

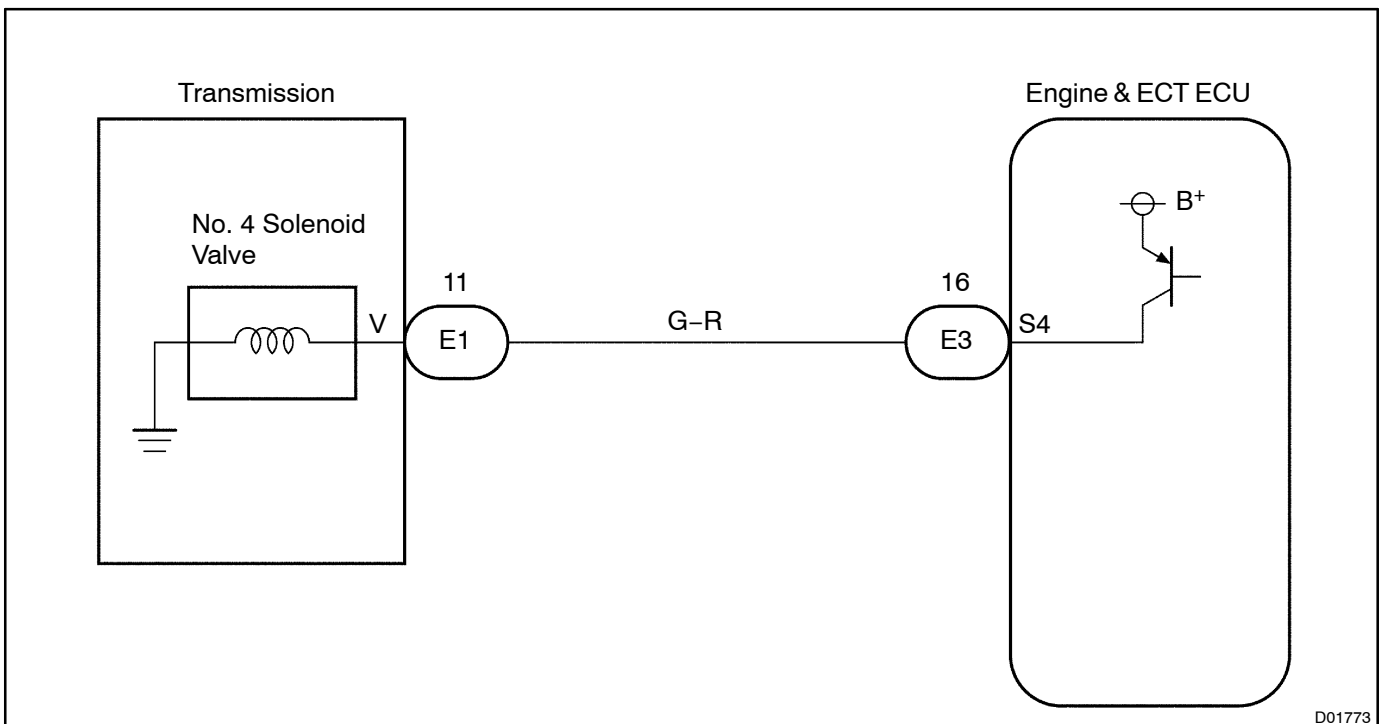
DTC	P0768	Shift Solenoid D Electrical Malfunction (No. 4 Solenoid Valve)
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CIRCUIT DESCRIPTION

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	<p>The Engine & ECT ECU checks for an open or short circuit in the No. 4 solenoid valve circuit when it changes.</p> <p>The Engine & ECT ECU records DTC P0768 if condition (a) or (b) is detected once, but it does not light up CHK ENG.</p> <p>After Engine & 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 & 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"> • Open or short in No. 4 solenoid valve circuit • No. 4 solenoid valve • Engine & ECT ECU

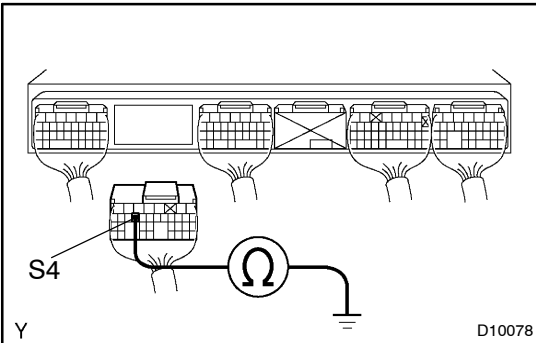
WIRING DIAGRAM



D01773

INSPECTION PROCEDURE

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

**PREPARATION:**

Disconnect the connector from Engine & ECT ECU.

CHECK:

Measure resistance between terminals S4 and body ground.

OK:

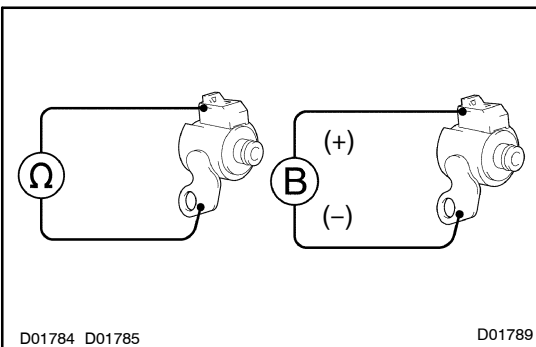
Resistance: 11 – 15 Ω at 20 °C (68 °F)

OK

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

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2 Check No. 4 solenoid valve.

**PREPARATION:**

- Remove the oil pan.
- Remove the No. 4 solenoid valve.

CHECK:

- Measure resistance between terminal and solenoid body.
- Connect positive (+) lead to terminal of solenoid connector and negative (-) lead to solenoid body.

OK:

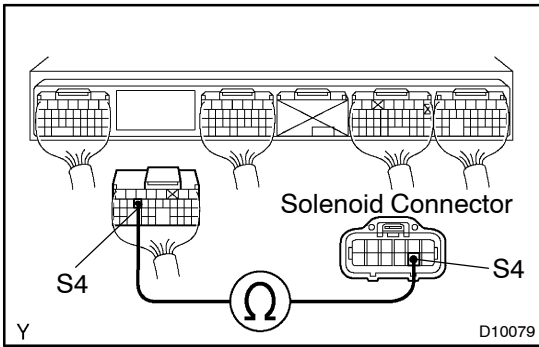
- Resistance: 11 – 15 Ω at 20 °C (68 °F)**
- The solenoid makes an operating noise.**

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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-294). However, when DTC P0768 is displayed, check and replace Engine & ECT ECU (See page IN-30).