DTC	P0571/52	STOP LIGHT SWITCH CIRCUIT MALFUNCTION

CIRCUIT DESCRIPTION

When the brake pedal is depressed, the stop lamp switch assy sends a signal to the ECM. When the ECM receives this signal, it cancels the cruise control.

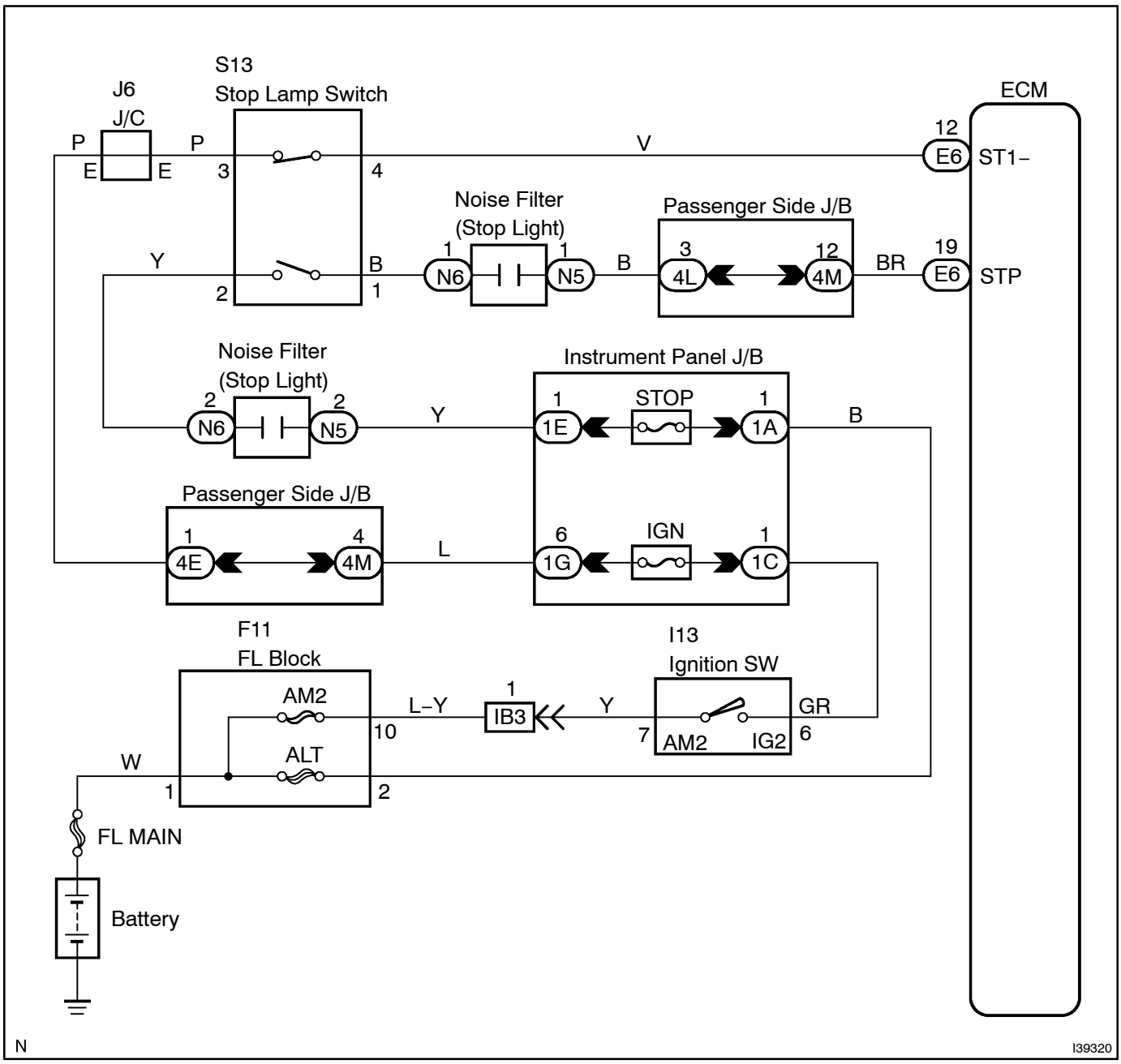
Fail–safe function operates to enable normal driving even if there is a malfunction in the stop lamp signal circuit.

The cancel condition occurs when positive battery voltage is applied to terminal STP.

When the brake is applied, battery positive voltage is normally applied to terminal STP of the ECM through the STOP fuse and the stop lamp switch assy, and the ECM turns the cruise control off.

