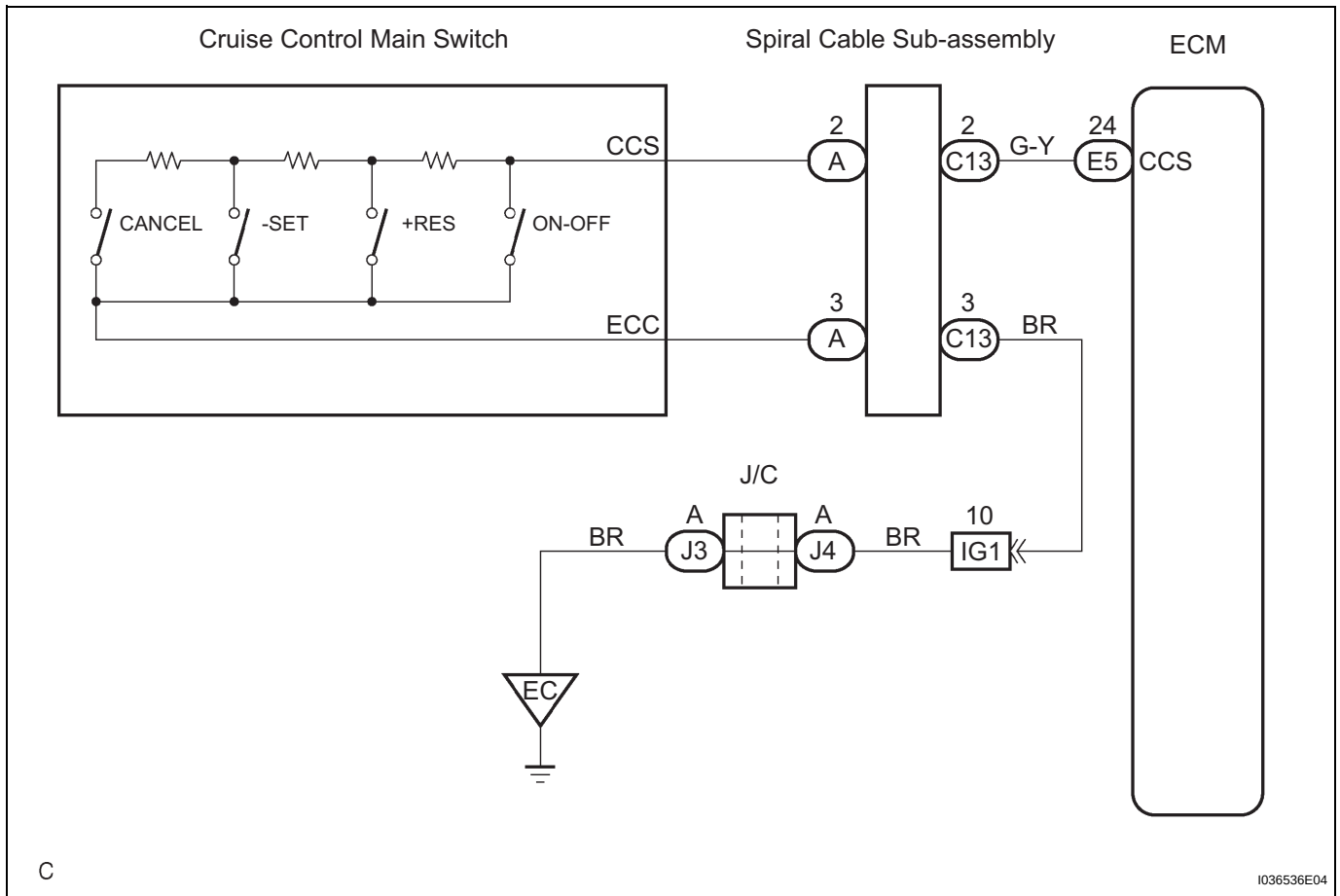


Cruise Control Switch Circuit

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, ACCEL and TAP-UP functions are operated with the same switch. 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 CCS terminal voltage value that has been changed by the switch operation to control SET, COAST, RESUME, ACCEL and CANCEL.

