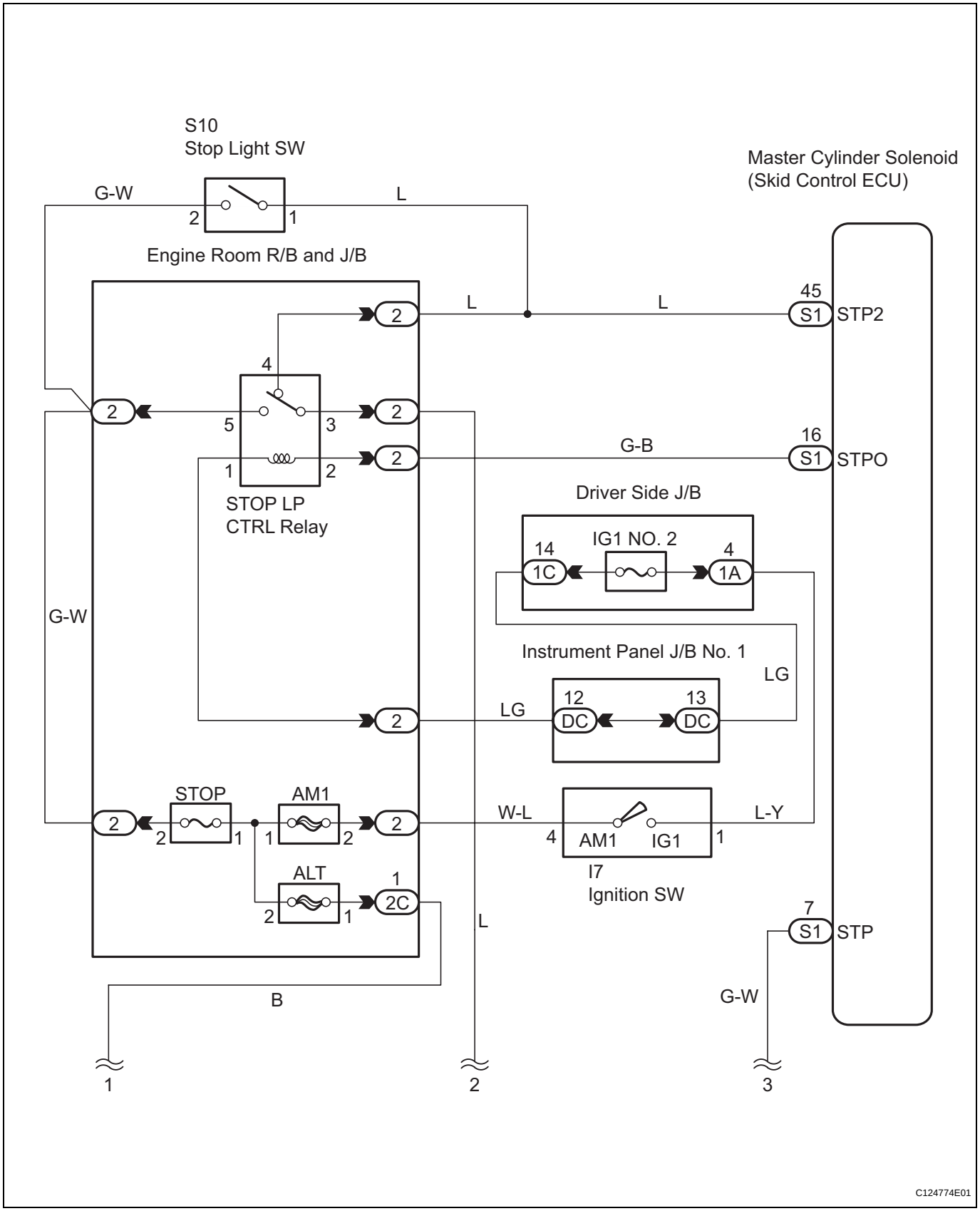
DTC	C1380/64	Stop Light Control Relay Malfunction

