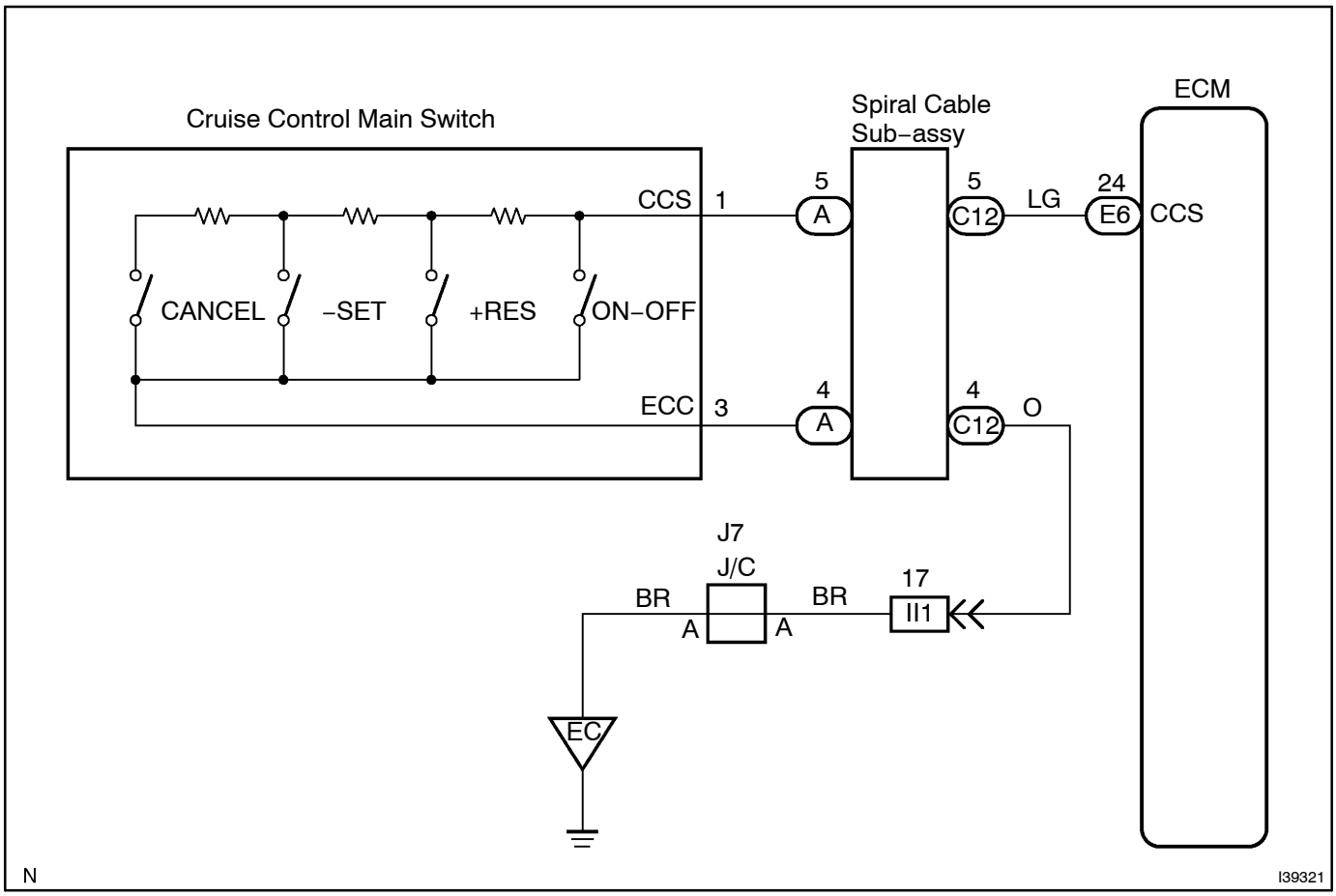
CRUISE CONTROL SWITCH CIRCUIT

CIRCUIT DESCRIPTION

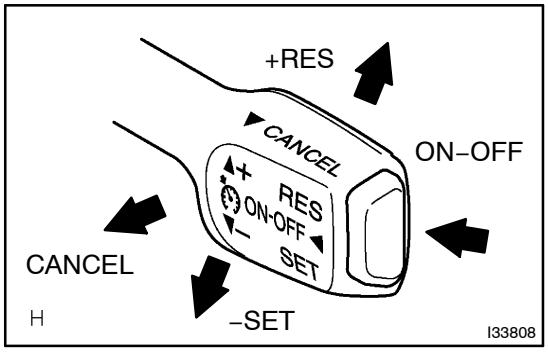
The cruise control main switch operates seven functions: SET, COAST (–), TAP–DOWN, RESUME, ACCEL (+), TAP–UP, and CANCEL. The SET, TAP–DOWN and COAST (–) functions, and the RESUME and ACCEL (+), TAP–UP functions are operated with the same switch respectively. The cruise control main switch is an automatic return type switch which turns on only while operating it in each arrow direction and turns off after releasing it. The internal contact point of the cruise control main switch is turned on with the switch operation. Then the ECM reads the resistance value that has been changed by the switch operation to control SET, COAST (–), RESUME, ACCEL (+) and CANCEL.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	READ VALUE OF INTELLIGENT TESTER II



