

<b>DTC</b>	<b>P0607</b>	<b>Control Module Performance</b>
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**DESCRIPTION**

This DTC indicates the internal abnormalities of the ECM.

DTC No.	DTC Detection Condition	Trouble Area
P0607/54	The ECM has a supervisory CPU and a control ECU inside. When each input STP signal is different for 0.15 secs. or more, the malfunction code is output. The malfunction code is output after 0.4 secs. have passed from the time the cruise cancel input signal (STP input) is input the ECM.	ECM

**HINT:**

When a malfunction code is detected, the fail safe must be kept on until the ignition switch is turned OFF.

<b>1</b>	<b>REPLACE ECM</b>
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**NEXT**

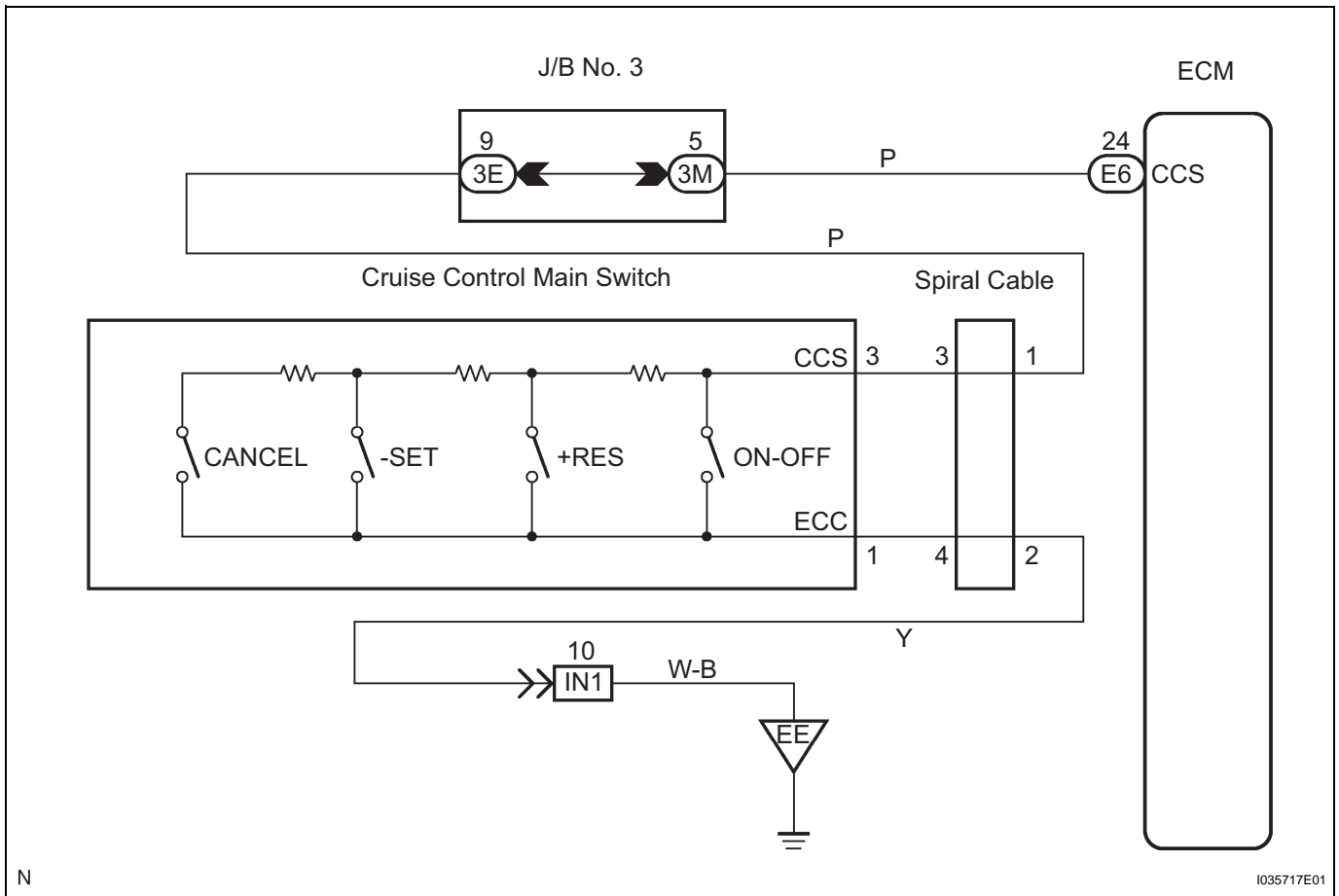
<b>END</b>
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## Cruise Control Switch Circuit