DESCRIPTION

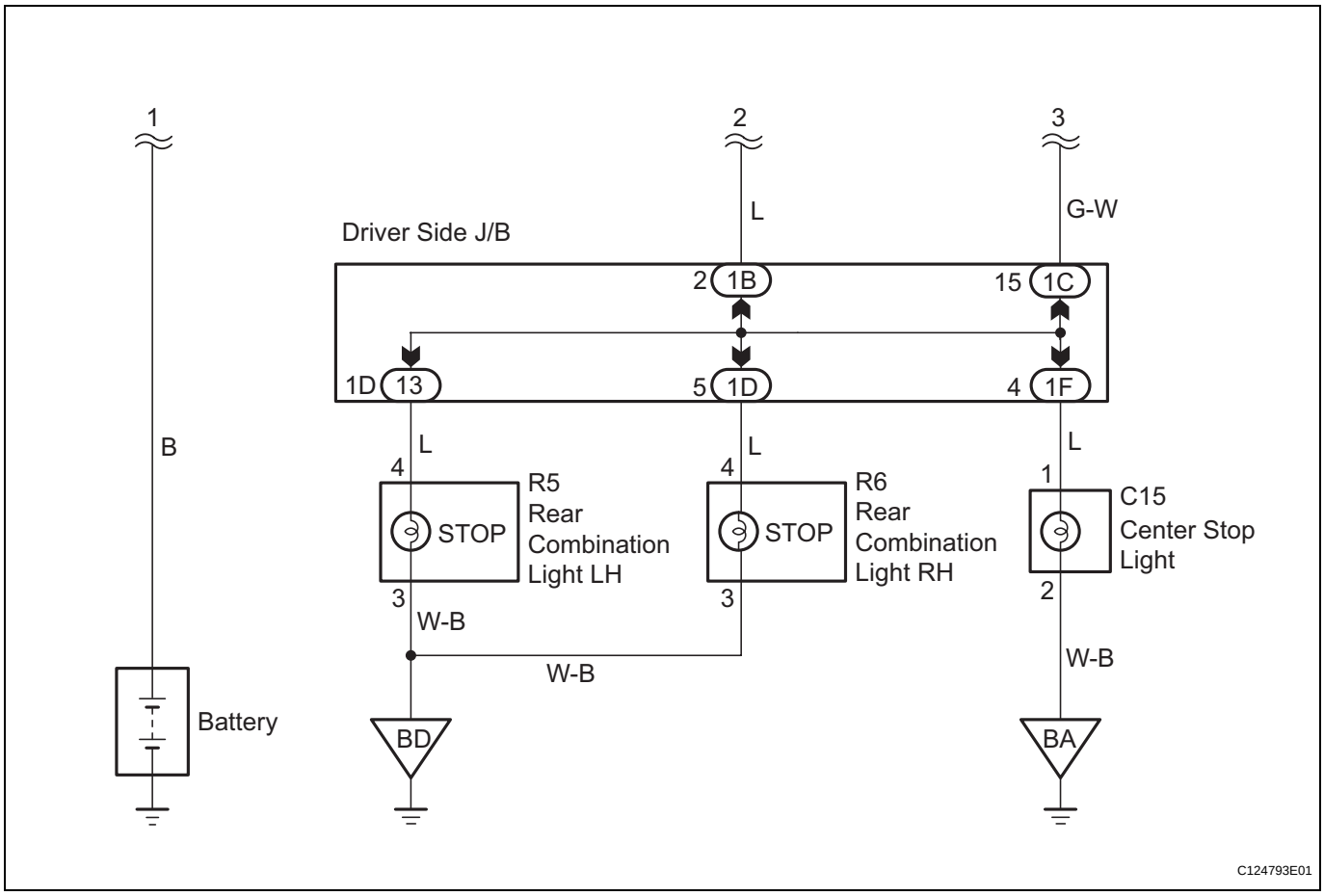
The skid control ECU inputs the stop light switch signal and detects the status of the brake operation.