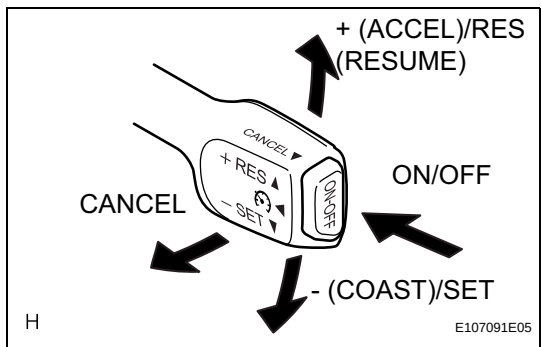
WIRING DIAGRAM



INSPECTION PROCEDURE

1

READ VALUE OF INTELLIGENT TESTER



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

CCS (ECM):

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
MAIN SW (MAIN)	Main SW signal (Main CPU) / ON or OFF	ON: Main SW ON (Pushed on) OFF: Main SW OFF (Pushed off)	-
MAIN SW (SUB)	Main SW signal (Sub CPU) / ON or OFF	ON: Main SW ON (Pushed on) OFF: Main SW OFF (Pushed off)	-
CANCEL SW	CANCEL SW signal / ON or OFF	ON: CANCEL SW ON OFF: CANCEL SW OFF	-
SET/COAST SW	SET/COAST SW signal / ON or OFF	ON: - (COAST)/SET SW ON OFF: - (COAST)/SET SW OFF	-
RES/ACC SW	RES/ACC SW signal / ON or OFF	ON: + (ACCEL)/RES SW ON OFF: + (ACCEL)/RES SW OFF	-

OK:
When the cruise control main switch is operated, the normal conditions listed above are shown on the display.

Result

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

A

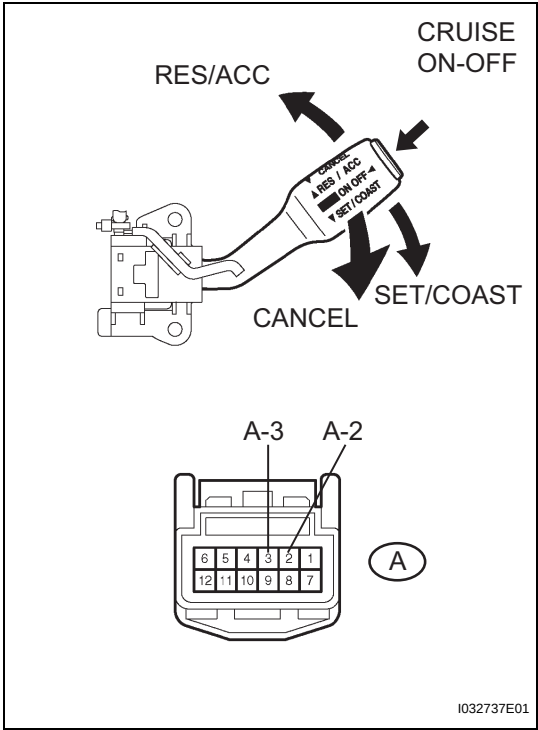
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

C

REPLACE SPIRAL CABLE

B

2 INSPECT CRUISE CONTROL MAIN SWITCH ASSEMBLY



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

OK

Tester connection	Switch position	Specified condition
A-2 - A-3	Neutral	∞ (No continuity)
A-2 - A-3	CRUISE ON-OFF	0 Ω (Continuity)
A-2 - A-3	RES/ACC	210 to 270 Ω
A-2 - A-3	SET/COAST	560 to 700 Ω
A-2 - A-3	CANCEL	1,380 to 1,700 Ω