(a) Connect the intelligent tester II to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) According to the display on the tester, read the "DATA LIST".

CC (ECM):

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
Main SW M–CPU	Main SW signal (Main CPU) / ON or OFF	ON : Main SW ON (Pushed on) OFF Main SW OFF (Pushed off)	–
Main SW S–CPU	Main SW signal (Sub CPU) / ON or OFF	ON : Main SW ON (Pushed on) OFF Main SW OFF (Pushed off)	–
CANCEL Switch	CANCEL SW signal / ON or OFF	ON : CANCEL SW ON OFF : CANCEL SW OFF	–
SET/COAST Switch	SET/COAST SW signal / ON or OFF	ON : SET/COAST SW ON OFF : SET/COAST SW OFF	–
RES/ACC Switch	RES/ACC SW signal / ON or OFF	ON : RES/ACC SW ON OFF : RES/ACC OFF	–

OK:
When cruise control main switch operation is performed, the standard values will be above.
Result:

OK	A
NG (All items are defective.)	B
NG (One to four items are defective.)	C

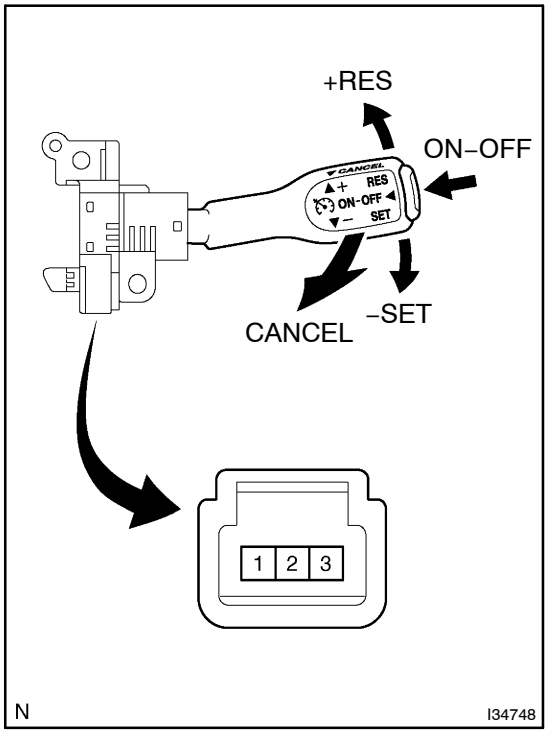
B → **Go to step 2**

C → **REPLACE CRUISE CONTROL MAIN SWITCH (SEE PAGE 82–1)**

A

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–1236)

2 INSPECT CRUISE CONTROL MAIN SWITCH



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

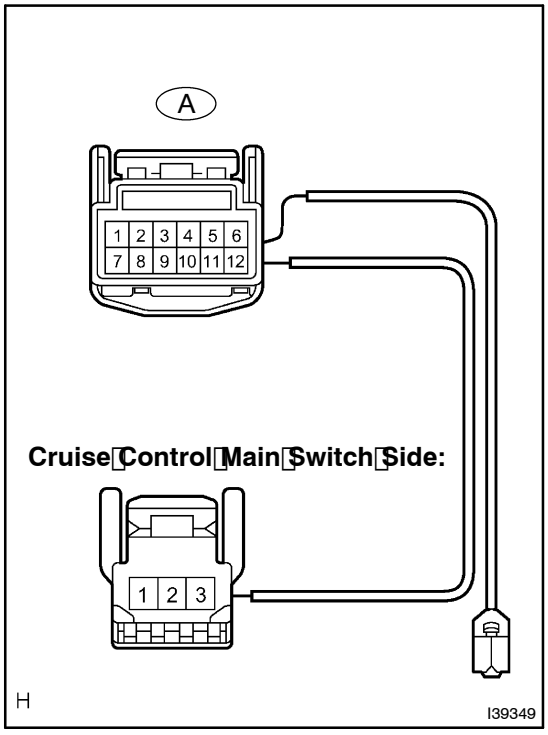
Standard:

