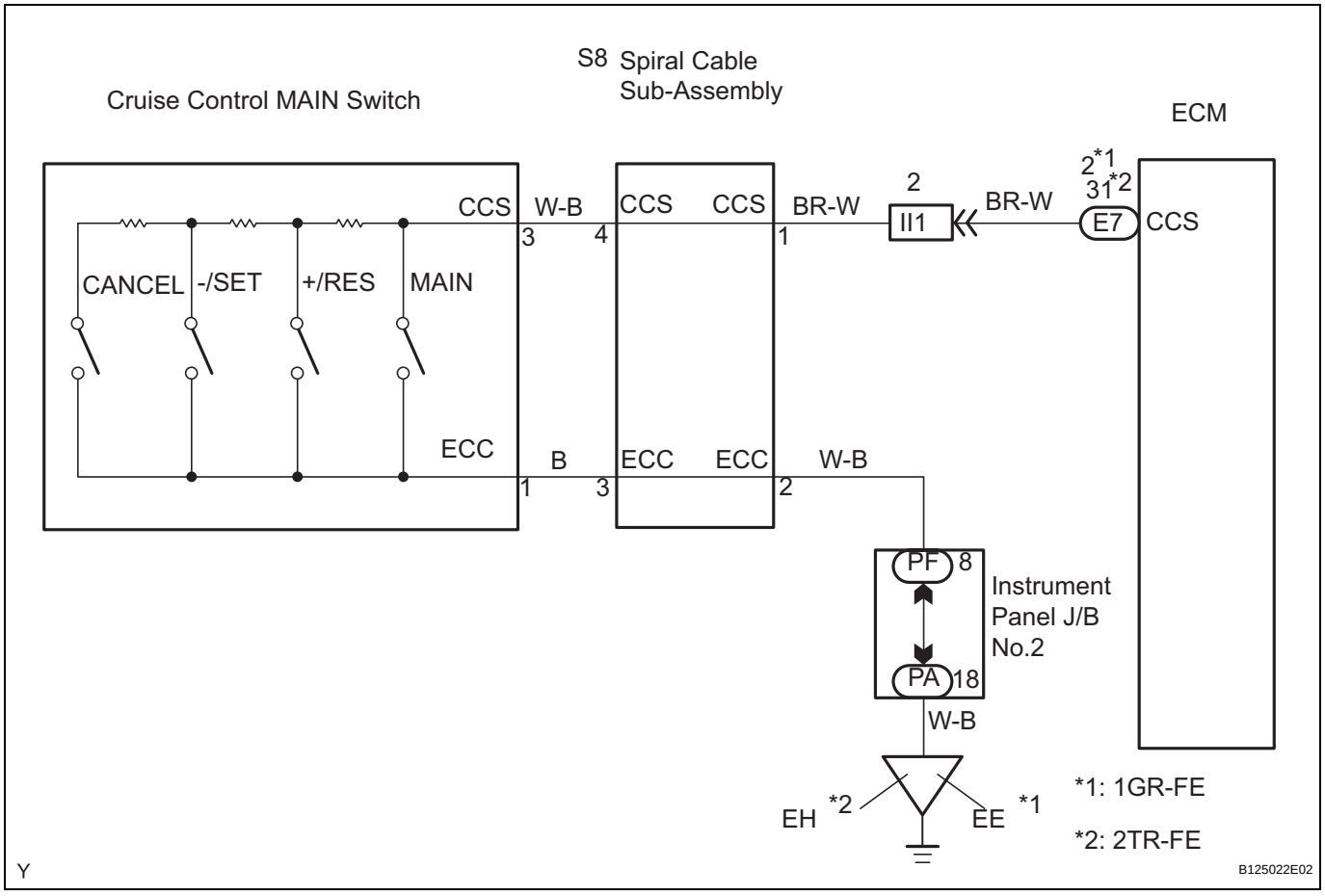
Cruise Control Switch Circuit

DESCRIPTION

This circuit sends signals to the ECM depending on the cruise control main switch condition.
The battery supplies the positive (+) battery voltage to the cruise control main switch. Then terminal CCS of the ECM receives the voltage as the signal according to the switch condition.