DTC No.	DTC Detecting Conditions	Trouble Areas
C1380/64	Either of following conditions met when IG1 terminal voltage between 10 V and 14 V: • Despite STPO (stop light driving output) being on, no signal input to STP terminal for 5 seconds or more • Despite STPO being off, input signals of STP and STP2 do not match	• Stop light switch • Stop light switch circuit • STOP LP CTRL relay • Master cylinder solenoid (skid control ECU)

WIRING DIAGRAM



BC



BC

NOTICE:
When replacing the master cylinder solenoid, perform zero point calibration (See page BC-99).

1	CHECK STOP LIGHT SWITCH OPERATION

(a) Check that the stop lights come on when the brake pedal is depressed and go off when the brake pedal is released.

OK

Pedal Condition	Illumination Condition
Brake pedal depressed	ON
Brake pedal released	OFF

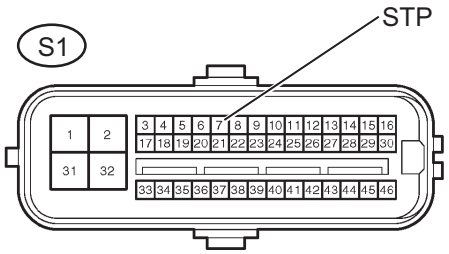
HINT:
Check the stop light bulbs as they may have burnt out.

NG → **Go to step 10**

OK

2 INSPECT SKID CONTROL ECU (STP TERMINAL VOLTAGE)

Skid Control ECU (harness side connector):



C121700E15

(a) Disconnect the skid control ECU connector.
(b) Measure the voltage.
Standard Voltage

Tester Connection	Switch condition	Specified Condition
S1-7 (STP) - Body ground	Brake pedal depressed	8 to 16 V
S1-7 (STP) - Body ground	Brake pedal released	Below 1.5 V

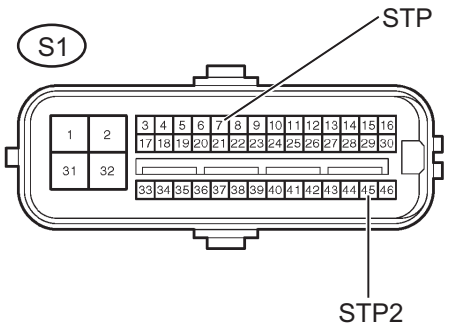
(c) Reconnect the skid control ECU connector.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (STP CIRCUIT)**

OK

3 INSPECT SKID CONTROL ECU (STP2 TERMINAL VOLTAGE)

Skid Control ECU (harness side connector):



C121700E19

(a) Disconnect the skid control ECU connector.
(b) Measure the resistance.
Standard Resistance

Tester Connection	Specified Condition
S1-7 (STP) - S1-45 (STP2)	Below 1 Ω

(c) Reconnect the skid control ECU connector.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (STP2 CIRCUIT)**

OK

4 PERFORM ACTIVE TEST BY INTELLIGENT TESTER (STOP LIGHT RELAY)

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Turn the intelligent tester ON.
(d) Select the ACTIVE TEST mode on the intelligent tester.

Item	Vehicle Condition / Test Details	Diagnostic Note
STP LIGHT RELAY	Turns stop light relay ON / OFF	Observe stop lights

BC

(e) Check that the stop lights turn on and off on the rear combination light when using the intelligent tester.

OK:

The stop lights turn on and off according to the intelligent tester operations.

NG → **Go to step 6**

OK

5 RECONFIRM DTC

(a) Clear the DTCs (See page BC-118).
(b) Check if the same DTCs are recorded.

