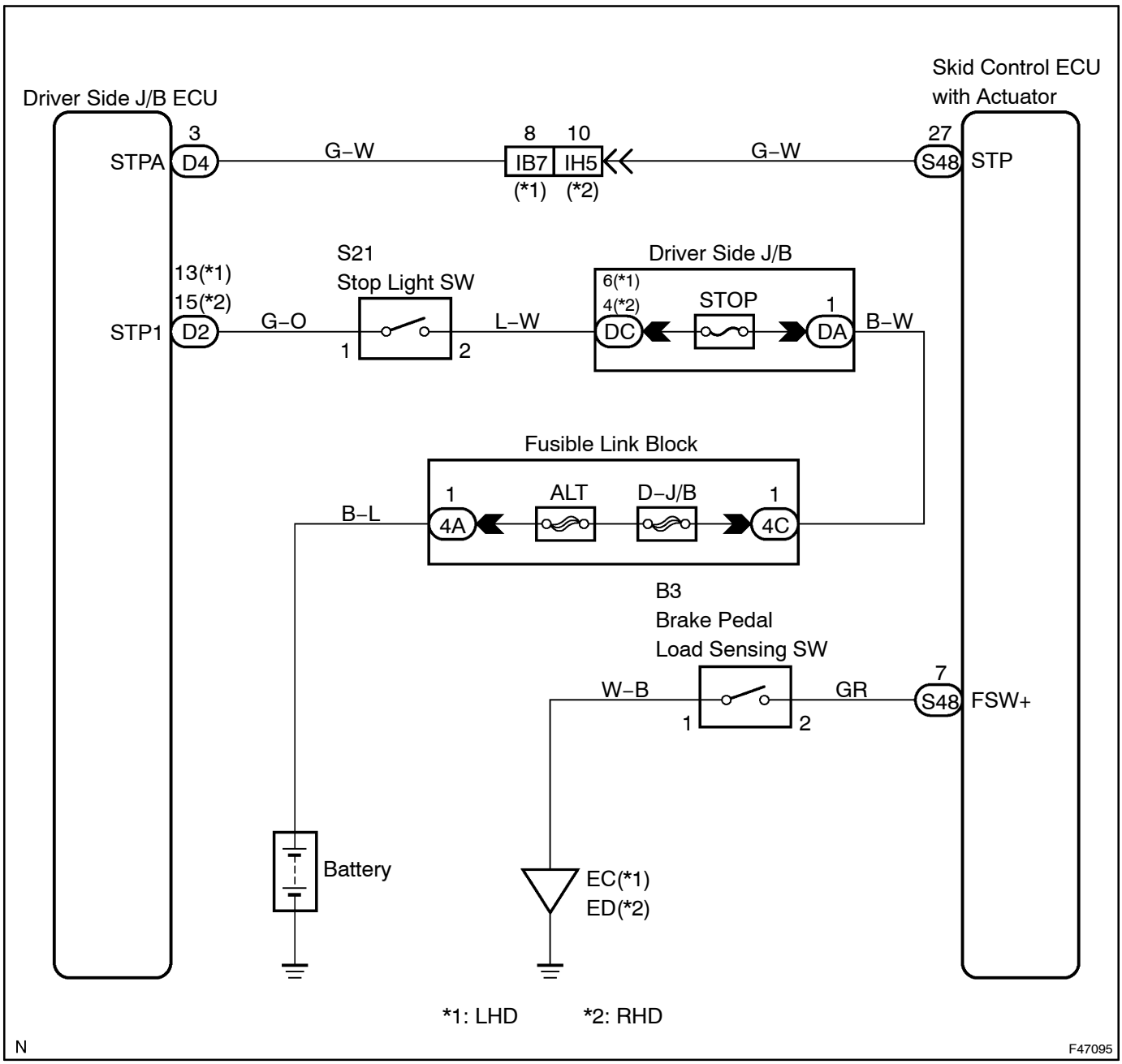
DTC	C1249/49	OPEN CIRCUIT IN STOP LIGHT SWITCH CIRCUIT

CIRCUIT DESCRIPTION

Recognition of brake operation by sending stop lamp signal to skid control ECU.

DTC No.	DTC Detecting Condition	Trouble Area
C1249/49	• When IG1 terminal voltage is 9.5 to 17.2 V, an open circuit of the stop lamp switch continues for 0.3 sec. or more. • When the brake pedal load sensing switch is on, the master cylinder pressure is 2 Mpa or more and the deceleration calculated from the vehicle speed is 0.2 G or more, the stop lamp switch is off for 2 sec. or more.	• Stop lamp bulb • Stop lamp switch circuit

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK STOP LAMP SWITCH OPERATION

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

OK:

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

NG → **Go to step 6**

HINT:
Check the stop lamp bulb as it may have burnt out.

OK

2	INSPECT MULTIPLEX COMMUNICATION SYSTEM (SEE PAGE 05–3331)

(a) Is DTC output Multiplex communication system?

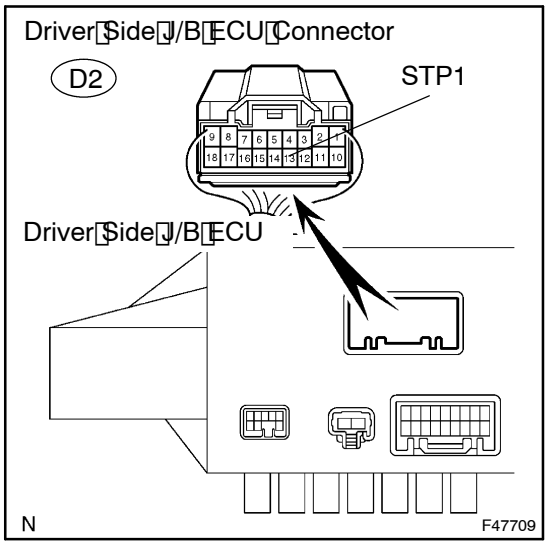
Result:

DTC is not output	A
DTC is output	B

B → **REPAIR MULTIPLEX COMMUNICATION SYSTEM**

A

3	CHECK HARNESS AND CONNECTOR(STP1 TERMINAL VOLTAGE OF DRIVER SIDE J/B ECU)



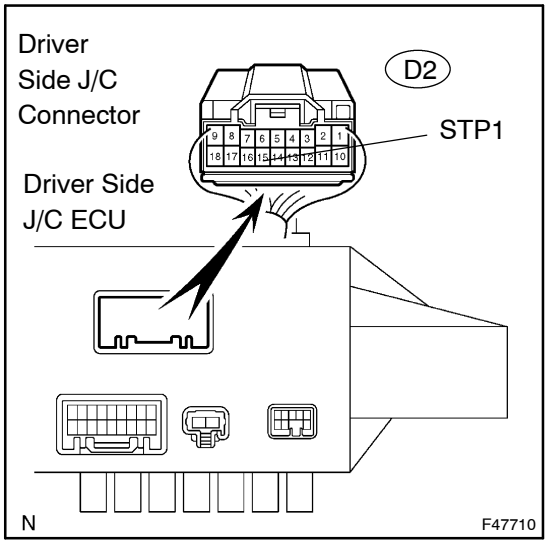
LHD:

(a) Disconnect the driver side J/B ECU connector.

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

Standard:

Tester Connection	Switch Condition	Specified Condition
D2–13 (STP1) – Body ground	Brake pedal depressed	8 to 14 V
D2–13 (STP1) – Body ground	Brake pedal released	Below 1 V



OK

RHD:

(c) Disconnect the driver side J/B ECU connector.

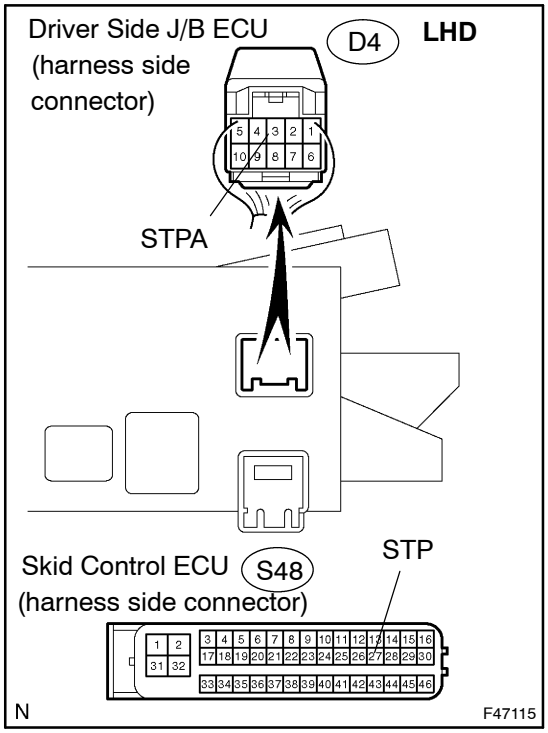
(d) Measure the voltage according to the value(s) in the table below.

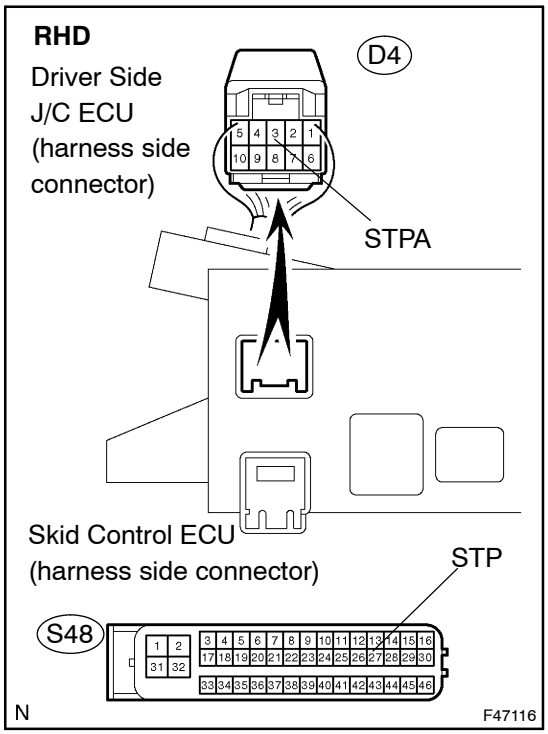
Standard:

Tester Connection	Switch Condition	Specified Condition
D2–15 (STP1) – Body ground	Brake pedal depressed	8 to 14 V
D2–15 (STP1) – Body ground	Brake pedal released	Below 1 V

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

4	CHECK HARNESS AND CONNECTOR(STPA OF DRIVER SIDE J/B ECU – STP OF SKID CONTROL ECU)





(a) Disconnect driver side J/B ECU connector and skid control ECU connector.

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

Standard:

Tester Connection	Specified Condition
D4–3 (STPA) – S48–27 (STP)	Below 1 Ω

Standard:

Tester Connection	Specified Condition
S48–27 (STP) – Body ground	1 MΩ or higher

NG	REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5 RECONFIRM DTC

(a) Clear the DTC (see page 05–400).
(b) Turn the ignition switch to the ON position.
(c) Check that the same DTC is recorded (see page 05–400).

OK:

The same DTC is recorded.

NG → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–395)**

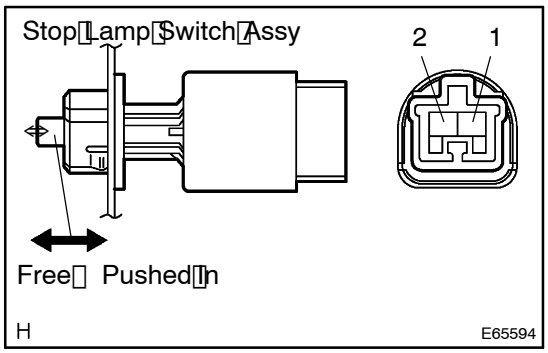
OK

REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32–53)

NOTICE:

When replacing the ABS & TRACTION actuator assy, perform zero point calibration (see page 05–387).

6 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.

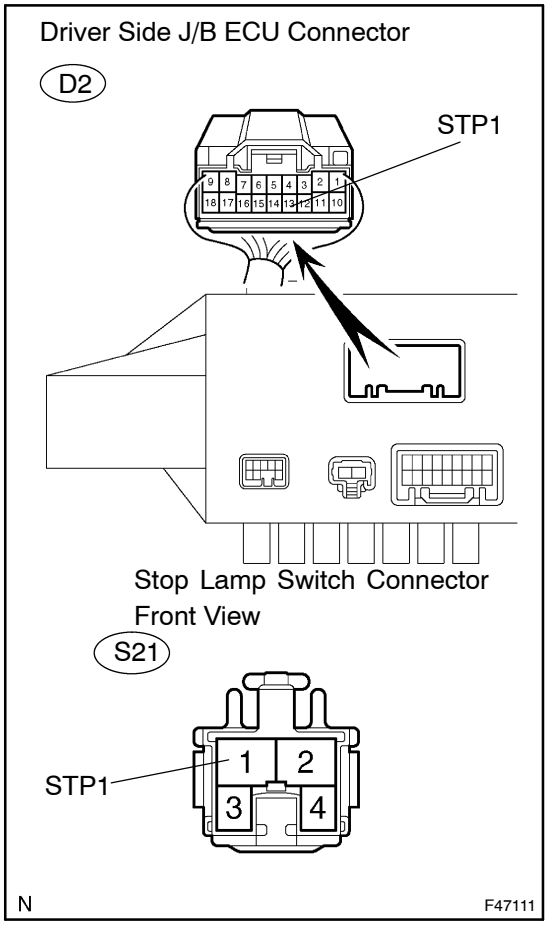
Standard:

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

NG → **REPLACE STOP LAMP SWITCH ASSY**

OK

7	CHECK HARNESS AND CONNECTOR(STOP LAMP SWITCH – DRIVER SIDE J/B ECU)



LHD:

(a) Disconnect the stop lamp switch connector and driver side J/B connector.

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

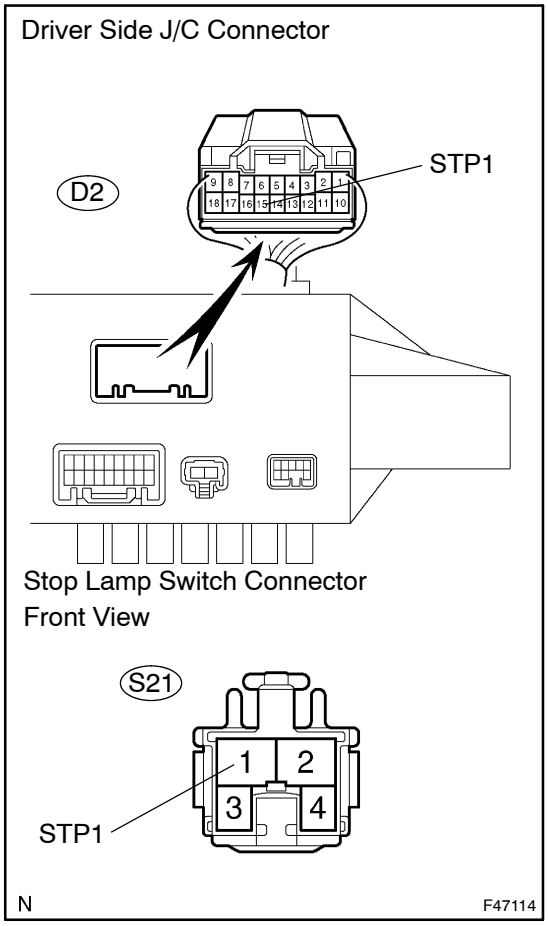
Standard:

Tester Connection	Specified Condition
(S21–1) – D2–13 (STP1)	Below 1 Ω

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

Standard:

Tester Connection	Specified Condition
(S21–1) – Body ground	1 MΩ or higher



RHD:

(d) Disconnect the stop lamp switch connector and driver side J/B connector.

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

Standard:

Tester Connection	Specified Condition
(S21–1) – D2–15 (STP1)	Below 1 Ω

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

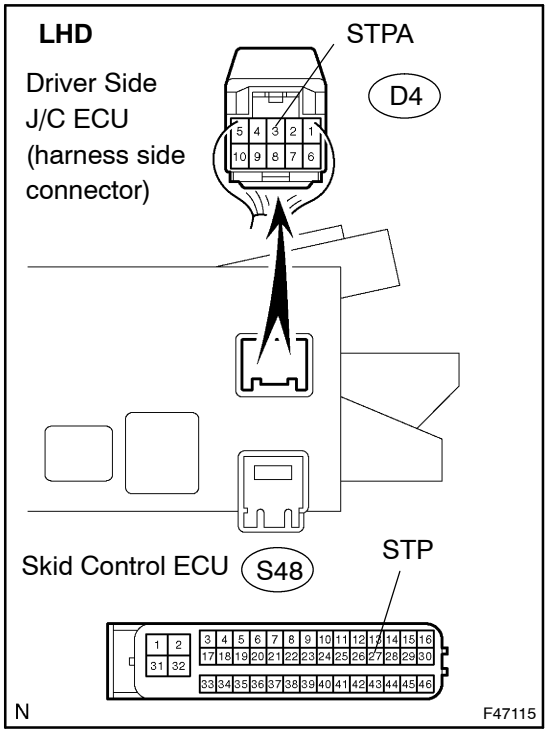
Standard:

Tester Connection	Specified Condition
(S21–1) – Body ground	1 MΩ or higher

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

OK

8	CHECK HARNESS AND CONNECTOR(STPA OF DRIVER SIDE J/B ECU – STP OF SKID CONTROL ECU)



(a) Disconnect the driver side J/B connector and skid control ECU connector.

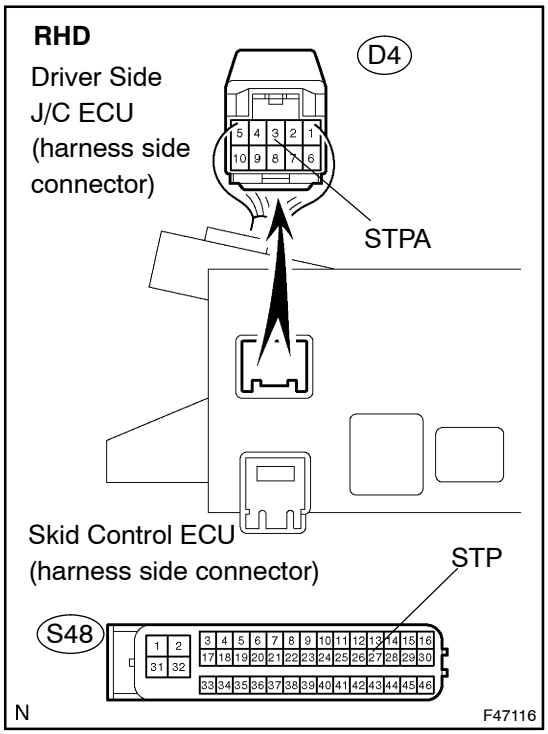
(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
D4–3 (STPA) – S48–27 (STP)	Below 1 Ω

Standard:

Tester Connection	Specified Condition
S48–27 (STP) – Body ground	1 MΩ or higher



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

OK

9	RECONFIRM DTC

(a) Clear the DTC (see page 05–400).
(b) Turn the ignition switch to the ON position.
(c) Check that the same DTC is recorded (see page 05–400).

OK:

The same DTC is recorded.

NG → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–395)**

OK

REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32–53)

NOTICE:

When replacing the ABS & TRACTION actuator assy, perform zero point calibration (see page 05–387).