

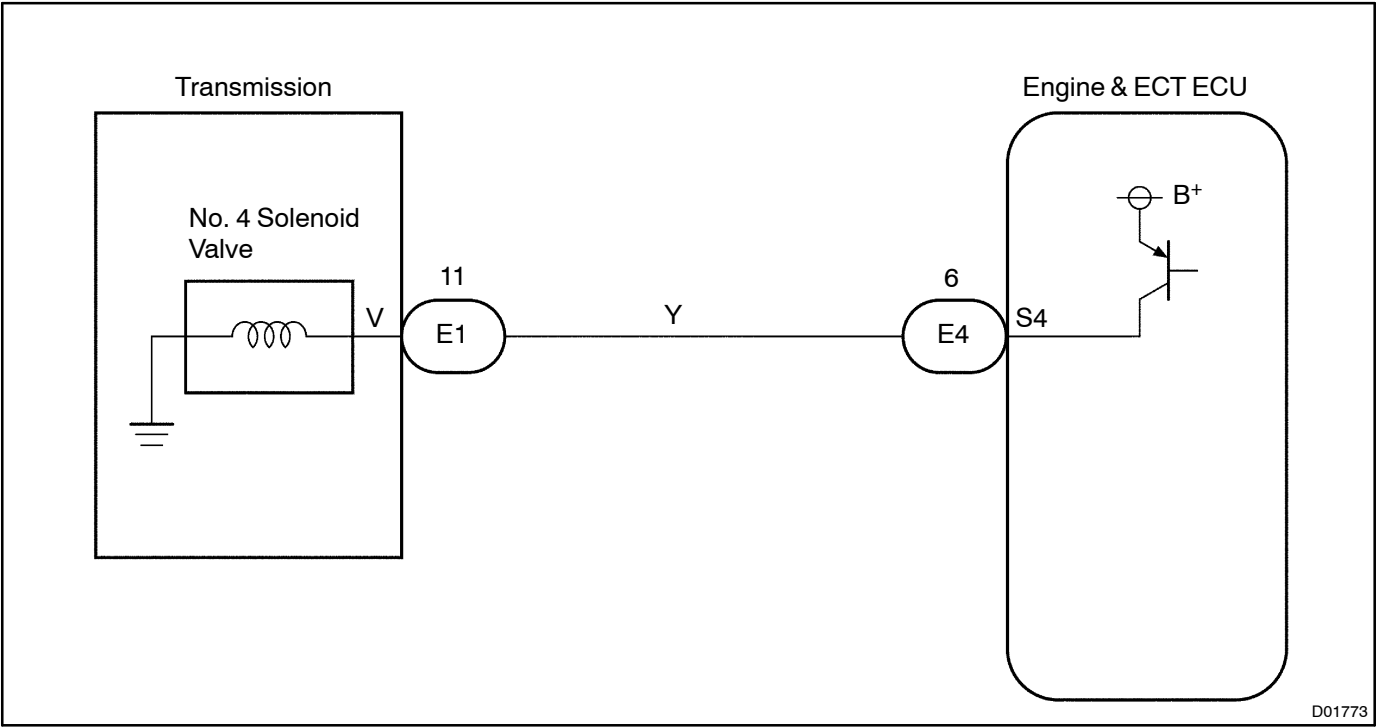
DTC	P0768/65	Shift Solenoid D Electrical Malfunction (No. 4 Solenoid Valve)
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CIRCUIT DESCRIPTION

No. 4 solenoid valve is controlled by Engine & ECT ECU and it switches ON and OFF of the O/D direct switch.

