| DTC | C1249/49 | Open in Stop Light Switch Circuit |
|---|---|---|

## DESCRIPTION

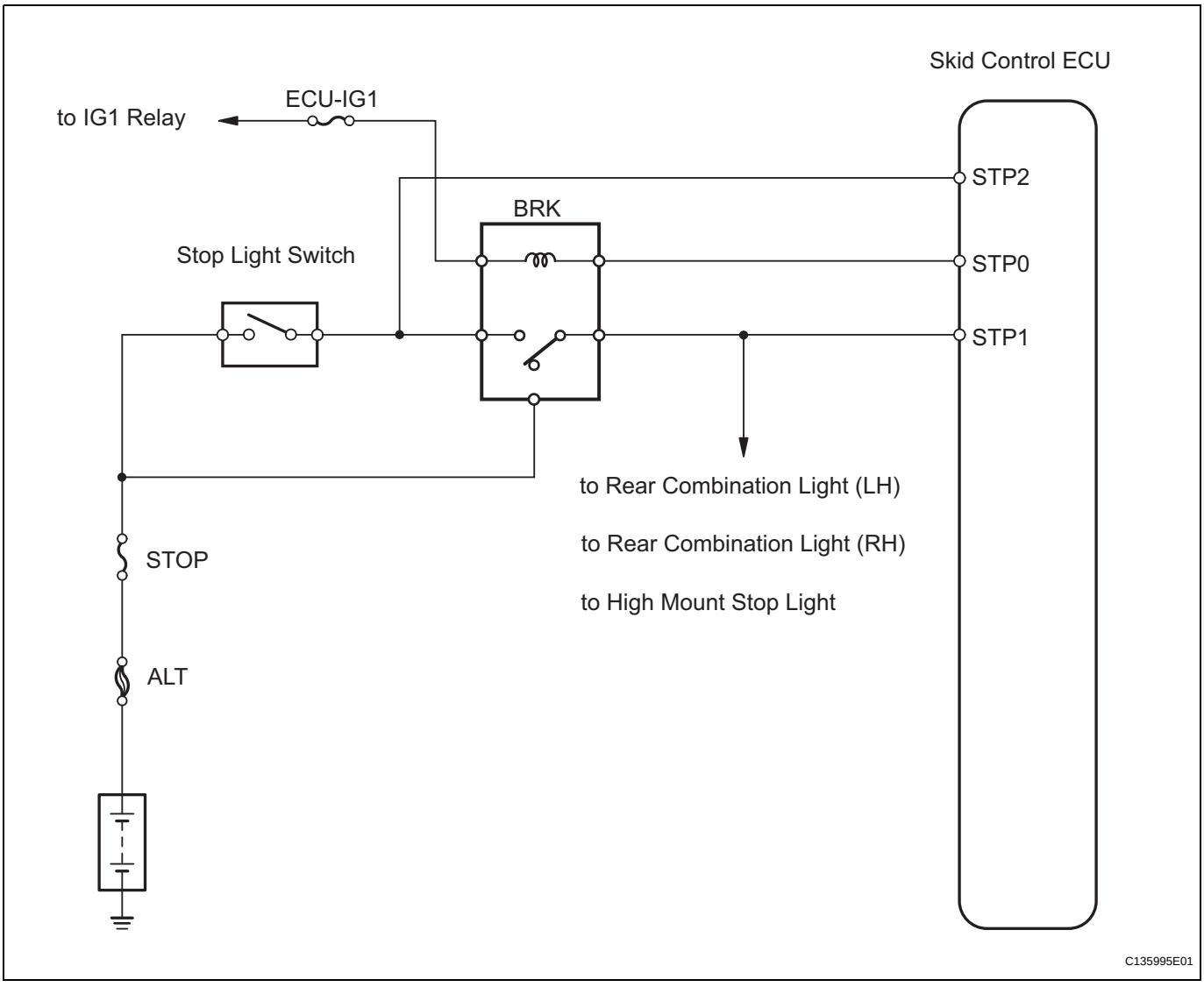
The skid control ECU detects the brake operating conditions through a signal transmitted by the stop light switch. The skid control ECU incorporates an open circuit detection circuit. This DTC is set under either of the following conditions:

