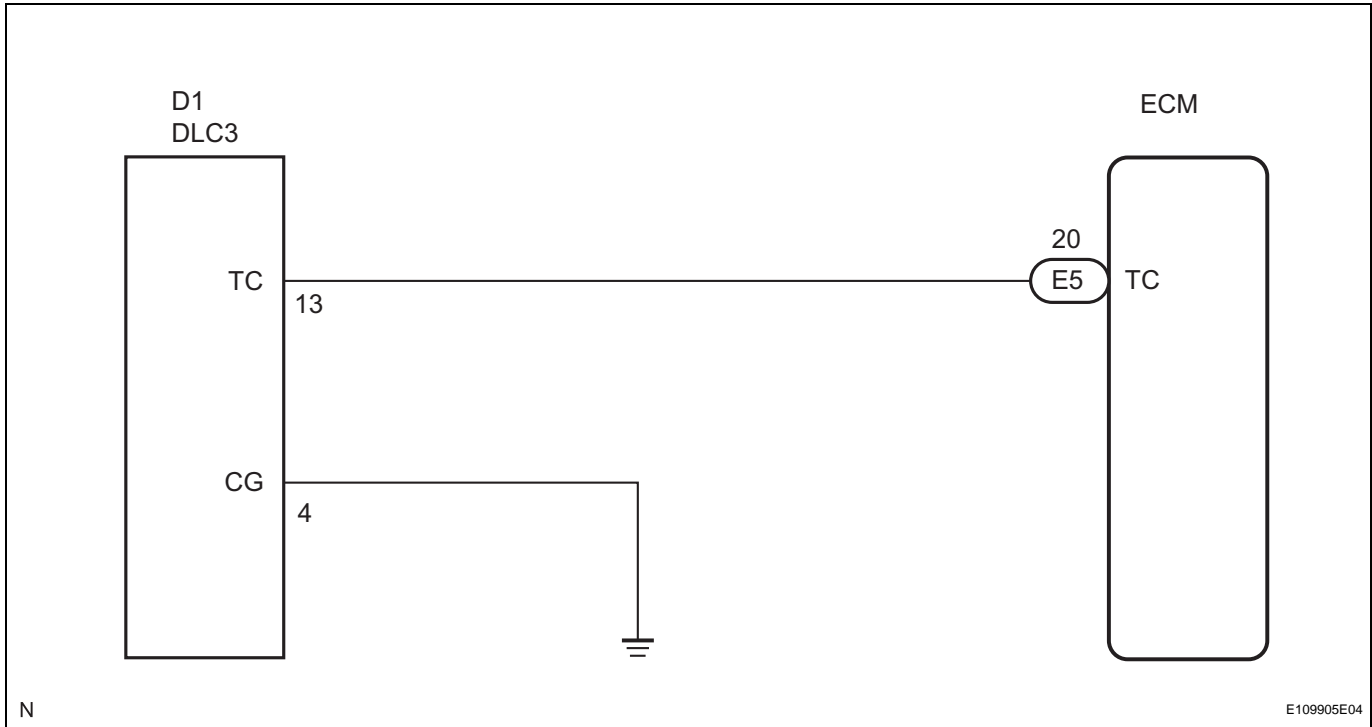
DESCRIPTION

Connecting terminals TC and CG of the DLC3 causes the system to enter self-diagnostic mode. If a malfunction is present, DTCs will be output.

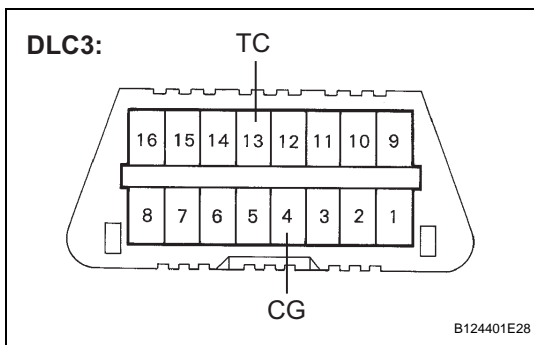
HINT:

When a particular warning light remains blinking, a ground short in the wiring of terminal TC of the DLC3 or an internal ground short in the relevant ECU is suspected.

WIRING DIAGRAM



1 INSPECT DLC3 (TC TERMINAL VOLTAGE)



- (a) Turn the ignition switch to the ON position.
- (b) Measure the voltage according to the value(s) in the table below.

Voltage

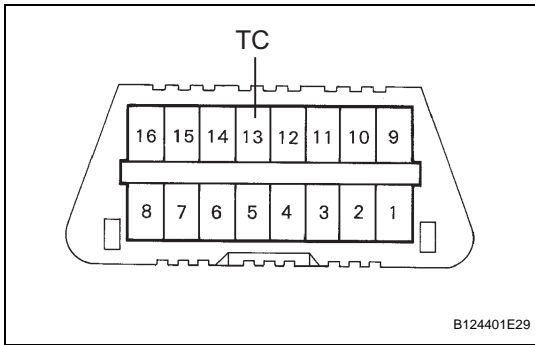
Tester Connection	Condition	Specified Condition
TC (DLC3 - 13) - CG (DLC3 - 4)	IG switch ON	10 to 14 V

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Go to step 3

OK

2 CHECK HARNESS AND CONNECTOR (DLC3 - ECM)



- (a) Disconnect the connector from ECM.
- (b) Measure the resistance according to the value(s) in the table below.

Resistance

Tester Connection	Condition	Specified Condition
TC (E5 - 20) - TC (DLC3 - 13)	Always	1 Ω or less

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

Resistance

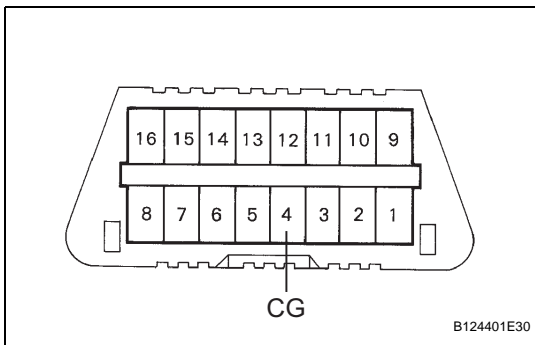
Tester connection	Condition	Specified condition
TC (E5-20) - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE ECM

3 CHECK HARNESS AND CONNECTOR (DLC3 - BODY GROUND)



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

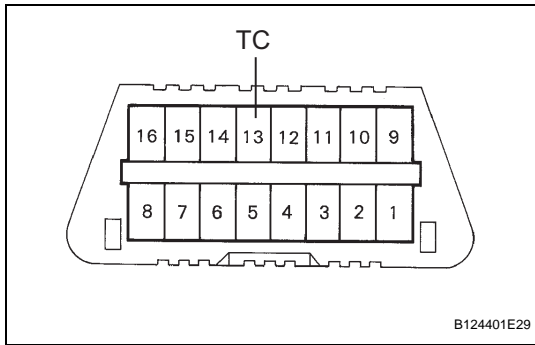
Resistance

Tester Condition	Condition	Specified Condition
CG (DLC3 - 4) - Body ground	Always	1 Ω or less

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4 CHECK HARNESS AND CONNECTOR (DLC3 - ECM)



- (a) Disconnect the connector from ECM.
- (b) Measure the resistance according to the value(s) in the table below.

Resistance

Tester Connection	Condition	Specified Condition
TC (E5 - 20) - TC (DLC3 - 13)	Always	1 Ω or less

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

Resistance

Tester connection	Condition	Specified condition
TC (E5-20) - Body ground	Always	10 kΩ or higher

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE ECM

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