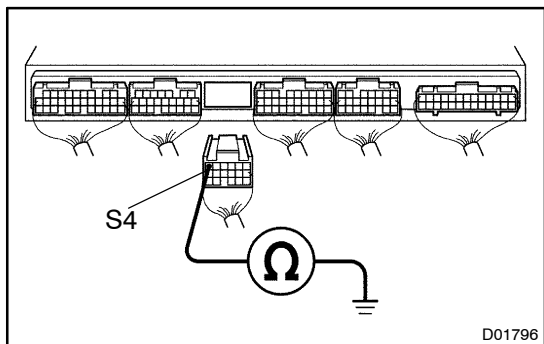
DTC No.	DTC Detecting Condition	Trouble Area
P0768/65	<p>The Engine &amp; ECT ECU checks for an open or short circuit in the No. 4 solenoid valve circuit when it changes.</p> <p>The Engine &amp; ECT ECU records DTC P0768/65 if condition (a) or (b) is detected once, but it does not light up CHK ENG.</p> <p>After Engine &amp; ECT ECU detects condition (a) or (b) continuously 8 times or more in 1 trip, it causes the CHK ENG lights up until condition (a) or (b) disappears.</p> <p>After that, if the Engine &amp; ECT ECU detects condition (a) or (b) once, it starts lighting up CHK ENG again.</p> <p>(a) Solenoid resistance is 8 Ω or less (short circuit) when the solenoid is energized.</p> <p>(b) Solenoid resistance is 100 kΩ or more (open circuit) when the solenoid is not energized.</p>	<ul style="list-style-type: none"><li>• Open or short in No. 4 solenoid valve circuit</li><li>• No. 4 solenoid valve</li><li>• Engine &amp; ECT ECU</li></ul>

WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 Check resistance between terminals S4 of Engine &amp; ECT ECU and body ground.

**PREPARATION:**

Disconnect the connector from Engine & ECT ECU.

**CHECK:**

Measure resistance between terminals S4 and body ground.

**OK:**

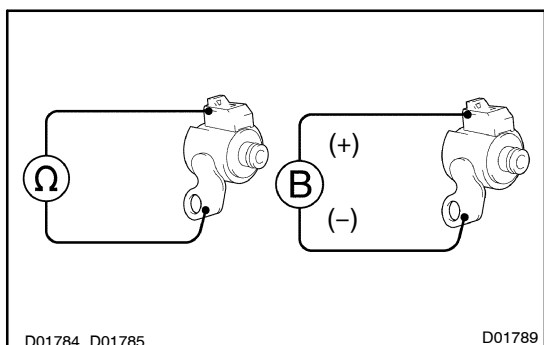
**Resistance: 11 – 15  $\Omega$  at 20 °C (68 °F)**

OK

**Check and replace the Engine & ECT ECU**  
(See [page N-30](#)).

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## 2 Check No. 4 solenoid valve.

**PREPARATION:**

- (a) Remove the oil pan.
- (b) Remove the No. 4 solenoid valve.

**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:**

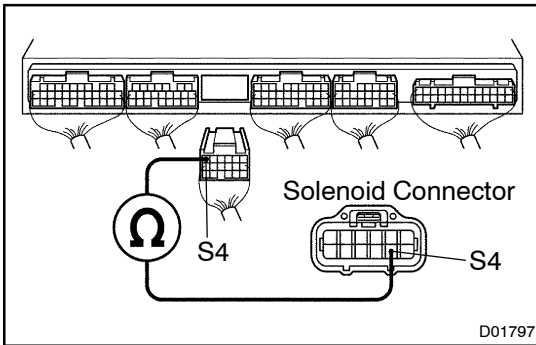
- (a) **Resistance: 11 – 15  $\Omega$  at 20 °C (68 °F)**
- (b) **The solenoid makes an operating noise.**

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**Replace No. 4 solenoid valve.**

OK

### 3 Check harness and connector between Engine & ECT ECU and automatic transmission solenoid connector.



#### **PREPARATION:**

Disconnect the solenoid connector from the automatic transmission.

#### **CHECK:**

Check the harness and connector between terminal S4 of Engine & ECT ECU and terminal S4 solenoid connector.

#### **OK:**

There is open and no short circuit.

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Repair or replace harness or connector.

OK

Proceed to next circuit inspection shown in problem symptoms table (See page DI-240). However, when DTC P0768/65 is displayed, check and replace Engine & ECT ECU (See page IN-20).