

DTC	C0278/11	OPEN CIRCUIT IN ABS SOLENOID RELAY CIRCUIT
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DTC	C0279/12	SHORT CIRCUIT IN ABS SOLENOID RELAY CIRCUIT
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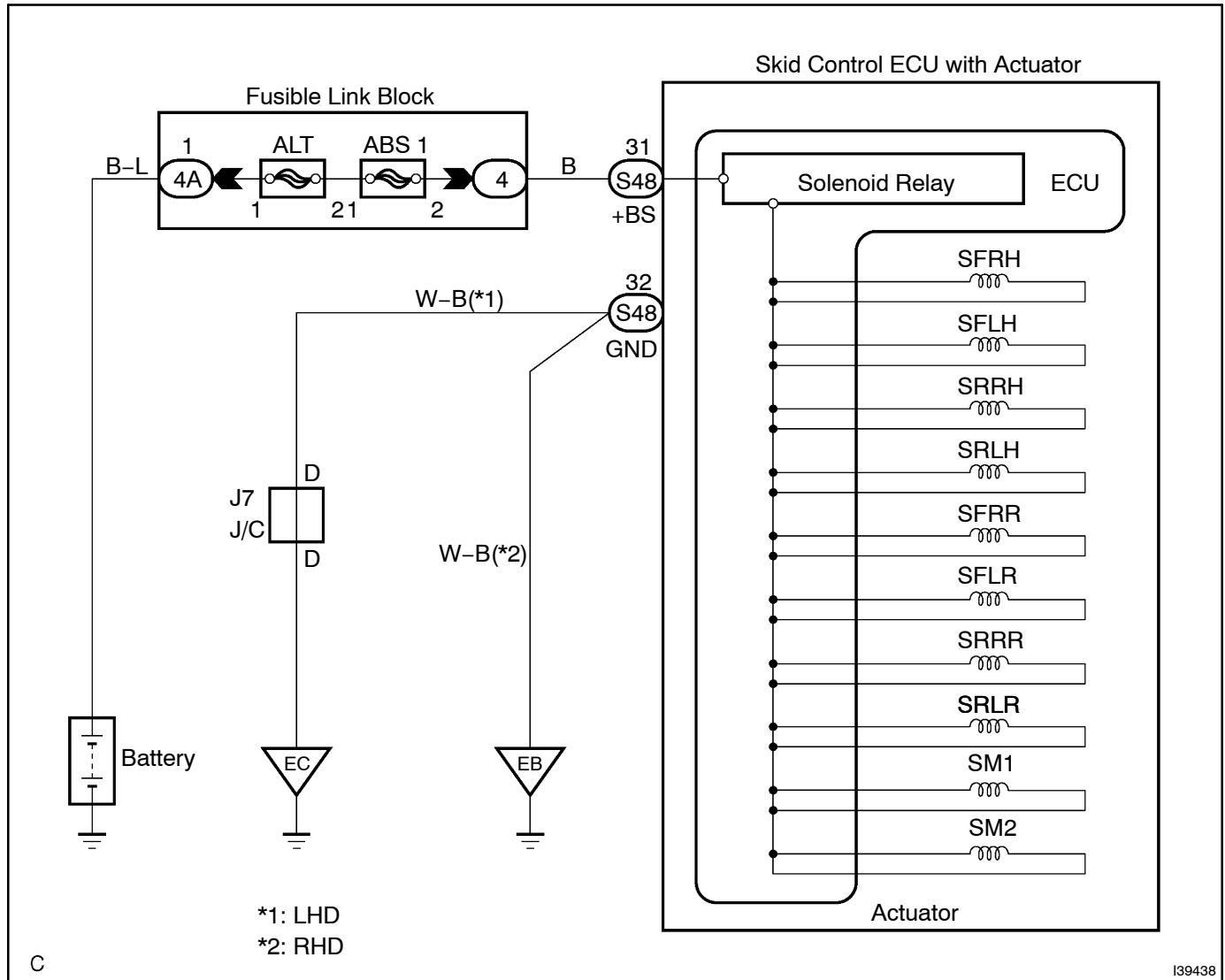
CIRCUIT DESCRIPTION

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 stays on.

