

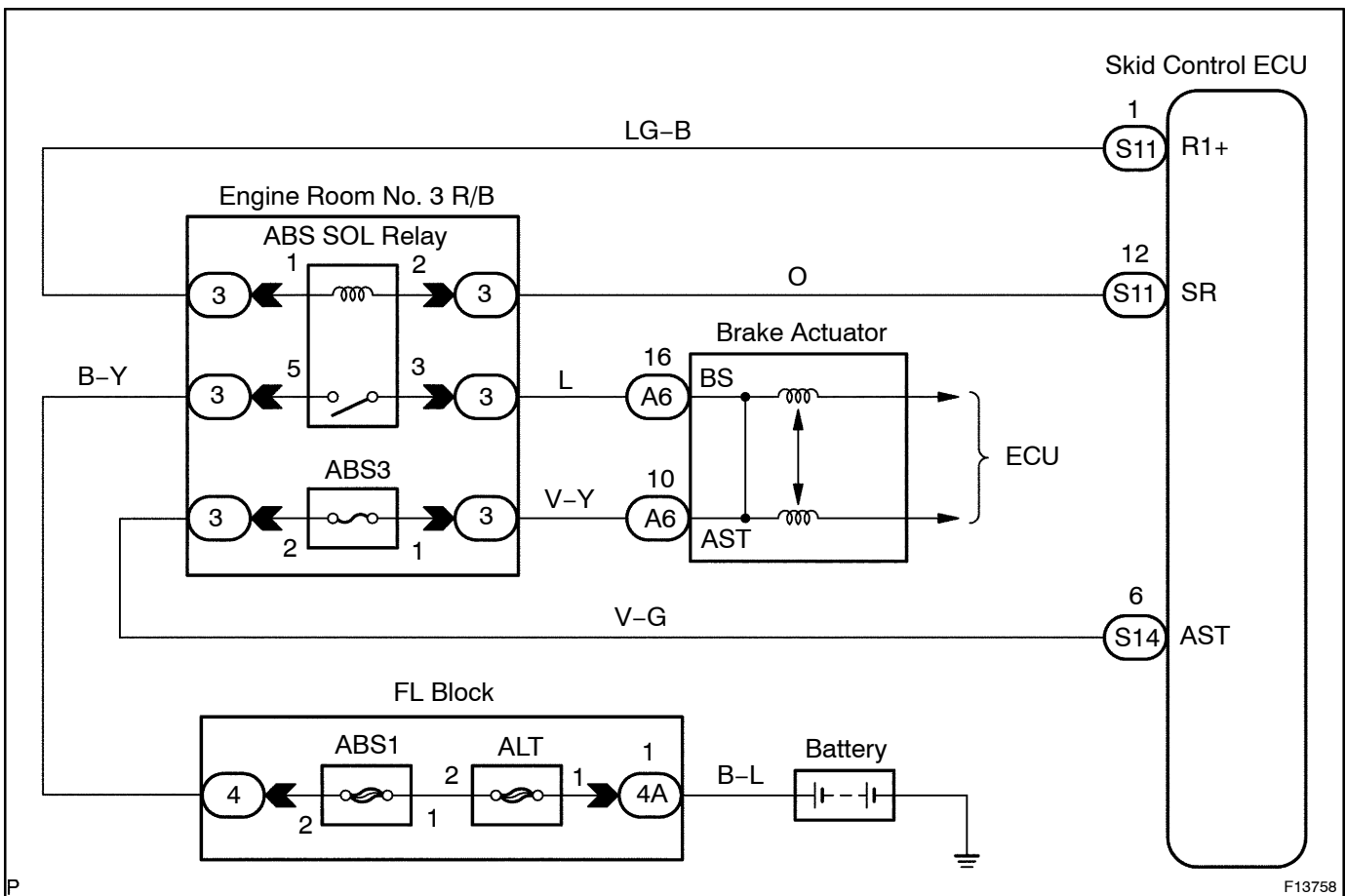
DTC	C0278 / 11, C0279 / 12	ABS SOL Relay Circuit
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CIRCUIT DESCRIPTION

This relay supplies power to each ABS solenoid. After the ignition switch is turned ON, if the initial check is OK, the relay goes on.