Result	Proceed to
DTC output	A
DTC not output	B

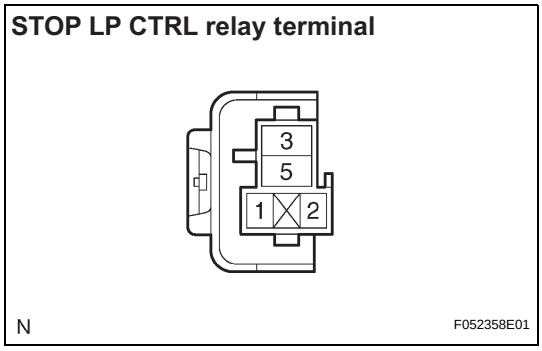
B → **END**

A

REPLACE MASTER CYLINDER SOLENOID

6 CHECK STOP LIGHT CONTROL RELAY

BC



(a) Disconnect the STOP LP CTRL relay.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage.

Standard Voltage

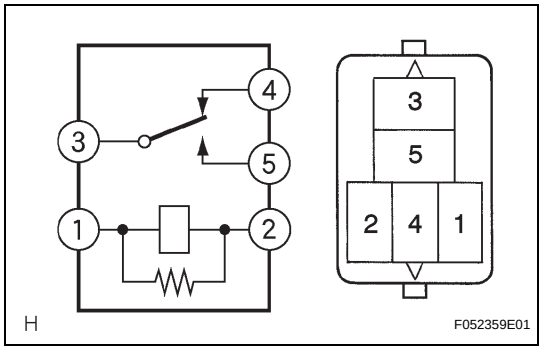
Tester Connection	Condition	Specified Condition
Terminal 5 - Body ground	Always	8 to 16 V
Terminal 1 - Body ground	Always	8 to 16 V

(d) Turn the ignition switch to OFF.
(e) Reconnect the STOP LP CTRL relay.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (STOP LP CTRL RELAY)**

OK

7 INSPECT STOP LIGHT CONTROL RELAY



(a) Remove the STOP LP CTRL relay from the engine room R/B and J/B.
(b) Measure the resistance.
Standard Resistance

Tester Connection	Specified Condition
3 - 4	Below 1 Ω
3 - 5	10 kΩ or higher

(c) Apply the battery voltage between terminals 1 (+) and 2 (-).
(d) Measure the resistance.
Standard Resistance

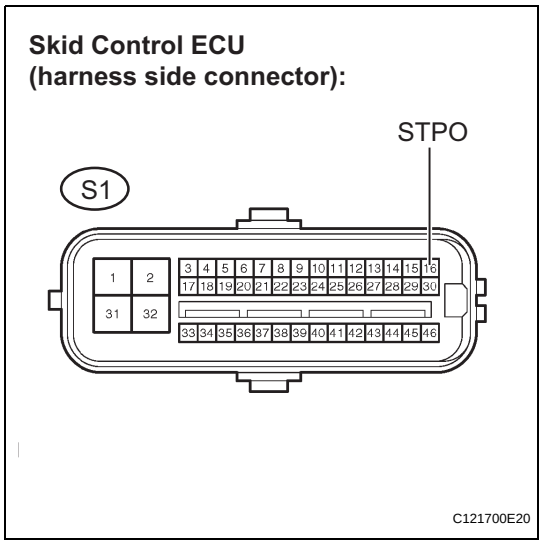
Tester Connection	Specified Condition
3 - 4	10 kΩ or higher
3 - 5	Below 1 Ω

(e) Reinstall the STOP LP CTRL relay.

NG → **REPLACE STOP LIGHT CONTROL RELAY**

OK

8 INSPECT MASTER CYLINDER SOLENOID (STPO TERMINAL VOLTAGE)



(a) Disconnect the skid control ECU connector.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage.
Standard Voltage

Tester Connection	Condition	Specified Condition
S1-16 (STPO) - Body ground	Brake pedal depressed	10 to 14 V

(d) Turn the ignition switch to OFF.
(e) Reconnect the skid control ECU connector.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (STOP CIRCUIT)**

OK

9 RECONFIRM DTC

(a) Clear the DTCs (See page BC-118).
(b) Check if the same DTCs are recorded.

Result	Proceed to
DTC output	A
DTC not output	B

BC

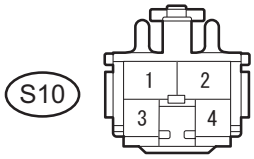
B → END

A

REPLACE MASTER CYLINDER SOLENOID

10 CHECK STOP LIGHT SWITCH ASSEMBLY (STOP LIGHT SWITCH POWER SOURCE TERMINAL VOLTAGE)

Stop Light Switch (harness side connector):



C124801E01

(a) Disconnect the stop light switch connector.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage.

Standard Voltage

Tester Connection	Specified Condition
S10-2 Body ground	10 to 14 V

(d) Turn the ignition switch to OFF.
(e) Reconnect the stop light switch connector.

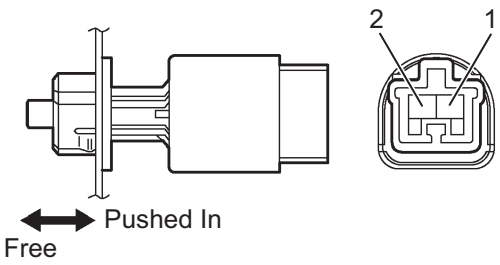
NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (STOP LIGHT POWER SOURCE CIRCUIT)**

OK

11 INSPECT STOP LIGHT SWITCH ASSEMBLY

BC

Stop Light Switch Assembly:



C124796E01

(a) Disconnect the stop light switch connector.
(b) Measure the resistance.

Standard Resistance

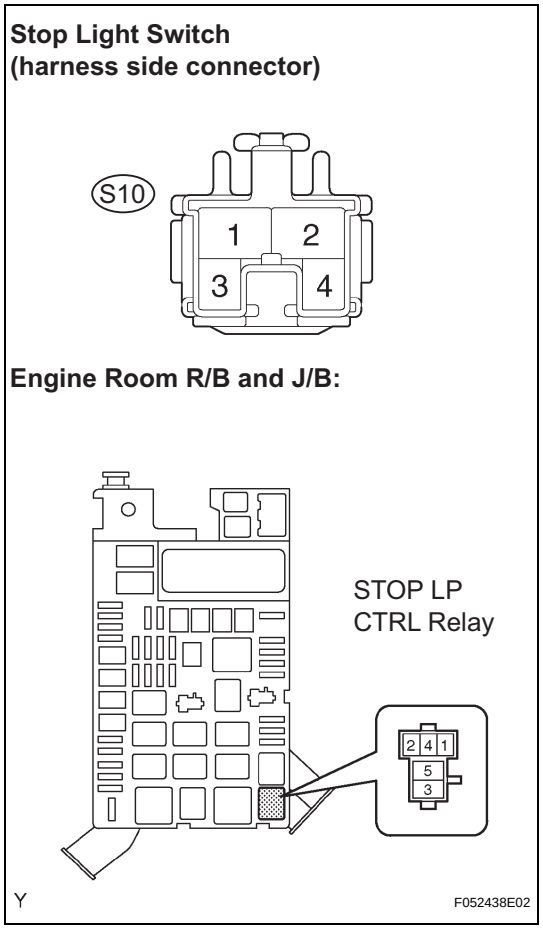
Switch condition	Tester connection	Specified condition
Switch pin free	1 - 2	Below 1 Ω
Switch pin pushed in	1 - 2	10 kΩ or higher

(c) Reconnect the stop light switch connector.

NG → **REPLACE STOP LIGHT SWITCH ASSEMBLY**

OK

12 CHECK HARNESS AND CONNECTOR (STOP LIGHT SWITCH - STOP LP CTRL RELAY)



(a) Remove the STOP LP CTRL relay.
(b) Measure the resistance.
Standard Resistance

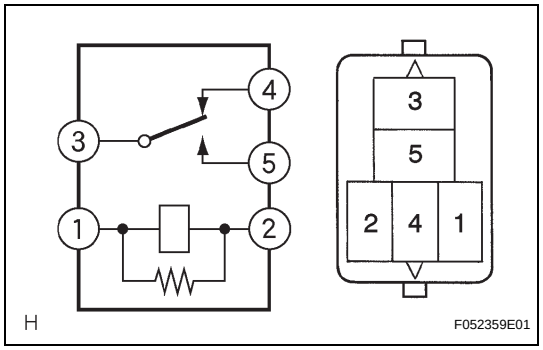
Tester Connection	Specified Condition
S10-2 - STOP LP CTRL relay (5)	Below 1 Ω
S10-2 - Body ground	10 kΩ or higher

(c) Reinstall the STOP LP CTRL relay.