### DESCRIPTION

The cruise control main switch operates 7 functions: SET, COAST, TAP-DOWN, RESUME, ACCEL, TAP-UP, and CANCEL. The SET, TAP-DOWN and COAST functions, and the RESUME, TAP-UP and ACCEL 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 resistance value that has been changed by the switch operation to control SET, COAST, RESUME, ACCEL and CANCEL.

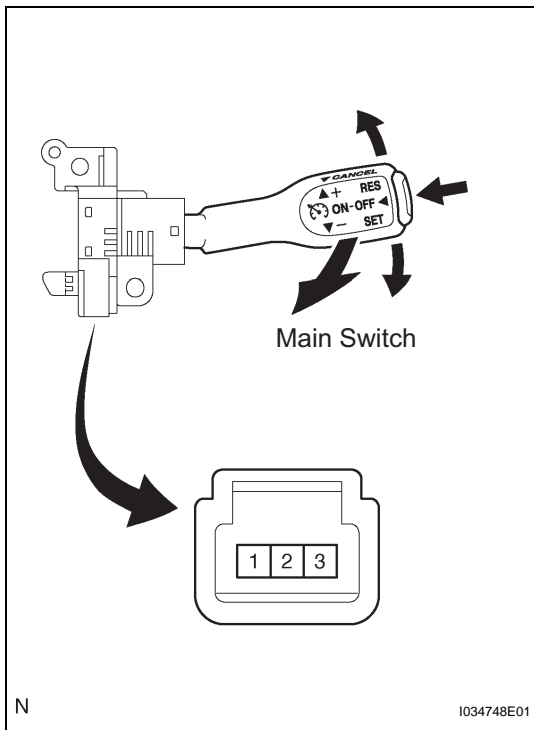
### WIRING DIAGRAM



## 1 INSPECT CRUISE CONTROL MAIN SWITCH

(a) Disconnect the cruise control main switch connector.

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

CC

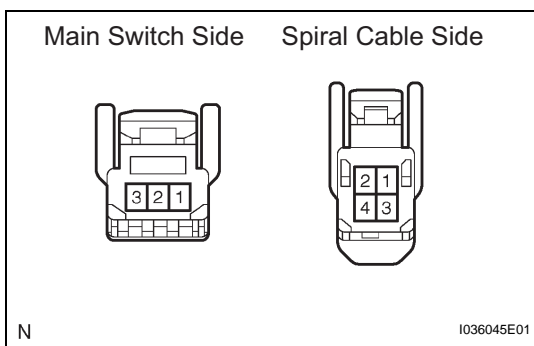
**Resistance**

Switch condition	Tester connection	Resistance ( $\Omega$ )
Neutral	1 - 3	$\infty$ (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 k $\Omega$ or higher
Main Switch ON	1 - 3	1 $\Omega$ or less

**NG** → **REPLACE CRUISE CONTROL MAIN SWITCH**

**OK**

**2 CHECK AND REPLACE HARNESS OR CONNECTOR**



- (a) Disconnect the main switch side connector and spiral cable side connector.
- (b) Measure the resistance according to the value(s) in the table below.