DTC No.	DTC Detection Condition	Trouble Area
P0571/52	The malfunction code is output when the voltage of the STP terminal and that of the ST1– terminal on the ECM are less than 1 V for 0.5 sec. or more.	• Stop lamp switch assy • Stop lamp switch assy circuit • ECM

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, and turn the intelligent tester II main switch on.
(c) Select the item "Stp Light SW M–CPU", "Stp Light SW S1–CPU" or "Stp Light SW S2–CPU" in the DATA LIST, and read its value displayed on the intelligent tester II.
(d) Check that the stop lamp comes on when the brake pedal is depressed, and goes off when the brake pedal is released.

CC (ECM):

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
Stp Light SW M–CPU	Stop lamp SW signal (Main CPU) / ON or OFF	ON : Brake pedal depressed OFF : Brake pedal released	–
Stp Light SW S1–CPU	Stop lamp SW signal (Sub CPU) / ON or OFF	ON : Brake pedal depressed OFF : Brake pedal released	–
Stp Light SW S2–CPU	Stop lamp SW signal (Sub CPU) / ON or OFF	ON : Brake pedal depressed OFF : Brake pedal released	–

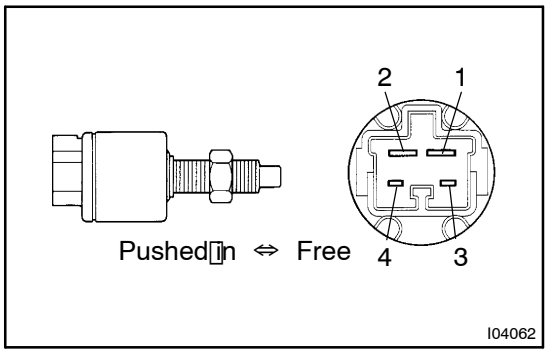
OK:
When brake pedal operation is performed, the standard values will be above.

NG → **Go to step 2**

OK

REPLACE ECM (SEE PAGE 10–13)

2 INSPECT STOP LAMP SWITCH ASSY



(a) Disconnect the stop lamp switch assy connector.
(b) Measure the resistance according to the value(s) in the table below.
Standard:

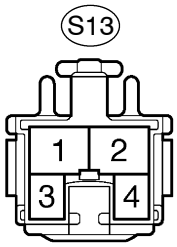
Switch condition	Tester connection	Specified value
Switch pin free	1 – 2	Below 1 Ω
Switch pin free	3 – 4	10 kΩ or higher
Switch pin pushed in	1 – 2	10 kΩ or higher
Switch pin pushed in	3 – 4	Below 1 Ω

NG → **REPLACE STOP LAMP SWITCH ASSY**

OK

3 CHECK HARNESS AND CONNECTOR

Stop Lamp Switch Wire Harness Side Connector Front View:



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

Standard:

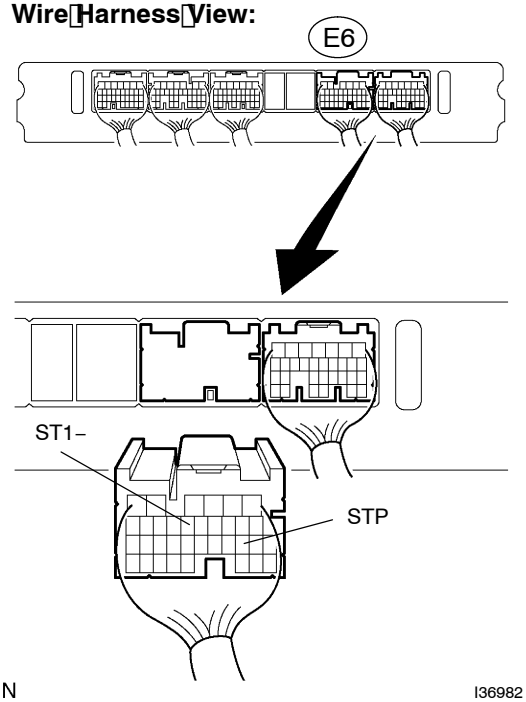
Tester connection	Condition	Specified condition
S13–2 – Body ground	Always	10 to 16 V
S13–3 – Body ground	Ignition SW ON	10 to 16 V

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (STOP LAMP SWITCH – BATTERY)**

OK

4 INSPECT ECM

Wire Harness View:



(a) Reconnect the stop lamp switch connector.
(b) Disconnect the E6 connector from the ECM.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage according to the value(s) in the table below.

Standard:

Pedal condition	Tester connection	Specification
Depressed	E6–19 (STP) – Body ground	10 to 16 V
Released	E6–19 (STP) – Body ground	Below 1 V
Depressed	E6–12 (ST1–) – Body ground	Below 1 V
Released	E6–12 (ST1–) – Body ground	10 to 16 V

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR(STOP LAMP SWITCH – ECM)**

OK

REPLACE ECM (SEE PAGE 10–13)