- An open is detected in the stop light signal input line when the stop light switch is off.
- An open is detected in the stop light circuit lead to the ground when the stop light switch is off.

| DTC No. | DTC Detection Condition | Trouble Area |
|---|---|---|
| C1249/49 | When either condition below is met:<br>1. When IG1 terminal voltage 9.5 to 17.2 V, open circuit of stop light switch continues for 0.3 seconds more.<br>2. w/ 16-inch disc:<br>With brake pedal load sensing switch ON, master pressure 2 MPa or more, vehicle deceleration 0.2 G or more (calculated based on vehicle speed), stop switch OFF condition continues for 2 seconds or more. | • ECU-IG1 fuse<br>• STOP fuse<br>• BRK relay<br>• Stop light switch<br>• Stop light switch circuit<br>• ABS and TRACTION actuator |

## WIRING DIAGRAM

BC



## INSPECTION PROCEDURE

**1** **READ VALUE OF INTELLIGENT TESTER (STOP LIGHT SWITCH)**

(a) Check the DATA LIST for proper functioning of the stop light switch.

**Skid control ECU**

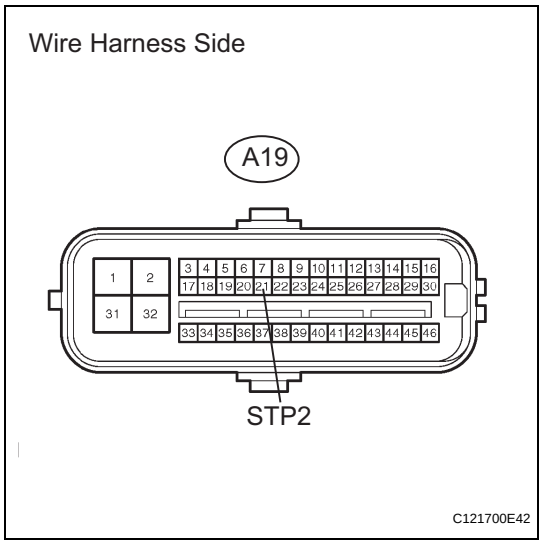
| Item (Display) | Measurement Item / Range (Display) | Normal Conditions | Diagnostic Note |
|---|---|---|---|
| STOP LAMP SW | Stop light switch / ON or OFF | ON: Brake pedal depressed<br>OFF: Brake pedal released | - |

**OK:**
**ON (brake pedal is depressed) appears on the screen.**

**NG** → **Go to step 3**

**OK**

**2** **CHECK WIRE HARNESS (STP VOLTAGE)**




(a) Disconnect the A19 ECU connector.
(b) Measure the voltage of the wire harness side connector.
**Standard voltage**

| Tester Connection | Switch Condition | Specified Condition |
|---|---|---|
| A19-21 (STP2) - Body ground | Brake pedal depressed | 8 to 14 V |
| A19-21 (STP2) - Body ground | Brake pedal released | Below 4.0 V |

**NG** → **Go to step 6**

**OK**

**REPLACE ABS AND TRACTION ACTUATOR ASSEMBLY**

**3** **INSPECT FUSE (STOP, ECU-IG1)**

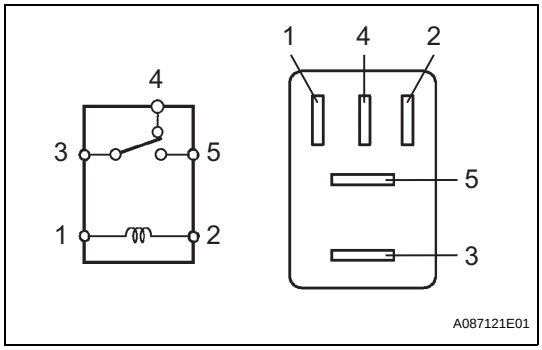
(a) Remove the STOP fuse and ECU-IG1 fuse from the instrument panel junction block.
(b) Measure the resistance of the fuse.
**Standard resistance:**
**Below 1 Ω**

**NG** → **REPLACE FUSE**

BC

OK

| 4 | INSPECT STOP LIGHT CONTROL RELAY (Marking: BRK) |
|---|---|




(a) Remove the stop light control relay from the engine room No. 1 relay block.
(b) Measure the resistance of the relay.