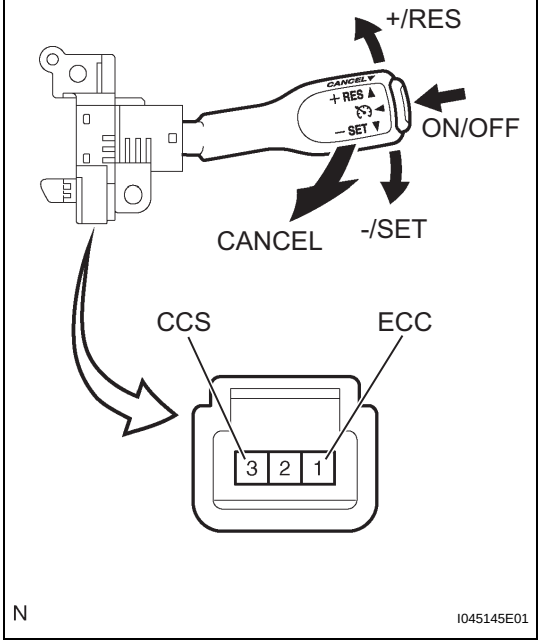
WIRING DIAGRAM



CC

1	INSPECT CRUISE CONTROL MAIN SWITCH

Cruise Control Main Switch Connector Front View:



(a) Turn the ignition switch off.
(b) Disconnect the cruise control main switch connector.
(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Switch Condition	Specified Condition
1 - 3	+ / RES	235 to 245 Ω
1 - 3	- / SET	617 to 643 Ω
1 - 3	CANCEL	1,509 to 1,571 Ω
1 - 3	Main Switch OFF	10 kΩ or higher
1 - 3	Main Switch ON	Below 1 Ω

(d) Reconnect the cruise control main switch connector.

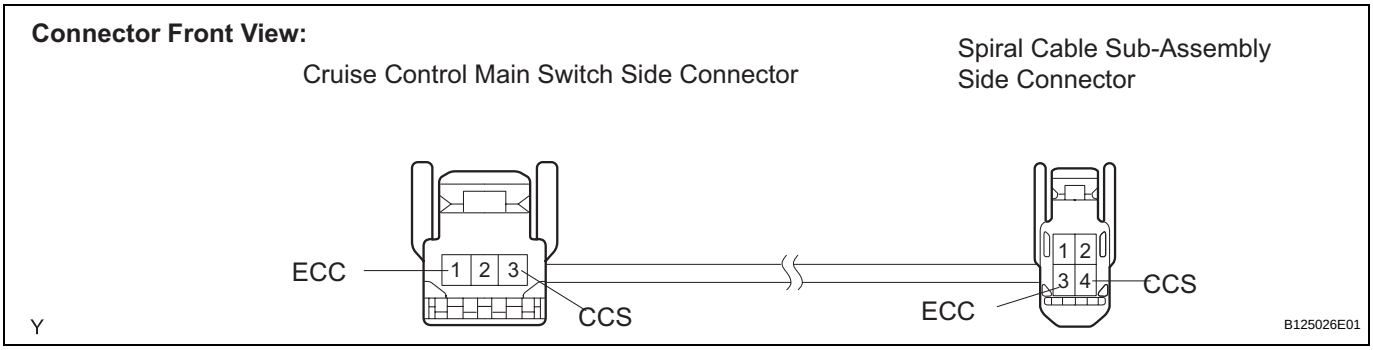
NG → **REPLACE CRUISE CONTROL MAIN SWITCH**

OK

2	CHECK HARNESS AND CONNECTOR (CRUISE CONTROL MAIN SWITCH - SPIRAL CABLE SUB-ASSEMBLY)

(a) Disconnect the spiral cable side connector.

Connector Front View:



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

Standard Resistance

Tester Connection	Condition	Specified Condition
Terminal 1 (ECC) main switch side - Terminal 3 (ECC) spiral cable side	Always	Below 1 Ω
Terminal 3 (ECC) main switch side - Terminal 4 (ECC) spiral cable side	Always	Below 1 Ω

