

DTC	P0973	Shift Solenoid "A" Control Circuit Low (Shift Solenoid Valve S1)
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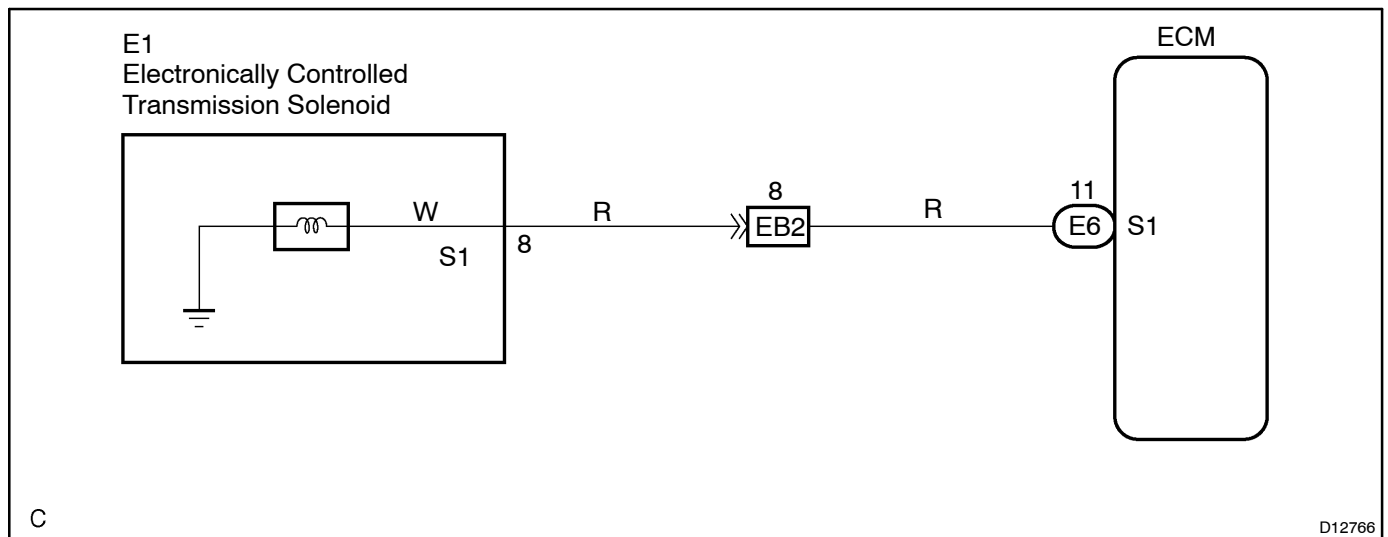
DTC	P0974	Shift Solenoid "A" Control Circuit High (Shift Solenoid Valve S1)
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CIRCUIT DESCRIPTION

See page [DI-286](#).

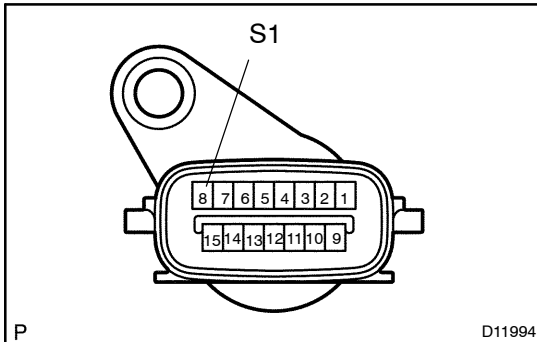
DTC No.	DTC Detection Condition	Trouble Area
P0973	ECM detects short in solenoid valve S1 circuit 4 times when solenoid valve S1 is operated (1-trip detection logic)	• Short in shift solenoid valve S1 circuit • Shift solenoid valve S1 • ECM
P0974	ECM detects open in solenoid valve S1 circuit 4 times when solenoid valve S1 is not operated (1-trip detection logic)	• Open in shift solenoid valve S1 circuit • Shift solenoid valve S1 • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check transmission wire.



PREPARATION:

Disconnect the transmission wire connector.

CHECK:

Measure resistance between S1 of transmission wire connector and body ground.

OK:

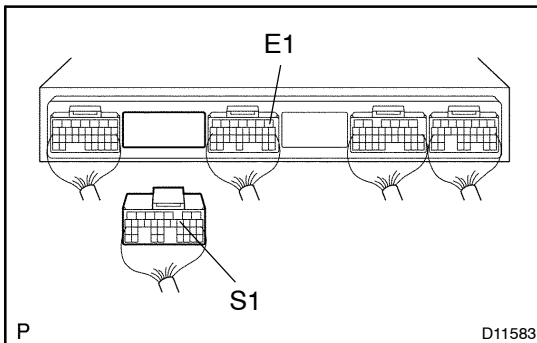
Resistance: 11 – 15 Ω at 20°C (68°F)

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Go to step 3.

OK

2 Measure resistance between terminal S1 and E1 of ECM connector.



PREPARATION:

- (a) Connect the transmission wire connector.
- (b) Disconnect the connector of the ECM.

CHECK:

Measure resistance between terminals S1 and E1 of ECM connector.

OK:

Resistance: 11 – 15 Ω at 20°C (68°F)

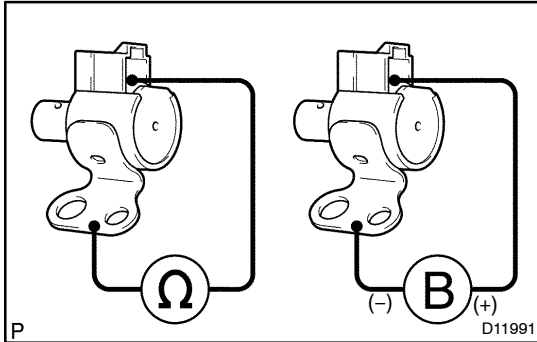
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Repair or replace the harness or connector (See page [IN-36](#)).

OK

Check and replace the ECM (See page [IN-36](#)).

3 Check shift solenoid valve S1.

**PREPARATION:**

- (a) Jack up the vehicle.
- (b) Remove the oil pan.
- (c) Remove the shift solenoid valve S1.

CHECK:

Measure the resistance between the solenoid connector terminal and the body ground.

OK:

Resistance: 11 – 15 Ω at 20°C (68°F)

CHECK:

Connect the battery positive lead to the solenoid connector terminal and the battery negative lead to the solenoid body ground.

OK:

Solenoid sounds operation noise.

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**Replace the shift solenoid valve S1
(See page [AT-8](#)).**

OK

**Repair or replace the transmission wire
(See page [AT-6](#)).**