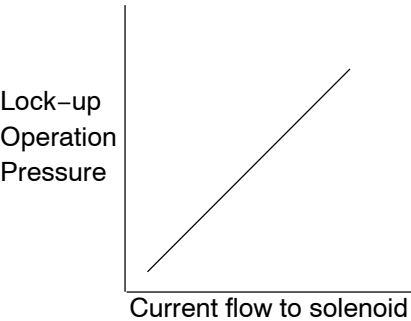


DTC	68	Liner Solenoid for Lock Up Ctrl Cir Malfunction (Shift Solenoid Valve SLU)
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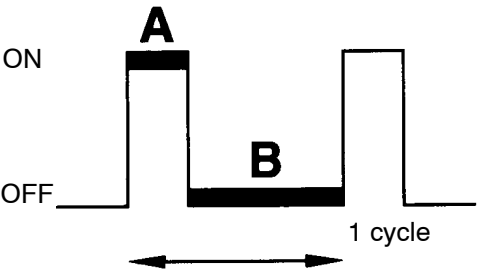


CIRCUIT DESCRIPTION

The amount of current flow to the solenoid is controlled by the (*) duty ratio of the Engine and ECT ECU output signal. The higher the duty ratio becomes, the higher the lock-up hydraulic pressure becomes during the lock-up operation.

(*) 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



(*)

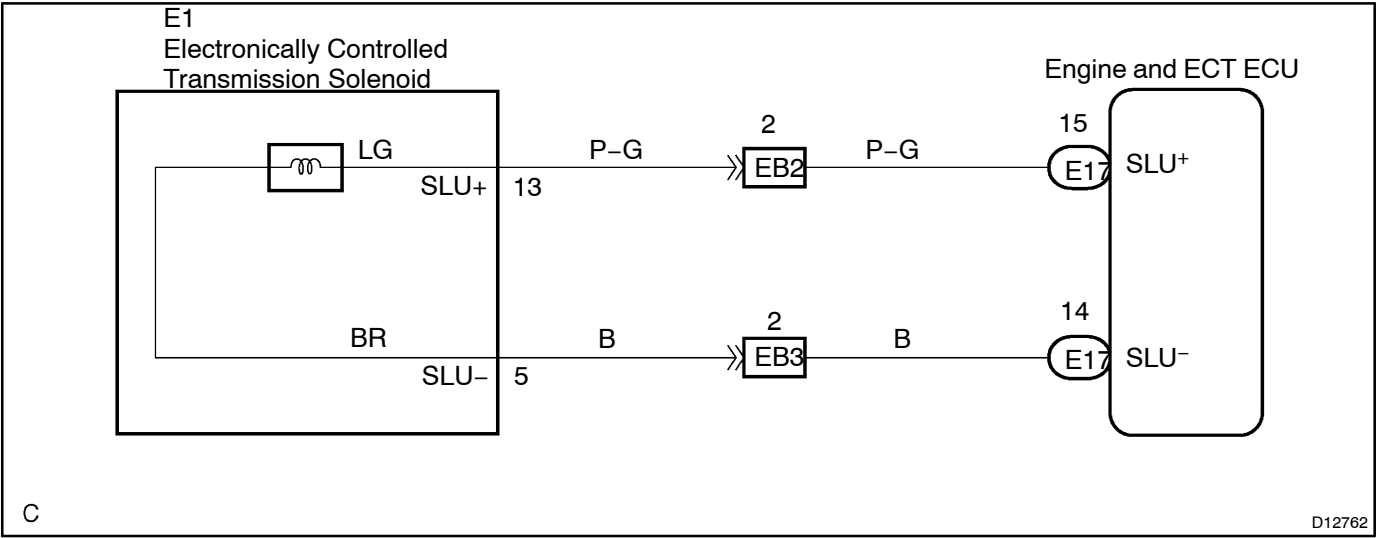
$$\text{Duty Ratio} = \frac{A}{A + B} \times 100 (\%)$$

BE4056

D00160

DTC No.	DTC detection condition	Trouble Area
68	The following condition is detected. (1-trip detection logic) SLU output signal's duty ON of 3.3 msec. or more with duty ratio of least 95% lasts for 1 second.	• Open or short in shift solenoid valve SLU circuit • Shift solenoid valve SLU • Engine and ECT ECU

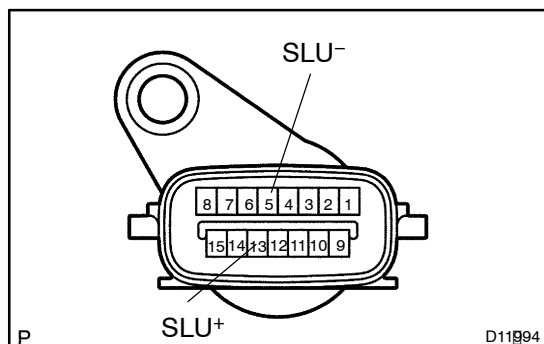
WIRING DIAGRAM



D12762

INSPECTION PROCEDURE

1 Check transmission wire.

**PREPARATION:**

Disconnect the transmission wire connector.

CHECK:

Measure resistance between SLU⁺ and SLU⁻ of transmission wire.

OK:

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

CHECK:

Measure resistance between terminals SLU⁺ and SLU⁻ of the transmission wire connector and body ground.

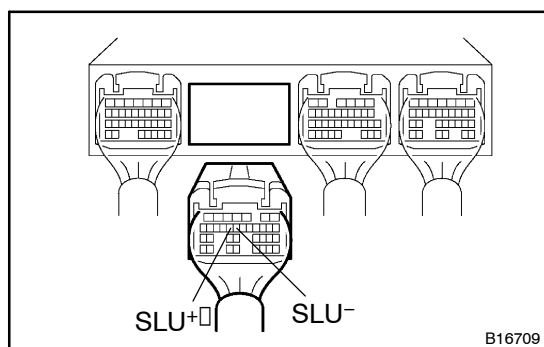
OK:

Resistance: 1 M Ω or higher

NG

Go to step 3.

OK

2 Measure resistance between terminal SLU⁺ and SLU⁻ 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 SLU⁺ and SLU⁻ of Engine and ECT ECU connector.

OK:

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

CHECK:

Measure resistance between terminals SLU⁺ and SLU⁻ of the Engine and ECT ECU connector and body ground.

OK:

Resistance: 1 M Ω or higher

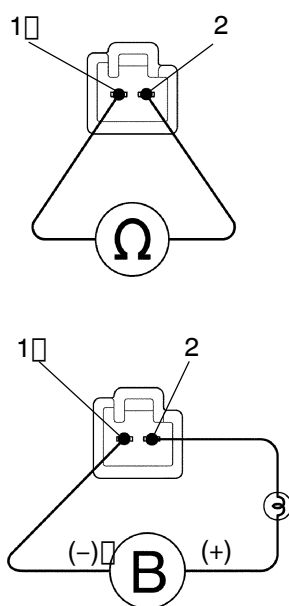
NG

**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 SLU.



D12795

PREPARATION:

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

CHECK:

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

Standard: 5.0 – 5.6 Ω at 20°C (68°F)

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

Standard: Solenoid sounds operation noise.

OK:

Standard

NG

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

OK

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