NG

REPLACE CRUISE CONTROL MAIN SWITCH ASSEMBLY

OK

3 INSPECT SPIRAL CABLE

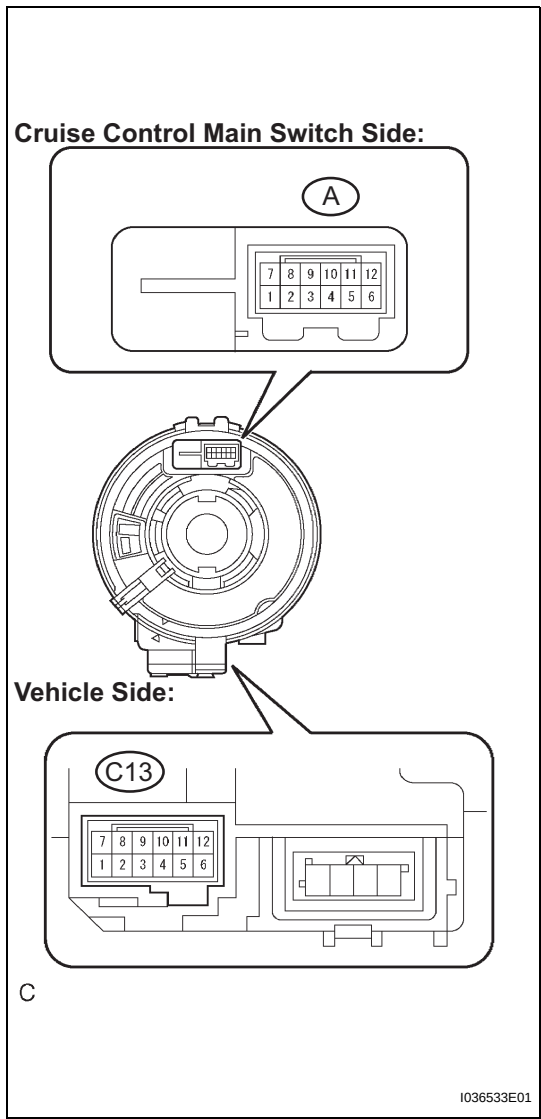
NOTICE:

The spiral cable is an important part of the SRS airbag system. Incorrect removal or installation of the spiral cable may prevent the airbag from deploying. Be sure to read the page shown in the brackets.

HINT:

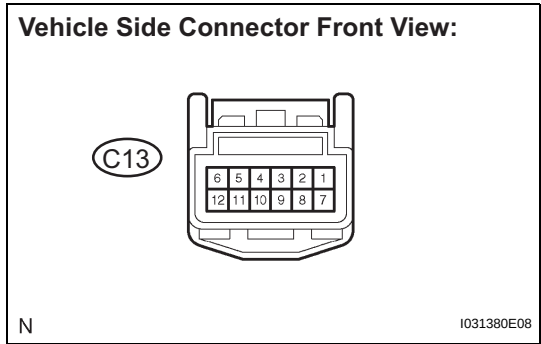
- Removal (See page [RS-285](#))
- Installation (See page [RS-285](#))

CC



OK

4 CHECK HARNESS AND CONNECTOR (SPIRAL CABLE - ECM)



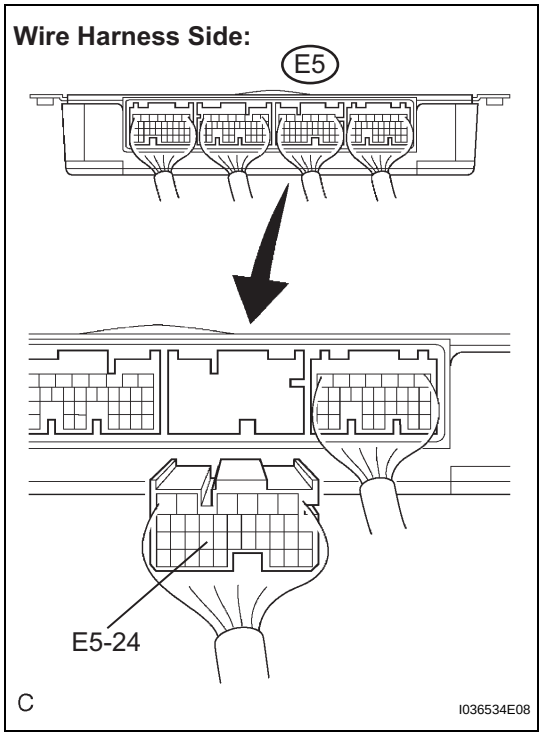
- (a) Remove the spiral cable.
- (b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Spiral Cable Position	Specified Condition
A-2 - C13-2	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
A-3 - C13-3	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	

HINT:
The spiral cable makes a maximum of approximately 5 rotations.

NG REPLACE SPIRAL CABLE



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

Resistance

Tester connection	Condition	Specified condition
Spiral cable (C13-2) - CCS (E5-24)	Always	Below 1 Ω
CCS (E5-24) - Body ground	Always	10 k Ω or higher
Spiral cable (C13-2) - Body ground	Always	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

CC

OK

REPLACE ECM