

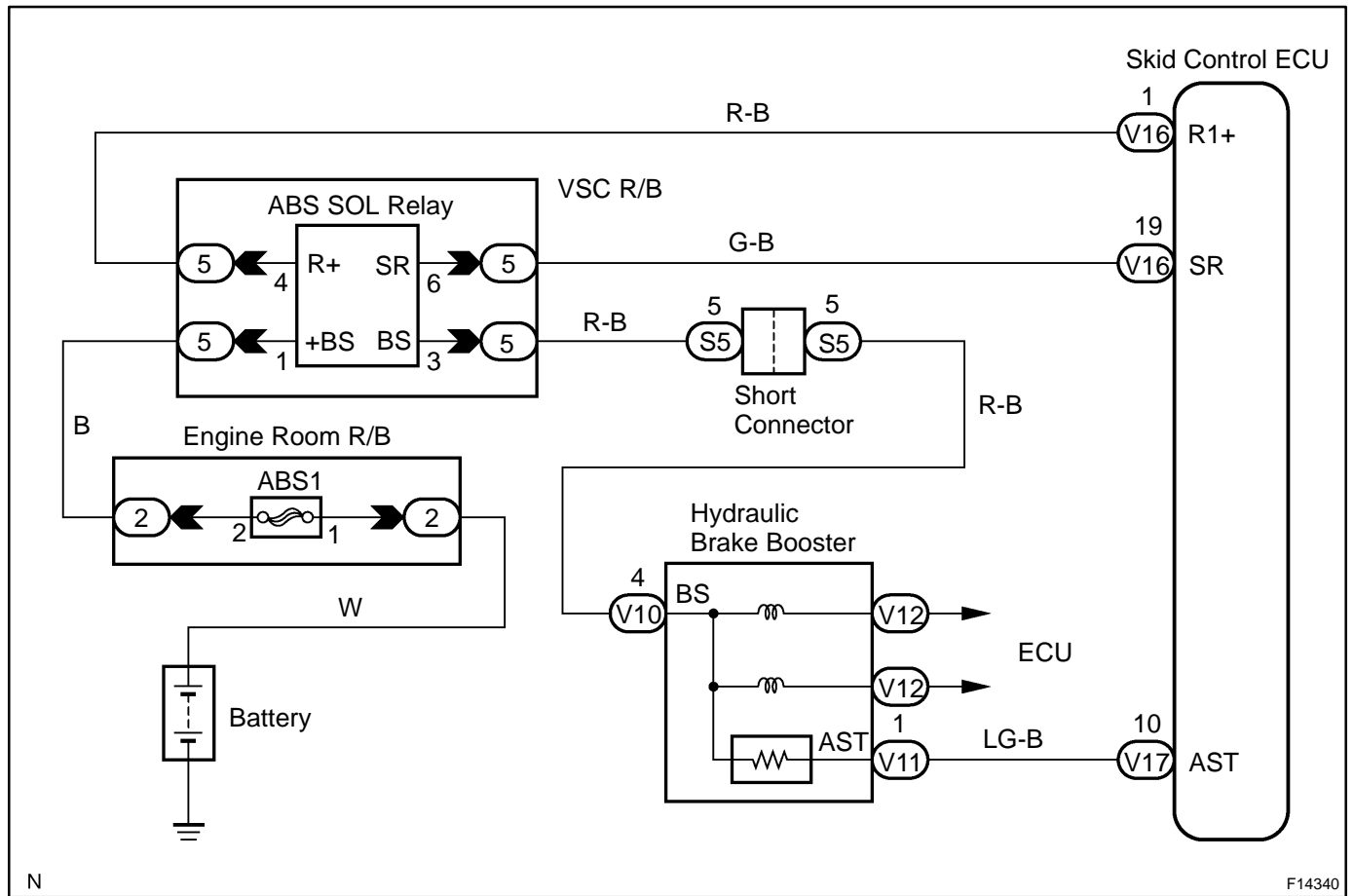
DTC	C0278 / 11, C0279 / 12	ABS SOL Relay Circuit
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CIRCUIT DESCRIPTION

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	Conditions 1. and 2. continue for 0.2 sec. or more: 1. ECU terminal IG1 voltage is 9.5 V to 17.0 V and the ABS SOL relay is ON, however, the contact point of the ABS SOL relay is OFF. 2. With ABS SOL relay ON, ECU terminal IG1 voltage becomes 9.5 V or less and the contact point of the ABS SOL relay does not become ON.	<ul style="list-style-type: none"> • ABS SOL relay • ABS SOL relay circuit
C0279 / 12	Immediately after ECU terminal IG1 becomes ON, ABS SOL relay is OFF. However, the condition that the ABS SOL relay remains ON due to the contact point continues for 0.2 sec. or more.	

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Start the inspection from step 1 in case of using the hand-held tester and start from step 2 in case of not using the hand-held tester.

