

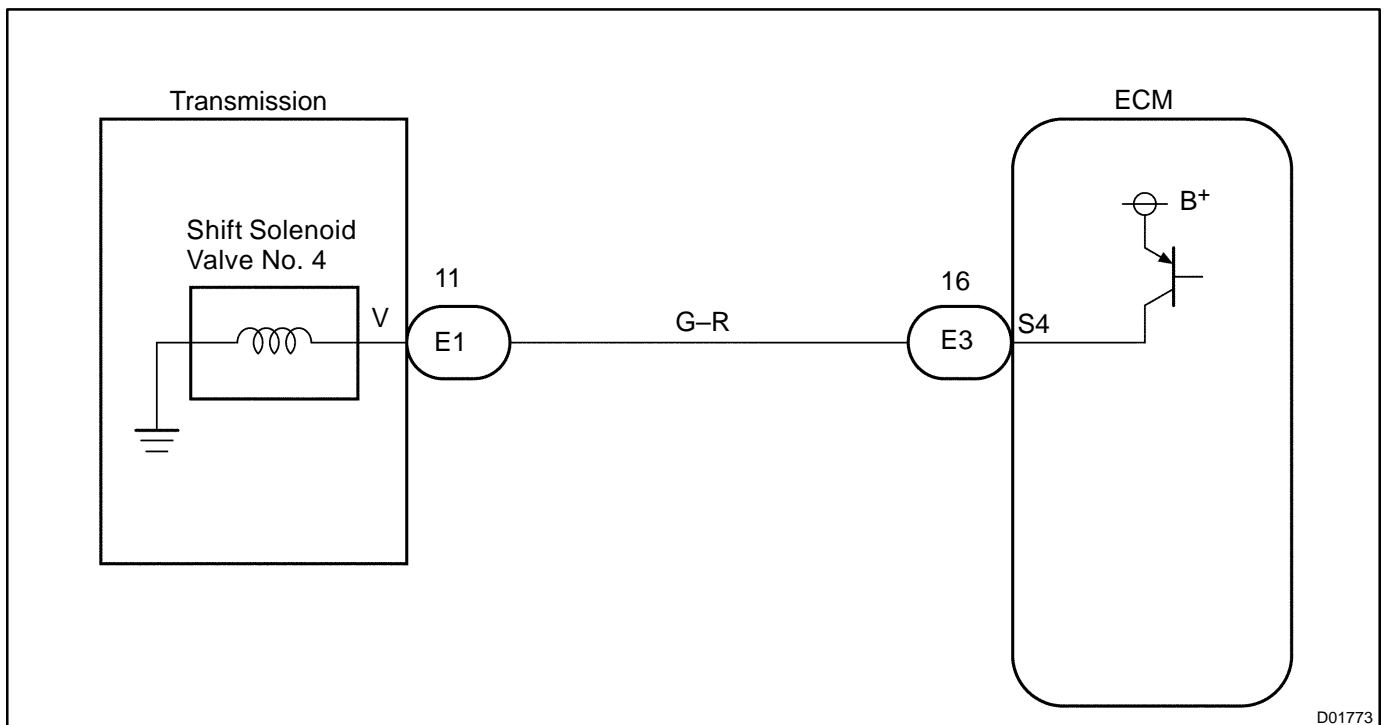
<b>DTC</b>	<b>P0768</b>	<b>Shift Solenoid "D" Electrical Malfunction (Shift Solenoid Valve No. 4)</b>
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## CIRCUIT DESCRIPTION

Shift solenoid valve No. 4 is controlled by ECM and it switches ON and OFF of the O/D direct switch.

