DTC	C0278/11	OPEN CIRCUIT IN ABS SOLENOID RELAY CIRCUIT

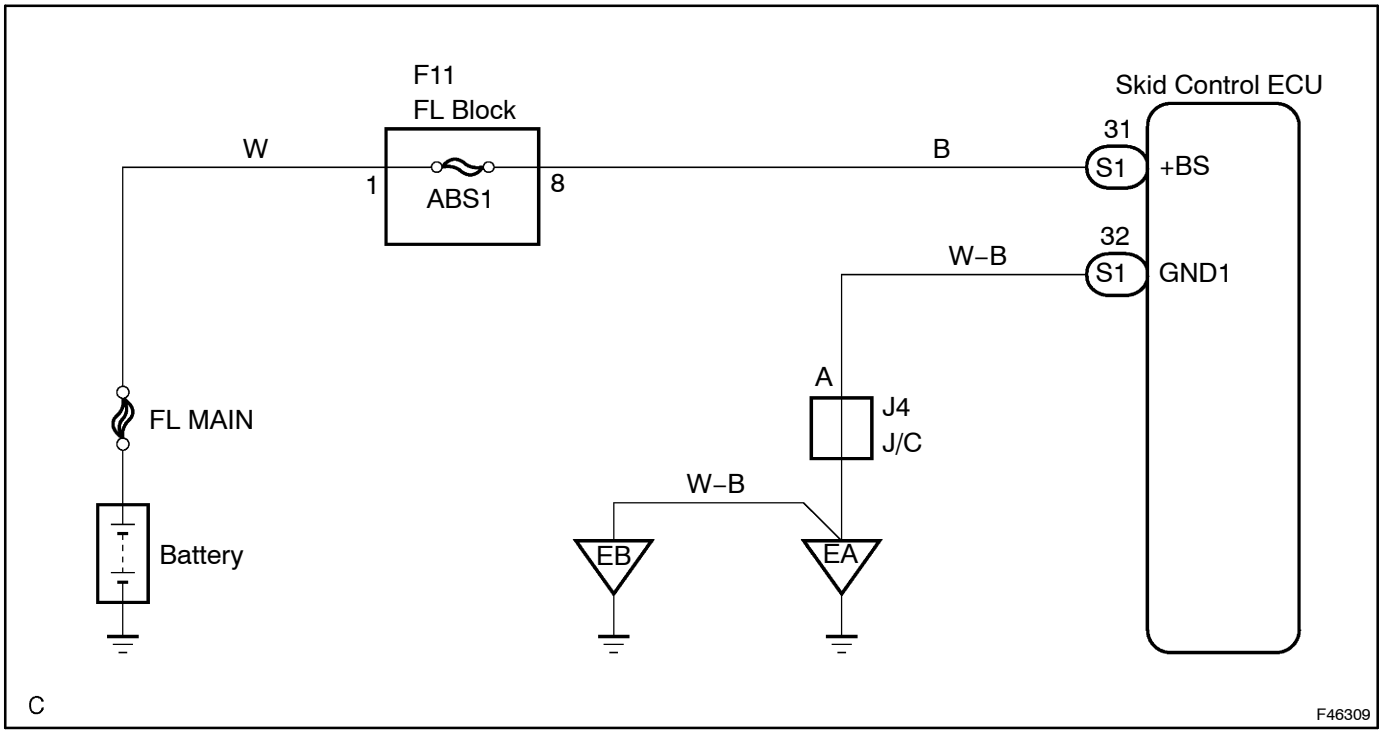
DTC	C0279/12	SHORT CIRCUIT IN ABS SOLENOID RELAY CIRCUIT

CIRCUIT DESCRIPTION

The ABS solenoid relay is built in the ABS & TRACTION Actuator assy. This relay supplies power to each ABS solenoid. If the initial check is OK, after the ignition switch is turned to the ON position, the relay goes on.