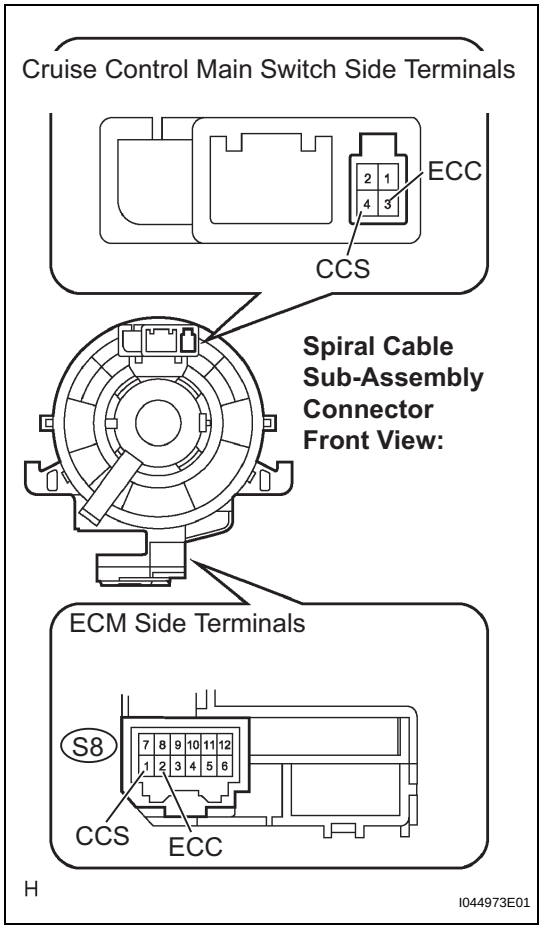
(c) Reconnect the spiral cable side connector.

CC

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

OK

3 INSPECT SPIRAL CABLE SUB-ASSEMBLY



(a) Disconnect the spiral cable connector on the ECM side.
(b) Measure the resistance according to the value(s) in the table below.

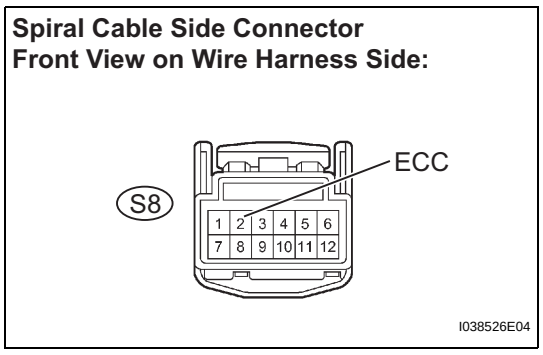
Standard Resistance

Tester Connection	Condition	Specified Condition
Terminal 4 (ECC) main switch side - CCS (S8-1)	Always	Below 1 Ω
Terminal 3 (ECC) main switch side - ECC (S8-2)	Always	Below 1 Ω

NG → **REPLACE SPIRAL CABLE SUB-ASSEMBLY**

OK

4 CHECK HARNESS AND CONNECTOR (SPIRAL CABLE SUB-ASSEMBLY - BODY GROUND)



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

Standard Resistance

Tester Connection	Condition	Specified Condition
ECC (S8-2) - Body ground	Always	Below 1 Ω

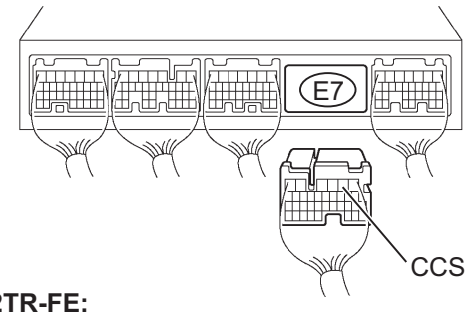
NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (SPIRAL CABLE SUB-ASSEMBLY - BODY GROUND)**

OK

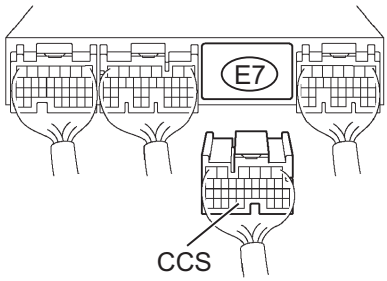
CC

5	CHECK HARNESS AND CONNECTOR (SPIRAL CABLE SUB-ASSEMBLY - ECM)

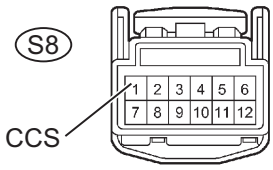
1GR-FE:



2TR-FE:



Spiral Cable Side Connector Front View on Wire Harness Side:



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(a) Disconnect the E7 ECM connector.
(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance (1GR-FE)

Tester Connection	Condition	Specified Condition
CCS (E7-2) - CCS (S8-1)	Always	Below 1 Ω
CCS (E7-2) - Body ground	Always	10 kΩ or higher

Standard Resistance (2TR-FE)

Tester Connection	Condition	Specified Condition
CCS (E7-31) - CCS (S8-1)	Always	Below 1 Ω
CCS (E7-31) - Body ground	Always	10 kΩ or higher

(c) Reconnect the ECM connector.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (SPIRAL CABLE SUB-ASSEMBLY - ECM)**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE