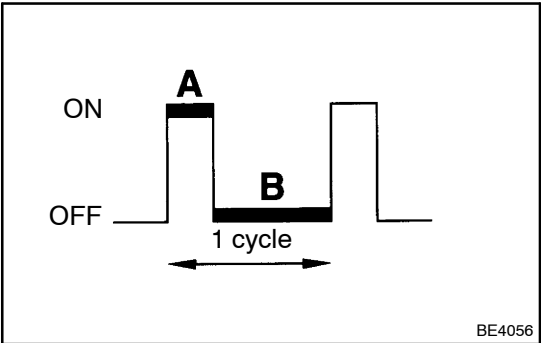
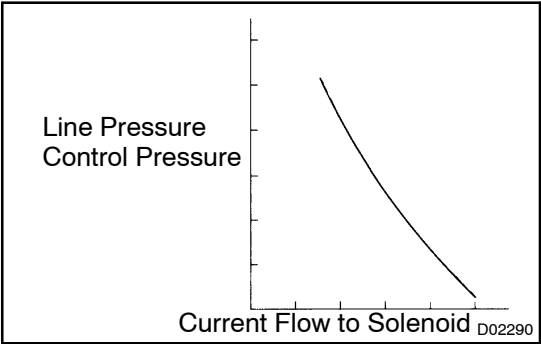


DTC	77(1)	Linear Solenoid for Line Pressure Control Circuit Malfunction (Shift Solenoid Valve SLT)
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CIRCUIT DESCRIPTION

The throttle pressure that is applied to the primary regulator valve (which modulates line pressure) causes the solenoid valve SLT, under electronic control, to precisely and minutely modulate and generate line pressure according to the accelerator pedal effort, or the detected engine power output. This controls the line pressure and provides smooth shifting characteristics.

Upon receiving the throttle valve opening angle signal, Engine and ECT ECU controls the line pressure by sending a predetermined (*) duty ratio to the solenoid valve, modulating the line pressure, and generating throttle pressure.

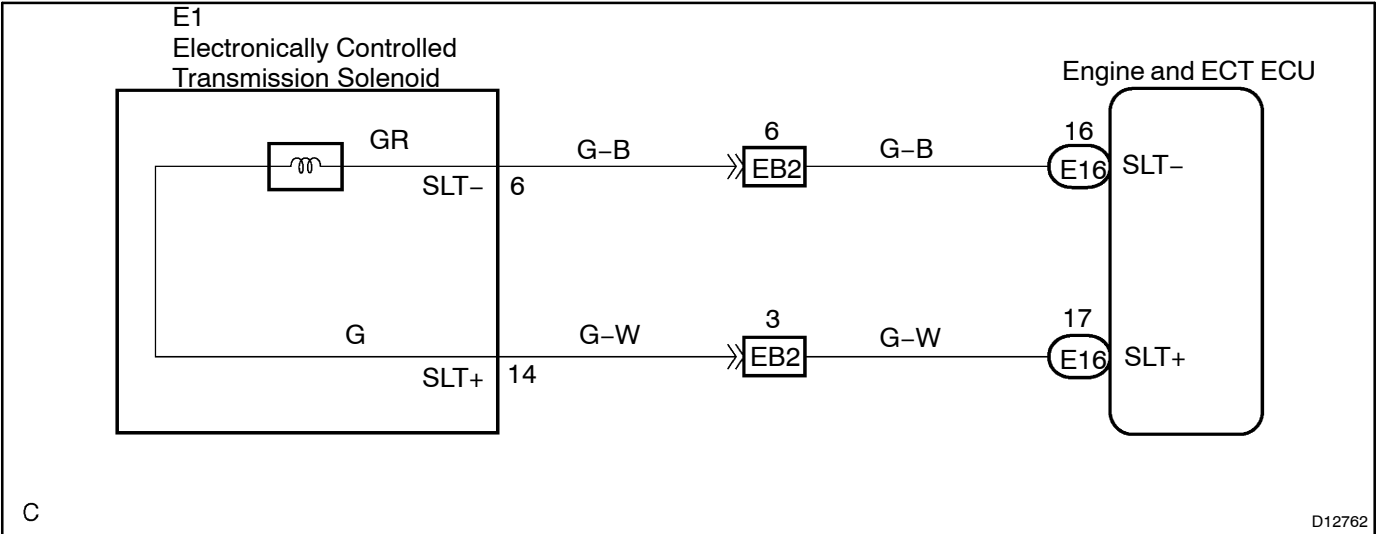
(*) Duty Ratio

The duty ratio is the ratio of the period of continuity in one cycle. For example, if A is the period of continuity in one cycle, and B is the period of non-continuity, then