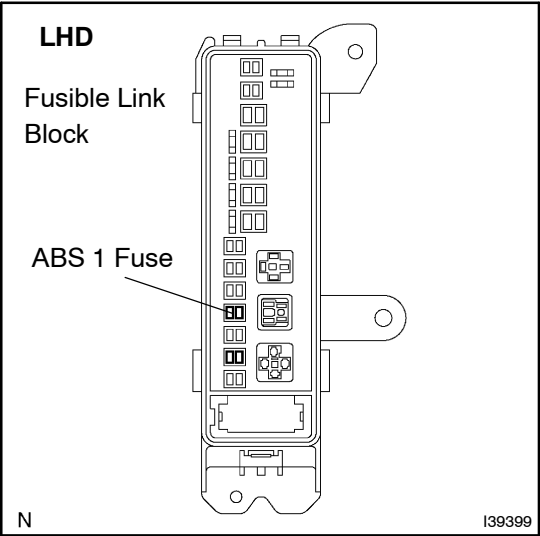
DTC No.	DTC Detecting Condition	Trouble Area
C0278/11	<p>When any of the following (1 to 2) is detected:</p> <p>(1) All of the following conditions continue for at least 0.2 seconds.</p> <ul style="list-style-type: none"> • IG voltage is between 9.5 and 17.2 V. • Relay contact is open when the relay is ON. <p>(2) All of the following conditions continue for at least 0.2 seconds.</p> <ul style="list-style-type: none"> • IG voltage is 9.5 V or less when the relay is ON. • Relay contact remains open. 	<ul style="list-style-type: none"> • ABS 1 fuse • ABS SOL relay • ABS SOL relay circuit • ABS & TRC actuator
C0279/12	<p>The following condition continues for at least 0.2 seconds.</p> <ul style="list-style-type: none"> • Relay contact is closed immediately after turning IG switch to the ON position when the relay is OFF. 	<ul style="list-style-type: none"> • ABS 1 fuse • ABS SOL relay • ABS SOL relay circuit • ABS & TRC actuator

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT FUSE(ABS1 FUSE)

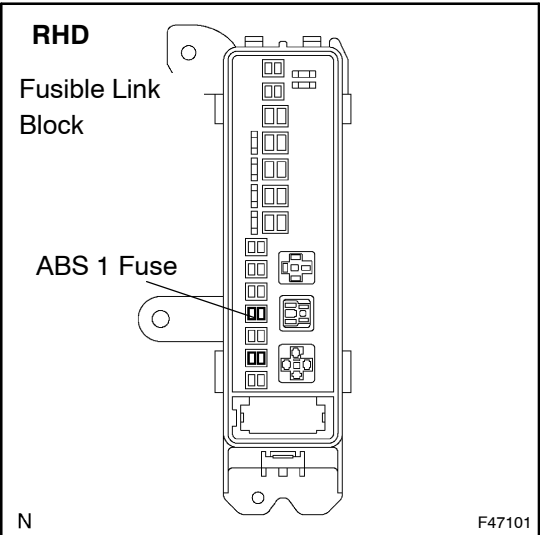


LHD:

- (a) Remove the ABS 1 fuse from the fusible link block.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

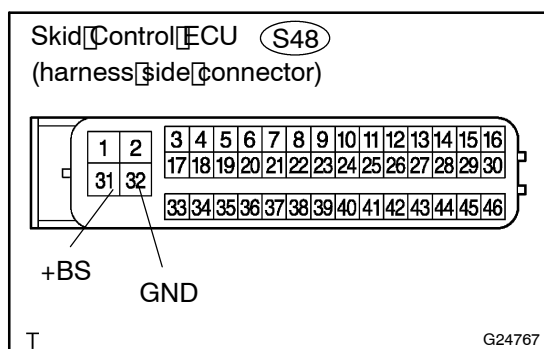
ABS 1 fuse	Below 1 Ω (Continuity)
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CHECK FOR SHORT IN ALL HARNESS AND CONNECTOR CONNECTED TO FUSE AND REPLACE FUSE

OK

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

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

Standard:

Tester Connection	Specified Condition
S48-31(+BS) - Body Ground	10 to 14 V

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

Standard:

Tester Connection	Specified Condition
S48-32(GND) - Body Ground	Below 1 Ω

NG**REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****3 RECONFIRM DTC****HINT:**

This code is detected when a problem is determined in the brake actuator Assy.

The ABS solenoid is in the brake actuator Assy.

Therefore, solenoid circuit inspection and solenoid unit inspection cannot be performed. Be sure to check if the DTC code is output before replacing the brake actuator Assy.

- (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.

OK:

The same DTC is recorded.

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PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-395)

HINT:

It is suspect that the DTCs output was caused by the poor connection on the connector terminal.

OK**REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32-53)****NOTICE:**

When replacing ABS & TRACTION ACTUATOR ASSY, perform zero point calibration (see page 05-387).