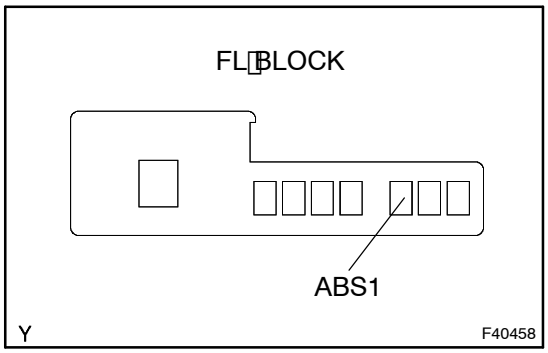
DTC No.	DTC Detecting Condition	Trouble Area
C0278/11	When any of the following (1 to 2) is detected: (1) All the following conditions continues for at least 0.2 seconds. • IG voltage is between 9.5 and 17.2 V. • Relay contact is open when the relay is ON. (2) All the following conditions continues for at least 0.2 seconds. • IG voltage is 9.5 V or less when the relay is ON. • Relay contact remains open.	• ABS No.1 fuse • ABS SOL relay • ABS SOL relay circuit • ABS & TRAC actuator
C0279/12	The following condition continue for at least 0.2 seconds. • Relay contact is closed immediately after turning IG switch to the ON position when the relay is OFF.	• ABS No.1 fuse • ABS SOL relay • ABS SOL relay circuit • ABS & TRAC actuator

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT FUSE(ABS1 FUSE)



(a) Remove ABS1 fuse from the FL BLOCK.
(b) Check continuity of ABS1 fuse.

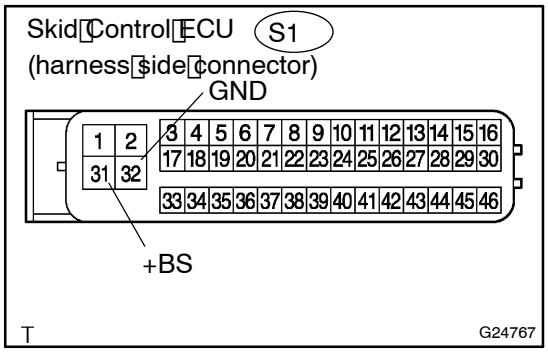
Standard:

ABS No.2 fuse	Below 1 Ω (Continuity)

NG → **CHECK FOR SHORT IN ALL HARNESS AND CONNECTOR CONNECTED TO FUSE AND REPLACE FUSE**

OK

2 INSPECT SKID CONTROL ECU CONNECTOR(+BS TERMINAL VOLTAGE)



(a) Disconnect the skid control ECU connector.
(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
S1–31 (+BS) – S1–32 (GND)	10 to 14 V

NG → **Go to step 4**

OK

3 RECONFIRM DTC

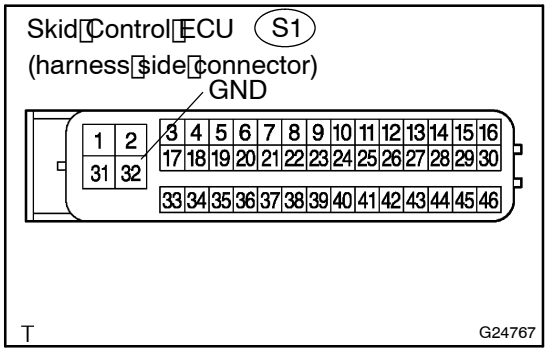
(a) Clear the DTCs (see page 05–234).
(b) Turn the ignition switch to the ON position.
(c) Are the same DTCs recorded?

NO → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–253)**

YES

REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32–43)

4 INSPECT SKID CONTROL ECU CONNECTOR(GND TERMINAL CONTINUITY)



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

Standard:

Tester Connection	Specified Condition
S1–32 (GND) – Body ground	Below 1 Ω

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

OK

5 RECONFIRM DTC

(a) Clear the DTCs (see page 05–234).
(b) Turn the ignition switch to the ON position.
(c) Are the same DTCs recorded?

HINT:
It is suspect that the DTCs output was caused by the poor connection of the connector terminal.

NO → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–253)**

YES

REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32–43)