DTC	C1380/64	MALFUNCTION IN STOP LIGHT RELAY SYSTEM

CIRCUIT DESCRIPTION

Upon receiving the DAC or HAC operating signal from the skid control ECU, the relay contact turns on and the stop light comes on.

DTC No.	DTC Detection Condition	Trouble Area
C1380/64	• When the voltage at the IG1 terminal is between 10 V and 14 V and the stop light driving output (STPO) is on, a signal has not been input to the STP terminal for 5 sec. or more. • When the voltage at the IG1 terminal is between 10 V and 14 V and stop light driving output (STPO) is off, the input signal at the STP is different from the input signal at the STP2 for 5 sec. or more.	• Stop light operation relay • Stop light operation relay circuit

WIRING DIAGRAM

Refer to DTC C1249/49 on page 05–831.

INSPECTION PROCEDURE

NOTICE:

When replacing the master cylinder solenoid, perform zero point calibration (see page 05–744).

HINT:

After steps 1, 2 and 3 are completed, start the inspection from step 4 when using the intelligent tester II and start from step 5 when not using the intelligent tester II.

1	CHECK STOP LIGHT SWITCH OPERATION

(a) Check that the stop light comes on when the brake pedal is depressed, and goes off when the brake pedal is released.

OK:

Stop light switch function is normal.

NG → **Go to step 9**

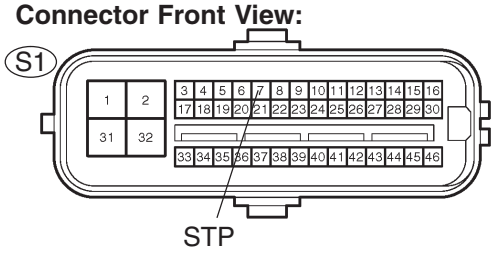
HINT:

Check the stop light bulb as it may have burnt out.

OK

2 INSPECT SKID CONTROL ECU (STP TERMINAL VOLTAGE)

Skid Control ECU (Wire Harness Side)
Connector Front View:



(a) Disconnect the skid control ECU connector.
(b) Measure the voltage according to the value(s) in the table below.

Standard:

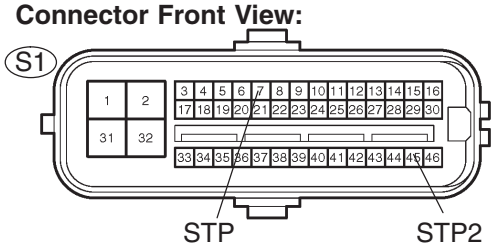
Tester Connection	Condition	Specified Condition
S1–7 (STP) – Body ground	Stop light switch ON (Brake pedal depressed)	8 to 14 V
S1–7 (STP) – Body ground	Stop light switch OFF (Brake pedal released)	Below 1.5 V

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

OK

3 INSPECT SKID CONTROL ECU (STP2 TERMINAL)

Skid Control ECU (Wire Harness Side)
Connector Front View:



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

Standard:

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

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

OK

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

(a) Reconnect the skid control ECU connector.
(b) Connect the intelligent tester II to the DLC3.
(c) Turn the ignition switch to the ON position and push the intelligent tester II main switch ON.
(d) Select "ACTIVE TEST" mode on the intelligent tester II.

Item	Vehicle Condition/Test Details	Diagnostic Note
Stop Light Relay	Turns stop light operation relay ON/OFF	Observe rear combination lamp (Does not come on for 5 sec. or more)

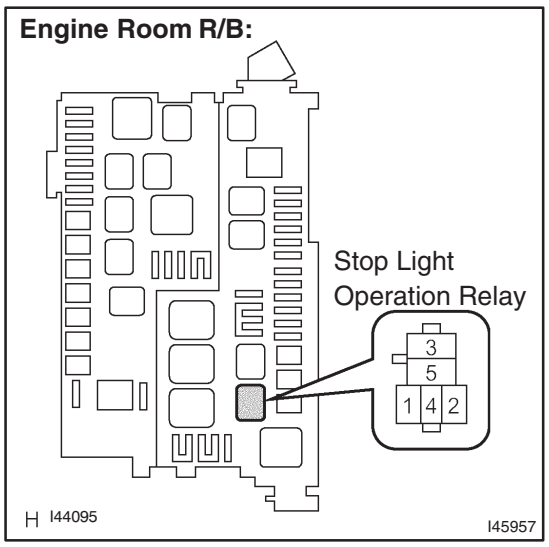
(e) Check that "ON" and "OFF" of the stop light can be shown on the rear combination lamp by the intelligent tester II.
OK:
The stop light turns on or off in accordance with the intelligent tester II.

NG → **Go to step 5**

OK

Go to step 8

5	INSPECT STOP LIGHT OPERATION RELAY (POWER SOURCE TERMINAL VOLTAGE)



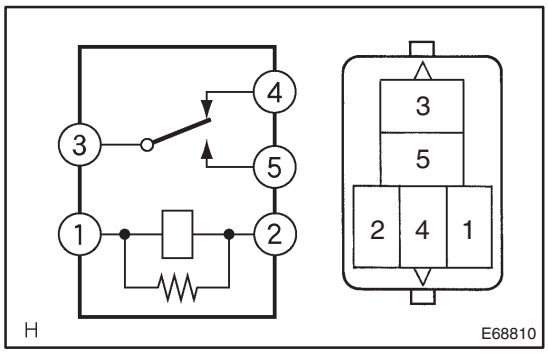
(a) Remove the stop light operation relay.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage according to the value(s) in the table below.
Standard:

Tester Connection	Specified Condition
1 – Body ground	8 to 14 V
5 – Body ground	8 to 14 V

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

OK

6 INSPECT STOP LIGHT OPERATION RELAY



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

Standard:

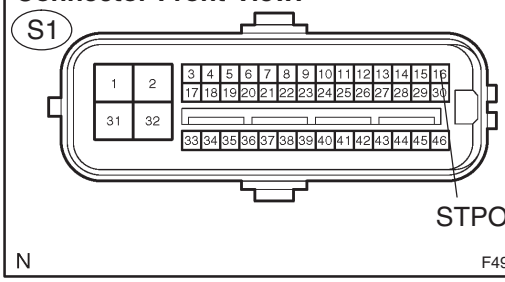
Tester Connection	Specified Condition
3 – 4	Below 1 Ω
3 – 5	10 kΩ or higher
3 – 4	10 kΩ or higher (When battery positive voltage is applied to terminal 1 and battery negative voltage to terminal 2.)
3 – 5	Below 1 Ω (When battery positive voltage is applied to terminal 1 and battery negative voltage to terminal 2.)

NG → **REPLACE STOP LIGHT OPERATION RELAY**

OK

7 INSPECT SKID CONTROL ECU (STPO TERMINAL VOLTAGE)

Skid Control ECU (Wire Harness Side) Connector Front View:



(a) Install the stop light operation relay.
(b) Disconnect the skid control ECU connector.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
S1–16 (STPO) – Body ground	10 to 14 V

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

OK

8 RECONFIRM DTC

(a) Clear the DTC (see page 05–766).
(b) Check if the same DTC is detected (see page 05–766).

HINT:
Reinstall the sensors, connectors, etc. and restore the previous vehicle conditions before rechecking for DTCs.

Result:

DTC is output	A
DTC is not output	B

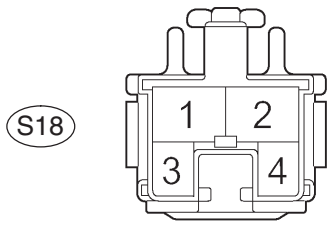
B → **END**

A

REPLACE MASTER CYLINDER SOLENOID (SEE PAGE 32–12)

9 INSPECT STOP LIGHT SWITCH ASSY (POWER SOURCE TERMINAL VOLTAGE)

Stop Light Switch (Wire Harness Side) Connector Front View:



(a) Disconnect the stop light switch connector.
(b) Measure the voltage according to the value(s) in the table below.

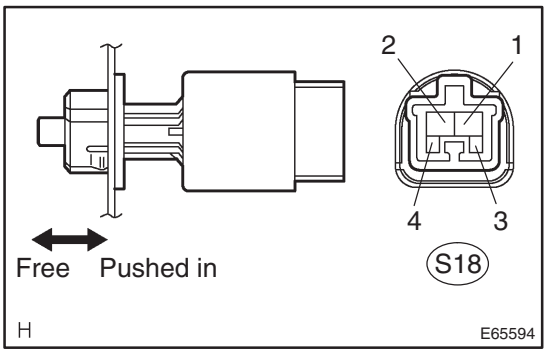
Standard:

Tester Connection	Condition	Specified Condition
S18–2 – Body ground	Always	10 to 14 V

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

OK

10 INSPECT STOP LIGHT SWITCH ASSY



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

Standard:

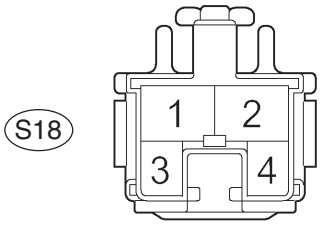
Tester Connection	Condition	Specified Condition
S18–1 – S18–2	Switch pin free	Below 1 Ω
S18–1 – S18–2	Switch pin pushed in	10 kΩ or higher

NG → **REPLACE STOP LIGHT SWITCH ASSY**

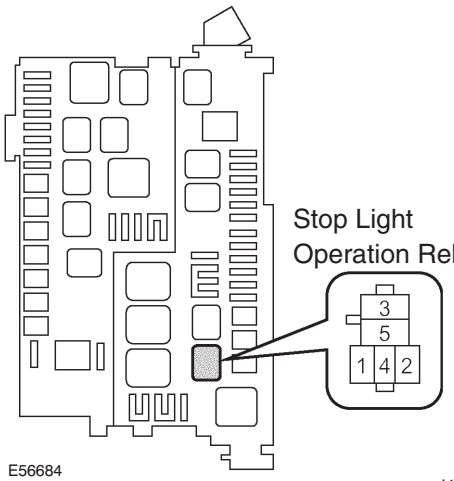
OK

11	CHECK HARNESS AND CONNECTOR (BETWEEN STOP LIGHT SWITCH AND STOP LIGHT OPERATION RELAY) (SEE PAGE 01–36)

Stop Light Switch (Wire Harness Side) Connector Front View:



Engine Room R/B:



(a) Remove the stop light operation relay.
(b) Measure the resistance according to the value(s) in the table below.

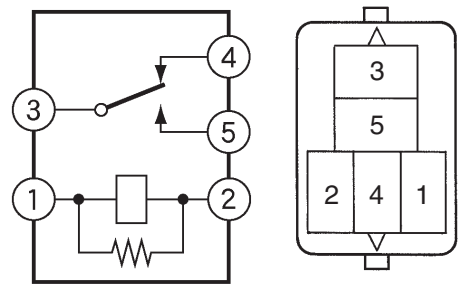
Standard:

Tester Connection	Specified Condition
S18–1 – 4	Below 1 Ω
S18–1 – Body ground	10 kΩ or higher

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

OK

12	INSPECT STOP LIGHT OPERATION RELAY



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

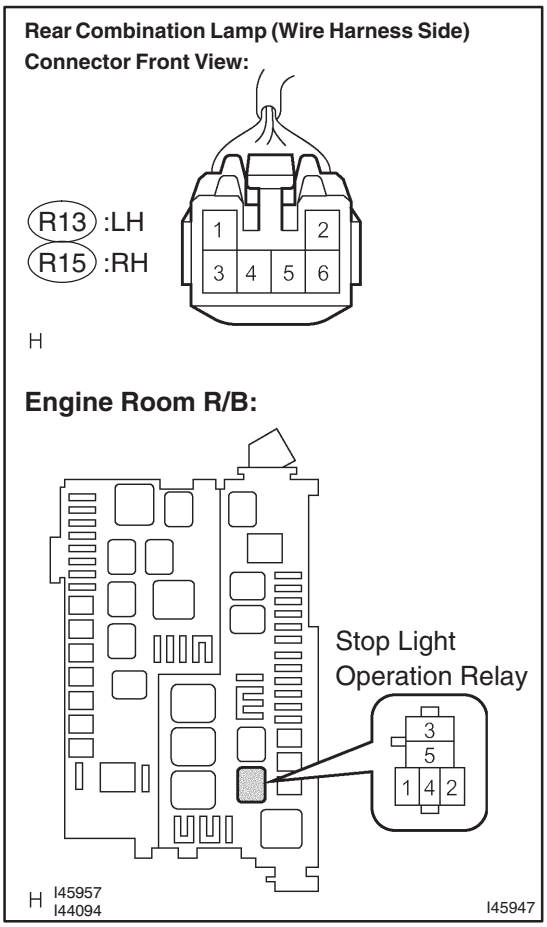
Standard:

Tester Connection	Specified Condition
3 – 4	Below 1 Ω

NG → **REPLACE STOP LIGHT OPERATION RELAY**

OK

13	CHECK HARNESS AND CONNECTOR (BETWEEN REAR COMBINATION LAMP, BODY GROUND AND STOP LIGHT OPERATION RELAY) (SEE PAGE 01–36)



(a) Disconnect the rear combination lamp connector.

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

Standard:

LH:

Tester Connection	Specified Condition
R13–6 – 3	Below 1 Ω
R13–6 – Body ground	10 kΩ or higher
R13–5 – Body ground	Below 1 Ω

RH:

Tester Connection	Specified Condition
R15–6 – 3	Below 1 Ω
R15–6 – Body ground	10 kΩ or higher
R15–5 – Body ground	Below 1 Ω

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

OK

END