**Resistance**

Tester Connection	Condition	Specification
Main switch side 1 - Spiral cable side 3	Always	1 $\Omega$ or less
Main switch side 3 - Spiral cable side 4	Always	1 $\Omega$ or less

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

**Resistance**

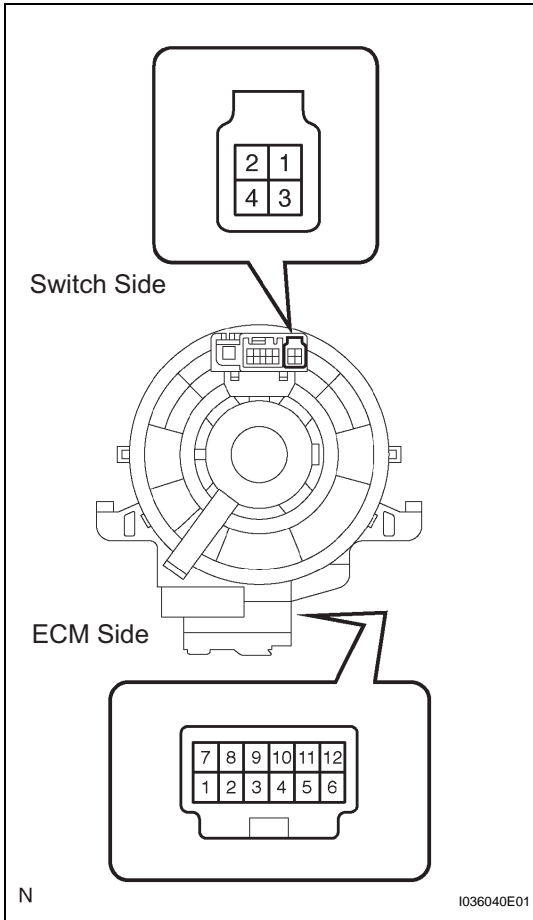
Tester Connection	Condition	Specification
Main switch side 1 - Body ground	Always	10 k $\Omega$ or higher

Tester Connection	Condition	Specification
Main switch side 3 - Body ground	Always	10 kΩ or higher

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

**OK**

**3 INSPECT SPIRAL CABLE SUB-ASSEMBLY**



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

**Resistance**

Tester Connection	Specification
Switch side 3 to ECM side 1	1 Ω or less
Switch side 4 to ECM side 2	1 Ω or less

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

**CC**

**OK**

**4 CHECK AND REPLACE HARNESS OR CONNECTOR**

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

**Resistance**

Tester Connection	Condition	Specification
Spiral cable 1 - CCS (E6 - 24)	Always	1 Ω or less

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

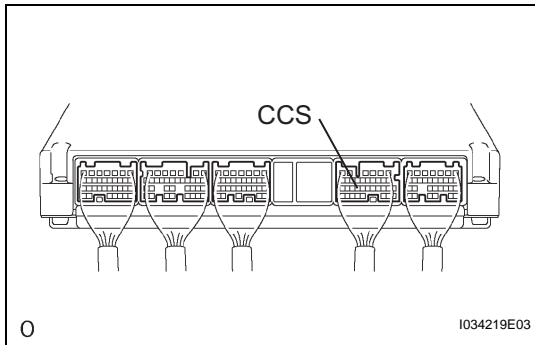
**Resistance**

Tester Connection	Condition	Specification
CCS (E6 - 24) - Body ground	Always	10 kΩ or higher
Spiral cable 2 - Body ground	Always	10 kΩ or higher

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**

**5 INSPECT ECM**



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

**Voltage**

Switch position	Tester condition	Specification
Neutral	CCS (E6-24) - Body ground	10 to 14 V
CANCEL	CCS (E6-24) - Body ground	6.6 to 10 V
- / SET	CCS (E6-24) - Body ground	4.5 to 7.1 V
+ / RES	CCS (E6-24) - Body ground	2.3 to 4 V
Main Switch ON	CCS (E6-24) - Body ground	1 V or less

**NG** REPLACE ECM

**OK**

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**