DTC No.	DTC Detecting Condition	Trouble Area
C0278 / 11	Detection of either condition 1. or 2.: 1. When ECU IG1 terminal voltage is 9.5 to 17.2 V and the SOL relay is ON, the contact point of the SOL relay is OFF for 0.2 sec. or more. 2. Due to the SOL relay driving, ECU IG1 terminal voltage becomes 9.5 V or less, and the contact point of the SOL relay is not ON for 0.2 sec. or more.	<ul style="list-style-type: none"> • ABS SOL relay • ABS SOL relay circuit
C0279 / 12	Immediately after ECU IG1 is turned ON, the contact point of the SOL relay is ON for 0.2 sec. or more.	

WIRING DIAGRAM



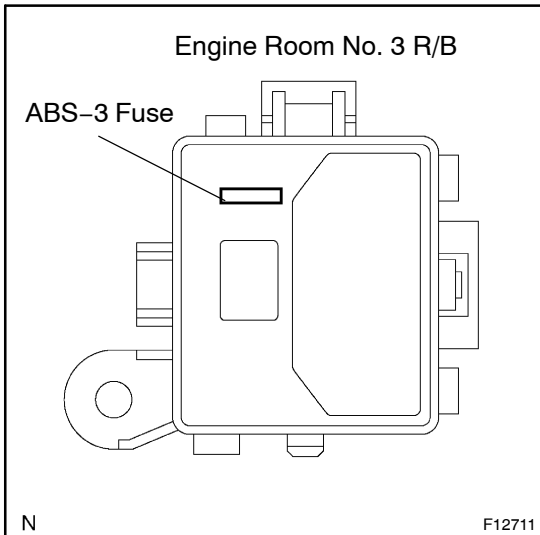
F13758

INSPECTION PROCEDURE

HINT:

Start the inspection from step 1. In case of not using the hand-held tester skip step 2.

1	Check ABS-3 fuse.
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PREPARATION:

Remove the ABS-3 fuse from the engine room No. 3 R/B.

CHECK:

Check continuity of ABS-3 fuse.

OK:

Continuity

NG

Check for short circuit in all the harnesses and components connected to ABS-3 fuse (See attached wiring diagram).

OK

2	Check ABS SOL relay operation.
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PREPARATION:

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON and turn the hand-held tester main switch ON.
- (c) Select the ACTIVE TEST mode on the hand-held tester.

CHECK:

Check the operation sound of the ABS SOL relay when operating it with the hand-held tester.

OK:

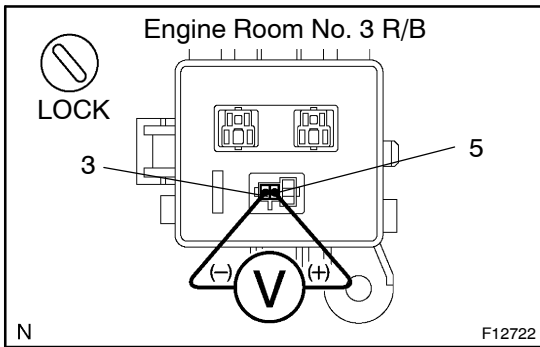
The operation sound of the ABS SOL relay should be heard.

OK

Go to step 5.

NG

3 Check voltage between terminals 3 and 5 of engine room No. 3 R/B.



PREPARATION:

Remove the ABS SOL relay from engine room No. 3 R/B.

CHECK:

Measure the voltage between terminals 3 and 5 of engine room No. 3 R/B (for ABS SOL relay).