Switch condition	Tester connection	Resistance (Ω)
Neutral	1 – 3	∞ (No continuity)
+ / RES	1 – 3	210 to 270
– / SET	1 – 3	560 to 700
CANCEL	1 – 3	1,380 to 1,700
Main Switch OFF	1 – 3	10 kΩ or higher
Main Switch ON	1 – 3	1 Ω or less

NG → **REPLACE CRUISE CONTROL MAIN SWITCH (SEE PAGE 32–1)**

OK

3 CHECK HARNESS AND CONNECTOR(CRUISE CONTROL MAIN SWITCH – SPIRAL CABLE SUB–ASSY)



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

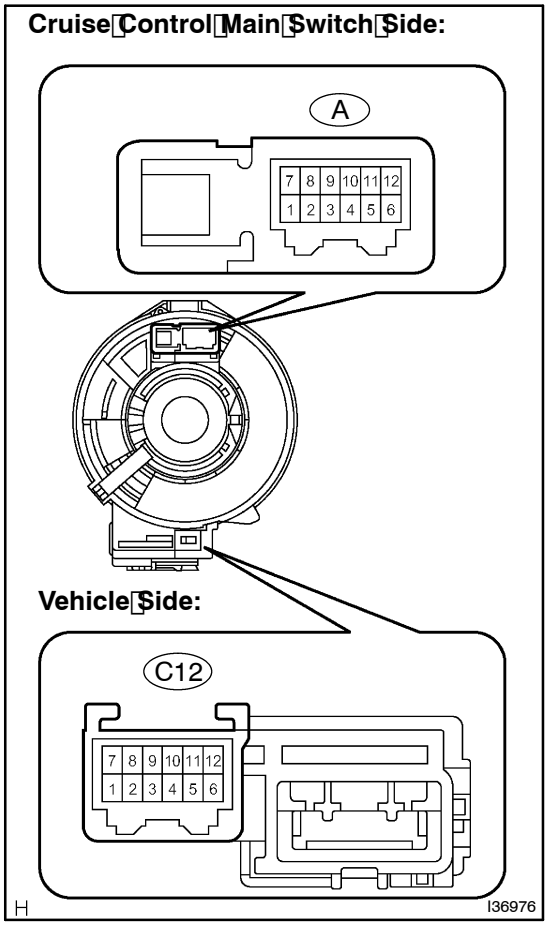
Standard:

Tester connection	Specification
1 – A–5	Below 1 Ω
3 – A–4	Below 1 Ω

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

OK

4 INSPECT SPIRAL CABLE SUB–ASSY



(a) Disconnect the spiral cable vehicle side connector.

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

Standard:

Tester connection	Specification
A–4 – C12–4	Below 1 Ω
A–5 – C12–5	Below 1 Ω

NG → **REPLACE SPIRAL CABLE SUB–ASSY (SEE PAGE 60–24)**

OK

5	CHECK HARNESS AND CONNECTOR

Vehicle Side Connector Front View:



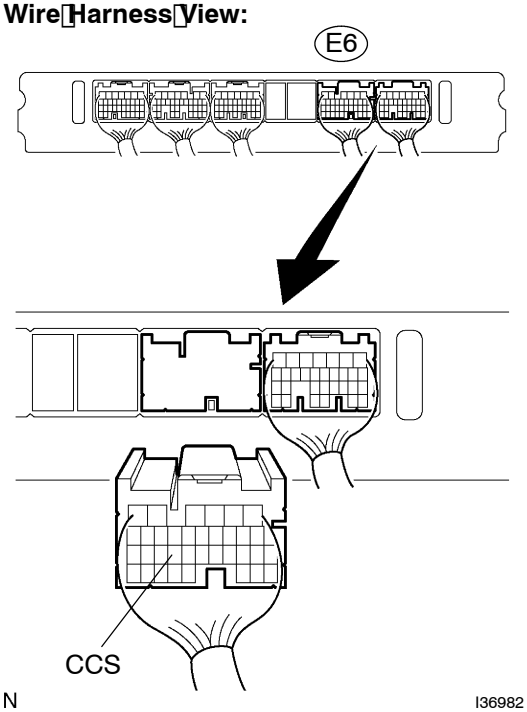
N I31380

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

Standard:

Tester connection	Condition	Specification
Spiral cable (C12–5) – CCS (E6–24)	Always	Below 1 Ω
CCS (E6–24) – Body ground	Always	10 kΩ or higher
Spiral cable (C12–4) – Body ground	Always	Below 1 Ω

Wire Harness View:



N I36982

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

OK

REPLACE ECM (SEE PAGE 10–13)