1	Check ABS SOL relay operation.
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PREPARATION:

- (a) Connect the hand-held tester to DLC3.
- (b) Turn the ignition switch ON and push 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:

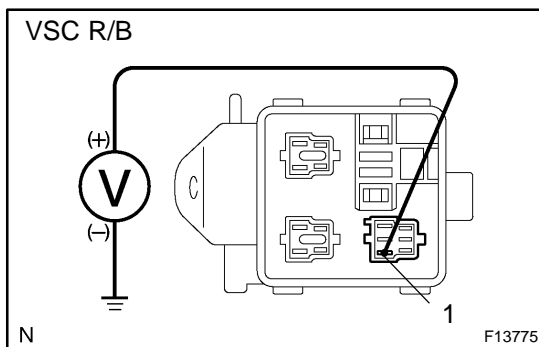
The operation sound of the ABS SOL relay should be heard.

OK

Go to step 6.

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2	Check voltage between terminal 1 of VSC R/B (for ABS SOL relay) and body ground.
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PREPARATION:

Remove the ABS SOL relay from VSC R/B.

CHECK:

Measure the voltage between terminals 1 and 2 of VSC R/B (for ABS SOL relay).

OK:

Voltage: 10 - 14 V

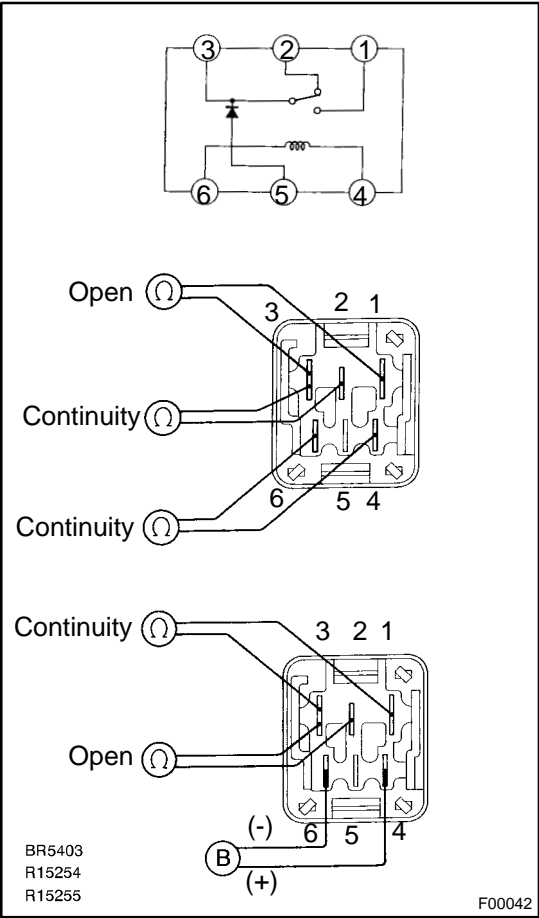
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Check and repair harness or connector.

OK

3

Check ABS SOL relay.



CHECK:
Check continuity between each terminal of ABS SOL relay.
OK:

Terminals 4 and 6	Continuity (Reference value 80 Ω)
Terminals 2 and 3	Continuity
Terminals 1 and 3	Open

CHECK:
(a) Apply battery positive voltage between terminals 4 and 6.
(b) Check continuity between each terminal of ABS SOL relay.
OK:

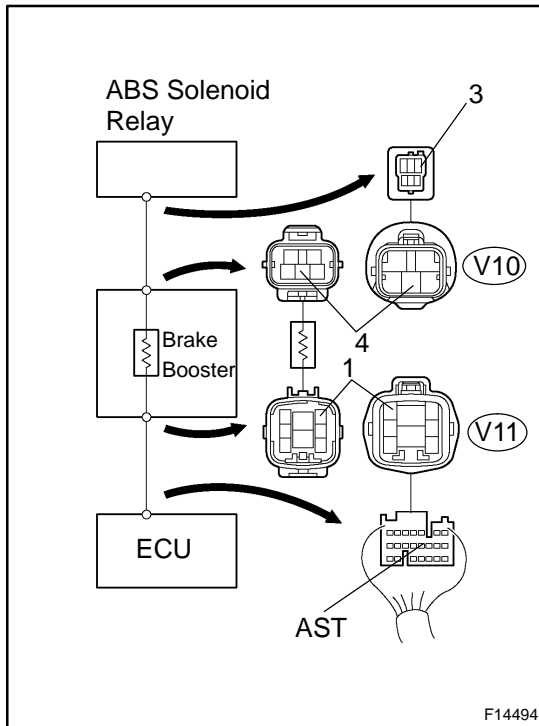
Terminals 2 and 3	Open
Terminals 1 and 3	Continuity

OK

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Replace ABS SOL relay.

4 Check continuity between terminal 3 of VSC R/B (for ABS SOL relay) and terminal AST of skid control ECU.



CHECK:

Check continuity between terminal 3 of VSC R/B (for ABS SOL relay) and terminal AST of the skid control ECU.

OK:

Continuity

HINT:

There is a resistance of $33 \pm 3 \Omega$ between terminal 4 of connector V10 and terminal 1 of connector V11.

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Repair or replace harness or hydraulic brake booster.

OK

5 Check for open and short circuit in harness and connector between VSC R/B and skid control ECU (See page [IN-28](#)).

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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, ECU may be defective.

6	Check for open circuit in harness and connector between terminals AST of hydraulic brake booster and skid control ECU (See page IN-28).
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Repair or replace harness and connector.

OK

Check and replace skid control ECU.