DTC No.	DTC Detecting Condition	Trouble Area
P0768	<p>The ECM checks for an open or short circuit in the shift solenoid valve No. 4 circuit when it changes.</p> <p>The ECM records DTC P0768 if condition 1. or 2. is detected once, but it does not light up MIL.</p> <p>After ECM detects condition 1. or 2. continuously 8 times or more in 1-trip, it causes the MIL to light up until condition 1. or 2. disappears.</p> <p>After that, if the ECM detects condition 1. or 2. once, it starts lighting up MIL again.</p> <ol style="list-style-type: none"> <li>1. Solenoid resistance is 8 <math>\Omega</math> or less (short circuit) when the solenoid is energized.</li> <li>2. Solenoid resistance is 100 k<math>\Omega</math> or more (open circuit) when the solenoid is not energized.</li> </ol>	<ul style="list-style-type: none"> <li>• Open or short in shift solenoid valve No. 4 circuit</li> <li>• Shift solenoid valve No. 4</li> <li>• ECM</li> </ul>

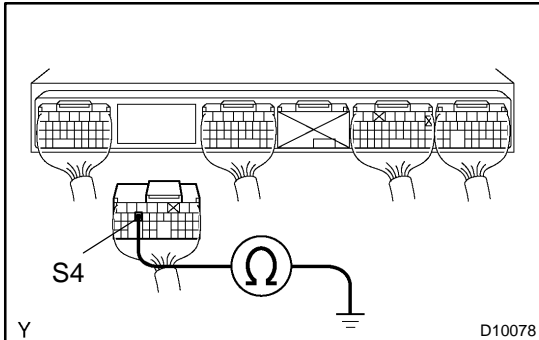
## WIRING DIAGRAM



D01773

## INSPECTION PROCEDURE

1	Check resistance between terminal S4 of ECM and body ground.
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**PREPARATION:**

Disconnect the connector from ECM.

**CHECK:**

Measure resistance between terminals S4 and body ground.

**OK:**

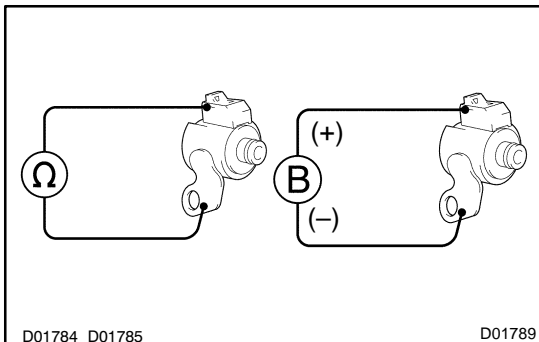
Resistance: 11 – 15  $\Omega$  at 20 °C (68 °F)

OK

Check and replace the ECM  
(See page [IN-32](#)).

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2	Check shift solenoid valve No. 4.
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**PREPARATION:**

(a) Remove the oil pan.

(b) Remove the shift solenoid valve No. 4.

**CHECK:**

(a) Measure resistance between terminal and solenoid body.

(b) Connect positive (+) lead to terminal of solenoid connector and negative (–) lead to solenoid body.

**OK:**

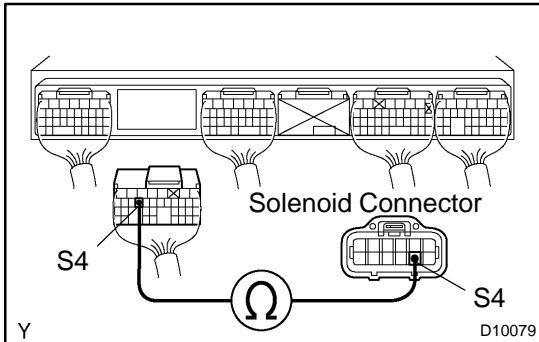
(a) Resistance: 11 – 15  $\Omega$  at 20 °C (68 °F)

(b) The solenoid makes an operating noise.

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Replace solenoid valve No. 4.

OK

**3****Check harness and connector between ECM and automatic transmission solenoid connector.****PREPARATION:**

Disconnect the solenoid connector from the automatic transmission.

**CHECK:**

Check the harness and connector between terminal S4 of ECM and terminal S4 solenoid connector.

**OK:**

**There is no open and short circuit.**

**NG****Repair or replace harness or connector.****OK**

**Proceed to next circuit inspection shown in problem symptoms table (See page [DI-433](#)). However, when DTC P0768 is displayed, check and replace ECM (See page [IN-32](#)).**