$$\text{Duty Ratio} = \frac{A}{A + B} \times 100 (\%)$$

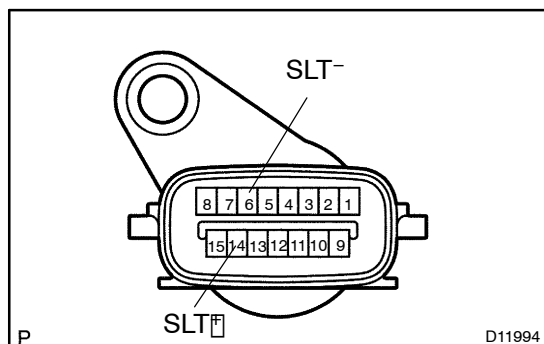
DTC No.	DTC Detection Condition	Trouble Area
77(1)	Engine and ECT ECU detects solenoid SLT circuit malfunction for 1 sec. or more (1-trip detection logic)	• Open or short in shift solenoid valve SLT circuit • Shift solenoid valve SLT • Engine and ECT ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check transmission wire.

**PREPARATION:**

Disconnect the transmission wire connector.

CHECK:

Measure resistance between SLT+ and SLT- of transmission wire.

OK:

Resistance: 5.0 – 5.6 Ω at 20 °C (68 °F)

CHECK:

Measure resistance between terminals SLT+ and SLT- of the transmission wire connector and body ground.

OK:

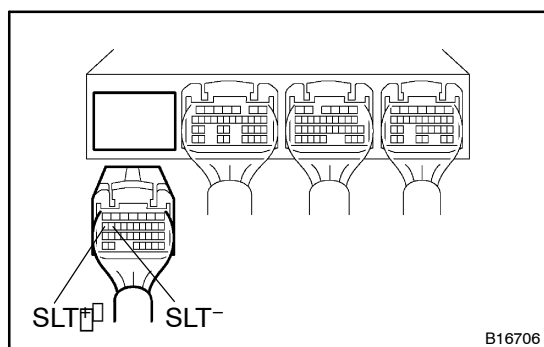
Resistance: 1 M Ω or higher

NG

Go to step 3.

OK

2 Measure resistance between terminal SLT+ and SLT- of Engine and ECT ECU connector.

**PREPARATION:**

(a) Connect the transmission wire connector.

(b) Disconnect the connector of the Engine and ECT ECU.

CHECK:

Measure resistance between terminals SLT+ and SLT- of Engine and ECT ECU connector.

OK:

Resistance: 5.0 – 5.6 Ω at 20 °C (68 °F)

CHECK:

Measure resistance between terminals SLT+ and SLT- of the Engine and ECT ECU connector and body ground.

OK:

Resistance: 1 M Ω or higher

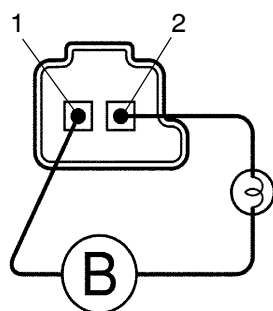
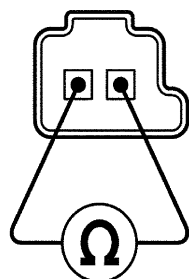
NG

Repair or replace the harness or connector (See page IN-38).

OK

Check and replace the Engine and ECT ECU (See page IN-38).

3 Check shift solenoid valve SLT.



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PREPARATION:

- Jack up the vehicle.
- Remove the oil pan.
- Remove the shift solenoid valve SLT.

CHECK:

- Measure the resistance between terminals 1 and 2 of solenoid connector.

Standard: 5.0 – 5.6 Ω at 20°C (68°F)

- Connect the positive (+) lead with an 21 W bulb to terminal 2 of solenoid connector and negative (–) lead to terminal 1 of the solenoid valve connector, then check the movement of the valve.

Standard: Solenoid sounds operation noise.

OK:

Standard

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**Replace the shift solenoid valve SLT
(See page AT-8).**

OK

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