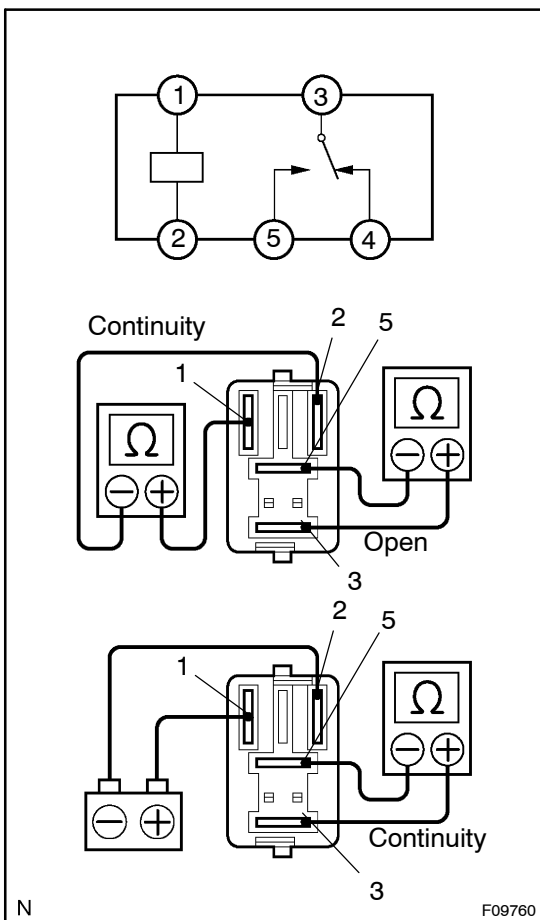
OK:

Voltage: 10 - 14 V

NG Check and repair harness or connector.

OK

4 Check ABS SOL relay.



CHECK:

Check continuity between each terminal of ABS SOL relay.

OK:

Terminals 1 and 2	Continuity (Reference value 62 Ω)
Terminals 3 and 5	Open

CHECK:

- (a) Apply battery voltage between terminals 1 and 2.
- (b) Check continuity between terminals 3 and 5 of ABS SOL relay.

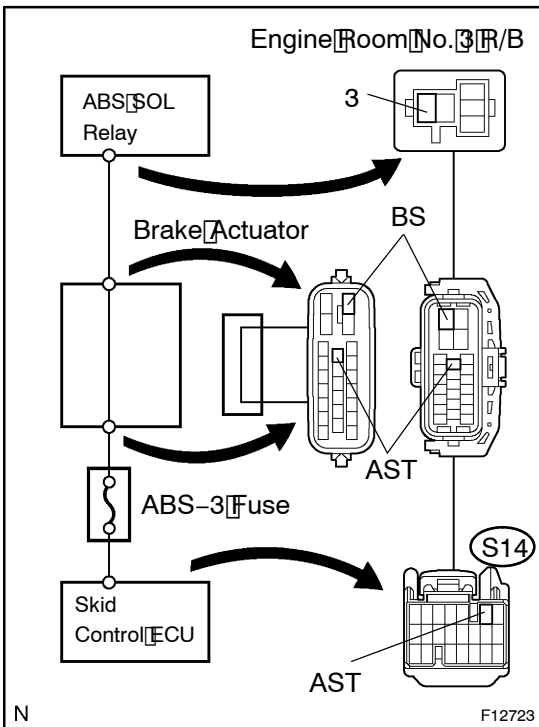
OK:

Terminals 3 and 5	Continuity
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NG Replace ABS SOL relay.

OK

5 Check continuity between terminal 3 of engine room No. 3 R/B and terminal AST of skid control ECU.



PREPARATION:

Disconnect the connector (S14) from the skid control ECU.

CHECK:

Check continuity between terminal 3 of engine room No. 3 R/B (for ABS SOL relay) and terminal AST (S14 - 6) of skid control ECU harness side connector.

OK:

Continuity

NG

Repair or replace harness or brake actuator.

OK

6 Check for open and short circuit in harness and connector between engine room No. 3 R/B (for ABS SOL relay) and skid control ECU (See page IN-35).

NG

Repair or replace harness or connector.

OK

If the same code is still output after the DTC is deleted, check the contact condition of each connection. If the connections are normal, the ECU may be defective.