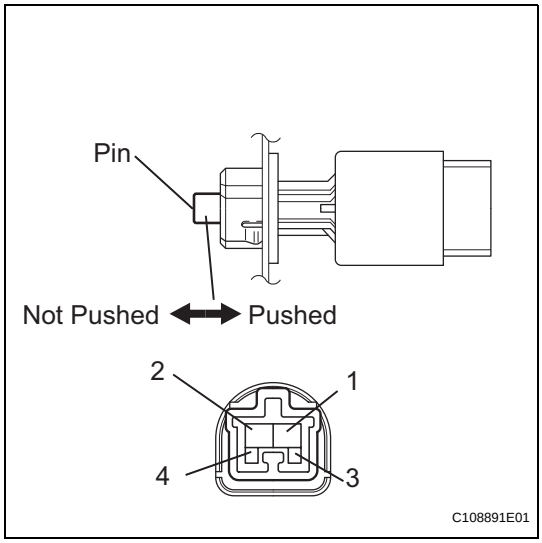
| Tester Connection | Specified Condition |
|---|---|
| 3 - 4 | Below 1 Ω |
| 3 - 5 | 10 kΩ or higher |
| 3 - 4 | 10 kΩ or higher (when battery voltage is applied to terminals 1 and 2) |
| 3 - 5 | Below 1 Ω (when battery voltage is applied to terminals 1 and 2) |

NG → REPLACE STOP LIGHT CONTROL RELAY

BC

OK

| 5 | INSPECT STOP LIGHT SWITCH ASSEMBLY |
|---|---|



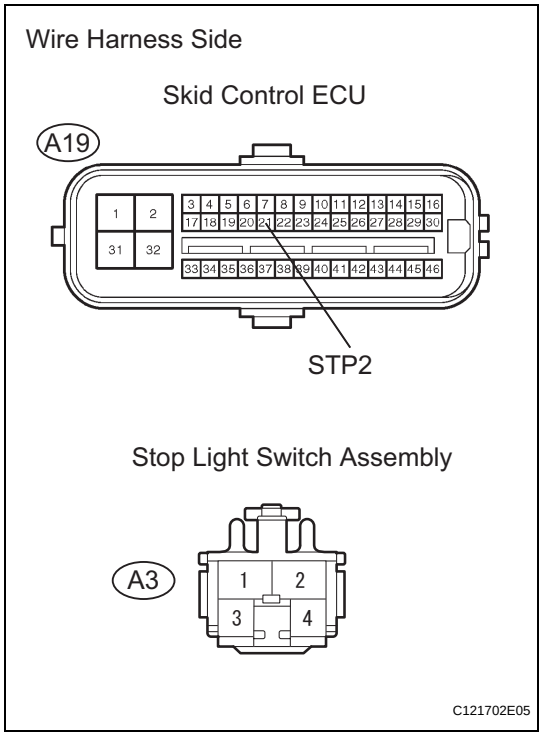

(a) Disconnect the stop light switch connector.
(b) Measure the resistance of the switch.
**Standard resistance**

| Tester Connection | Switch Condition | Specified Condition |
|---|---|---|
| 1 - 2 | Pin not pushed | Below 1 Ω |
| 1 - 2 | Pin pushed | 10 kΩ or higher |
| 3 - 4 | Pin not pushed | 10 kΩ or higher |
| 3 - 4 | Pin pushed | Below 1 Ω |

NG → REPLACE STOP LIGHT SWITCH ASSEMBLY

OK

## 6 CHECK WIRE HARNESS (SKID CONTROL ECU - STOP LIGHT SWITCH)




(a) Disconnect the A19 ECU connector.
(b) Disconnect the A3 switch connector.
(c) Measure the resistance of the wire harness side connectors.

**Standard resistance**

| Tester Connection | Specified Condition |
|---|---|
| A19-21 (STP2) - A3-1 | Below 1 Ω |

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

OK

## 7 RECONFIRM DTC

(a) Clear the DTC (see page BC-47).
(b) Check if the same DTC is output (see page BC-47).

**Result**

| Result | Proceed to |
|---|---|
| DTC is output | A |
| DTC is not output | B |

B → **END**

A

**REPLACE ABS AND TRACTION ACTUATOR ASSEMBLY**

BC