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

OK

13 INSPECT STOP LIGHT CONTROL RELAY



(a) Remove the STOP LP CTRL relay from the engine room R/B and J/B.
(b) Measure the resistance.
Standard Resistance

Tester Connection	Specified Condition
3 - 4	Below 1 Ω
3 - 5	10 kΩ or higher

(c) Apply the battery voltage between terminals 1 (+) and 2 (-).
(d) Measure the resistance.
Standard Resistance

Tester Connection	Specified Condition
3 - 4	10 kΩ or higher
3 - 5	Below 1 Ω

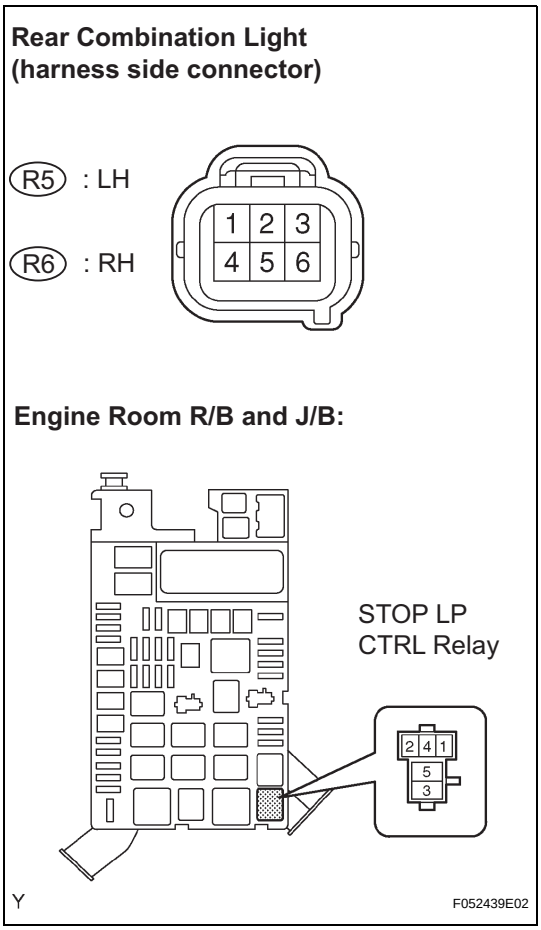
(e) Reinstall the STOP LP CTRL relay.

BC

NG → REPLACE STOP LIGHT CONTROL RELAY

OK

14	CHECK HARNESS AND CONNECTOR (REAR COMBINATION LIGHT - STOP LP CTRL RELAY)



(a) Disconnect the rear combination light connector.
(b) Remove the STOP LP CTRL relay.
(c) Measure the resistance.

Standard Resistance (LH)

Tester Connection	Specified Condition
R5-1 - STOP LP CTRL (4)	Below 1 Ω
R5-1 - Body ground	10 kΩ or higher
R5-6 - Body ground	Below 1 Ω

Standard Resistance (RH)

Tester Connection	Specified Condition
R6-1 - STOP LP CTRL (4)	Below 1 Ω
R6-1 - Body ground	10 kΩ or higher
R6-6 - Body ground	Below 1 Ω

(d) Reinstall the STOP LP CTRL relay.
(e) Reconnect the rear combination light connector.

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK FOR SHORTS IN ALL HARNESSES AND CONNECTORS CONNECTED TO FUSE AND REPLACE FUSE

BC